2018

ANNUAL FINANCIAL REPORT

INCLUDING THE MANAGEMENT REPORT AND THE CORPORATE GOVERNANCE REPORT

GenSight BIOLOGICS

GenSight Biologics S.A.
Corporation *(société anonyme)* with a share capital of €718,113.53
Registered Office:
74, rue du Faubourg Saint-Antoine
75012 Paris, France
751 164 757 Paris Trade and Companies Register

2018 ANNUAL FINANCIAL REPORT INCLUDING THE THE MANAGEMENT REPORT AND THE CORPORATE GOVERNANCE REPORT

CONCORDANCE TABLE

The concordance table below makes it possible to identify in this document:

- the information which forms the annual financial report (article L.451-1-2 of the French Monetary and Financial Code and article 222-3 of the General Regulation of the AMF);
- the information which forms the annual management report (article L.225-100 *et seq.* of the French Commercial Code); and
- the information which forms the Corporate Governance report.

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• Specific terms and conditions of shareholder participation in the general meeting or provisions of the statutes providing for such terms and conditions	Section 21.2.5

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The report on Corporate Governance and the information required under this report were prepared and elaborated by the board of directors pursuant to article L.225-37 of the French Commercial Code, with the involvement of the executive and management committees.

The report was adopted by the board of directors held on April 23, 2019, upon recommendation of the audit committee, which previously met the same day, and was sent to the statutory auditors.

This Document does not include the resolutions that will be published in the French *Bulletin des Annonces Légales Obligatoires* in accordance with applicable legislation and submitted to the shareholders' meeting called to approve the consolidated financial statements for the fiscal year ended December 31, 2018 which will be held by the end of June 2019.

NOTE

In this Document, the terms "Company", "GenSight Biologics", "we", "us" and "our" mean GenSight Biologics S.A. All references herein to "$" are to United States dollars, the currency of the United States of America.

This Document describes the Company as of the date hereof.

This Document includes our annual financial statements prepared in accordance with French accounting standards for the fiscal year ended December 31, 2018. In accordance with provisions of Article 28 of the Commission Regulation (EC) No 809/2004 of April 29, 2004, as amended, the Company's annual financial statements prepared in accordance with French accounting standards for the fiscal years ended December 31, 2016 and 2017 and the statutory auditor's reports on the Company's annual financial statements prepared in accordance with French accounting standards for the fiscal years ended December 31, 2016 and 2017 included in the Document registered with the AMF on April 27, 2018 under number R.18-036 are incorporated by reference in this Document.

This Document also includes our consolidated financial statements prepared in accordance with International Financial Reporting Standards, or IFRS, as adopted by the European Union for the fiscal year ended December 31, 2018. In accordance with provisions of Article 28 of the Commission Regulation (EC) No 809/2004 of April 29, 2004, as amended, the Company's annual financial statements (IFRS) for the fiscal years ended December 31, 2016 and 2017 and the statutory auditor's report on the Company's annual financial statements (IFRS) for the fiscal years ended December 31, 2016 and 2017 included in the Document registered with the AMF on April 27, 2018 under number R.18-036 are incorporated by reference in this Document.

The Document may be consulted on the Company's website (www.gensight-biologics.com) and on the AMF's website (www.amf-france.org).

Unless otherwise indicated the selected financial information and comments on the consolidated financial statements presented in this Document have been prepared on the basis of the consolidated financial statements prepared in accordance with IFRS as adopted by the European Union.

A glossary defining some of the terms used herein is appended to this Document.

Forward-looking Statements

This Document contains statements regarding our prospects and growth strategies. These statements are sometimes identified by the use of the future or conditional tense, or by the use of forward-looking terms such as "considers", "envisages", "believes", "aims", "expects", "intends", "should", "anticipates", "estimates", "thinks", "wishes" and "might", or, if applicable, the negative form of such terms and similar expressions or similar terminology. Such information is not historical in nature and should not be interpreted as a guarantee of future performance. Such information is based on data, assumptions, and estimates that we consider reasonable. Such information is subject to change or modification based on uncertainties in the economic, financial, competitive or regulatory environments. This information is contained in several sections of this Document and includes statements relating to our intentions, estimates and targets with respect to our markets, strategies, growth, results of operations, financial situation and liquidity. Our forward-looking statements speak only as of the date of this Document. Absent any applicable legal or regulatory requirements, we expressly disclaim any obligation to release any updates to any forward-looking statements contained in this Document to reflect any change in our expectations or any change in events, conditions or circumstances, on which any forward-looking statement contained in this Document is based. We operate in a competitive and rapidly evolving environment; it is therefore unable to anticipate all risks, uncertainties or other factors that may affect our business, their potential impact on our business or the extent to which the occurrence of a risk or combination of risks could have significantly different results from those set out in any forward-looking statements, it being noted that such forward-looking statements do not constitute a guarantee of actual results.

Information on the Market and Competitive Environment

This Document contains, in particular in Section 6, "Business Overview", information relating to our markets and to our competitive position. Unless otherwise indicated, the information contained in this Document related to market shares and the size of relevant markets are our estimates and are provided for illustrative purposes only. We believe that the information contained herein in relation to our markets and competitive position is reliable, but the information has not been verified by an independent expert, and we cannot guarantee that a third-party using different methods to collect, analyze or compute market data would arrive at the same results.

Risk Factors

Investors should carefully consider the risk factors in Section 4, "Risk Factors". The occurrence of all or any of these risks could have an adverse effect on our business, reputation, results of operation, financial condition or prospects. Furthermore, additional risks that have not yet been identified or that are not considered material by us at the date of the visa on this Document could produce adverse effects.

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PERSONS RESPONSIBLE

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1.1 NAME AND POSITION OF THE PERSON RESPONSIBLE FOR THE DOCUMENT

Bernard Gilly, Chief Executive Officer of GenSight Biologics S.A.

1.2 CERTIFICATION OF THE PERSON RESPONSIBLE FOR THE DOCUMENT

I hereby certify, having taken all reasonable measures to this effect, that the information contained in this Document is, to the best of my knowledge, in accordance with the facts and contains no omission likely to affect our import.

I certify that, to the best of my knowledge, the consolidated financial statements were prepared in accordance with applicable accounting standards and that they give a fair view of the assets, financial position and results of the Company. I further certify that the management report contained in this Document, as mentioned in the concordance table of this Document, provides a faithful representation of the development of the business, results and financial position of the Company, as well as a description of the principal risks and uncertainties it faces.

April 29, 2019

Bernard Gilly, Chief Executive Officer of GenSight Biologics S.A.

1.3 NAME AND POSITION OF THE PERSON RESPONSIBLE FOR FINANCIAL INFORMATION

Thomas Gidoin,
Chief Financial Officer of GenSight Biologics S.A.
74, rue du Faubourg Saint-Antoine – 75012 Paris, France
Tel.: +33 (0)1 76 21 72 20

STATUTORY AUDITORS

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2.1 STATUTORY AUDITORS

Deloitte & Associés

Represented by Stéphane Lemanissier

Tour Majunga, 6 place de la Pyramide, 92908 Paris-La Défense Cedex

Deloitte & Associés is a member of the *Compagnie Régionale des Commissaires aux Comptes de Versailles* (the Regional Association of Auditors of Versailles).

Becouze

Represented by Fabien Brovedani

1, rue Buffon – 49100 Angers, France

Becouze is a member of the *Compagnie Régionale des Commissaires aux Comptes d'Angers* (the Regional Association of Auditors of Angers).

Deloitte & Associés's initial appointment as statutory auditor has been expressed in the the bylaws of April 17, 2012, for a six-year term, which will end at the close of the shareholders' meeting called to approve the financial statements for the fiscal year ending on December 31, 2018 and Becouze's appointment as statutory auditor was approved by the general shareholders' meeting of the Company on May 19, 2016 for a six-year term, which will end at the close of the shareholders' meeting called to approve the financial statements for the fiscal year ending on December 31, 2021.

2.2 ALTERNATE STATUTORY AUDITORS

BEAS (substitute to Deloitte & Associés)

Tour Majunga, 6 place de la Pyramide, 92908 Paris-La Défense Cedex

BEAS is a member of the *Compagnie Régionale des Commissaires aux Comptes de Versailles* (the Regional Association of Auditors of Versailles).

Guillaume Saby (substitute to Becouze)

1, rue Buffon – 49100 Angers, France

Guillaume Saby is a member of the *Compagnie Régionale des Commissaires aux Comptes d'Angers* (the Regional Association of Auditors of Angers).

BEAS was appointed substitute statutory auditor by the bylaws of April 17, 2012 for a six-year term, which will end at the close of the shareholders' meeting called to approve the financial statements for the fiscal year ending on December 31, 2018. Guillaume Saby was appointed substitute statutory auditor by our general shareholders' meeting on May 19, 2016 for a six-year term, which will end at the close of the shareholders' meeting called to approve the financial statements for the fiscal year ending on December 31, 2021.

As of the date of this Document, none of the statutory auditors or substitute statutory auditors have resigned or been revoked.

SELECTED FINANCIAL INFORMATION

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The tables below present selected financial information and the income statement and other data of the Company, as of and for the periods ended on the dates indicated below.

This Document includes our annual financial statements prepared in accordance with French accounting standards for the fiscal year ended December 31, 2018. These financial statements are presented in Section 19.1.3, "Company's Annual Financial Statements (French-GAAP) for the Fiscal Year Ending December 31, 2018" of this Document.

The company has prepared, in addition to its annual financial statements in compliance with the French accounting standards, corporate consolidated financial statements prepared in accordance with the IFRS as adopted by the European Union as of and for the fiscal year ended December 31, 2018 presented in this Document in Section 19.1.1, "Company's Annual Consolidated Financial Statements (IFRS) for the Fiscal Year Ending December 31, 2018." On April 28, 2017, the Company created its first subsidiary, Gensight Biologics Inc., registered and located in the United States of America. This US-Based subsidiary is held at 100% by Gensight Biologics S.A. and is fully consolidated. These financial statements are therefore consolidated financial statement of the group thus formed.

Unless otherwise indicated, the selected financial information as of and for the fiscal year ended December 31, 2018 has been derived from our consolidated financial statements prepared in accordance with IFRS as adopted by the European Union as of and for the fiscal year ended December 31, 2018, hereafter in the Document the "Financial Statements". These consolidated financial statements for the fiscal year ended December 31, 2018 have been audited by Deloitte & Associés and Becouze, statutory auditors. The statutory auditors' report on the consolidated financial statements as of and for the fiscal year ended December 31, 2018 is included in Section 19.1.2, "Statutory Auditors' Report on the Company's Annual Consolidated Financial Statements (IFRS) for the Fiscal Year Ending December 31, 2018" of this Document.

The information in this section should be read together with (i) our consolidated financial statements contained in Section 19.1.1, "Company's Annual Consolidated Financial Statements (IFRS) for the Fiscal Year Ending December 31, 2018" of this Document, (ii) our analysis of our results presented in Section 8, "Operating and Financial Review", and (iii) our analysis of our liquidity and capital resources presented in Section 9, "Capital Resources".

3.1 SELECTED CONSOLIDATED FINANCIAL INFORMATION

CONSOLIDATED STATEMENTS OF INCOME (LOSS)

	As of December 31,	
In thousands of euros	2017	2018
Operating income		
Revenues	—	—
Other income	3,702	4,346
Total operating income	**3,702**	**4,346**
Operating expenses		
Research and development	18,675	29,031
General and administrative	8,173	7,010
Sales and Marketing	844	1,350
Total operating expenses	**27,692**	**37,391**
Operating profit (loss)	**(23,990)**	**(33,045)**
Financial income	34	44
Financial expenses	(156)	(452)
Financial income (loss)	**(122)**	**(408)**
Income tax	—	—
Net income (loss)	**(24,112)**	**(33,453)**
Basic and diluted earnings (loss) per share[1] (€/share)	**(1.10)**	**(1.37)**
Number of shares used for computing basic and diluted earnings (loss) per share	21,936,006	24,466,559

(1) See Note 21 to our consolidated financial statements as of December 31, 2018 for further details on the calculation of basic and diluted earnings (loss) per share.

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

	As of December 31,	
In thousands of euros	2017	2018
Cash and cash equivalents	55,448	26,241
Total assets	**62,212**	**36,979**
Total shareholders' equity	54,996	23,870
Total non-current liabilities	3,121	3,506
Total current liabilities	4,095	9,602
Total liabilities	7,216	13,108
Total liabilities and shareholders' equity	**62,212**	**36,979**

CONSOLIDATED STATEMENTS OF CASH FLOWS

	As of December 31,	
In thousands of euros	2017	2018
Cash flows from operating activities		
Net profit (loss)	(24,112)	(33,453)
Operating activities		
Amortization and depreciation	224	315
Retirement pension obligations	26	28
Expenses relating to share-based payments	4,800	2,422
Other financial items	77	410
Operating cash flows before change in working capital	**(18,984)**	**(30,278)**
Accounts receivable	19	9
Accounts payable, net of prepayments	384	5,233
Other receivables	(976)	(3,478)
Other current liabilities	775	132
Change in working capital	**202**	**1,896**
Net cash flows from operating activities	**(18,782)**	**(28,383)**
Cash flows from investment activities		
Acquisitions of property, plant, and equipment	(236)	(789)
Acquisitions of intangible assets	—	(2)
Acquisitions / reimbursement of non-current financial assets	(232)	8
Acquisitions / reimbursement of current financial assets	(216)	120
Sales of property, plant, and equipment	—	—
Net cash flows from investment activities	**(684)**	**(663)**
Cash flows from financing activities		
Conditional advances received	—	—
Treasury shares	(84)	(123)
Warrants issuance	257	8
Capital increases, net of transaction costs	20,774	—
Net cash flows from financing activities	**20,946**	**(115)**
Increase/(decrease) in cash and cash equivalents	**1,480**	**(29,160)**
Cash and cash equivalents at the beginning of the period	53,982	55,448
Effect of changes in exchange rates on cash and cash equivalent	(14)	(47)
Cash and cash equivalents at the close of the period	**55,448**	**26,241**

RISK FACTORS

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The company has opted for a presentation of its risk factors by category of risk, with a hierarchisation of these risks within each category from riskier to less risky.
Investors should carefully consider all of the information set forth in this Document before making an investment decision, including the risk factors set forth in this Section. Such risks are, as of the date of this Document, the risks that we believe, were they to occur, could have a material adverse effect on our business, results of operations, financial condition and prospects. Investors should note that there may be other risks that have not yet been identified as of the date of this Document, or the occurrence, as of the date hereof, we do not consider likely to have a material adverse effect on our business, results of operations, financial condition and prospects.

Among these important risks are the following:

- We have never generated revenue from product sales and have incurred significant operating losses since our inception. We expect to continue to incur significant losses for the foreseeable future and may never achieve profitability.
- We may need to raise additional capital in the future, which may not be available on acceptable terms, or at all, and failure to obtain this necessary capital when needed may force us to delay, limit or terminate our product development efforts or other operations.
- Our product candidates are based on novel technologies, including gene therapy, which may implicate ethical, social and legal concerns about genetic testing and genetic research in general, and such novel technologies make it difficult to predict the timing and costs of development of new and unforeseen regulatory requirements and of subsequently obtaining regulatory approval.
- The regulatory approval process of the FDA, the EMA and other regulatory authorities and the clinical trials that our product candidates will need to undergo, are time-consuming and expensive, the outcomes of which are unpredictable, and for which there is a high risk of failure.
- We have not completed the evaluation of our lead product candidate, GS010, in clinical trials, and we are currently conducting a Phase I/II clinical trial for our second most advanced product candidate, GS030.
- Our product candidates and the process for administering our product candidates using AAV vectors may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial potential or result in significant negative consequences following any potential marketing approval.
- Success in preclinical studies or early clinical trials may not be indicative of results obtained in later trials.
- We have entered, and may in the future enter, into collaborations with third parties for the development and commercialization of our product candidates. If we are unable to enter into such collaborations on acceptable terms, or if these collaborations are not successful, our business could be adversely affected.
- Gene therapies are novel, complex and difficult to manufacture. We have limited manufacturing experience and could experience production problems that result in delays in our development or commercialization programs.
- We may not be successful in our efforts to identify or discover additional product candidates and may fail to capitalize on programs or product candidates that may be a greater commercial opportunity or for which there is a greater likelihood of success.
- We do not own any issued patents and our rights to develop and commercialize our product candidates are subject to the terms and conditions of intellectual property licenses granted to us by others.

4.1 FINANCIAL RISKS

We have never generated revenue from product sales and have incurred significant operating losses since our inception. We expect to continue to incur significant losses for the foreseeable future and may never achieve profitability.

Since inception, we have devoted substantially all of our efforts to research and development, including preclinical and clinical development of our product candidates, as well as to building our team. We have never generated revenue from product sales, and we have incurred operating losses since inception. We incurred net losses of €24.1 million and €33.5 million for the fiscal years ended December 31, 2017 and 2018, respectively, and these losses have adversely impacted and will continue to adversely impact, our equity attributable to shareholders and net assets. We anticipate that our operating losses will continue for at least the coming years as we continue with our research and development activities and until we generate substantial revenues from approved product candidates. As of December 31, 2018, we had an accumulated deficit of €110.5 million.

Our capacity to generate revenues from product sales and to achieve profitability will depend on our ability, alone or with collaborative partners, to successfully complete the development of and to obtain the regulatory approvals necessary to commercialize product candidates with significant market potential. We do not currently have the required approvals to market GS010, GS030 or any other product candidates and we may never obtain such approvals or be able to commercialize

any of our current or future product candidates. Our ability to generate future revenues from product sales will depend heavily on our and any of our collaborators' success in:

- continuing our research and development of our two lead product candidates, including our Phase III clinical trials for our lead product candidate, GS010, and clinical trials for our second most advanced product candidate, GS030;
- initiating additional preclinical studies, clinical trials or other studies of GS011 and our other product candidates;
- identifying and validating new product candidates that combine gene therapy approaches with our key platform technologies;
- preparing our biologic license application, or BLA, and European Union centralized marketing authorization application, or MAA, for GS010 and GS030, and seeking marketing approvals for any of our other product candidates that successfully complete clinical trials;
- completing and submitting applications to, and obtaining regulatory approval from, other regulatory authorities;
- launching and commercializing product candidates for which we obtain marketing approval by establishing a sales force, marketing and distribution infrastructure or, in regions where we choose to do so, collaborating with a commercialization partner;
- setting a commercially viable price for any products for which we may receive approval;
- obtaining and maintaining adequate coverage and reimbursement from government and third-party payors for our product candidates;
- maintaining and enhancing a sustainable, scalable, reproducible and transferable manufacturing process for our product candidates;
- establishing and maintaining supply and manufacturing relationships with third parties that can provide adequate, in both amount and quality, products and services to support clinical supply and the market demand for our product candidates, if approved;
- obtaining market acceptance of our product candidates, if approved, as a viable treatment option and satisfying any post-marketing requirements;
- addressing any competing technological and market developments;
- implementing additional internal systems and infrastructure, as needed;
- negotiating favorable terms in any collaboration, licensing or other arrangements into which we may enter and performing our obligations in such collaborations;
- acquiring or in-licensing other product candidates and technologies;
- maintaining, protecting and expanding our portfolio of intellectual property rights, including patents, trade secrets and know-how;
- avoiding and defending against third-party interference or infringement claims; and
- attracting, hiring and retaining qualified personnel.

We may never succeed in any or all of these activities and, even if we do, we may never generate revenues that are significant or large enough to achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on an annual basis and may need to obtain additional funding to continue operations. Our failure to become and remain profitable would decrease the value of our company and could impair our ability to raise capital, maintain our research and development efforts, expand our business, diversify our product pipeline or continue our operations. A decline in the value of our company could also cause investors to lose all or part of their investment.

Moreover, our operating results may fluctuate significantly from year to year, such that a period-to-period comparison of our results of operations may not be a good indication of our future performance. In any particular period or periods, our operating results could be below the expectations of securities analysts or investors, which could cause the price of the ordinary shares to decline.

Our limited operating history may make it difficult for you to evaluate our business to date and to assess our future viability.

We began our operations in April 2012. Our operations to date have been limited to organizing and staffing our company, business planning, raising capital, acquiring our technology, identifying potential product candidates, undertaking preclinical studies and clinical trials of our most advanced product candidates, and establishing collaborations. We have not yet demonstrated the ability to complete Phase III trials of our product candidates, obtain marketing approvals, manufacture a commercial-scale product or conduct sales and marketing activities necessary for successful commercialization. Consequently, any predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history.

In addition, as a development-stage business, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors. We will need to transition from a company with a research focus to a company that is also capable of supporting commercial activities. We may not be successful in such a transition.

We may need to raise additional capital in the future, which may not be available on acceptable terms, or at all, and failure to obtain this necessary capital when needed may force us to delay, limit or terminate our product development efforts or other operations.

Our operations have consumed significant cash since inception. To date, we have financed our activities primarily through private placements of our ordinary shares and preferred shares, funding

received from Bpifrance Financement, research tax credits *(crédit d'impôt recherche)*, or CIR, and a sale of our ordinary shares in connection with our July 2016 initial public offering on the regulated market of Euronext Paris, or Euronext Paris.

We are currently advancing our product candidates through clinical development. Developing product candidates is expensive, lengthy and risky, and we expect our expenses to increase in connection with our ongoing activities, particularly as we continue the research and development of, initiate further clinical trials of and seek marketing approval for, our product candidates. Our expenses could increase beyond our current expectations, depending on:

- the scope, progress, results and costs of drug discovery, laboratory testing, preclinical development and clinical trials for our product candidates;
- the costs, timing and outcome of regulatory review of our product candidates, including, in particular, if we are required by the U.S. Food and Drug Administration, or FDA, the European Medicines Agency, or EMA, or other regulatory agencies to perform clinical trials and other studies in addition to those that we currently anticipate;
- the costs of future activities, including product sales, medical affairs, marketing, manufacturing and distribution, for any of our product candidates for which we receive marketing approval;
- pricing and reimbursement levels for commercial sale of our products and the amount of any revenues we would receive from such sales; and
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims.

Furthermore, with our listing on Euronext Paris, we have incurred additional costs associated with operating as a public company.

Until such time that we can generate substantial revenue from product sales, we expect to finance our operating activities through a combination of our existing liquidity sources and the proceeds of any future financings. If we are unable to generate revenue from product sales, in particular from GS010, within our expected timeframes, or if our expenses increase to a level or at a rate beyond our expectations, we will need to raise additional capital. However, we may be unable to raise additional funds or enter into other funding arrangements when needed on favorable terms, or at all. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate certain of our research and development programs. Any additional fundraising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates.

To the extent that additional capital is raised through the sale of equity or equity-linked securities, the issuance of those securities could result in substantial dilution for our current shareholders and the terms may include liquidation or other preferences that adversely affect the holdings or the rights of our current shareholders. To the extent that additional capital is raised through a debt offering, the incurrence of indebtedness would result in increased fixed payment obligations, and we may be required to agree to certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. We could also be required to seek funds through arrangements with collaborative partners or otherwise at an earlier stage than otherwise would be desirable, and we may be required to relinquish rights to some of our technologies or product candidates or otherwise agree to terms unfavorable to us.

We may be forced to repay conditional advances prematurely if we fail to comply with our contractual obligations under certain innovation grant agreements.

Since inception through December 31, 2018, we have received €865 K in non-refundable grants and €2.96 million in conditional advances from Bpifrance Financement. If we fail to comply with our contractual obligations under the applicable innovation grant agreements, we could be forced to repay the conditional advances ahead of schedule. Such premature repayment could adversely affect our ability to finance our research and development projects, in which case we would need to locate alternative sources of capital, which may not be available on commercially reasonable terms or at all.

We may lose access to research tax credits in the event of regulatory or legislative changes or challenges by tax authorities.

Since incorporation, we have received the CIR, which is granted to companies by the French tax authorities in order to encourage them to conduct technical and scientific research. For the year ended December 31, 2017, we recorded CIR in the amount of approximately €3.7 million, which was reimbursed in cash in September 2018. For the year ended December 31, 2018, we recorded CIR in the amount of approximately €4.3 million, we expect will be reimbursed during fiscal year 2019.

Companies demonstrating that they have expenditures that meet the required criteria, including research expenditures located in France or, since January 1, 2005, within the European Community or in another State that is a party to the Agreement on the European Economic Area, or the EEA, that has concluded a tax treaty with France that contains an administrative assistance clause, receive a tax credit which can be used against the payment of the corporate tax due the fiscal year in which the expenditures

were made and during the next three fiscal years, or, as applicable, can be reimbursed for the excess portion. The expenditures taken into account for the calculation of the CIR only involve research expenses.

Legislative or regulatory changes relating to CIR or challenges by the French tax authorities with respect to our research expenditures or our eligibility to receive CIR could have a material adverse effect on our ability to operate our business and our financial condition, results of operations and prospects.

We may not be able to carry forward future losses as a result of legislative or regulatory changes in corporate taxation in France.

As of December 31, 2018, taking into account the net loss recorded during the year, our consolidated financial statements showed accumulated tax losses to carry forward of €110.5 million. As of the date of this Document, these losses can be carried forward indefinitely and charged against future profits, in accordance with current French tax laws.

In France, for financial years ending as from December 31, 2012, the set off of these losses is capped at €1 million plus 50% of profits exceeding this cap. The unused balance of losses can be carried forward to following financial years, and set off under the same conditions with no time limit.

We may not be able to set off prior losses against future profits, in whole or in part, in the event of legislative or regulatory changes in corporate taxation, which could have an adverse effect on our results.

Our current and future shareholders may experience dilution.

Since incorporation, we have issued or allotted share warrants for founders (*Bons de souscription de parts de créateur d'entreprise*, or BCE), share warrants (*Bons de souscription d'actions*, or BSA), free shares (*Attributions gratuites d'actions*, or AGA), and (*Options de souscription ou d'achat d'actions*, or SO). As of December 31, 2018, 674,636 BCE, 757,040 BSA, 763,750 AGA and 505,000 SO have been allotted (giving the right to subscribe for or acquire, respectively, 674,636, 757,040, 763,750 and 505,000 new shares) See Section 20.1.5.1, "Warrants" of this Document.

As of December 31, 2018, the exercise of all BCE, all BSA and all SO and the definitive acquisition of all AGA allotted and outstanding will thus allow for a subscription or acquisition of 2,700,426 new ordinary shares, generating a dilution of 9.82% based on fully diluted capital.

Moreover, the exercise of delegations of authority granted to the Board of Directors by the mixed general meeting of April 12, 2018 to carry out one or more capital increases could lead to additional dilution. See Section 2.1.5, "Other Securities Giving Access to Share Capital" of this Document.

As part of our policy to provide incentives for our executive officers and employees, and in order to attract additional expertise, we may in the future issue or allot shares or new financial instruments giving access to our share capital, which could result in additional, potentially significant, dilution for our current and future shareholders.

Interest Rate Risk

We believe we have very low exposure to interest rate risk. Such exposure primarily involves money market funds and time deposit accounts. Changes in interest rates have a direct impact on the rate of return on these investments and the cash flows generated.

We have no credit facilities. The repayment flows of the conditional advances from Bpifrance Financement are not subject to interest rate risk.

Foreign Currency Exchange Risk

We are exposed to foreign exchange risk inherent in certain services provided in the United States, which have been invoiced in U.S. dollars. We do not currently have revenues in euros, dollars nor in any other currency. Due to the relatively low level of these expenditures, the exposure to foreign exchange risk is unlikely to have a material adverse impact on our results of operations or financial position.

Our exposure to currencies other than the U.S. dollar is negligible. For the year ended December 31, 2018, less than 20% of our purchases and other external expenses were made in U.S. dollars, generating foreign exchange losses of €43 K. In light of these insignificant amounts, we have not adopted, at this stage, a hedging mechanism in order to protect our business activity against fluctuations in exchange rates. As we further increase our business activity, particularly in the United States, we expect to face greater exposure to exchange rate risk and would then consider adopting an appropriate policy for hedging against these risks.

Liquidity Risk

We do not currently believe that we are exposed to short-term (12 months) liquidity risk, considering the cash and cash equivalents that we had available as of December 31, 2018 amounting to €26.2 million which was primarily cash and money market funds, terms deposits and marketable securities that are convertible into cash immediately without penalty. In addition, we have undertaken a specific risk review regarding liquidity risk and we consider that we are able to meet our future repayments of conditional advances from Bpifrance Financement. We believe that our existing cash and cash equivalents as of December 2018, the capital increase of €7.9 million completed in February 2019, as well as the reimbursement of the 2018 Research Tax Credit in the amount of €4.3 million expected during the second half year

of 2019 should enable the Group to cover its cash requirements through the next 12 months.

We expect to have significant ongoing financing needs in connection with our ongoing activities, particularly as we continue the research and development of, initiate further clinical trials of and seek marketing approval for, our product candidates. We may need to raise additional capital in the future, which may not be available on acceptable terms, or at all, and failure to obtain this necessary capital when needed may force us to delay, limit or terminate our product development efforts or other operations" of this Document.

Credit Risk

We believe that the credit risk related to our cash and cash equivalents is not significant in light of the quality of the co-contracting financial institutions.

Inflation Risk

We do not believe that inflation has had a material effect on our business, financial condition or results of operations. If our costs were to become subject to significant inflationary pressures, we may not be able to fully offset such higher costs through price increases. Our inability or failure to do so could harm our business, financial condition and results of operations.

4.2 RISKS RELATED TO THE DISCOVERY AND DEVELOPMENT OF AND OBTAINING REGULATORY APPROVAL FOR OUR PRODUCT CANDIDATES

Our product candidates are based on novel technologies, including gene therapy, which may implicate ethical, social and legal concerns about genetic testing and genetic research in general, and such novel technologies make it difficult to predict the timing and costs of development of new and unforeseen regulatory requirements and of subsequently obtaining regulatory approval.

We have concentrated our research and development efforts on gene therapy approaches using our core platform technologies, mitochondrial targeting sequence, or MTS, and optogenetics, and our future success depends on our successful development of viable product candidates. We may experience problems or delays in developing GS010, GS030, or any other new product candidates, and such problems or delays may result in unanticipated costs, and there can be no assurance that any such development problems can be solved. We also may experience unanticipated problems or delays in developing a sustainable, reproducible and scalable manufacturing process or transferring that process to commercial partners, which may prevent us from completing our clinical trials, meeting the obligations of our collaborations or commercializing our products on a timely or profitable basis, if at all. For example, we, a collaborator or another group may uncover a previously unknown risk associated with the adeno-associated virus, or AAV, which is the vector currently used in our gene therapy approaches, and this may prolong the period of observation required for obtaining regulatory approval or may necessitate additional clinical testing.

Because human gene therapy is a relatively new and expanding area of novel therapeutic interventions, and because we are developing product candidates for the treatment of mitochondrial and neurodegenerative diseases of the eye and central nervous system for which there are no or limited therapies and/or treatments, and for which there is little clinical trial experience, there is an increased risk that the FDA, EMA or other regulatory authorities may not consider the endpoints of our clinical trials to be sufficient for marketing approval. In addition, ethical, social and legal concerns about gene therapy, genetic testing and genetic research could result in additional regulations restricting or prohibiting the processes we may use. The product specifications and the clinical trial requirements of the FDA, EMA and other regulatory authorities and the criteria these regulators use to determine the safety and efficacy of a product candidate vary substantially according to the type, complexity, novelty and intended use and market of such product candidate. The regulatory approval process for novel product candidates such as ours is unclear and may be lengthier and more expensive than the process for other, better-known or more extensively studied product candidates. For example, clinical trial protocols for some gene therapies are potentially subject to review by the Recombinant DNA Advisory Committee, or RAC, a committee of the U.S. National Institutes of Health, or NIH, and the RAC review process can delay the initiation of a clinical trial, even if the FDA has approved the initiation of the trial. In addition, the FDA generally requires multiple well- controlled clinical trials to provide the evidence of effectiveness necessary to support a BLA, although FDA guidance provides that reliance on a single pivotal trial may be appropriate if the trial has demonstrated a clinically meaningful effect on mortality, irreversible morbidity or prevention of a disease with a potential serious outcome, and where confirmation of the result in a second trial would be practically or ethically impossible.

Regulatory requirements governing gene and cell therapy products have changed frequently and may continue to change in the future. The FDA has established the Office of Tissues and Advanced Therapies within its Center for Biologics Evaluation and Research, or CBER, to consolidate the review of gene therapy and related products, and has established the Cellular, Tissue and Gene Therapies Advisory Committee to advise CBER in its review.

CBER and its advisory committee, and any new guidelines they promulgate, may lengthen the regulatory review process, require us to perform additional preclinical studies or clinical trials, increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of our current or future product candidates or lead to significant post-approval limitations or restrictions. As we advance our product candidates, we will be required to consult with these regulatory and advisory groups and comply with applicable guidelines. If we fail to do so, we may be required to delay or discontinue development of our product candidates. These additional processes may result in a review and approval process that is longer than we otherwise would have expected. Delay or failure to obtain, or unexpected costs in obtaining, the regulatory approval necessary to bring a potential product to market could decrease our ability to generate sufficient product revenue, and our business, financial condition, results of operations and prospects would be harmed. Even if our product candidates are approved, we expect that the FDA will require us to submit follow-up data regarding our clinical trial subjects for a number of years after approval. If these follow-up data show negative long-term safety or efficacy outcomes for these patients, the FDA may revoke its approval or change the label of our products in a manner that could have an adverse impact on our business.

In addition, adverse developments in clinical trials of gene therapy products conducted by others may cause the FDA or other oversight bodies to change the requirements for approval of our product candidates. Similarly, the EMA may issue new guidelines concerning the development and marketing authorization for gene therapy products and require that we comply with these new guidelines.

As a result, it is difficult to determine how long it will take or how much it will cost to obtain regulatory approvals for GS010, GS030, or any other new product candidates in either the United States or the European Union or how long it will take to commercialize our other product candidates. Approvals by the EMA may not be indicative of what the FDA may require for approval and vice versa.

The regulatory approval process of the FDA, the EMA and other regulatory authorities and the clinical trials that our product candidates will need to undergo, are time-consuming and expensive, the outcomes of which are unpredictable, and for which there is a high risk of failure.

The regulatory approval process for novel product candidates such as ours can be more expensive and take longer than for other, better known or more extensively studied product candidates. As of the date of this Document, Spark Therapeutics' Luxturna, has received marketing approval by both the FDA and the EMA, and GlaxoSmithKline plc's Strimvelis is the only other gene therapy products currently approved by the EMA, which makes it difficult to determine how long it will take or how much it will cost to obtain regulatory approvals for our product candidates in either the United States or the European Union or how long it will take to commercialize our product candidates. Approvals by the EMA may not be indicative of what the FDA may require for approval, and vice versa.

In addition, we believe that certain of our product candidates and certain of our underlying technology platforms may be immediately transferable to the treatment of other diseases, including dry age-related macular degeneration, or dry AMD, and geographic atrophy, or GA, as well as diseases outside of ophthalmology, including central nervous system, or CNS, disorders. These other indications, as well as additional potential product candidates, will require additional, time-consuming and costly development efforts prior to commercial sale, which may be unpredictable and may differ significantly from those of our initial product candidates.

Changes in regulatory requirements, guidance from regulatory authorities or unanticipated events during our clinical trials of our product candidates could necessitate changes to clinical trial protocols or additional clinical trial requirements, which would result in increased costs to us and could delay our development timeline.

Changes in regulatory requirements, FDA guidance or guidance from the EMA or other European regulatory authorities, or unanticipated events during our clinical trials, may force us to amend clinical trial protocols. The regulatory authorities could also impose additional clinical trial requirements. Amendments to our clinical trial protocols would require resubmission to the FDA, EMA, national clinical trial regulators and Institutional Review Boards, or IRBs, and ethics committees for review and approval, which may adversely impact the cost, timing or successful completion of a clinical trial. If we experience delays completing, or if we terminate, any of our clinical trials, or if we are required to conduct additional clinical trials, the commercial prospects for our product candidates may be harmed and our ability to generate product revenue will be delayed.

The complexity of a combination product that includes a biological product and a medical device presents additional, unique development and regulatory challenges, which may adversely impact our development plans and our ability to obtain regulatory approval of GS030.

GS030 relies on the combination of two components: a gene therapy to restore light sensitivity in retinal cells, and biomimetic goggles that stimulate the reengineered retinal cells by projecting light-amplified images onto the retina. Developing and obtaining regulatory approval, in the United States and in the European

Union, for combination products such as GS030 poses unique challenges because they involve components that are regulated under different types of regulatory requirements, and, in the United States, by different FDA evaluation centers. As a result, such products raise regulatory, policy and review challenges. For example, in the European Union, GS030 has been classified by the EMA Committee for Advanced Therapies, or CAT, as an advanced therapy medicinal product, even though it consists of two components, as its primary mode of action is linked to the gene therapy component. Because the biomimetic goggles are not incorporated in, or combined with, the drug product itself, they are considered an external device. In the United States, because divisions from both the CBER and FDA's Center for Devices and Radiological Health must review our submissions concerning GS030, the regulatory review and approval process for GS030 may be lengthened. In addition, differences in regulatory requirements for each component of a combination product can impact the regulatory processes for all aspects of product development and management, including preclinical testing, clinical investigation, marketing applications, manufacturing and quality control, adverse event reporting, promotion and advertising, user fees, pricing and reimbursement, and post-approval modifications.

To be successful in developing and commercializing GS030, we would need to address a number of scientific, technical and regulatory challenges. We have limited experience in the development of biologic-device combinations and may not be successful in developing GS030. Given our limited experience in developing devices, we expect to rely in part on third parties for the design and manufacture of the biomimetic goggles. As a result, we have entered into a consortium agreement and related agreements for the financing and conduct of research and development activities with Pixium Vision S.A., or Pixium Vision, and Fondation Voir et Entendre, or FVE, a scientific foundation that funds scientific programs in the field of ophthalmic diseases. See Section 6.13.4, "Collaboration, Partnership and Related Agreements" of this Document.

Success in preclinical studies or early clinical trials may not be indicative of results obtained in later trials.

Results from preclinical studies or previous clinical trials are not necessarily predictive of future clinical trial results, and interim results of a clinical trial are not necessarily indicative of final results. Our product candidates may fail to show the desired safety and efficacy in clinical development despite demonstrating positive results in preclinical studies or having successfully advanced through initial clinical trials.

We have no clinical data demonstrating either the safety or efficacy of GS030 in humans, and we have limited clinical data demonstrating efficacy of GS010 in humans. There can be no assurance that the results demonstrated in the Phase I/II clinical trial for GS010 will result in success in our ongoing Phase III clinical trials. In addition, we cannot assure you that we will be able to achieve the same or similar success in our preclinical studies and clinical trials of our other product candidates.

There is a high failure rate for drugs, biological products and devices proceeding through clinical trials. Companies in the pharmaceutical, medical devices and biotechnology industries frequently suffer significant setbacks in late-stage clinical trials, even after earlier clinical trials have shown promising results. Data obtained from preclinical and clinical activities are subject to varying interpretations, which may delay, limit or prevent regulatory approval. Only a small percentage of medical products under development result in the submission of a new product application to the FDA, the EMA or other regulatory agencies, and even fewer are approved for commercialization. Any such delays or rejections could materially and adversely affect our business, financial condition, results of operations and prospects.

We may find it difficult to conduct our clinical trials, in particular with respect to patient enrollment, which could delay or prevent us from proceeding with clinical trials of our product candidates.

Identifying and qualifying patients to participate in clinical trials of our product candidates is critical to our success. The timing of our clinical trials depends on how quickly we can recruit patients and complete required follow-up periods. If patients are unwilling to participate in our gene therapy studies because of negative publicity from adverse events related to the biotechnology or gene therapy fields, competitive clinical trials for similar patient populations, clinical trials in products employing our vectors or our platform or for other reasons, the timeline for recruiting patients, conducting studies and obtaining regulatory approval of our product candidates may be delayed. These delays could result in increased costs, delays in advancing our product candidates, delays in testing the effectiveness of our product candidates or termination of the clinical trials altogether.

We may not be able to identify, recruit and enroll a sufficient number of patients, or those with required or desired characteristics, to complete our clinical trials in a timely manner. In particular, our current product candidates are being developed to treat rare conditions with limited patient pools. The eligibility criteria of our clinical trials will further limit the pool of available trial participants.

Patient enrollment is affected by factors including:

- size of the patient population and process for identifying subjects;
- design of the trial protocol;
- eligibility and exclusion criteria;

- perceived risks and benefits of the product candidate under study;
- perceived risks and benefits of gene therapy-based approaches to treat diseases;
- availability of competing therapies and clinical trials;
- severity of the disease under investigation;
- availability of genetic testing for potential patients;
- proximity and availability of clinical trial sites for prospective subjects;
- ability to obtain and maintain subject consent;
- efforts to facilitate timely enrollment in clinical studies; and
- patient referral practices of physicians.

We may not be able to initiate or continue clinical trials if we cannot enroll a sufficient number of eligible patients to participate in the clinical trials required by the FDA or the EMA or other regulatory authorities. In addition to risks related to patient enrollment, our ability to successfully initiate and complete a clinical trial in any other country is subject to numerous risks unique to conducting business in other countries, including:

- inability to find contract research organizations, or CROs, qualified local consultants, physicians and partners, or difficulty in establishing or managing relationships with such persons;
- difficulty in making patients and patients' communities aware of the existence of the clinical trials;
- different standards for the conduct of clinical trials;
- absence in some countries of regulatory authorities with sufficient expertise for review of gene therapy protocols; and
- the potential burden of complying with a variety of laws, medical standards and regulatory requirements, including the regulation of pharmaceutical and biotechnology products and treatment.

If we have difficulty enrolling a sufficient number of patients to conduct our clinical trials as planned, we may need to delay, limit or terminate ongoing or planned clinical trials, any of which would have an adverse effect on our business, financial condition, results of operations and prospects.

We may encounter substantial delays in our clinical trials, and we cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, if at all.

Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must conduct extensive clinical trials to demonstrate the safety and efficacy of the product candidates. Clinical testing is expensive and time-consuming and the results are uncertain. We cannot guarantee that any clinical trial will be conducted as planned or completed on schedule, if at all. Failure of a clinical trial can occur at any stage of testing. Events that may prevent successful or timely completion of clinical development include:

- delays in raising, or inability to raise, sufficient capital to fund the planned or ongoing clinical trials;
- delays in reaching a consensus with the FDA, EMA or regulatory authorities on trial design;
- delays in reaching agreement on acceptable terms with prospective CROs and clinical trial sites;
- delays in opening clinical trial sites or obtaining required independent IRB approval in the United States or approval by an independent ethics committee in the European Union at each clinical trial site;
- delays in recruiting suitable patients to participate in our clinical trials;
- imposition of a clinical hold by regulatory authorities, including as a result of a serious adverse event or after a negative finding following an inspection of our clinical trial operations or clinical trial sites;
- failure by us, any CROs we engage or any other third parties to adhere to clinical trial requirements;
- failure to perform in accordance with Good Clinical Practices, or GCP, or applicable regulatory requirements in the United States, the European Union or other international markets;
- delays in the testing, validation, manufacturing and delivery of our product candidates to the clinical trial sites, including delays by any third parties with whom we have contracted to perform certain of those functions;
- delays in having patients complete a trial or return for post-treatment follow-up;
- clinical trial sites or patients dropping out of a clinical trial;
- selection of clinical endpoints that require prolonged periods of clinical observation or analysis of the resulting data;
- the occurrence of serious adverse events associated with the product candidate that are viewed to outweigh its potential benefits;
- the occurrence of serious adverse events in clinical trials of the same class of agents conducted by other sponsors; and
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols.

We do not know whether any of our preclinical studies or clinical trials will begin as planned, will need to be restructured or will be completed on schedule, or at all. Any inability to successfully complete preclinical and clinical development could result in additional costs or impair our ability to generate revenues from product sales, regulatory and commercialization milestones and royalties. In addition, if we make manufacturing or formulation changes to our product candidates, we may need to conduct

additional studies to bridge our modified product candidates to earlier versions. Clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do, which could impair our ability to successfully commercialize our product candidates and may harm our business, financial conditions, results of operations and prospects.

If clinical trials of our product candidates fail to satisfactorily demonstrate safety and efficacy to the EMA, FDA and other regulators, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of these product candidates.

The results of preclinical testing and clinical trials are very unpredictable, and we cannot assure you that our clinical trials will satisfactorily demonstrate safety and efficacy. If the results of our clinical trials are inconclusive or if there are safety concerns or serious adverse events associated with our product candidates, we may:

- be delayed in obtaining marketing approval for our product candidates, if at all;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings;
- be subject to changes in the way the product is administered;
- be required to perform additional clinical trials to support approval or be subject to additional post- marketing testing requirements;
- have regulatory authorities withdraw, or suspend, their approval of the product or impose restrictions on its distribution in the form of a modified risk evaluation and mitigation strategy, or REMS;
- be subject to the addition of labeling statements such as warnings or contraindications;
- be sued; or
- experience damage to our reputation.

For example, following our meetings with the FDA in April and December 2016, the FDA requested that we undertake our REFLECT Phase III trial under a special protocol assessment to provide primary evidence of effectiveness in bilateral treatment of LHON subjects and we initiated this trial in 2018. If the top-line results of the RESCUE and REVERSE trials are positive, we intend to meet with the FDA and apply for Fast Track Designation, which, if granted, would allow us to file a BLA and seek an accelerated approval pathway, while we continue to conduct our REFLECT trial. However, we cannot assure you that our RESCUE or REVERSE clinical trials will satisfactorily demonstrate safety and efficacy or that the FDA will grant our application for Fast Track Designation or support our filing of a BLA.

Our development costs will increase if we are unable to satisfactorily demonstrate safety and efficacy to the applicable regulatory authorities, as we may need to conduct additional preclinical studies or clinical trials and may experience delay in testing or obtaining marketing approvals, or may fail to obtain marketing approvals at all. Moreover, significant preclinical study or clinical trial delays could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do, which could impair our ability to successfully commercialize our product candidates and may harm our business, financial condition, results of operations and prospects.

We have not completed the evaluation of our lead product candidate, GS010, in clinical trials, and we are currently conducting a Phase I/II clinical trial for our second lead product candidate, GS030.

We have initiated two Phase III clinical trials in GS010, for which we reported data for both in 2018 and 2019, and for our current Phase I/II clinical trial in GS030, we treated the first patient in October 2018 and expect to report data in 2021. However, neither GS010 nor GS030, nor our other product candidates, have ever been fully evaluated in human clinical trials, and we may experience unexpected results in the future. We or any of our future development partners will be required to demonstrate through adequate and well-controlled clinical trials that our product candidates containing our proprietary vectors are safe and effective, with a favorable benefit-risk profile, for use in their target indications before we can seek regulatory approvals for their commercial sale. Drug development is a long, expensive and uncertain process, and delay or failure can occur at any stage of development, including after commencement of any of our clinical trials.

Our product candidates and the process for administering our product candidates using AAV vectors may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit their commercial potential or result in significant negative consequences following any potential marketing approval.

During the conduct of clinical trials, patients report changes in their health, including illnesses, injuries and discomforts, to their study doctor. Often, it is not possible to determine whether the product candidate being studied caused these conditions. Various illnesses, injuries and discomforts have been reported from time to time during clinical trials of our product candidates. Regulatory authorities may draw different conclusions or require additional testing to confirm these determinations.

In addition, it is possible that as we test our product candidates in larger, longer and more extensive clinical programs, or as use of these product candidates becomes more widespread if they receive regulatory approval, illnesses, injuries, discomforts and other adverse events that were observed in earlier trials, as well as conditions that did not occur or went undetected in previous trials, will be reported by patients. Many times, side effects are only detectable after investigational products are tested in large-scale, Phase III clinical trials or, in some cases, after they are made available to patients on a commercial scale after approval. If additional clinical experience indicates that our product candidates cause serious or life-threatening side effects, the development of our product candidates may fail or be delayed, or, if the product candidate has received regulatory approval, such approval may be revoked, which would harm our business, prospects, operating results and financial condition.

Our product candidates may lead to undesirable side effects or adverse reactions. In previous studies involving gene therapy treatments, some subjects experienced significant adverse side effects, including reported cases of leukemia and death seen in other clinical trials using other vectors. While new recombinant vectors have been developed to reduce these side effects, gene therapy is still a relatively new approach to disease treatment and additional adverse side effects could develop. Insertional oncogenesis, where the vector is inserted near a cancer causing gene, or an oncogene, may cause adverse immunologic reactions and we cannot assure that such reactions will not occur in any of our planned or future studies. There also is the potential risk of delayed adverse events following exposure to gene therapy products due to persistent biologic activity of the genetic material or other components of products used to carry the genetic material.

Possible adverse side effects that could occur with treatment with gene therapy products include an immunologic reaction shortly after administration which, while not necessarily adverse to the patient's health, could substantially limit the effectiveness of the treatment. In previous clinical trials involving AAV vectors for gene therapy, some patients experienced the development of a T-cell response, whereby after the vector is within the target cell, the cellular immune response system triggers the removal of transduced cells by activated T-cells. If our products demonstrate a similar effect, we may decide or be required to halt or delay further clinical development of our product candidates. There are also risks inherent in intravitreal injections, including those used to administer GS010 and GS030, such as intraocular inflammation, cataract, sterile and culture-positive endophthalmitis, retinal detachment and retinal tear.

In addition to any potential side effects caused by our product candidates, the administration process or related procedures also can cause adverse side effects. If any such adverse events occur, our clinical trials could be suspended or terminated.

If in the future we are unable to demonstrate that such adverse events were not caused by the product candidate, the FDA, the EMA or other regulatory authorities could deny approval or order us to cease further development of our product candidates for any or all targeted indications. Even if we are able to demonstrate that all future serious adverse events are not product-related, such occurrences could affect patient recruitment or the ability of enrolled patients to complete the clinical trial. Moreover, if we elect or are required to delay, suspend or terminate any clinical trial of any of our product candidates, the commercial prospects of such product candidates may be harmed and our ability to generate product revenues from any of these product candidates may be delayed or eliminated. Any of these occurrences may harm our ability to develop other product candidates and may harm our business, financial condition and prospects significantly.

Additionally, if any of our product candidates receives marketing approval, the FDA and the EMA could require us to adopt a Risk Evaluation and Mitigation Strategy, or REMS, or a Risk Management Plan, or RMP, to ensure that its benefits outweigh its risks, which may include, among other things, a medication guide outlining the risks of the product for distribution to patients and a communication plan to healthcare practitioners.

Furthermore, if we or others later identify undesirable side effects caused by any of our product candidates, several potentially significant negative consequences could result, including:

- regulatory authorities may suspend or withdraw approvals of such product candidate;
- regulatory authorities may require additional warnings on the label;
- we may be required to change the way a product candidate is administered or conduct additional clinical trials;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of our product candidates and could significantly harm our business, prospects, financial condition and results of operations.

We may be unable to obtain orphan drug designation for our product candidates other than GS010 and GS030, and may be unable to obtain exclusivity for any of our product candidates. If our competitors are able to obtain orphan drug exclusivity for products that constitute the same drug and treat the same indications as our product candidates, we may not be able to have competing products approved by the applicable regulatory authority for a significant period of time.

Regulatory authorities in some jurisdictions, including the United States and the European Union, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan

Drug Act of 1983, the FDA may designate a product candidate as an orphan drug if it is intended to treat a rare disease or condition, which is generally defined as having a patient population of fewer than 200,000 individuals annually in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States. In the European Union, the European Commission, after receiving a recommendation from the EMA's Committee for Orphan Medicinal Products, grants orphan medicinal product designation to promote the development of products that are intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition affecting not more than five in 10,000 persons in the European Union when the application is made. Additionally, orphan designation is granted for products intended for the diagnosis, prevention or treatment of a life-threatening, seriously debilitating or serious and chronic condition when, without incentives, it is unlikely that sales of the drug in the European Union would be sufficient to justify the necessary investment in the drug or biologic product.

Moreover, in order to obtain orphan designation in the European Union, it is necessary to demonstrate that there exists no satisfactory method of diagnosis, prevention or treatment of the condition authorized for marketing in the European Union, or if such a method exists, that the product will be of significant benefit to those affected by the condition. The EMA will reassess whether GS010 and GS030 continue to meet the criteria for orphan medicinal product designation in the European Union at the time it reviews a marketing authorization application for each product candidate. If the EMA considers that either of GS010 or GS030 no longer meets these criteria, for example, because either product candidate does not offer a significant benefit over existing therapies, it may revoke the applicable orphan medicinal product designation prior to approval.

GS010 and GS030 have been granted orphan drug designation by the FDA and the European Commission for the treatment of Leber Hereditary Optic Neuropathy, or LHON, and for the treatment of Retinitis Pigmentosa, or RP, respectively. If we request orphan drug designation for our other product candidates, there can be no assurances that the FDA or the European Commission will grant any of our product candidates such designation. Additionally, the designation of any of our product candidates as an orphan product does not guarantee that any regulatory agency will accelerate regulatory review of, or approve, that product candidate, nor does it limit the ability of any regulatory agency to grant orphan drug designation to product candidates of other companies that treat the same indications prior to our product candidates receiving exclusive marketing approval.

Even if we were to obtain orphan drug exclusivity for a product candidate, such as for GS010 and GS030, that exclusivity may not effectively protect the product candidate from competition because different drugs can be approved for the same condition. In the United States, even after an orphan drug is approved, the FDA may subsequently approve another drug for the same condition if the FDA concludes that the latter drug is not the same drug or is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care. In the European Union, marketing authorization may be granted to a similar medicinal product for the same orphan indication if:

- the second applicant can establish that its medicinal product, although similar to the orphan medicinal product already authorized, is safer, more effective or otherwise clinically superior;
- the holder of the marketing authorization for the original orphan medicinal product consents to a second orphan medicinal product application; or
- the holder of the marketing authorization for the original orphan medicinal product cannot supply sufficient quantities of orphan medicinal product.

Even if we complete the necessary clinical trials, we cannot predict when, or if, we will obtain regulatory approval to commercialize a product candidate and the approval may be for a more narrow indication than we seek.

We cannot commercialize a product candidate until the appropriate regulatory authorities have reviewed and approved the product candidate. Even if our product candidates meet their safety and efficacy endpoints in clinical trials, regulatory authorities may not complete their review processes in a timely manner and may recommend non-approval or may place restrictions on approval. In addition, we may experience delays or rejections as a result of future legislation or administrative action, or changes in regulatory authority policy during the period of product development, clinical trials and the review process.

Regulatory authorities also may approve a product candidate for more limited indications than requested, may require precautions or contraindications or they may grant approval subject to the performance of costly post-marketing clinical trials or implementation of REMS. In addition, regulatory authorities may not approve the labeling claims that are necessary or desirable for the successful commercialization of our product candidates. Any of the foregoing events could materially harm the commercial prospects for our product candidates.

Even if we obtain regulatory approval for a product candidate, our products will remain subject to the terms of our approvals and ongoing regulatory oversight that may limit how we market our products, which could materially impair our ability to generate revenues.

Even if we obtain any regulatory approval for our product candidates, this approval may carry conditions that limit the

market for the product or put the product at a competitive disadvantage relative to alternative products. In addition, any approved products will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record keeping and submission of safety, RMP and other post-market information. In the European Union, our product candidates will be subject to the regulatory oversight of the CAT, which makes recommendations to the Committee for Medicinal Products for Human Use, or CHMP, for recommendation of approval by the European Commission. In the United States, any regulatory approvals that we receive for our product candidates also may be subject to REMS, limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase IV clinical trials, and surveillance to monitor the quality, safety and efficacy of the product. For example, the holder of an approved BLA is obligated to monitor and report adverse events and any failure of a product to meet the specifications in the BLA. FDA and EMA guidance advises that patients treated with some types of gene therapy undergo follow-up observations for potential adverse events for as long as 15 years. If a previously unknown safety issue is discovered with a product after approval, the FDA, the EMA or other regulatory authorities may require revisions to the labeling or approved indications of the product or withdraw approval of the product entirely. The holder of an approved BLA also must submit new or supplemental applications and obtain FDA approval for certain changes to the approved product, product labeling or manufacturing process. Advertising and promotional materials must comply with FDA rules and other applicable federal and state laws. In addition, product manufacturers are subject to payment of user fees and continual review and periodic inspections by the FDA, the EMA and other regulatory authorities for compliance with current Good Manufacturing Practices, or cGMP, requirements and adherence to commitments made in the BLA, Common Technical Document, or CTD, or other marketing application.

If we fail to comply with applicable regulatory requirements following approval of any of our product candidates, a regulatory authority may:

- issue a warning letter asserting that we are in violation of the law;
- seek an injunction or impose administrative, civil or criminal penalties or monetary fines;
- suspend or withdraw regulatory approval or revoke a license;
- suspend any ongoing clinical trials;
- refuse to approve a pending BLA or comparable other marketing application (or any supplements thereto) submitted by us or our strategic partners;
- restrict the marketing or manufacturing of the product;
- seize or detain the product or otherwise require the withdrawal of the product from the market;
- refuse to permit the import or export of products; or
- refuse to allow us to enter into supply contracts, including government contracts.

Any government investigation could require us to expend significant time and resources in response and could generate negative publicity. The occurrence of any event or penalty described above may inhibit our ability to commercialize our product candidates and adversely affect our business, financial condition, results of operations and prospects.

In addition, the FDA or EMA's policies, and those of equivalent other regulatory agencies, may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

If we fail to develop and commercialize other product candidates, we may be unable to grow our business.

Although the development and commercialization of GS010 for the treatment of LHON and GS030 for the treatment of Retinitis Pigmentosa, or RP, is our primary focus, as part of our growth strategy, we believe that GS030, if successful in the treatment of RP, may be transferable to the treatment of other diseases of photoreceptor degeneration, including dry AMD and GA. In addition, we believe our technology platforms have broad applicability both within and outside ophthalmology as well as in certain CNS disorders. These other indications as well as additional product candidates will require additional, time-consuming and costly development efforts prior to commercial sale, including preclinical studies, clinical trials and approval by the FDA, the EMA and/or applicable foreign regulatory authorities, which may also differ appreciably from those of our initial product candidates focused on retinal neurodegenerative diseases. All product candidates are prone to the risks of failure that are inherent in pharmaceutical product development, including the possibility that the product candidate will not be shown to be sufficiently safe and effective for approval by regulatory authorities. In addition, we cannot assure you that any such products that are approved will be manufactured or produced economically, successfully commercialized or widely prescribed.

We face significant competition in an environment of rapid technological change, and our competitors, many of which have more resources and experience than we have, may achieve regulatory approval before us or develop therapies that are more advanced or effective than ours.

The biotechnology and pharmaceutical industries, including the gene therapy field, are characterized by rapidly changing technologies, significant competition and a strong emphasis on intellectual property. We face substantial competition from many different sources, including large and specialty pharmaceutical and biotechnology companies, academic research institutions, government agencies and public and private research institutions.

We are aware of several companies focused on developing gene therapies for various indications, including Adverum, Dimension Therapeutics, Inc., Applied Genetic Technologies Corporation, Asklepios BioPharmaceutical, Inc., Audentes Therapeutics, Inc., bluebird bio, Inc., GlaxoSmithKline, Nightstar Therapeutics Ltd., Spark Therapeutics, Inc., uniQure and Voyager Therapeutics, Inc., as well as several companies addressing other methods for modifying genes and regulating gene expression. Advances in gene therapy technology made by a competitor may be used to develop therapies that could compete against any of our product candidates. In addition, our individual product candidates face competition from companies outside the gene therapy approach who are using other treatment methods to address the same target indications, such as companies developing retinal implants or other stem cell approaches. See Section 6.11, "Competition" of this Document.

Many of our potential competitors have substantially greater financial, technical and other resources, such as larger research and development, clinical, manufacturing and marketing departments. Established competitors may invest heavily to quickly discover and develop novel compounds that could make our product candidates obsolete or uneconomical. Any new product that competes with an approved product may need to demonstrate compelling advantages in efficacy, convenience, tolerability and safety to be commercially successful. Any of our product candidates that are approved in the future will also face other competitive factors, including generic competition, which could force us to lower prices or could result in reduced sales. In addition, new products developed by others could emerge as competitors to our product candidates.

In addition, mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated among a smaller number of competitors. Our commercial opportunities could be reduced or eliminated if competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Competitors also may obtain FDA or other regulatory approval for their products more rapidly or earlier than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market.

Furthermore, members of our management team may be affected by conflicts of interest to the extent that they serve in management or directorship capacities at our competitors. For example, Bernard Gilly is currently non-executive Chairman of the Board of Directors of Pixium Vision, a company working on a retinal implant technology that targets end stage, non-syndromic patients with no photoreceptors, whereas gene therapy targets patients earlier in the disease with some residual vision and photoreceptors. See Section 13.1.2, "Biographical Information About the Members of the Board of Directors and Officers of the Company" and Section 6.6, "Our Second Product Candidate: GS030 for the Treatment of RP – No Existing Therapies for the Treatment of RP" of this Document.

In addition, as a result of the expiration or successful challenge of the patent rights that we license from third parties, we could face more litigation with respect to the validity or scope of patents. The availability of our competitors' products could limit the demand and the price we are able to charge for any product candidate that we may develop and commercialize.

If we are not able to compete effectively against our current and future competitors, our business will not grow and our financial condition and operations will suffer.

Even if we obtain and maintain approval for our product candidates from the FDA or the EMA, such approval does not ensure approval from other regulatory authorities, and we still may never obtain approval for our product candidates in other countries or jurisdictions outside of the United States or the European Union.

Approval of a product candidate in the United States by the FDA or in the European Union by the EMA does not ensure approval of such product candidate by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority does not ensure approval by the FDA, the EMA or regulatory authorities in other countries. Sales of our product candidates outside of the United States and the European Union will be subject to different regulatory requirements governing clinical trials and marketing approval. Even if the FDA or the EMA grants marketing approval for a product candidate, comparable regulatory authorities of other countries also must approve the manufacturing and marketing of the product candidates in those countries. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from, and more onerous than, those in the United States and the European Union, including additional preclinical studies or clinical trials. In many countries outside the United States, a product candidate must be approved

for reimbursement before it can be approved for sale in that country. In some cases, the price that we intend to charge for our products, if approved, is also subject to approval. We also intend to submit a marketing authorization application to the EMA for approval of our product candidates in the European Union, but obtaining such approval from the European Commission following the opinion of the EMA is a lengthy and expensive process. Even if a product candidate is approved, the FDA or the EMA may limit the indications for which the product may be marketed, require extensive warnings on the product labeling or require expensive and time-consuming additional clinical trials or reporting as conditions of approval. Regulatory authorities in countries outside of the United States and the European Union also have requirements for approval of product candidates with which we must comply prior to marketing in those countries. Obtaining such regulatory approvals and compliance with such other regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our product candidates in certain countries.

Further, clinical trials conducted in one country may not be accepted by regulatory authorities in other countries. Also, regulatory approval for any of our product candidates may be withdrawn. If we fail to comply with the regulatory requirements, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed and our business, financial condition, results of operations and prospects will be adversely affected.

4.3 RISKS RELATED TO MANUFACTURING AND COMMERCIALIZATION OF OUR PRODUCT CANDIDATES

Gene therapies are novel, complex and difficult to manufacture. We have limited manufacturing experience and could experience production problems that result in delays in our development or commercialization programs.

We have limited experience manufacturing our product candidates. We may be unable to produce commercial materials or meet demand to support a commercial launch for our product candidates. Any such failure could delay or prevent the development of our product candidates and would have a negative impact on our business, financial condition and results of operations.

As of the date of this Document, we have contracts with Brammer and Lonza to manufacture clinical and commercial supplies of our product candidates, and we expect to continue to rely on third parties for our manufacturing needs. This is and will continue to be especially challenging as the manufacturing process to produce our product candidates is complex, novel and has not been validated for commercial use. Several factors could cause production interruptions, including equipment malfunctions, facility contamination, raw material shortages or contamination, natural disasters, disruption in utility services, human error or disruptions in the operations of our current and future suppliers.

Our product candidates require processing steps that are more complex than those required for most chemical pharmaceuticals because the physical and chemical properties of a biologic such as ours generally cannot be fully characterized. As a result, assays of the finished product may not be sufficient to ensure that the product will perform in the intended manner. Accordingly, we employ multiple steps to control the manufacturing process to assure that the product candidate is made in strict and consistent compliance with our requirements. Problems with the manufacturing process, including even minor deviations from our requirements, could result in product defects or manufacturing failures that result in lot failures, product recalls, product liability claims or insufficient inventory. In addition, we may encounter problems achieving adequate quantities and quality of clinical-grade materials that meet FDA, EMA or other applicable standards or specifications with consistent and acceptable production yields and costs.

The FDA, the EMA and other regulatory authorities may also require submission of samples of any lot of an approved product together with the protocols showing the results of applicable tests. Under some circumstances, the FDA, the EMA or other regulatory authorities may require that a lot not be distributed until the agency authorizes its release. Slight deviations in the manufacturing requirements, including those affecting quality attributes and stability, may result in unacceptable changes in the product that could result in lot failures or product recalls. Lot failures or product recalls could cause us to delay product launches or clinical trials, which could be costly to us and otherwise harm our business, financial condition, results of operations and prospects.

We may also encounter problems hiring and retaining the experienced specialist scientific, quality control and manufacturing personnel needed to supervise manufacturing processes carried out by third parties, which could result in delays in our production or difficulties in complying with applicable regulatory requirements.

Any problems in the manufacturing process or facilities for our product candidates could make us a less attractive collaborator for potential partners, including larger pharmaceutical companies and academic research institutions, which could limit our access to additional attractive development programs. Problems in our manufacturing process or facilities also could restrict our ability to meet market demand for our products.

We rely, and expect to continue to rely, on Brammer, Lonza and other third parties to conduct, supervise and monitor manufacturing for our preclinical studies and clinical trials. If these third parties do not meet our deadlines, successfully carry out their contractual duties or otherwise conduct the manufacturing for these studies and trials as required, we may not be able to obtain regulatory approval for or commercialize our product candidates when expected or at all.

We currently rely, and expect to continue to rely to a significant degree, on Brammer, Lonza and other third parties to carry out the production of our preclinical study, clinical trial and commercial materials. We can control only certain aspects of these third-party activities.

Under certain circumstances, Brammer, Lonza are entitled to terminate their engagements with us. If we need to enter into alternative arrangements, it could delay our product development activities. Our reliance on Brammer and Lonza for certain manufacturing activities will reduce our control over these activities but will not relieve us of our responsibility to ensure compliance with all required regulations. If Brammer or Lonza do not successfully carry out their contractual duties, meet expected deadlines or manufacture our clinical trial materials in accordance with regulatory requirements, or if there are disagreements between us and Brammer or Lonza, we will not be able to complete, or may be delayed in completing, the preclinical studies required to support future IND submissions and the clinical trials required for approval of our product candidates. In such instances, we would need to find an appropriate replacement third-party relationship, which may not be readily available or on acceptable terms, causing additional delay or increased expense prior to the approval of our product candidates.

In addition to Brammer and Lonza, we rely on additional third parties to manufacture ingredients of our product candidates and to perform quality testing, and reliance on these third parties rather than manufacturing the product candidates ourselves, exposes us to additional risks, including:

- reduced control for certain aspects of manufacturing activities;
- termination or nonrenewal of such manufacturing agreements in a manner or at a time that is costly or damaging to us; and
- disruptions to the operations of our third-party manufacturers caused by conditions unrelated to our business or operations, including the bankruptcy of the manufacturer or service provider.

Any of these events could lead to clinical trial delays or failure to obtain regulatory approval, or impact our ability to successfully commercialize future product candidates. Some of these events could be the basis for FDA, EMA or other regulatory authority action, including injunction, recall, seizure or partial or total suspension of product manufacture.

Failure to comply with regulatory requirements related to manufacturing could result in suspension or delay of commercial sales.

In the future, we may rely on third parties' manufacturing facilities for commercial supplies of our product candidates, and the facilities and quality systems of such parties must pass an inspection for compliance with the applicable regulations as a condition of regulatory approval. This is because the preparation of therapeutics for clinical trials or commercial sale is subject to extensive regulation. For example, components of a finished therapeutic product approved for commercial sale or used in late-stage clinical trials must be manufactured in accordance with cGMP requirements. These regulations govern manufacturing processes and procedures, including record keeping, and the implementation and operation of quality systems to control and assure the quality of investigational products and products approved for sale. Poor control of production processes can lead to the introduction of outside agents or other contaminants, or to inadvertent changes in the properties or stability of product candidates that may not be detectable in final product testing. We must supply all necessary documentation in support of a BLA or other marketing authorization application on a timely basis and must adhere to the FDA's and the EMA's cGMP requirements.

In addition, the regulatory authorities may, at any time following approval of a product for sale, audit the manufacturing facilities for such product. If any such inspection or audit identifies a failure to comply with applicable regulations, or if a violation of product specifications or applicable regulations occurs independent of such an inspection or audit, the relevant regulatory authority may require remedial measures that may be costly or time-consuming to implement and that may include the temporary or permanent suspension of a clinical trial or commercial sales or the temporary or permanent closure of a manufacturing facility. Any such remedial measures imposed upon a third-party manufacturer or us could materially harm our business, financial condition, results of operations and prospects.

If any of our third party manufacturers fails to comply with applicable cGMP regulations, the FDA, the EMA and other regulatory authorities can impose regulatory sanctions including, among other things, refusal to approve a pending application for a new product candidate or suspension or revocation of a pre-existing approval. Such an occurrence may cause our business, financial condition, results of operations and prospects to be materially harmed.

Additionally, if supply from our third-party manufacturer is interrupted, there could be a significant disruption in commercial supply of our products. We do not currently have a backup

manufacturer of our product candidate supply for clinical trials. An alternative manufacturer would need to be qualified, through a supplement to its regulatory filing, which could result in further delay. For example, for our GS010 product candidate, in 2018, in anticipation of commercial launch, we transferred manufacturing technology from a third-party manufacturer that fulfilled our preclinical, Phase I, Phase II and Phase III product candidate supply and product requirements to a new third-party manufacturer, BrammerBio. Any failure or delay of this new third-party manufacturer to successfully and timely produce adequate supply would result in potentially significant delays to our GS010 clinical development and commercialization plan.

Any contamination in the manufacturing process for our product candidates could result in delays in our clinical development or marketing schedules.

Given the nature of biologics manufacturing, there is a risk of contamination. Any contamination could materially adversely affect our ability to produce product candidates on schedule and could, therefore, harm our results of operations and cause reputational damage.

Most of the raw materials required in our manufacturing process are derived from biologic sources. Such raw materials are difficult to procure and may be subject to contamination or recall. A material contamination, recall or restriction on the use of biologically derived substances in the manufacture of our product candidates could adversely impact or disrupt the commercial manufacturing or the production of clinical material, which could materially and adversely affect our development timelines.

Interruptions in the supply of product or inventory loss may adversely affect our operating results and financial condition.

Our product candidates are manufactured using technically complex processes requiring specialized facilities, highly specific raw materials and other production constraints. The complexity of these processes, as well as strict government standards for the manufacture and storage of our products, subjects us to production risks. While product batches released for use in clinical trials undergo sample testing, some defects may only be identified following product release. In addition, process deviations or unanticipated effects of approved process changes may result in these intermediate products not complying with stability requirements or specifications.

Our product candidates must be stored and transported at temperatures within a certain range. If these environmental conditions deviate, our product candidates' remaining shelf-lives could be impaired or their efficacy and safety could be adversely affected, making them no longer suitable for use.

The occurrence, or suspected occurrence, of production and distribution difficulties can lead to lost inventories and, in some cases, product recalls, with consequential reputational damage and the risk of product liability. The investigation and remediation of any identified problems can cause production delays, substantial expense, lost sales and delays of new product launches. Any interruption in the supply of finished products or the loss thereof could hinder our ability to timely distribute our products and satisfy customer demand. Any unforeseen failure in the storage of the product or loss in supply could delay our clinical trials and, if our product candidates are approved, result in a loss of our market share and negatively affect our business, financial condition, results of operations and prospects.

We rely on third parties to conduct, supervise and monitor our preclinical studies and clinical trials. If these third parties do not meet our deadlines or otherwise conduct the studies and trials as required, our clinical development programs could be delayed or unsuccessful and we may not be able to obtain regulatory approval for or commercialize our product candidates when expected or at all.

We do not have the ability to conduct all aspects of our preclinical studies or clinical trials ourselves. We rely, and expect to continue to rely, on medical institutions, clinical investigators, CROs, contract laboratories and collaborators to carry out our preclinical studies and clinical trials and to perform data collection and analysis. Such third parties play a significant role in the conduct of these studies and trials and the subsequent collection and analysis of data. While we have agreements governing their activities, we have limited influence over their actual performance and will control only certain aspects of such third parties' activities. Nevertheless, we are responsible for ensuring that each of our preclinical studies and clinical trials is conducted in accordance with the applicable legal, regulatory, ethical and scientific standards, and our reliance on the third party does not relieve us of our regulatory responsibilities.

We and our CROs are required to comply with the FDA's, the EMA's and other regulatory authorities' GCP, cGMP, Good Laboratory Practice, or GLP, and other applicable requirements for conducting, recording and reporting the results of our preclinical studies and clinical trials to assure that the data and reported results are credible and accurate and that the rights, integrity and confidentiality of clinical trial participants are protected. Regulatory authorities around the world, including the FDA and the EMA, enforce these requirements through periodic inspections of study sponsors, CROs, principal investigators and clinical trial sites. If we, our CROs, our investigators or trial sites fail to comply with applicable GCP, GLP and cGMP requirements, the clinical data generated in our future clinical trials may be deemed unreliable and the FDA, the EMA or other regulatory authorities around the world may require us to perform additional clinical trials before issuing any marketing authorizations for our product candidates. Upon inspection, the FDA or EMA may determine that our clinical trials did not comply with GCP and

cGMP requirements, which may render the data generated in those trials unreliable or unusable for the purpose of supporting the marketing authorization applications for our products. In addition, our future clinical trials will require a sufficient number of study subjects to evaluate the safety and efficacy of our product candidates. Accordingly, if, for example, our CROs fail to comply with these regulations or if trial sites fail to recruit a sufficient number of patients, we may be required to repeat such clinical trials or incur delays in the performance of such trials, which would delay the regulatory approval process.

Therefore, the timing of the initiation and completion of trials is largely controlled by such third parties and may occur at times substantially different from our estimates. Our development activities, including preclinical studies and clinical trials conducted in reliance on third parties, may be delayed, suspended or terminated if:

- we are unable to negotiate agreements with third parties under reasonable terms;
- termination or nonrenewal of agreements with third parties occurs in a manner or at a time that is costly or damaging to us;
- the third parties do not successfully carry out their contractual duties or fail to meet regulatory obligations or expected deadlines; or
- the quality or accuracy of the data obtained by third parties is compromised due to their failure to adhere to clinical protocols, regulatory or ethical requirements, or for other reasons.

Third party performance failures in connection with our preclinical studies and clinical trials may increase our costs, delay our ability to obtain regulatory approval, delay or prevent starting or completion of clinical trials and delay or prevent commercialization of our product candidates. In the event of a default, bankruptcy or shutdown of, or a dispute with, a third party, we may be unable to enter into a new agreement with another third party on commercially acceptable terms. In addition, our third-party agreements usually contain a clause limiting such third party's liability, such that we may not be able to obtain full compensation for any losses we may incur in connection with the third party's performance failures. While we believe that there are numerous alternative sources to provide these services, in the event that we seek such alternative sources, we may not be able to enter into replacement arrangements without incurring delays or additional costs.

We have entered, and may in the future enter, into collaborations with third parties for the development and commercialization of our product candidates. If we are unable to enter into such collaborations on acceptable terms, or if these collaborations are not successful, our business could be adversely affected.

We have limited capabilities for product development and may seek to enter into collaborations in the future with third parties, such as pharmaceutical and biotechnology companies, for the development and potential commercialization of our product candidates, whether in specific geographic regions or worldwide, due to substantial capital costs required to develop the product candidates or manufacturing constraints. We may not be successful in our efforts to establish such strategic partnerships or other alternative arrangements for our product candidates because our research and development pipeline may be insufficient, our product candidates may be deemed to be at too early of a stage of development for collaborative effort or third parties may not view our product candidates as having the requisite potential to demonstrate safety and efficacy. In addition, we may be restricted under existing collaboration agreements from entering into future agreements with potential collaborators.

If we are unable to reach agreements with suitable collaborators on a timely basis, on acceptable terms or at all, we may have to curtail the development of a product candidate, reduce or delay its development program, delay its potential commercialization, reduce the scope of any sales or marketing activities or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to fund development or commercialization activities on our own, we may need to obtain additional expertise and additional capital, which may not be available to us on acceptable terms or at all. If we fail to enter into collaborations and do not have sufficient funds or expertise to undertake the necessary development and commercialization activities, we may not be able to further develop our product candidates.

Even if we are able to enter into such collaborations, our ability to generate revenues from these arrangements would depend on our and our collaborators' abilities to successfully perform the functions assigned to each of us in these arrangements. Our relationships with such collaborators may pose several risks, including the following:

- collaborators have significant discretion in determining the efforts and the amount and timing of resources that they will apply to these collaborations;
- collaborators may not perform their obligations as expected;
- collaborators may not pursue development and commercialization of any product candidates that achieve regulatory approval or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborators' strategic focus or available funding or external factors, such as an acquisition, that divert resources or create competing priorities;
- we may not have access to, or may be restricted from disclosing, certain information regarding product candidates being developed or commercialized under a collaboration

and, consequently, may have limited ability to inform our shareholders about the status of such product candidates;

- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- product candidates developed in collaboration with us may be viewed by our collaborators as competitive with their own product candidates or products, which may cause collaborators to cease to devote resources to the commercialization of our product candidates;
- a collaborator with marketing and distribution rights to one or more of our product candidates that achieve regulatory approval may not commit sufficient resources to the marketing and distribution of any such product candidate;
- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation or the preferred course of development of any product candidates, may cause delays or termination of the research, development or commercialization of such product candidates, may lead to additional responsibilities for us with respect to such product candidates or may result in litigation or arbitration, any of which would be time-consuming and expensive;
- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation;
- disputes may arise with respect to the ownership of intellectual property developed pursuant to our collaborations;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability; and
- collaborations may be terminated for the convenience of the collaborator and, if terminated, we could be required to raise additional capital to pursue further development or commercialization of the applicable product candidates.

Moreover, an unsuccessful outcome in any clinical trial for which our collaborator is responsible could be harmful to the public perception and prospects of our gene therapy platform. If any collaborations we enter into do not result in the successful development and commercialization of products, or if a collaborator terminates its agreement with us, we would not receive any future research funding or milestone or royalty payments under such collaboration. If we did not receive the funding we expected under such agreements, our development of product candidates could be delayed and we could need additional resources to develop our product candidates. In addition, if a collaborator terminates its agreement with us, we may find it more difficult to attract new collaborators, and the perception of us in the business and financial communities could be adversely affected. All of the risks relating to product development, regulatory approval and commercialization described in this Document apply to the activities of any of our collaborators.

Relationships with pharmaceutical and biotechnology companies for the development and potential commercialization of our product candidates, or those like them, may require us to incur additional expenses, issue securities that dilute our existing shareholders or disrupt our management and business. In addition, we could face significant competition in seeking appropriate collaborators, and the negotiation process is time- consuming and complex. Our ability to reach a definitive collaboration agreement will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of several factors. If we license rights to product candidates, we may not be able to realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations and company culture.

Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed.

Because we currently rely on Brammer Bio, or Brammer, Lonza Houston Inc., or Lonza, and other third parties to manufacture all or part of our product candidates and to perform quality testing, and because we collaborate with various organizations and academic institutions for the advancement of our gene therapy platform, we must share our proprietary technology and confidential information with them. We seek to protect our proprietary technology, in part, by entering into confidentiality agreements and, if applicable, material transfer agreements, collaborative research agreements, consulting agreements or other similar agreements with our collaborators, advisors, employees and consultants prior to beginning research or disclosing proprietary information. These agreements limit the rights of the third parties to use or disclose our confidential information. Despite these confidentiality agreements, the need to share trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others or are disclosed or used in violation of these agreements. Given that our proprietary position is based on our know-how and trade secrets, a competitor's discovery of our proprietary technology and confidential information or other unauthorized use or disclosure would impair our competitive position and may have a material adverse effect on our business, financial condition, results of operations and prospects.

If we are unable to establish sales, marketing and distribution capabilities for our product candidates, whether it be an internal infrastructure or an arrangement with a commercial partner, we may not be successful in commercializing those product candidates if and when they are approved.

Other than the appointment of our Vice President of Marketing, we currently have no sales, marketing, or distribution capabilities. To successfully commercialize any of our product candidates, we will need to develop these capabilities, either on our own or with others, which will be expensive and time-consuming and could delay any product launch. Moreover, we cannot be certain that we will be able to successfully develop this capability. We intend to commercialize our products, on our own or with strategic partners, in Europe and the United States and expect to seek partnership agreements in Asia for sales, marketing and distribution. If any current or future collaborators do not commit sufficient resources to commercialize our products, or we are unable to develop the necessary capabilities on our own, we will be unable to generate sufficient product revenue to sustain our business. We will be competing with many companies that have extensive, experienced and well- funded marketing and sales operations to recruit, hire, train and retain marketing and sales personnel. We also face competition in our search for third parties to assist us with the sales and marketing efforts of our product candidates. Without an internal team or the support of a third party to perform marketing, sales and distribution functions, we may be unable to compete successfully against more established companies.

Market opportunities for our product candidates may be smaller than anticipated.

Our understanding of both the number of people who have the diseases targeted by our product candidates, as well as the subset of people with such diseases who have the potential to benefit from treatment with our product candidates, are based on estimates. These estimates have been derived from a variety of sources, including the scientific literature, surveys of clinics, patient foundations and market research and may prove to be incorrect. Further, new studies may reduce the estimated incidence or prevalence of these diseases. The number of patients in the United States, the European Union and elsewhere may turn out to be lower than expected, may not be otherwise amenable to treatment with our products or patients may become increasingly difficult to identify and access. In addition, even if we obtain significant market share for our product candidates, because the potential target populations are very small, we may not achieve profitability despite obtaining significant market share.

Future insurance coverage and reimbursement status of our product candidates is uncertain.

We expect the cost of a single administration of our products candidates to be substantial, when and if they achieve regulatory approval. We expect that coverage and reimbursement by government and private payors will be essential for most patients to be able to afford these treatments. Accordingly, sales of our product candidates will depend substantially, in the United States and the European Union in particular, on the extent to which the costs of our product candidates will be paid or reimbursed by government authorities, private health coverage insurers and other third-party payors. The marketability of any products for which we receive regulatory approval for commercial sale may suffer if the government and third-party payors fail to provide adequate coverage and reimbursement. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our product candidates. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Coverage and reimbursement by a third-party payor may depend upon several factors, including the third- party payor's determination that use of a product is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

Obtaining coverage and reimbursement for a product from third-party payors is a time-consuming and costly process that could require us to provide to the payor supporting scientific, clinical and cost-effectiveness data. We may not be able to provide data sufficient to gain acceptance with respect to coverage and reimbursement. If coverage and reimbursement are not available, or are available only at limited levels, we may not be able to successfully commercialize our product candidates. Even if coverage is provided, the approved reimbursement amount may not be adequate to realize a sufficient return on our investment.

There is significant uncertainty related to third-party coverage and reimbursement of newly approved products. In many countries outside the United States, product sales generally are subject to extensive government price controls and other market regulations. In both the European Union and Canada there is an increasing emphasis on cost-containment initiatives, which may put pricing pressure on us. In the European Union, reimbursement of products are mostly governed by national states and governmental entities. In many countries, the prices of medical products are subject to varying price control mechanisms as part of national health systems. In general, the prices of medicines under such systems are substantially lower than in the

United States. Other countries allow companies to fix their own prices for medical products, but monitor and control company profits. Additional other price controls or other changes in pricing regulation could restrict the amount that we are able to charge for our product candidates. Accordingly, in many markets outside the United States, the reimbursement for our products may be reduced compared to the United States and may be insufficient to generate commercially reasonable product revenues.

In the United States, third-party payors, including government payors such as the Medicare and Medicaid programs, play an important role in determining the extent to which new drugs and biologics will be covered and reimbursed. The Medicare and Medicaid programs increasingly are used as models for how private payors and government payors develop their coverage and reimbursement policies. A number of gene therapy products have been approved over the past year by the FDA. Although the Center for Medicare and Medicaid Services, or CMS, subsequently approved its first method of coverage and reimbursement for one such product, the methodology has been subject to challenge by members of Congress. Further, CMS's decision as to coverage and reimbursement for one product does not mean that all similar products will be eligible for analogous coverage and reimbursement. As there is no uniform policy for coverage and reimbursement amongst third-party payors in the United States, even if CMS approves coverage and reimbursement for any of our product candidates, it is unclear what affect, if any, such a decision will have on our ability to obtain and maintain coverage and adequate reimbursement from other private payors. Moreover, reimbursement agencies in the European Union may be more conservative than CMS. For example, several cancer drugs have been approved for reimbursement in the United States and have not been approved for reimbursement in certain EU Member States. It is difficult to predict what third-party payors will decide with respect to the coverage and reimbursement for our product candidates.

Increasing efforts by government and third-party payors in the United States, the Europe Union and elsewhere to cap or reduce healthcare costs may cause such organizations to limit both coverage and the level of reimbursement for new products approved and, as a result, they may not cover or provide adequate payment for our product candidates. Payors increasingly are considering new metrics as the basis for reimbursement rates, such as average sales price, average manufacturer price and actual acquisition cost. The existing data for reimbursement based on some of these metrics is relatively limited, although certain states in the United States have begun to survey acquisition cost data for the purpose of setting Medicaid reimbursement rates, and CMS has begun making National Average Drug Acquisition Cost and National Average Retail Price data publicly available on at least a monthly basis. Therefore, it may be difficult to project the impact of these evolving reimbursement metrics on the willingness of payors to cover candidate products that we or our partners are able to commercialize. We expect to experience pricing pressures in connection with the sale of any of our product candidates due to the trend toward managed healthcare, the increasing influence of health maintenance organizations additional legislative changes and downward pressure on healthcare costs in general. As a result, increasingly high barriers are being erected to the entry of new products such as ours.

The commercial success of any of our product candidates will depend upon their degree of market acceptance by physicians, patients, third-party payors and others in the medical community.

Our efforts to educate the medical community and third-party payors on the benefits of our product candidates may require significant resources and may never be successful. Such efforts may require more resources than are typically required due to the complexity and uniqueness of our potential products. If any of our product candidates is approved but fails to achieve market acceptance among physicians, patients or third- party payors, we will not be able to generate significant revenues from such product.

The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on several factors, including:

- the potential and perceived advantages of product candidates over alternative treatments;
- the cost of treatment relative to alternative treatments;
- patient awareness of genotyping;
- the willingness of physicians to prescribe new therapies;
- the willingness of the target patient population to try new therapies;
- the prevalence and severity of any side effects;
- product labeling or product insert requirements of the FDA, the EMA or other regulatory authorities, including any limitations or warnings contained in a product's approved labeling;
- relative convenience and ease of administration;
- the strength of marketing and distribution support;
- the timing of market introduction of competitive products;
- publicity concerning our products or competing products and treatments; and
- sufficient third-party payor coverage and adequate reimbursement.

Even if a potential product displays a favorable efficacy and safety profile in preclinical studies and clinical trials, market acceptance of the product will not be fully known until after it is launched.

Negative public opinion and increased regulatory scrutiny of gene therapy may damage public perception of the safety of our product candidates.

Gene therapy remains a novel technology, and, to date, one gene therapy product has been approved in the United States and only one has current approval in the European Union. Public perception may be influenced by claims that gene therapy is unsafe, and gene therapy may not gain the acceptance of the public or the medical community. Our success will depend upon physicians who specialize in the treatment of genetic diseases targeted by our product candidates, prescribing treatments that involve the use of our product candidates in lieu of, or in addition to, existing treatments for which greater clinical data may be available. For example, earlier gene therapy trials led to several well-publicized adverse events, including cases of leukemia and death seen in trials using other vectors. Serious adverse events in our clinical trials, or other clinical trials involving gene therapy products, even if not ultimately attributable to the relevant product candidates, could result in increased government regulation, unfavorable public perception, potential regulatory delays in the testing or approval of our product candidates, stricter labeling requirements for any approved product candidates, and a decrease in demand for any such product candidates.

Our research and development activities could be affected or delayed as a result of possible restrictions on animal testing.

Certain laws and regulations require us to test our product candidates on animals before initiating clinical trials involving humans. Animal testing activities have been the subject of controversy and adverse publicity. Animal rights groups and other organizations and individuals have attempted to stop animal-testing activities by pressing for legislation and regulation in these areas and by disrupting these activities through protests and other means. To the extent the activities of these groups are successful, our research and development activities may be interrupted, delayed or become more expensive.

If we obtain approval to commercialize our product candidates outside of the United States or the European Union, we would be subject to additional risks associated with international operations.

Upon completion of our RESCUE and REVERSE Phase III clinical trials of GS010 for the treatment of LHON, if successful, we intend to meet with the FDA and apply for Fast Track Designation, which, if granted, would allow us to file a BLA and seek an accelerated approval pathway. In addition, we expect that the results of our Phase III RESCUE and REVERSE trials, if successful, will be sufficient to support filing for marketing authorization in the European Union. Because of the orphan nature of LHON and RP, we believe a targeted sales and marketing organization would be able to reach specialized ophthalmology centers and their patients in the United States. If GS010 is approved, we plan to deploy a similar commercialization strategy in the European Union. With respect to GS030, we are currently starting a Phase I/II clinical trial. If we progress through to completion of clinical trials, and are successful, while we intend to retain the option to commercialize GS030 by ourselves, due to the broader patient populations that GS030 may address, we may enter into strategic partnerships to maximize the commercial value of GS030.

While we intend to initially focus on commercializing our product candidates in the United States and/or the European Union, we expect that we will be subject to additional risks in commercializing our product candidates outside the United States or the European Union if we choose to do so, including:

- different regulatory requirements for approval of drugs and biologics from country to country;
- reduced protection for intellectual property rights;
- unexpected changes in tariffs, trade barriers and regulatory requirements;
- economic weakness, including inflation, or political instability in particular other economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- other currency fluctuations, which could result in increased operating expenses and reduced revenues, and other obligations incident to doing business in another country;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from natural disasters including earthquakes, typhoons, floods and fires.

4.4 RISKS RELATED TO OUR BUSINESS OPERATIONS

We may not be successful in our efforts to identify or discover additional product candidates and may fail to capitalize on programs or product candidates that may be a greater commercial opportunity or for which there is a greater likelihood of success.

Because we have limited resources and access to capital to fund our operations, we must decide which product candidates to pursue and the amount of resources to allocate to each. Our decisions concerning the allocation of research, collaboration, management and financial resources towards particular product candidates may not lead to the development of viable commercial products and may divert resources away from more promising opportunities. Similarly, our potential decisions to delay, terminate or collaborate with third parties with respect to some of our product development programs may also prove not to be optimal and could cause us to miss valuable opportunities. If we do not accurately evaluate the commercial potential or target

market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights. If we make incorrect determinations regarding the market potential of our product candidates or misread trends in the pharmaceutical industry, our business prospects could be harmed.

The success of our business currently depends primarily upon our ability to identify, develop and commercialize our lead product candidates, GS010 and GS030, as well as to identify other product candidates based on our MTS and optogenetics technology platforms. However, we may be unsuccessful in identifying potential product candidates for development. Alternatively, our potential product candidates may be shown to have harmful side effects or other characteristics that could make the products unmarketable or unlikely to receive marketing approval. If we are forced to abandon our development efforts for a program or programs, this would likely have a material adverse effect on our business and could potentially cause us to cease operations.

Our future success depends on our ability to retain key employees, consultants and advisors and to attract, retain and motivate qualified personnel, and members of our management team may be affected by conflicts of interest to the extent that they serve in management or directorship capacities at our competitors.

We are highly dependent on members of our executive team, the loss of whose services may adversely impact the achievement of our objectives. While we have entered into employment agreements with each of our executive officers, any of them could leave our employment at any time, as all of our employees are "at will" employees. We currently do not have "key person" insurance on any of our employees. The loss of the services of one or more of our current employees might impede the achievement of our research, development and commercialization objectives.

Recruiting and retaining other qualified employees, consultants and advisors for our business, including scientific and technical personnel, will also be critical to our success. There is a shortage of skilled individuals with substantial gene therapy experience, which is likely to continue. As a result, competition for skilled personnel, including the area of gene therapy research and vector manufacturing, is intense and the turnover rate can be high. We may not be able to attract and retain personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies and academic institutions for individuals with similar skill sets. In addition, failure to succeed in preclinical studies or clinical trials or applications for marketing approval may make it more challenging to recruit and retain qualified personnel. The inability to recruit, or the loss of services of certain executives, key employees, consultants or advisors, may impede the progress of our research, development and commercialization objectives and could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, members of our management team have served, and may in the future serve, in management or directorship capacities at companies engaged in similar areas of research and development, or that have product candidates or products targeting the same indications as our product candidates. As a result, such members of management may face actual, potential or perceived conflicts of interest, in particular when we enter into contractual arrangements with such companies. For example, Bernard Gilly is currently non-executive Chairman of the Board of Directors of Pixium Vision, a company working on retinal implant technology targeting RP patients at an advanced stage of the disease with no photoreceptor left, whereas gene therapy is targeting patients earlier in the disease with some residual vision and photoreceptors. See Section 13.1.2 "Biographical Information About the Members of the Board of Directors and Officers of the Company" and Section 6.6, "Our Second Product Candidate: GS030 for the Treatment of RP—No Existing Therapies for the Treatment of RP" of this Document. We have entered into a consortium agreement and related agreements for the financing and conduct of research and development activities with Pixium Vision and FVE, a scientific foundation that funds scientific programs in the field of ophthalmic diseases. See Section 6.13.4, "Collaboration, Partnership and Related Agreements" of this Document. We have entered into a consortium agreement and related agreements for the financing and conduct of research and development activities with Pixium Vision and FVE, a scientific foundation that funds scientific programs in the field of ophthalmic diseases.

If we are unable to manage our expected growth, we may not achieve our research and development plans in line with our timing expectations or at all.

To be successful in executing our business strategy, we expect that we will need to expand our resources to manage our operations, continue our research and development activities and, in the longer term, build a commercial infrastructure to support commercialization of any of our product candidates that are approved for sale. Future growth would impose significant added responsibilities on members of management. The expansion of our operations may lead to significant costs and may divert our management and business development resources. It is likely that our management, finance and development personnel, information technology systems and facilities currently in place may not be adequate to support this future growth. Our need to effectively manage our operations, growth and product candidates will require us to continue to develop more robust

business processes and to improve our systems and procedures in each of these areas, and to recruit, train and retain sufficient numbers of qualified personnel. We may be unable to successfully implement these tasks on a larger scale. Any inability to manage growth could delay or prevent the execution of our research, development and growth plans or disrupt our operations, and have a material adverse effect on our business.

Recently enacted and future legislation may increase the difficulty and cost for us to commercialize our product candidates and affect the prices we may obtain.

Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the ACA is significantly impacting the provision of, and payment for, healthcare. Various provisions of the ACA were designed to expand Medicaid eligibility, subsidize insurance premiums, provide incentives for businesses to provide healthcare benefits, prohibit denials of coverage due to pre-existing conditions, establish health insurance exchanges, and provide additional support for medical research. With regard to biopharmaceutical products specifically, the ACA, among other things, expanded and increased industry rebates for drugs covered under Medicaid programs and made changes to the coverage requirements under the Medicare Part D program. However, some provisions of the ACA have yet to be fully implemented and certain provisions have been subject to judicial and Congressional challenges, as well as efforts by the Trump Administration to repeal or replace certain aspects of the ACA. Since January 2017, President Trump has signed two Executive Orders and other directives designed to delay the implementation of certain provisions of the ACA or otherwise circumvent some of the requirements for health insurance mandated by the ACA. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the ACA. While Congress has not passed comprehensive repeal legislation, two bills affecting the implementation of certain taxes under the ACA have been signed into law. The Tax Cuts and Jobs Act of 2017 includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate." Additionally, on January 22, 2018, President Trump signed a continuing resolution on appropriations for fiscal year 2018 that delayed the implementation of certain ACA-mandated fees, including the so-called "Cadillac" tax on certain high cost employer-sponsored insurance plans and the annual fee imposed on certain health insurance providers based on market share. Further, the Bipartisan Budget Act of 2018, among other things, amends the ACA, effective January 1, 2019, to reduce the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole." Congress could consider additional legislation to repeal or repeal and replace certain elements of the ACA. We continue to evaluate the potential impact of the ACA and its possible repeal or replacement on our business.

In addition, both the Budget Control Act of 2011 and the American Taxpayer Relief Act of 2012, or the ATRA, have instituted, among other things, mandatory reductions in Medicare payments to certain providers. Additional legislative proposals to reform healthcare and government insurance programs, along with the trend toward managed healthcare in the United States, could influence the purchase of medicines and reduce reimbursement and/or coverage of our product candidates, if approved. Recently, there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products. For example, there have been several recent U.S. Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, reduce the costs of drugs under Medicare and reform government program reimbursement methodologies for drug products. At the federal level, the Trump administration's budget proposal for fiscal year 2019 contains further drug price control measures that could be enacted during the 2019 budget process or in other future legislation, including, for example, measures to permit Medicare Part D plans to negotiate the price of certain drugs under Medicare Part B, to allow some states to negotiate drug prices under Medicaid, and to eliminate cost sharing for generic drugs for low-income patients. While any proposed measures will require authorization through additional legislation to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. At the state level, legislatures are increasingly passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. These legislative proposals and initiatives could harm our ability to market any product candidates and generate revenues. Cost containment measures that healthcare payors and providers are instituting and the effect of further healthcare reform could significantly reduce potential revenues from the sale of any of our product candidates approved in the future, and could cause an increase in our compliance, manufacturing, or other operating expenses.

We expect that the ACA, as well as other healthcare reform measures that may be adopted in the future, may result in more

rigorous coverage criteria and lower reimbursement, and in additional downward pressure on the price that we receive for any approved product candidate. Any reduction in reimbursement from Medicare or other government-funded programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our drugs. Moreover, we cannot predict what healthcare reform initiatives may be adopted in the future.

We or our employees, principal investigators, consultants, and commercial partners may violate U.S. federal and state and European Union healthcare fraud and abuse laws, false claims laws and health information privacy laws.

In some European Union Member States, the provision of benefits or advantages to physicians to induce or encourage the prescription, recommendation, endorsement, purchase, supply, order or use of medicinal products is prohibited. The provision of benefits or advantages to physicians is notably governed by the national anti- bribery laws of European Union Member States, such as the U.K. Bribery Act or in France, the French Anti-Gift Act (French law no. 93-121 of January 27, 1993, as amended) and the French Sunshine Act (French law no. 2011-2012 of December 29, 2011, as amended). Infringement of these laws could result in substantial fines and imprisonment.

Payments made to physicians in certain European Union Member States must be publicly disclosed. Moreover, agreements with physicians often must be the subject of prior notification and approval by the physician's employer, his or her competent professional organization and/or the regulatory authorities of the individual European Union Member States. These requirements are provided in the national laws, industry codes or professional codes of conduct, applicable in the European Union Member States. Failure to comply with these requirements could result in reputational risk, public reprimands, administrative penalties, fines or imprisonment.

The collection and use of personal health data in the European Union is governed by the provisions of the Data Protection Directive. This directive imposes several requirements relating to the consent of the individuals to whom the personal data relates, the information provided to the individuals, notification of data processing obligations to the competent national data protection authorities and the security and confidentiality of the personal data. The Data Protection Directive also imposes strict rules on the transfer of personal data out of the European Union to the United States. Failure to comply with the requirements of the Data Protection Directive and the related national data protection laws of the European Union Member States may result in fines and other administrative penalties. The draft Data Protection Regulation currently going through the adoption process is expected to introduce new data protection requirements in the European Union and substantial fines for breaches of the data protection rules. If the draft Data Protection Regulation is adopted in its current form it may increase our responsibility and liability in relation to personal data that we process and we may be required to put in place additional mechanisms ensuring compliance with the new data protection rules. This may be onerous and adversely affect our business, financial condition, results of operations and prospects.

In the United States, our current and future operations are directly, or indirectly through our prescribers, customers and purchasers, subject to various U.S. federal and state fraud and abuse laws and regulations, including, without limitation, the federal Health Care Program Anti-Kickback Statute, the federal civil and criminal False Claims Act and Physician Payments Sunshine Act and regulations. These laws will impact, among other things, our proposed sales, marketing and educational programs. In addition, we may be subject to patient privacy laws by both the U.S. federal government and the U.S. states in which we conduct our business. The laws that will affect our operations include, but are not limited to:

- the federal Health Care Program Anti-Kickback Statute, which prohibits, among other things, persons or entities from knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe or rebate), directly or indirectly, overtly or covertly, in cash or in kind, in return for the purchase, recommendation, leasing or furnishing of an item or service reimbursable under a federal healthcare program, such as the Medicare and Medicaid programs. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand, and prescribers, purchasers and formulary managers on the other. The ACA amends the intent requirement of the federal Anti-Kickback Statute. A person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it;
- federal civil and criminal false claims laws and civil monetary penalty laws which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid or other government payors that are false or fraudulent. The ACA provides and recent government cases against pharmaceutical and medical device manufacturers support the view that federal Anti-Kickback Statute violations and certain marketing practices, including off-label promotion, may implicate the False Claims Act;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created additional federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare

benefit program or obtain, by means of false or fraudulent pretenses, representations or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of whether the payor is public or private, knowingly and willfully embezzling or stealing from a health care benefit program, willfully obstructing a criminal investigation of a health care offense and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and its implementing regulations, which impose certain requirements relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization on "covered entities," including healthcare providers, health plans, and healthcare clearinghouses, as well as their respective "business associates" that create, receive, maintain or transmit individually identifiable health information for or on behalf of a covered entity;
- federal transparency laws, including the federal Physician Payments Sunshine Act, created under Section 6002 of the ACA, that require disclosure of payments and other transfers of value provided to physicians and teaching hospitals, and ownership and investment interests held by physicians and other healthcare providers and their immediate family members and applicable group purchasing organizations; and
- U.S. state law equivalents of each of the above federal laws, state laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts in certain circumstances, such as specific disease states.

Ensuring that our business arrangements and contracts comply with applicable healthcare laws and regulations will likely be costly. Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of our business activities could be subject to challenge by governmental authorities under one or more current or future statues, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of the laws described above or any other governmental regulations that may apply to us, we may be subject to significiant civil, criminal and administrative penalties, damages, fines, disgorgement, individual imprismonment, possible exclusion from government-funded healthcare programs, such as Medicare and Medicaid, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, contractual damages, reputational harm, diminished profits and future earnings and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

If the physicians or other providers or entities with whom we expect to do business are found not to be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

Our employees and other third parties we partner with or interact with may engage in misconduct or other improper activities, including violating applicable regulatory standards and requirements or engaging in insider trading, which could significantly harm our business.

In both the United States and the Europan Union, and elsewhere, we are exposed to the risk of fraud or other misconduct by our employees, principal investigators, consultants and commercial partners. Misconduct by employees, for example, could include intentional failures to comply with legal requirements or the requirements of CMS, the EMA, the FDA and other government regulators, provide accurate information to applicable government authorities, comply with fraud and abuse and other healthcare laws and regulations in the United States and abroad, report financial information or data accurately or disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Employee misconduct could also involve the improper use of, including trading on, information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. In connection with our initial public offering on Euronext Paris, we adopted a Code of Ethics, but it is not always possible to identify and deter misconduct, and the precautions we take to detect and prevent this activity may be ineffective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions.

We may be subject to product liability lawsuits.

We face an inherent risk of product liability exposure related to the testing of our product candidates in clinical trials and may face an even greater risk if we commercialize any products that we may develop. If we cannot successfully defend ourselves against claims that our product candidates caused injuries, we could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates that we may develop;
- loss of revenue;
- substantial monetary awards to trial participants or patients;
- significant time and costs to defend the related litigation;
- withdrawal of clinical trial participants;
- the inability to commercialize any product candidates that we may develop; and
- injury to our reputation and significant negative media attention.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the generation, handling, use, storage, treatment, manufacture, transportation and disposal of, and exposure to, hazardous materials and wastes, as well as laws and regulations relating to occupational health and safety. Our operations involve the use of hazardous and flammable materials, including chemicals and biologic and radioactive materials. Our operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties.

Although we maintain workers' compensation insurance for certain costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials or other work related injuries, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for toxic tort claims that may be asserted against us in connection with our storage or disposal of biologic, hazardous or radioactive materials.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations, which have tended to become more stringent over time. These current or future laws and regulations may impair our research, development or production efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions or liabilities, which could materially adversely affect our business, financial condition, results of operations and prospects.

Unfavorable global economic conditions could adversely affect our business, financial condition or results of operations.

Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. The most recent global financial crisis caused extreme volatility and disruptions in the capital and credit markets. A severe or prolonged economic downturn, such as the most recent global financial crisis, could result in a variety of risks to our business, including weakened demand for our product candidates and our ability to raise additional capital when needed on acceptable terms, if at all. This is particularly true in the European Union, which is undergoing a continued severe economic crisis. This could lead to a period of considerable uncertainty, particularly in relation to global financial markets which in turn could adversely affect our ability to raise additional capital. A weak or declining economy could strain our suppliers, possibly resulting in supply disruption, or cause delays in payments for our services by third-party payors or our collaborators. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

The United Kingdom's vote in favor of withdrawing from the European Union may have a negative effect on global economic conditions, financial markets and our business and make it more difficult to do business in Europe.

In June 2016, a majority of the eligible members of the electorate in the United Kingdom voted to withdraw from the European Union in a national referendum (commonly referred to as "Brexit"). The withdrawal of the United Kingdom from the European Union will take effect either on the effective date of the withdrawal agreement or, in the absence of agreement, two years after the United Kingdom provides a notice of withdrawal pursuant to Article 50 of the EU Treaty, unless the European Council, in agreement with the United Kingdom, unanimously decides to extend this period. On March 29, 2017, the U.K. Prime Minister formally delivered the notice of withdrawal. It appears likely that this withdrawal will involve a process of lengthy negotiations between the United Kingdom and EU Member States to determine the future terms of the United Kingdom's relationship with the European Union.

These developments, or the perception that any of them could occur, have had and may continue to have a significant adverse effect on global economic conditions and the stability of global financial markets, and could significantly reduce global market liquidity and restrict the ability of key market participants to operate in certain financial markets. In particular, it could also lead to a period of considerable uncertainty in relation to the U.K. financial and banking markets, as well as on the regulatory process in Europe. As a result of this uncertainty, global financial markets could experience significant volatility, which could adversely affect the market price of our ordinary shares. Asset valuations, currency exchange rates and credit ratings may also be subject to increased market volatility. Lack of clarity about future U.K. laws and regulations as the United Kingdom determines which European Union rules and regulations to replace or replicate in the event of a withdrawal, including financial laws and regulations, tax and free trade agreements, intellectual property rights, supply chain logistics, environmental, health and safety laws and regulations, immigration laws and employment laws, could decrease foreign direct investment in the United Kingdom, increase costs, depress economic activity and restrict our access to capital. If the United Kingdom and the European Union are unable to negotiate acceptable withdrawal terms or if other EU Member States pursue withdrawal, barrier-free access between the United Kingdom and other EU Member States or among the European Economic Area overall could be diminished or eliminated.

We may also face new regulatory costs and challenges that could have an adverse effect on our operations. Depending on the terms of Brexit, the United Kingdom could lose the benefits of global trade agreements negotiated by the European Union on behalf of its members, which may result in increased trade barriers that could make our doing business in Europe more difficult. In addition, currency exchange rates in the euro and the pound sterling with respect to each other and the U.S. dollar have already been adversely affected by Brexit.

We and our third-party collaborators may be adversely affected by natural disasters and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.

Natural disasters could severely disrupt our operations or the operations of our suppliers' manufacturing facilities and have a material adverse effect on our business, financial condition, results of operations and prospects. If a natural disaster, power outage or other event occurred that prevented us from using all or a significant portion of our headquarters, that damaged critical infrastructure, such as our suppliers' manufacturing facilities, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible for us to continue our business for a substantial period of time. The disaster recovery and business continuity plans we or our collaborators have in place currently are limited and may not prove adequate in the event of a serious disaster or similar event. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our internal information technology systems, or those of our third-party collaborators or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our product development programs.

Despite the implementation of security measures, our internal information technology systems and those of our current and any future collaborators and other contractors or consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While we have not experienced any such material system failure, accident or security breach, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our development programs.

In the ordinary course of our business, we collect and store sensitive data, including, among other things, legally protected patient health information, personally identifiable information about our employees, intellectual property and proprietary business information. We manage and maintain our applications and data utilizing on-site systems and outsourced vendors. These applications and data encompass a wide variety of business critical information, including research and development information, commercial information and business and financial information. Because information systems, networks and other technologies are critical to many of our operating activities, shutdowns or service disruptions at our company or vendors that provide information systems, networks or other services to us pose increasing risks. Such disruptions may be caused by events such as computer hacking, phishing attacks, ransomware, dissemination of computer viruses, worms and other destructive or disruptive software, denial of service attacks and other malicious activity, as well as power outages, natural disasters (including extreme weather), terrorist attacks or other similar events. Such events could have an adverse impact on us and our business, including loss of data and damage to equipment and data. In addition, system redundancy may be ineffective or inadequate, and our disaster recovery planning may not be sufficient to cover all eventualities. Significant events could result in a disruption of our operations, damage to our reputation or a loss of revenues. In addition, we may not have adequate insurance coverage to compensate for any losses associated with such events. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Any breach of our data security, especially a breach resulting in the unauthorized

use or disclosure of protected health information, personally identifiable information or other data subject to privacy laws, could damage our reputation and/or result in monetary damages or other liabilities. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability, our competitive position could be harmed and the further development and commercialization of our product candidates could be delayed.

We could be subject to risks caused by misappropriation, misuse, leakage, falsification or intentional or accidental release or loss of information maintained in the information systems and networks of our company and our vendors, including personal information of our employees and patients, and company and vendor confidential data. In addition, outside parties may attempt to penetrate our systems or those of our vendors or fraudulently induce our personnel or the personnel of our vendors to disclose sensitive information in order to gain access to our data and/or systems. We may experience threats to our data and systems, including malicious codes and viruses, phishing and other cyber-attacks. The number and complexity of these threats continue to increase over time. If a material breach of our information technology systems or those of our vendors occurs, the market perception of the effectiveness of our security measures could be harmed and our reputation and credibility could be damaged. We could be required to expend significant amounts of money and other resources to repair or replace information systems or networks. In addition, we could be subject to regulatory actions and/or claims made by individuals and groups in private litigation involving privacy issues related to data collection and use practices and other data privacy laws and regulations, including claims for misuse or inappropriate disclosure of data, as well as unfair or deceptive practices. Although we develop and maintain systems and controls designed to prevent these events from occurring, and we have a process to identify and mitigate threats, the development and maintenance of these systems, controls and processes is costly and requires ongoing monitoring and updating as technologies change and efforts to overcome security measures become increasingly sophisticated. Moreover, despite our efforts, the possibility of these events occurring cannot be eliminated entirely. As we outsource more of our information systems to vendors, engage in more electronic transactions with payors and patients, and rely more on cloud-based information systems, the related security risks will increase and we will need to expend additional resources to protect our technology and information systems. In addition, there can be no assurance that our internal information technology systems or those of our third-party contractors, or our consultants' efforts to implement adequate security and control measures, will be sufficient to protect us against breakdowns, service disruption, data deterioration or loss in the event of a system malfunction, or prevent data from being stolen or corrupted in the event of a cyberattack, security breach, industrial espionage attacks or insider threat attacks which could result in financial, legal, business or reputational harm.

Use of social media may materially and adversely impact our reputation.

Unauthorized communications, such as press releases or posts on social media, purported to be issued by us, may contain information that is false or otherwise damaging and could have an adverse impact on the price of our securities. Negative or inaccurate posts or comments about us, our research and development programs, and our directors or officers could seriously damage our reputation.

In addition, our employees and partners may use social media and mobile technologies inappropriately, for which we may be held liable, or which could lead to breaches of data security, loss of trade secrets or other intellectual property or public disclosure of sensitive information. Such uses of social media and mobile technologies could have a material adverse effect on our reputation, business, financial condition and results of operations.

Related party transactions may be challenged by tax authorities.

Many of the jurisdictions in which we conduct or may in the future conduct business have detailed transfer pricing rules which require that all transactions with related parties be priced using arm's-length pricing principles. Contemporaneous documentation must exist to support this pricing. The taxation authorities in these jurisdictions could challenge our arm's-length related-party transfer pricing policies. International transfer pricing is an area of taxation that depends heavily on the underlying facts and circumstances and generally involves a significant degree of judgment. If any of these taxation authorities are successful in challenging our transfer pricing policies, our income tax expense may be adversely affected and we could also be subjected to interest and penalty charges. Any increase in our income tax expense and related interest and penalties could have a significant impact on our future earnings and future cash flows.

4.5 LEGAL RISKS AND RISKS RELATED TO OUR INTELLECTUAL PROPERTY

We do not own any issued patents and our rights to develop and commercialize our product candidates are subject to the terms and conditions of intellectual property licenses granted to us by others.

Although since 2016 we have filed eight priority patent applications in the United States and in Europe, five of which have now been filed worldwide, we do not currently own any issued patents, and we are heavily reliant upon licenses to certain patent rights and

other intellectual property from third parties that are important or necessary to the development and commercialization of our technology and products, including technology related to our manufacturing process and our gene therapy product candidates. Any of our patent applications may not be approved, and these intellectual property licenses and any patents that issue from these applications may not provide us with rights to use such intellectual property and technology in all relevant fields of use and in all territories in which we may wish to develop or commercialize our technology and products in the future. In particular, there may be unforeseen areas of technology over which the licensed rights, or any patents that issue from our pending applications, may not extend and for which we may be unable to obtain rights in the future. To the extent our licenses do not cover a relevant field or territory, the third-party licensor of applicable intellectual property rights may block our ability to develop or commercialize our technology and products in such field or territory unless we are able to extend our license to cover such field or territory. Further, our licenses may not provide us with exclusive rights to use such intellectual property in all relevant fields of use and in all territories in which we may wish to develop or commercialize our technology and products in the future. As a result, we may not be able to prevent competitors from developing and commercializing competitive products in fields and/or territories included in our licenses.

In some circumstances, we may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain or enforce the patents, covering technology that we license from third parties. For example, pursuant to our intellectual property license agreement with Adverum Biotechnologies, Inc., or Adverum, Adverum retains control of such activities. Therefore, we cannot be certain that the Adverum patent applications will be prosecuted, maintained and enforced in a manner consistent with the best interests of our business. If our licensors fail to prepare, file, maintain or enforce such patents or patent applications, or lose rights to such patents or patent applications, the rights we have licensed may be reduced or eliminated and our right to develop and commercialize any of our product candidates that are the subject of such licensed rights could be adversely affected. In addition, we face similar risks and uncertainties regarding our pending patent applications and any other patent rights that we may own in the future.

In some circumstances, our license agreements provide that we must grant, on a non-exclusive royalty-free basis, a license to the licensor to exploit technological improvements we have made to the licensed technology. Such "grant-back" provisions may limit our exclusive rights in technology we develop in-house, and so may limit the extent to which we can prevent competitors from developing and commercializing competitive products relating to those technologies.

We also in-license certain patents owned by the Regents of the University of California pursuant to our license agreement with Adverum and we in-license certain patent rights from the Massachusetts Institute of Technology, or M.I.T. Under applicable law, to the extent that the research giving rise to the patents or technology that we license was funded by the U.S. government, the U.S. government may have certain rights, including (1) a non-exclusive, irrevocable, paid-up license to practice or have practiced such patents or technology on behalf of the United States and (2) "march-in rights" requiring the grant of licenses under such patent rights and technology to one or more third parties. When new technologies are developed with U.S. government funding, the U.S. government generally obtains certain rights in any resulting patents and inventions, including a non-exclusive license to practice or have practiced on behalf of the U.S. government such patents and inventions. These rights may further permit the U.S. government to disclose our confidential information to third parties and to exercise march-in rights to allow third parties to use our licensed technology. The U.S. government can exercise its march-in rights if it determines that action is necessary because we or our licensors fail to achieve practical application of the U.S. government-funded technology, or because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations or to give preference to U.S. industry. In addition, our rights in such inventions may be subject to certain requirements to manufacture products embodying such inventions in the United States. Any exercise by the U.S. government of such rights could harm our business, financial condition, results of operations and prospects.

In addition, licenses to additional third-party technology and materials that may be required for our development programs, including additional technology and materials owned by any of our current licensors, may not be available in the future or may not be available on commercially reasonable terms, or at all, which could have an adverse effect on our business and financial condition.

We or our licensors may be unable to obtain and maintain adequate patent protection for our product candidates and technology.

Our success depends, in large part, on our and our licensors' ability to obtain and maintain patent protection in the United States, the European Union and other countries with respect to our proprietary product candidates and manufacturing technology. We or our licensors have sought and we intend to further seek, to protect our proprietary position by filing patent applications in the United States, the European Union and other jurisdictions related to many of our novel technologies and product candidates that are important to our business. If we or our licensors fail to obtain and maintain patent or other protection for this proprietary intellectual property, we could lose our rights to such intellectual property or our exclusivity with respect to those rights, and

our competitors could market competing products using the intellectual property.

The patent prosecution process is expensive, time-consuming and complex and we or our licensors may not be able to, or may choose not to, file, prosecute, maintain or enforce in a timely manner, or at all, all issued patents or patent applications that we believe are necessary or desirable for our business. In addition, patents might not be issued or granted with respect to our patent applications that are currently pending, and any issued patents may be challenged, invalidated, circumvented or rendered unenforceable. We cannot assure that either we or our licensors will be successful should such patents be challenged. If our or our licensors' patent claims are rendered invalid or unenforceable, or narrowed in scope, it could seriously impair our competitive position.

Consequently, we would not be able to assert any such patents to prevent others from using our technology for, and developing and marketing competing products to treat, these indications. It is also possible that we will fail to identify patentable aspects of our research and development output in time to obtain patent protection.

In some cases, the work of certain academic researchers in the gene therapy field has entered the public domain, which we believe precludes our ability to obtain patent protection for certain inventions relating to such work. Consequently, we will not be able to assert any such patents to prevent others from using our technology for, and developing and marketing competing products to treat, these indications. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection.

The patent position of biotechnology and pharmaceutical companies is highly uncertain, involves complex legal and factual questions and has, in recent years, been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. We cannot be certain that any patents will be granted with respect to any of the pending patent applications that we own or are licensed to us or any patent applications that we or our licensors may file in the future. In addition, we cannot be certain that any of the existing patents that we in-license or that we may in-license or own in the future will adequately protect our technology and our product candidates and methods of manufacturing the same and effectively prevent others from commercializing competitive technologies and product candidates or otherwise provide any competitive advantage. In fact, patent applications may not issue as patents at all. Even assuming patents issue from patent applications in which we have rights, changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection. In the European Union, variation in the application of laws relating to the patentability of biotechnological inventions, including the application of specific exclusions to patentability means we cannot be certain that we or our licensors can effectively protect our technology in order to prevent competitors from developing and commercializing competitive products and technology similar or identical to ours, and our ability to successfully commercialize our products and technology may be adversely affected.

We may not be aware of all third-party intellectual property rights potentially relating to our product candidates and our future candidates. Because patent applications in the United States and most other countries are confidential for a period of time after filing, and some remain so until issued, and because publication of discoveries in the scientific or patent literature often lags behind actual discoveries and filings of patent applications, we cannot be certain of the priority of inventions covered by any pending patent applications.

Accordingly, with respect to our current patent applications and any patent applications that we may file in the future in the European Union or the United States, we may not be the first to file patent applications covering such subject matter, meaning that we may be unable to protect or exploit the invention(s) concerned.

Furthermore, for U.S. patent applications in which all claims are entitled to a priority date before March 16, 2013, we may become subject to interference proceedings or derivation proceedings before the United States Patent and Trademark Office, or the USPTO, to determine priority of invention. For U.S. patent applications containing a claim not entitled to priority before March 16, 2013, there is a greater level of uncertainty in the U.S.patent laws in view of the passage of the Leahy-Smith America Invents Act, or the Leahy-Smith Act, signed into law on September 16, 2011, which brought into effect significant changes to these laws, including new procedures for challenging pending patent applications and issued patents.

Even if the patent applications that we own or license from third parties or may own in the future do issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors or other third parties from competing with us or otherwise provide us with any competitive advantage. Our competitors or other third parties may be able to design around or otherwise circumvent our or our licensors' patents by developing similar or alternative technologies or products in a non-infringing manner.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our licensors' patents, or any patents that we may independently seek may be challenged in the courts or patent offices in the United States, the European Union or elsewhere. Such challenges may result in loss of exclusivity or in

patent claims being narrowed, invalidated or held unenforceable, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and product candidates. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our intellectual property rights may not provide us with sufficient protection to exclude others from commercializing product candidates similar or identical to ours.

Our intellectual property licenses with third parties may be subject to disagreements over contract interpretation, which could narrow the scope of our rights to the relevant intellectual property or technology or increase our financial or other obligations to our licensors.

We currently depend, and will continue to depend, on our license agreements, including our agreements with Inserm Transfert, Adverum Biotechnologies and Massachusetts Institute of Technology, whereby we obtain rights in certain patents and patent applications owned by them. Further, development and commercialization of our current product candidates may, and development of any future product candidates will, require us to enter into additional licenses or collaboration agreements. The agreements under which we currently license intellectual property or technology from third parties are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

We may fail to comply with our obligations under the agreements under which we in-license intellectual property and could thereby lose license rights that are important to our business.

We are a party to a number of intellectual property license agreements, including agreements with Inserm Transfert S.A., Adverum and M.I.T. that are important to our business, and we expect to enter into additional license agreements in the future. Our existing license agreements impose, and we expect that any future license agreements will impose, various diligence, development and commercialization timelines, milestone payments, royalties and other obligations on us. See Section 6.13.5 "Intellectual Property" and Section 21.2 "In-License Agreements" of this Document for a description of our license agreements. If we fail to comply with our obligations under these agreements, or we are subject to a bankruptcy or certain other specified events, the licensor may have the right to terminate the license, in which event we would not be able to market products covered by the license. Further, in certain of our license agreements, we have the first right to bring actions against any third party for infringing the patents licensed to us. Certain of our license agreements also require us to meet development thresholds to maintain the license, including establishing a set timeline for developing and commercializing product candidates and minimum yearly diligence obligations in developing and commercializing the product. Disputes may arise regarding intellectual property subject to a licensing agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which our technology and processes infringe any intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of intellectual property and other rights under our collaborative development, manufacturing and other third-party relationships;
- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the inventorship or ownership intellectual property resulting from the joint creation or use of intellectual property by our licensors, consultants, contractors, collaborators or partners and us; and
- the priority of invention of patented technology.

If disputes over intellectual property that we have in-licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates.

We may not be successful in obtaining or maintaining necessary rights to gene therapy components and processes for our development pipeline.

We currently have certain rights to intellectual property, through licenses from third parties, to develop our product candidates. Because our product candidate development pipeline may require the use of additional proprietary rights held by these or other third parties, the growth of our business likely will depend, in part, on our ability to acquire, in-license or use proprietary rights from third parties in the future. We may be unable to acquire or in-license compositions, methods of use, processes or other intellectual property rights from third parties necessary to advance our research or allow commercialization of our product candidates at a reasonable cost or on reasonable terms, or that we may otherwise identify as necessary or desirable for our product candidates. In that event, we may be required to expend significant time and resources to redesign our product candidates

or the methods for manufacturing them or to develop or license from third parties replacement technology, some or all of which may not be feasible on a technical or commercial basis. If we are unable to do so, we may be unable to develop or commercialize the affected product candidates, which could harm our business significantly. We cannot provide any assurances that third-party patents do not exist that might be enforced against our product candidates or future products or methods for manufacturing the same, resulting in either an injunction prohibiting our manufacture or sale of such products, or, with respect to our sales, an obligation on our part to pay royalties and/or other forms of compensation to third parties. The in-licensing or acquisition of third-party intellectual property rights is a competitive area, and several more established companies may pursue strategies to in-license or acquire third-party intellectual property rights that we may consider attractive. These established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We may be unable to in-license or acquire third-party intellectual property rights on terms acceptable to us or at all.

For example, we sometimes collaborate with non-profit or academic institutions to further our preclinical research or development activities under written agreements with these institutions. Typically, these institutions may provide us with an option to negotiate a license to, or co-ownership of, any of the institution's rights in technology resulting from the collaboration. Regardless of such option, we may be unable to negotiate a license or ownership rights within the specified timeframe or under terms that are acceptable to us or at all. If we are unable to do so, the institution may offer the intellectual property rights to other parties, potentially blocking our ability to pursue our program.

If we are unable to successfully obtain rights to required third-party intellectual property rights or maintain the existing intellectual property rights we have, we may have to abandon development of the relevant program or product candidate and our business, financial condition, results of operations and prospects could be adversely affected.

Our patent protection could be reduced or eliminated for non-compliance with various procedural, document submission, fee payment and other requirements imposed by government patent agencies.

Periodic maintenance fees, renewal fees, annuity fees and various other government fees on patents and/or applications will be due to the USPTO, the European Patent Office, or the EPO, and to various government patent agencies outside of the United States and the European Union, over the lifetime of our patent applications or in-licensed patents or applications and any patent rights we may own in the future. For the patent applications that we own, we employ reputable outside counsel to help us timely pay these fees due to the USPTO, the EPO and other government patent agencies and, for our in-licensed patents, we rely on our licensing partners to timely pay these fees. The USPTO and various other government patent agencies, including the EPO, require compliance with several procedural, documentary, fee payment and other similar provisions during the patent application process. We are dependent on our licensors to take the necessary actions to comply with these requirements with respect to our in-licensed intellectual property and rely on advice from our outside counsel to comply with these requirements with respect to our patent applications and any other patent rights we may own in the future. In certain cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. There are situations, however, in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, potential competitors might be able to enter the market and this circumstance could have a material adverse effect on our business.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting, defending and enforcing patents on product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States and the European Union could be less extensive than those in the United States or the European Union.

Our patent applications and in-licensed patent rights may not have corresponding patents or patent applications in other countries. In addition, the laws of some other countries do not protect intellectual property rights to the same extent as federal and state laws in the United States or patent laws in Europe. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States and Europe, or from selling or importing products made using our inventions in and into the United States or in Europe or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection or may export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as in the United States or in Europe. These products may compete with our products patents or other intellectual property rights that we license from third parties.

Many companies have encountered significant problems in protecting, defending and enforcing intellectual property rights in other jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the

enforcement of patents, trade secrets and other intellectual property rights, particularly those relating to biotechnology products, which could make it difficult for us to stop the infringement of our in-licensed patents or any patents that issue from our applications or the marketing of competing products in violation of our proprietary rights. Proceedings to enforce our intellectual property rights in other jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our in-licensed patents, or patents we may own in the future, at risk of being invalidated or interpreted narrowly and our in-licensed patent applications, or patent applications we own or may own in the future, at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or in-license.

Issued patents that we in-license and that cover our product candidates could be found invalid or unenforceable, and we may not be able to protect our trade secrets in court.

If we or one of our licensing partners initiate legal proceedings against a third party to enforce a patent covering one of our product candidates, assuming such a patent has issued or does issue, the defendant could counterclaim that the patent covering our product candidate is invalid or unenforceable. In all patent litigation, counterclaims by defendants alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge include, without limitation, an alleged failure to meet any of several statutory requirements, such as lack of novelty, obviousness, written description or non-enablement. Grounds for an unenforceability assertion in the United States include, without limitation, an allegation that someone connected with prosecution of the patent withheld information material to patentability from the USPTO or made a misleading statement, during prosecution. Third parties also may raise similar claims before administrative bodies in the United States, the European Union or elsewhere, even outside the context of litigation. Such mechanisms include re-examination, post grant review, inter partes review and equivalent proceedings in foreign jurisdictions, and such proceedings could result in the revocation or cancellation of, or amendment to, our patents or licensed patents in such a way that they no longer cover our product candidates. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which the patent examiner and we or our licensing partners were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we could lose at least part, and perhaps all, of the patent protection on one or more of our product candidates. Such a loss of patent protection could have a material adverse impact on our business.

In addition to the protection afforded by patents, we rely on trade secret protection and confidentiality agreements to protect our proprietary information, including know-how, processes, techniques and data, and technology that is not patentable or that we elect not to patent or which patents are difficult to enforce. However, trade secrets and other proprietary information can be difficult to protect and some courts inside and outside the United States and the European Union are less willing or unwilling to protect trade secrets and other proprietary information. If any of our trade secrets or other proprietary information were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that information to compete with us. We seek to protect our trade secrets and other proprietary information, in part, by entering into confidentiality agreements with our employees, consultants, scientific advisors and contractors. We cannot guarantee that we have entered into such agreements with each party that may have or have had access to our trade secrets or other proprietary information. We also seek to preserve the integrity and confidentiality of our trade secrets and other proprietary information by maintaining the physical security of our premises and the physical and electronic security of our information technology systems. While we have confidence in these individuals, organizations and systems, agreements or security measures may be breached, and we may not have adequate remedies for any such breach and we cannot guarantee that our trade secrets and other proprietary know-how will not be publicly disclosed.

Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.

Our commercial success depends upon our ability and the ability of our existing or future collaborators and third-party service providers to develop, manufacture, market and sell our product candidates and use our proprietary technologies without infringing the proprietary rights and intellectual property of third parties. The biotechnology and pharmaceutical industries are characterized by extensive and complex litigation regarding patents and other intellectual property rights. We may in the future become party to, or be threatened with, adversarial proceedings or litigation regarding intellectual property rights with respect to our product candidates and technology, including interference proceedings, post-grant review and inter partes review before the USPTO, the EPO or equivalent measures outside the United States and the European Union.

Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future, regardless of their merit. We are aware of certain third-party patents relating to gene delivery to ocular cells and certain vector manufacturing methods that may relate to, and potentially could be asserted to encompass our product candidates. There is a risk that third parties may choose to engage in litigation with us to enforce or to otherwise assert their patent rights against us. A court of competent jurisdiction could hold that these third-party patents are valid, enforceable and infringed by us, which could materially and adversely affect our ability to commercialize our GS010 or GS030 product candidates or any other of our product candidates or technologies covered by the asserted third-party patents. In several major territories, including the United States, in order to successfully challenge the validity of any such U.S. patent in federal court, we would need to overcome a presumption of validity. As this burden is a high one requiring us to present clear and convincing evidence as to the invalidity of such U.S. patent claim, there is no assurance that a court of competent jurisdiction would invalidate the claims of any such U.S. patent. In addition, even if we were to prevail in any such litigation, the cost and diversion of management and employee attention could be significant and could adversely affect our business. Where a patent issued by the EPO, otherwise known as a European Patent, is concerned, it may be necessary to do this on a country-by-country basis, leading to increased litigation costs and diversion of management and employee attention. The risks of such third-party action apply equally outside the United States or the European Union, where it may also be necessary to establish, through a court or other procedure, that a patent is invalid.

If we are found to infringe a third party's valid and enforceable intellectual property rights, we could be forced, including by court order, to cease developing, manufacturing and commercializing the infringing technology or product candidates. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent or other intellectual property right. A finding of infringement could prevent us from manufacturing and commercializing our product candidates or force us to cease some of our business operations. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business, financial condition, results of operations or prospects. We may be able to avoid such an outcome by obtaining a license from such third party to continue developing, manufacturing and marketing our product candidates and technology; however, we may not be able to obtain such a license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors and other third parties access to the same technologies licensed to us, and it could require us to make substantial licensing and royalty payments.

Intellectual property litigation could cause us to spend substantial resources and distract our personnel from their normal responsibilities.

Competitors may infringe our intellectual property or the intellectual property of our licensors, or we may be required to defend against claims of infringement. To counter infringement or unauthorized use claims or to defend against claims of infringement can be expensive and time consuming. Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses, and could distract our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our ordinary shares. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. Uncertainties resulting from the initiation and continuation of intellectual property litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

We may be subject to claims asserting that our employees, consultants or advisors have wrongfully used or disclosed alleged trade secrets of their current or former employers or claims asserting ownership of what we regard as our own intellectual property.

Many of our employees, consultants or advisors are currently, or were previously, employed, consulted or advised at universities or other biotechnology or pharmaceutical companies, including some of our competitors or potential competitors. We may be subject to claims that such individuals or we have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such individual's current or former employer. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

In addition, while it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property on our behalf to execute

agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. The assignment of intellectual property rights may not be self-executing or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property.

Changes in patent law could diminish the value of patents in general, thereby impairing our ability to obtain patent protection for our product candidates.

In the United States, the European Union and elsewhere, patent law and its interpretation is frequently in a state of development and flux routinely vulnerable to modification or repeal by legislators and changes in policy or interpretation and application by courts or patent offices. This also applies particularly to the biotechnological and pharmaceutical areas.

Recent patent reform legislation in the United States could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. On September 16, 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes several significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted and also may affect patent litigation. These also include provisions that switched the United States from a "first-to-invent" system to a "first-to-file" system, allow third-party submission of prior art to the USPTO during patent prosecution and set forth additional procedures to attack the validity of a patent by the USPTO administered post-grant proceedings. Under a first-to-file system, assuming the other requirements for patentability are met, the first inventor to file a patent application generally will be entitled to the patent on an invention regardless of whether another inventor had made the invention earlier. The USPTO recently developed new regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first to file provisions, only became effective on March 16, 2013. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications of those of our licensors and the enforcement or defense of any patents issuing from these applications, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

For example, the Leahy-Smith Act provides a new administrative tribunal known as the Patent Trial and Appeals Board, or PTAB, that provides a venue for companies to challenge the validity of competitor patents at a cost that is much lower than district court litigation and on timelines that are much faster. Although it is not clear what, if any, long term impact the PTAB proceedings will have on the operation of our business, the initial results of patent challenge proceedings before the PTAB since its inception in 2013 have resulted in the invalidation of many U.S. patent claims. The availability of the PTAB as a lower-cost, faster and potentially more potent tribunal for challenging patents could therefore increase the likelihood that our own licensed patents and any future patents owned by us will be challenged, thereby increasing the uncertainties and costs of maintaining and enforcing them. Moreover, if such challenges occur, as indicated above, we have no right to control the defense. Instead, we would essentially rely on our licensor to consider our suggestions and to defend such challenges, with the possibility that it may not do so in a way that best protects our interests.

The U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations.

The patent positions of companies engaged in the development and commercialization of biologics and pharmaceuticals are particularly uncertain. Two cases involving diagnostic method claims and "gene patents" have recently been decided by the Supreme Court of the United States, or the Supreme Court. On March 20, 2012, the Supreme Court issued a decision in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, or *Prometheus*, a case involving patent claims directed to a process of measuring a metabolic product in a patient to optimize a drug dosage for the patient. According to the Supreme Court, the addition of well-understood, routine or conventional activity such as "administering" or "determining" steps was not enough to transform an otherwise patent-ineligible natural phenomenon into patent-eligible subject matter. On July 3, 2012, the USPTO issued a guidance memo to patent examiners indicating that process claims directed to a law of nature, a natural phenomenon or a naturally occurring relation or correlation that do not include additional elements or steps that integrate the natural principle into the claimed invention such that the natural principle is practically applied and the claim amounts to significantly more than the natural principle itself should be rejected as directed to not patent-eligible subject matter. On June 13, 2013, the Supreme Court issued its decision in *Association for Molecular Pathology v. Myriad Genetics, Inc.*, or *Myriad*, a case involving patent claims held by Myriad Genetics, Inc. relating to the breast cancer susceptibility genes BRCA1 and BRCA2. Myriad held that an isolated segment of naturally occurring DNA, such as the DNA constituting the BRCA1 and BRCA2 genes, is not patent eligible subject matter, but that complementary DNA, which is an

artificial construct that may be created from RNA transcripts of genes, may be patent eligible.

On March 4, 2014, the USPTO issued a guidance memorandum to patent examiners entitled "2014 Procedure For Subject Matter Eligibility Analysis Of Claims Reciting Or Involving Laws Of Nature/Natural Principles, Natural Phenomena And/Or Natural Products." These guidelines instruct USPTO examiners on the ramifications of the *Prometheus* and *Myriad* rulings and apply the *Myriad* ruling to natural products and principles including all naturally occurring nucleic acids. Patents for certain of our product candidates may contain claims related to specific DNA sequences that are naturally occurring and, therefore, could be the subject of future challenges made by third parties. In addition, the recent USPTO guidance could make it impossible for us to pursue similar claims in U.S. patent applications we may prosecute in the future.

We cannot assure investors that our efforts to seek patent protection for our technology and products in the United States will not be negatively impacted by the decisions described above, rulings in other cases or changes in guidance or procedures issued by the USPTO. We cannot fully predict what impact the Supreme Court's decisions in *Prometheus* and *Myriad* may have on the ability of life science companies to obtain or enforce patents relating to their products and technologies in the future. These decisions, the guidance issued by the USPTO and rulings in other cases or changes in USPTO guidance or procedures could have a material adverse effect on our existing patent portfolio and our ability to protect and enforce our intellectual property in the future. In December 2014, the USPTO issued its Interim Guidance on Patent Subject Matter Eligibility, in which it extended Myriad's "marked difference" standard for patent subject matter eligibility to all potential natural products. This standard applies to patent claims that recite not only nucleic acids (such as DNA in *Myriad*), but also other subject matter that could be considered a natural product, such as peptides, proteins, extracts, organisms, antibodies, chemicals, and minerals. As a consequence of the *Myriad* decision and the USPTO's Interim Guidance, if any of our future product candidates utilize isolated DNA, peptides, proteins or the like, we will not be able to obtain patents in the U.S. claiming such novel gene targets that we discover, which could limit our ability to prevent third parties from developing drugs directed against such targets.

Moreover, although the Supreme Court has held in *Myriad* that isolated segments of naturally occurring DNA are not patent-eligible subject matter, certain third parties could allege that activities that we may undertake infringe other gene-related patent claims, and we may deem it necessary to defend ourselves against these claims by asserting non-infringement and/or invalidity positions, or paying to obtain a license to these claims. In any of the foregoing or in other situations involving third-party intellectual property rights, if we are unsuccessful in defending against claims of patent infringement, we could be forced to pay damages or be subjected to an injunction that would prevent us from utilizing the patented subject matter. Such outcomes could harm our business, financial condition, results of operations or prospects.

The laws and regulations governing patents in the United States, the European Union and elsewhere could change in unpredictable ways that would weaken our and our licensors' ability to obtain new patents or to enforce our existing in-licensed patents and any patents that we might obtain in the future. In particular, there have been recent proposals for additional changes to the patent laws of the United States and other countries that, if adopted, could impact our ability to obtain patent protection for our proprietary technology or our ability to enforce our proprietary technology. Depending on future actions by the U.S. Congress, the U.S. courts, the USPTO and the relevant law-making bodies in other countries, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future. Europe's planned Unified Patent Court, currently working towards early 2018 as a target date to come into existence and begin its operations, may particularly present uncertainties for our ability to protect and enforce our patent rights against competitors in Europe. While that new court is being implemented to provide more certainty and efficiency to patent enforcement throughout Europe, it will also provide our competitors with a new forum to use to centrally revoke our European patents. It will be several years before we will understand the scope of patent rights that will be recognized and the strength of patent remedies that will be provided by that court. We will have the right to opt our patents out of that system over the first seven years of the court, but doing so may preclude us from realizing the benefits of the new unified court.

Upon the expiration of any of our in-licensed U.S. and European patents, or any patents issuing from our patent applications, we may not receive the benefit of patent term extension or data exclusivity for our product candidates in the United States and the European Union.

Depending upon the timing, duration and specifics of any marketing approval by the FDA of our product candidates, one or more of our U.S. or European patents that we in-license or that may issue from our patent applications may be eligible for limited patent term extension.

In the United States, one or more of the in-licensed U.S. patents, or any patent that issues from our U.S. patent application, may be eligible for patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, or Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit

a patent extension term of up to five years as compensation for patent term lost during the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, only one patent may be extended and only those claims covering the approved drug, a method for using it or a method for manufacturing it may be extended. However, we may not be granted an extension because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain patent term extension or the term of any such extension is less than we request, our competitors may obtain approval of competing products following our patent expiration, and our revenue could be reduced, possibly materially.

In the European Union, one or more of the in-licensed European Union patents, or any patents that issue from our European Union patent applications, may be eligible for limited patent term extension if a Supplementary Protection Certificate, or SPC, is available under Regulation (EC) No 469/2009. Further protection may also be available by means of a Paediatric Extension to such an SPC. Alternatively, our licensors we may be able to extend their de facto exclusive rights by means of trial data exclusivity protection. In any case, failure to obtain, or lack of eligibility for, such protection may allow our competitors may obtain approval of competing products following our patent expiration, and our revenue could be reduced, possibly materially to the extent that we, and/or our licensors have no effective period of market exclusivity.

Our trademarks and trade names may not be adequately protected and we may not be able to build name recognition in our markets of interest.

The validity of our registered Community Trademark for "GenSight" in France may still be challenged by third parties. Likewise, any subsequent trademark applications we may file, will not be guaranteed not guaranteed to be ultimately registered or exempt of any subsequent challenge from third parties. For example, a trademark application may be subject to an opposition proceeding in the USPTO, the Office for Harmonization in the Internal Market or corresponding other trademark offices, which could result in the total or partial refusal of the trademark application. Even if we are successful in registering our trademarks or trade names, such trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing third parties prior trademarks. We may not be able to protect our rights in and to our trademark and trade name, which we need to build name recognition among potential partners or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks, domain names or copyrights may be ineffective and could result in substantial costs and diversion of resources and could adversely impact our financial condition or results of operations.

In addition, there could be potential trade name or trademark infringement claims brought by owners of prior registered trademarks alleging that the use of a corporate name or logo, product names or other signs by which we distinguish our products and services are infringing their trade mark or allied rights. The outcome of such claims is uncertain and may adversely affect our business and/or our freedom to use our corporate name or other relevant signs as well as all the risks identified in the above paragraph. If litigation arises in this area it may lead to significant costs and diversion of management and employee attention.

Intellectual property rights do not necessarily address all potential threats.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations and may not adequately protect our business or permit us to maintain our competitive advantage. For example:

- others may be able to make products that are similar to our product candidates but that are not covered by the claims of the patents that we in-license or may own in the future;
- we, or our current or future licensors or collaborators, might not have been the first to make the inventions covered by the issued patent or pending patent application that we in-license or that we own or may own in the future;
- we, or our current or future licensors or collaborators, might not have been, or might not be, the first to file the patent applications covering certain of our or their inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our owned or in-licensed intellectual property rights;
- it is possible that the pending licensed patent applications of our licensors or those that we own or may own in the future will not lead to issued patents;
- issued patents that our licensors hold rights to, or that our licensors or we may hold rights to in the future, may be held

invalid or unenforceable, including as a result of legal challenges by our competitors;

- other may conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable; and
- we may choose not to file a patent application for certain trade secrets or other proprietary information, and a third party may subsequently file a patent application covering such intellectual property.

Should any of these events occur, they could significantly harm our business, financial condition, results of operations or prospects.

4.6 INSURANCE AND RISK MANAGEMENT

We have implemented a policy to cover the main insurable risks with coverage amounts that we deem compatible with the nature of our operations. The total amount of premiums paid for all of our insurance policies for the fiscal year ended December 31, 2018 amounted to €122K.

As a development-stage business, we are unable to quantify risk to determine a coverage amount, in particular with respect to civil liability. However, we consider that the insurance policies described below adequately cover the risks inherent to our operations and that our insurance policy is consistent with practice in our sector. We do not envisage any particular difficulty in maintaining appropriate levels of insurance in the future subject to market conditions and capacities.

Our insurance policies are summarized below:

Risks covered	Insurer	Amount	Excess per claim
Comprehensive professional insurance	**GENERALI (N°AR520316)**	Globally capped at €5,900 K (2019 amounts)	
Sub-limits for operating direct damages and additional costs combined:			
• Climate events (excluding natural disasters)		€1,000 K	
• Electrical damages		€300 K	
• Machinary breakdown		€900 K	
• Costs and losses		€1,000 K	
• Liability, including use of third parties		€4,500 K	
• Automatic guarantee		€500 K	
• Error or omissions		€500 K	
• Other damages		€2,000 K	
Sub-limits for direct damages			
• Theft		€100 K	
• Computer equipment breakdown		€700 K	
• Asset in travel status and/or transport for own account		€100 K	
• Asset in deposit with third parties, limited to fire and assimilated events		€2,000 K	
• Glass breakage		€20 K	
• Research and Development expenses		€250 K	

Risks covered	Insurer	Amount	Excess per claim
Directors & Officers civil liability insurance: claims made or pursued world-wide	**AIG (7.919.283) and AIG (7.919.284)**	Capped at €5,000 K except for : (per "insured year")	
Reputation damage		€100 K	
Psychological support		€50 K	
Consulting fees in case of extradition		€50 K	
Support expenses in case of property restrictive measures		€60 K per insured person with a maximum amount of €200 K per insured year	
Risk mitigation expenses		€500 K per insured year, with a maximum amount of €1,000K for all insured persons	
Consulting fees related to a judicial liquidation		€50 K	
Preliminary investigation expenses following a social action *ut singuli*		€250 K	
Non-separable fault		€5,000 K	
Fund for prevention for financial difficulties		€30 K	
Consulting fees on the WCAM regulation within the framework of a group action related to financial securities		€50 K	
Emergency fees		€1,000 K	
Independent director		€1,000 K	
Claim related to a pollution		€1,000 K	
Civil Liability	**CHUBB (N° RC0099500275)**		
Civil operating liability:			
All damage taken together including bodily harm:		€7,500 K per "claim"	
• Inexcusable fault		€1,000 K per victim capped at €3,000 K per "insured year"	
• All "material" and "non-material" damage including:		€1,500 K per "claim"	
– "non-consecutive non-material damage"		€200 K per "claim"	€1,500
– "property damage"		€50 K per "claim"	€1,500
– "any damage resulting from accidental pollution"		€300 K per "insured year"	€1,500
Criminal defense-Appeal		€30 K per dispute	€1,500
Civil product liability:			
All damage taken together including bodily harm:		€5,000 K	€10 K
• "Non-consecutive non-material damage"		€200 K except for professional civil liability €1,000 K	€10 K

Risks covered	Insurer	Amount	Excess per claim
Employee Travel Insurance	**CHUBB (N° FRBBBA22378)**		
Death or total permanent invalidity		Up to €500 K depending on the person insured	
Assistance (for individuals and legal assistance abroad, business assistance, travel incident assistance)		Travel incidents: up to €15 K, Legal assistance: up to €20 K	
Medical insurance and luggage and professional equipment insurance		No limitation for medical insurance out of the country of residence and €5 K for luggage and professional equipment	
Civil responsibility		Up to €7,500 K	
Research sponsor's civil liability insurance			
Study GS-LHON-CLIN-03A in mainland France and its overseas departments and territories:	HDI Gerling		
• Victim		€1,000 K	€1,500 per victim capped at €16,000 per protocol
• Research protocol		€6,000 K	
• Claims made during an insurance year by one and the same sponsor for several research protocol		€10,000 K	
Study GS-LHON-CLIN 03A in Italy, U.K. and USA:	ALLIANZ		
• ITALY :			
– Per Victim		€1,500 K	
– Per Research protocol		€5,000 K	
• UNITED KINGDOM			
– Per Research protocol		£5,000 K	
• UNITED STATES			
– Per research protocol		$5,000 K	
Study GS-LHON-CLIN-03A in Germany	ALLIANZ		
• Per victim		€500 K	
– if up to 1,000 patients participate in this trial		€5,000 K	
– if more than 1,000 patients and up to 3,000 participate in this trial		€10,000 K	
– if more than 3,000 patients participate in this trial		€15,000 K	
Study GS-LHON-CLIN-03B in *France métropolitaine* and DOM-TOM :	HDI Gerling		
• Per victim		€1,000 K	€1,500 per victim capped at €16,000 per protocol
• Per research protocol		€6,000 K	
• Claims made during an insurance year by one and the same sponsor for several research protocol		€10,000 K	

Risks covered	Insurer	Amount	Excess per claim
Study GS-LHON-CLIN-03B in Italy, U.K. and USA	ALLIANZ		
• ITALY			
– Per victim		€1,500 K	
– Per research protocol		€5,000 K	
• UNITED KINGDOM			
– Per research protocol		£5,000 K	
• UNITED STATES			
– Per research protocol		$5,000 K	
Study GS-LHON-CLIN-03B in Germany	ALLIANZ		
• Per victim		€500 K	
– if up to 1,000 patients participate in this trial		€5,000 K	
– if more than 1,000 patients and up to 3,000 participate in this trial		€10,000 K	
– if more than 3,000 patients participate in this trial		€15,000 K	
GS-LHON-CLIN-01	**HDI Gerling**		
In mainland France and overseas departments and territories:			
• Per victim		€1,000 K	€1,500 per victim capped at €16,000 per protocol
• Per Research protocol		€6,000 K	
• Claims made during an insurance year by one and the same sponsor for several research protocol		€10,000 K	
GS-LHON-CLIN-05	**HDI Global SE**		
• FRANCE			
– Victim		€1,000 K	€1,500 per victim capped at €16,000 per protocol
– Research protocol		€6,000 K	
– Claims made during an insurance year by one and the same sponsor for several research protocol		€10,000 K	
• ITALY	ALLIANZ		
– Per victim		€1,500 K	
– Per research protocol		€5,000 K	
• UNITED KINGDOM	ALLIANZ		
– Per research protocol		£5,000 K	

Risks covered	Insurer	Amount	Excess per claim
• UNITED STATES	ALLIANZ		
– Per research protocol		$5,000 K	
• BELGIUM	HDI Global SE		
– Per victim		€650 K	
– Per research protocol		€5,000 K	
• TAIWAN	Allianz GCS		
– Per victim		€500 K	
– Per research protocol		€2,000 K	
• SPAIN	HDI Global SE		
– Per victim		€250 K	
– Per research protocol		€2,500 K	Per protocol and annually
GS010 REGISTRY 001 (REALITY)	**HDI GERLING**		
• FRANCE			
– Victim		€1,000 K	€1,500 per victim capped at €16,000 per protocol
– Research protocol		€6,000 K	
– Claims made during an insurance year by one and the same sponsor for several research protocol		€10,000 K	
• ITALY	CNA		
– Per victim		€1,000 K	
– Per research protocol			
• If # subject less than or equal to 50		€5,000 K	
• If # subject more than 50 but less than 200		€7,500 K	
• If # subject more than 200		€10,000 K	
• UNITED KINGDOM	CNA		
– Per victim		£5,000 K	
– Per research protocol		£5,000 K	
• UNITED STATES	CNA		
– Per victim		$1,000 K	
– Per research protocol		$1,000 K	
• SPAIN	CNA		
– Per victim		€250 K	
– Per research protocol		€2,500 K	Per protocol and annually

Risks covered	Insurer	Amount	Excess per claim
GS-LHON-CLIN-06			
• FRANCE	HDI Global SE		
– Victim		€1,000 K	€1,500 per victim capped at €16,000 per protocol
– Research protocol		€6,000 K	
– Claims made during an insurance year by one and the same sponsor for several research protocol		€10,000 K	
• ITALY	CNA		
– Per victim		€1,000 K	
– Per research protocol			
• If # subject less than or equal to 50		€5,000 K	
• If # subject more than 50 but less than 200		€7,500 K	
• If # subject more than 200		€10,000 K	
• UNITED KINGDOM	CNA		
– Per victim		£5,000 K	
– Per research protocol		£5,000 K	
• UNITED STATES	CNA		
– Per victim		$5,000 K	
– Per research protocol		$5,000 K	
• GERMANY	HDI Global SE		
– Per victim (for death)		€50 K for patient of 18 up to 64 €37.5 K for patient of 65 up to 69 €25 K for patient of 70 up to 74	
– Per victim (for disability)		€100 K for patient of 18 up to 64 €75 K for patient of 65 up to 69 €50 K for patient of 70 up to 74	
GS030-CLIN-001	HARDY		
• UNITED STATES			
– Per claim, per research subject		$5,000 K	
– Per Clinical trial		$7,500 K	
– Globally during the period of Insurance		$7,500 K	
• FRANCE	HDI Global SE		
– Victim		€1,000 K	€1,500 per victim capped at €16,000 per protocol
– Research protocol		€6,000 K	
– Claims made during an insurance year by one and the same sponsor for several research protocol		€10,000 K	
• UNITED KINGDOM	CAN/HARDY		
– Per victim		£5,000 K	
– Per research protocol		£5,000 K	

Although we maintain insurance coverage for our clinical trials in the amount of €1 million per victim, €6 million per protocol and €10 million in the aggregate over a one-year period, this insurance may not be adequate to cover all liabilities that we may incur. We anticipate that we will need to increase our insurance coverage each time we commence a clinical trial and if we successfully commercialize any product candidate. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

4.7 INTERNAL CONTROL AND RISK MANAGEMENT PROCEDURES

As part of its listing on Euronext Paris, the Company has implemented an internal control policy and a certain number of procedures. Over time, the Company seeks to conform to AMF recommendations for small and medium-sized companies with regard to internal control.

The internal control procedures implemented by the Company are intended to:

- Ensure control over operations, employee behavior and optimal resource management, in accordance with the framework defined by management, laws and applicable regulations;
- Anticipate and control the risks inherent to the Company's activities, whether operational, industrial or financial.

4.7.1 GENERAL INTERNAL CONTROL ORGANIZATION

Internal control within the Company is handled, in fine, by the board of directors, assisted by the audit and compensation committees. The Company is managed operationally by two internal committees, the executive committee and the management committee.

Executive committee

Upstream of the board of directors, and more operationally, an executive committee (ComEx) ensures compliance with current procedures. This committee meets once a week, and consists of the chief financial officer, chief medical officer and chief executive officer, who chairs it.

The executive committee assists the chief executive officer in the Company's strategic and operational management.

Management committee

The executive committee is supported by a management committee (CoDir), which is the operational review body for the Company's projects. The management committee meets once a month and consists of the members of the executive committee and the Company's principal managers. It meets to monitor performance and adjust the operational orientation, if needed. The Company's management committee is a true place for exchange and reflection and plays a role in controlling and coordinating all operational teams. The management committee is responsible for meeting the Company's annual corporate objectives.

4.7.2 INTERNAL CONTROL AND RISK MANAGEMENT PROCEDURES

The procedures implemented by the Company as part of its internal control are reviewed and evaluated by the statutory auditors during their annual reviews of half-year and annual consolidated financial statements. The findings of these tasks are shared with the Company's financial management, allowing it to take corrective measures and improve the Company's internal control. These findings are also shared with the Audit Committee.

4.7.2.1 Financial risk management

Accounting and financial information

The Company's accounting is operated by both the financial department and an independent accounting firm using a dedicated ERP system.

The recording of accounting items, preparation of accounting information, reporting and corporate reports and documentation are provided internally, while the independent firm provides monthly controls, calculation of the research tax credit (CIR) and tax returns.

The work is reviewed and analyzed within the Company's finance department, which prepares quarterly management reports for operations. These reports enable management to assess current expenses, with respect to the budget and various quarterly forecasts, and to take corrective measures if needed.

As of the date of this Document, the Company has implemented the following internal control procedures related to accounting and financial information, as well as the preparation of consolidated financial statements:

- The Company maintains, internally, a separation between the production and the control of financial operations, accounting procedures and the preparation of consolidated financial statements;
- An independent certified public accounting firm provides payroll management, as well as social security and tax returns;
- Valuation and assessment of specific financial items, either complex or relying on subjective assumptions, are subcontracted to third-party experts. These items include notably the CIR, the provisions for compensation payable to

employees on their retirement and the expense related to share-based payments; and

- The Company has implemented an integrated system that provides for book keeping and securing the purchase-to-pay workflow, including electronic approvals, as well as automated entries and payments.
- The Company has implemented monthly closing procedures and key controls (Cut-off entries, Bank statement reconciliations, Manual journal entries review, Payroll reconciliation etc.) in order to ensure the reliability of the financial information.
- The Company has also implemented expense-control measures, using an electronic purchase order system. Invoice payments are prepared by the "accounting" function, automatically and electronically transmitted to the bank for payment, and validated by the "controlling" function.

Payroll management

Payroll is also subcontracted in its entirety to an accounting firm. We performed a monthly three-way reconciliation control (reconciliation between the payroll journal, accounting entries and bank statement) over the documentation received by the third party provider.

4.7.2.2 Operational risk management

Given its stage of development, the Company's operations are primarily:

- Pre-clinical and toxicity studies of drug candidates;
- Pharmaceutical and clinical development of drug candidates.

4.7.2.2.1 Pre-clinical research and toxicity studies of drug candidates

These activities are subcontracted to top-tier, specialized international providers operating in accordance with Good Laboratory Practices (GLP) and certified by AAALAC International, a private non-profit organization that is an international reference in assessing the humane animal treatment in experimentation.

4.7.2.2.2 Pharmaceutical and clinical development of drug candidates

These activities are subcontracted to top-tier, specialized international providers operating in accordance with both Good Laboratory Practices (GLP) and Good Clinical Practices (GCP).

The manufacturing of clinical supply is subcontracted to Contract Manufacturing Organizations (CMOs).

INFORMATION ABOUT THE ISSUER

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5.1 HISTORY AND DEVELOPMENT

Our corporate name is "GenSight Biologics S.A."

We are registered with the Paris Trade and Companies Register under number 751 164 757.

The Company is identified under the Legal Entity Identifier (LEI) 549300NK4AB8OUEX1F54.

We were incorporated on April 17, 2012.

The Company's duration is 99 years from the date of its registration with the Paris Trade and Companies Register except in the event of early dissolution or extension.

Our registered office is located at 74, rue du Faubourg Saint-Antoine – 75012 Paris, France (Tel: +33 (0)1 76 21 72 20).

We are a French limited liability corporation *(société anonyme)* with a Board of Directors, governed by French law, including, in particular, Book II of the French Commercial Code.

Our website address is www.gensight-biologics.com

The information on the website does not form part of the Document.

Important Events in the Development of the Company

April 2012	Incorporation of the Company on the basis of a collaborative effort involving renowned academic institutions.
March 2013	Series A private round raising €19.7 million through Novartis Venture Fund, Abingworth, Versant Ventures, Vitavest S.à r.l. and Bpifrance (FBIMR).
February 2014	Initiation of a Phase I/II clinical trial to assess safety and tolerability of GS010 in Leber's Hereditary Optic Neuropathy, or LHON.
June 2015	Positive interim safety report of the Phase I/II clinical trial confirming safety and tolerability of GS010 in LHON.
July 2015	Series B private round raising €32.1 million (or €30.8 million net proceeds) through our Series A investors joined by Fidelity Management & Research Company, Perceptive Advisors, Jennison Associates, HealthCap and Sphera Global HealthCare Fund.
December 2015	Initiation of two Phase III clinical trials to demonstrate efficacy of GS010 in LHON.
July 2016	Listing of our shares on Euronext Paris which allowed the Company to raise approximately €45.2 million (or €41.4 million net proceeds).
January 2017	U.S. Food and Drug Administration (FDA) has granted orphan drug designation (ODD) to the Company's product candidate GS030 for the treatment of retinitis pigmentosa.
April 2017	Creation of the first subsidiary, GenSightBiologics Inc., registered and located in the Unites States of America.
June 2017	Capital Increase which allowed to raise €22.5 million (or €20.7 million net proceeds), by means of a private placement reserved to a category of persons, U.S. and European institutional investors specialized in healthcare and biotechnology.
December 2017	Positive long-term visual acuity gains and safety results from Phase I/II Study of GS010 for the treatment of Leber Hereditary Optic Neuropathy.
December 2017	GenSight Biologics received MHRA approval to initiate Phase I/II PIONEER clinical trial of GS030 gene therapy in Retinitis Pigmentosa.
April 2018	Topline data at 48 weeks of the REVERSE Phase III clinical trial with GS010 in LHON.
October 2018	Topline data at 72 weeks of the REVERSE Phase III clinical trial with GS010 in LHON.
October 2018	Treatment of first subject in first-in-man PIONEER Phase I/II clinical trial of GS030 combining gene therapy and Optogenetics for the treatment of Retinitis Pigmentosa.
December 2018	Additional data reporting sustained quality of life improvements at week 72 of the REVERSE Phase III clinical trial with GS010 in LHON.
February 2019	Topline data at 48 weeks of the RESCUE Phase III clinical trial with GS010 in LHON.
February 2019	Completion of an €8 million capital increase without discount subscribed entirely by Sofinnova.
April 2019	Topline data at 72 weeks of the RESCUE Phase III clinical trial with GS010 in LHON.

5.2 INVESTMENTS

HISTORICAL INVESTMENTS

Our historical investments since 2015 involve mainly the acquisition of property, plant and equipment, and intangible assets. The following table sets forth our net cash used in investing activities for the relevant periods:

	As of December 31,	
In thousands of euros	2017	2018
Cash flows from investment activities		
Acquisitions of property, plant and equipment	(236)	(789)
Acquisitions of intangible assets	–	(2)
Acquisitions of non-current financial assets	(232)	8
Acquisition of current financial assets	(216)	120
Net cash flows from investment activities	**(684)**	**(663)**

Over the course of the period presented, our investments primarily consisted of equipment, installations and furniture especially for our office located in New York City.

ONGOING INVESTMENTS

We currently expect that the amount of our cash expenditures for investment in 2019 will be generally consistent with the level of investment during the 2017 to 2018 period. We expect that the types of investments that we make and our investments objectives will be similar in nature to investments made during the 2016 to 2017 period. However, investment expenditures can be uneven and unpredictable, particularly when they are associated with external growth transactions.

FUTURE PLANNED INVESTMENTS

As of the date of this Document, we do not have any material commitments to make investments in the future.

BUSINESS OVERVIEW

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6.1 OVERVIEW

We are an innovative clinical-stage gene therapy company with an initial focus on discovering, developing and commercializing novel therapies for severe retinal neurodegenerative diseases. We are developing a pipeline of proprietary product candidates to provide patients with a long-lasting cure for severe inherited retinal diseases for which there are no currently approved treatments. Our current product candidates are designed to be administered in a single treatment to each eye by intravitreal, or IVT, injection. We are leveraging our expertise in ophthalmology, gene therapy and drug development to restore vision by combining a gene therapy-based approach with our proprietary technology platforms of mitochondrial targeting sequence, or MTS, and optogenetics. We believe our technology platforms have broad applicability both within and outside of ophthalmology as well as central nervous system, or CNS, disorders. Our lead product candidate, GS010, is a recombinant AAV2-based gene therapy for the treatment of Leber Hereditary Optic Neuropathy, or LHON, and is currently in Phase III clinical trials. We reported top-line data from our Phase III clinical trials REVERSE in April 2018 and RESCUE in February 2019. Our second most advanced product candidate, GS030, for the treatment of Retinitis Pigmentosa, or RP, is currently in a Phase I/II trial. The first subject was treated in October 2018, and we expect to complete recruitment in the first half of 2020.

GS010 for the Treatment of LHON

LHON is an orphan mitochondrial disease that causes the sudden and dramatic loss of vision, leading to bilateral blindness in less than a year, in teens and young adults and for which we believe there is currently no effective treatment option. LHON is estimated to have a prevalence of between one in 31,000 and one in 40,000 in the United States and the European Union, respectively. LHON originates mainly from mutations in the three NADH dehydrogenase mitochondrial genes: ND1, ND4 and ND6. NADH dehydrogenase is an enzyme that acts on NADH and is the key enzyme in cellular and mitochondrial metabolism, the complex that supplies energy to cells that promote vision. ND4 and ND1 mutations account for approximately 70% and 15% of the LHON populations, respectively.

Our lead product candidate, GS010, is developed using our MTS technology platform and is designed to treat LHON by restoring the function of NADH dehydrogenase resulting from a mutation in the ND4 gene. Our MTS technology platform allows for efficient expression of a mitochondrial gene by active delivery of messenger ribonucleic acid, or mRNA, to polysomes located at the mitochondrial surface. This allows for the synthesis, translocation, internalization and proper localization of the missing mitochondrial protein into the matrix of the mitochondrion. We believe that our MTS technology is the only existing technology that permits missing mitochondrial proteins to be actively shuttled into the mitochondrion, enabling the restoration of mitochondrial function necessary to effectively treat LHON.

GS010 has received orphan drug designation for the treatment of LHON in the United States and the European Union, and is being evaluated in our ongoing Phase III clinical trials. We reported top-line data from our first Phase III clinical trial REVERSE in April 2018, highlighting the favorable safety and tolerability profile of GS010, and showing a clinically meaningful improvement of visual acuity of +11 ETDRS letters in treated eyes at 48 weeks as compared to baseline in all 37 patients. A similar improvement was reported in untreated eyes, and caused the trial not to meet its primary endpoint, defined as a difference of improvement in visual acuity in GS010-treated eyes compared to sham-treated eyes at 48 weeks. We reported additional results at 72 weeks in October 2018, showing a clinically meaningful improvement of visual acuity of +15 ETDRS letters in treated eyes, and of +12 ETDRS letters in untreated eyes. This bilateral improvement is currently being investigated further. The trial also demonstrated a statistically significant relative preservation of the structure of the retina in treated eyes, specifically the volume of the retinal ganglion cells and the thickness of the nerve fiber layers, while untreated eyes continued to deteriorate. We also reported sustained improvements in quality of life at both 48 and 72 weeks. We reported similar top-line results from our second Phase III trial RESCUE in February 2019, showing visual acuity in GS010-treated eyes and sham-treated eyes evolving with similar trajectories, worsening to a low point, or nadir, before beginning to improve by Week 48. We reported additional results at 72 weeks in April 2019, showing sustained recovery from nadir. By Week 72, GS010-treated eyes improved by +21 ETDRS letters from nadir, compared to the Week 48 improvement of +13 ETDRS letters. This recovery at Week 72 could not yet completely offset deterioration from baseline through the acute phase: GS010-treated eyes were still below baseline by -10 ETDRS letters, compared to -19 ETDRS letters at Week 48.. The strength of the bilateral recovery shifted the mean BCVA in both sets of eyes from being off-chart at Week 48 to on-chart at Week 72. In addition, 40% of GS010- and sham-treated eyes improved by a clinically meaningful difference of +15 ETDRS letters from nadir. Similarly, 58% of GS010-treated and 50% of sham-treated eyes improved by a clinically meaningful difference of +10 ETDRS letters from nadir. Following the RESCUE results, if compelling, we intend to meet with the FDA and apply for Fast Track Designation, which if granted, would allow us to file a BLA and seek priority

review, and/or Regenerative Medicines Advanced Therapies designation (RMAT) allowing, in addition to priority review, for a rolling submission and eligibility for accelerated approval, while we continue to conduct our ongoing REFLECT trial pursuant to a special protocol assessment with the FDA. In addition, we expect that the complete results at 96 weeks of our Phase III REVERSE trial and RESCUE trial, if compelling, will be sufficient to support filing for marketing authorization in the European Union. We believe that the benefits of GS010 treatment may prevent further vision loss and/or restore vision, leading to increased autonomy and overall quality of life for affected individuals. We have completed a Phase I/II trial for GS010 in France in 15 subjects with long-standing vision loss from LHON with the ND4 gene mutation. Results of this trial were published in Ophthalmology, the journal of the American Academy of Ophthalmology. This trial demonstrated that GS010 was well tolerated, with no unexpected treatment-emergent adverse events, no serious adverse events related to the treatment or procedure, and no suspected unexpected serious adverse reactions. We believe that GS010 has the potential to be the first therapy approved by the FDA for the treatment of LHON.

RESCUE enrolled LHON patients with an onset of vision loss of less than six months in duration, while REVERSE enrolled patients with an onset of vision loss between six and 12 months. REFLECT is enrolling patients with an onset of vision loss of less than 12 months. For more information on clinical trials protocols, see Section 6.5 "Our Lead Product Candidate: GS010 for the Treatment of LHON", of this Document.

GS030 for the Treatment of RP

We are developing GS030 for the treatment of diseases of photoreceptor degeneration that include RP and dry age-related macular degeneration, or AMD, with and without geographic atrophy, or GA. We initially focused our studies on the treatment of RP, which is an orphan family of diseases caused by multiple mutations in over 100 genes involved in the visual cycle. On average, RP patients begin experiencing vision loss as young adults, eventually becoming blind around the age of 40 to 45. RP is the most widespread hereditary cause of blindness in developed nations, with a prevalence of about 1.5 million people throughout the world. In Europe and the United States, the prevalence of RP is approximately one in 3,500 and one in 4,000 and the incidence of new patients each year is 15,000 and 20,000. There is currently no existing treatment for RP.

GS030 utilizes our novel optogenetics technology platform. Optogenetics is a biologic technique that involves the transfer of a gene that is encoding for a light-sensitive protein to cause neuronal cells to respond to light stimulation. Our platform of optogenetics targets retinal ganglion cells, or RGCs, and modifies them into true photoreceptors. This allows us to confer a photoreceptive function to the healthy and preserved RGCs independent of any specific underlying genetic mutation. Light stimulation, which activates the protein, is amplified and enhanced by an external wearable device designed as goggles. We developed these goggles to amplify the light stimulation upon the transduced neuronal cells and expand vision restoration. We believe our technology would be immediately transferable to any disease in which photoreceptors are lost while RGCs remain, such as dry AMD and GA. Approximately 15 million people are affected with AMD in the United States, with a global prevalence of 170 million, and dry AMD accounts for approximately 80% of all cases of late-stage AMD. Given this, we expect to initiate clinical trials of GS030 for the treatment of dry AMD and GA.

GS030 has received orphan drug designation for the treatment of RP in the United States and the European Union and advanced therapy medicinal product, or ATMP, classification for the treatment of RP in the European Union. Our preclinical proof-of-concept studies have demonstrated that GS030 can restore light sensitivity in the retina of blind mice and non-human primates. In other preclinical studies, we have also restored visual behaviors *in vivo* in blind rats using GS030 with demonstrable effects upon their visual cortex. We received approval in December 2017 from the UK's Medicines and Healthcare Products Regulatory Agency, or MHRA, followed by the French Agence nationale de sécurité du médicament et des produits de santé, or ANSM, in May 2018 and the US-FDA in August 2018, to conduct a Phase I/II clinical trial in severely affected RP subjects and treated the first subject in October 2018. We expect to complete recruitment in the first half of 2020.

Our Technology Platforms and Other Applications

We believe our integrated technology, which combines gene therapy with our core MTS and optogenetics technology platforms, has the potential to replace or restore the function of retinal cells, either RGCs or photoreceptors that have degenerated in order to regain vision for patients, thereby improving the quality of their lives. Beyond our initial product candidate, GS010 for the treatment of LHON, we believe that our MTS technology platform can be applied to treatments for LHON caused by other single mutations, including our second LHON product candidate, GS011, to treat LHON due to mutation in the ND1 gene. Similarly, we believe that GS030 using our optogenetics platform can address any disease of photoreceptor degeneration regardless of the etiology and be entirely transferable to dry AMD or GA, offering a meaningful benefit to these diseases that have significant unmet medical needs.

In addition, our MTS and optogenetics technologies have potential applicability outside of our initial focus on severe retinal diseases. We believe our MTS technology platform, given its unique ability to actively shuttle mitochondrial proteins into the mitochondrion,

enables the development of treatments for the many indications involving defects of the mitochondrion, including such rare diseases as Kearns-Sayre syndrome and Alpers disease, and possibly more common disorders such as Parkinson's disease and amyotrophic lateral sclerosis, or ALS. Similarly, we believe this gene therapy approach of our optogenetics platform that permits the introduction of proteins sensitive to light stimulation has broad applicability to indications outside ophthalmology that are receptive to light stimulation, such as congenital deafness, pain treatment and vagus nerve stimulation.

We own or have exclusively in-licensed all intellectual property rights covering our MTS and optogenetics platform technologies and our current product candidates. In addition, we hold worldwide commercialization rights to our technology platforms, product candidates and development programs. Because of the orphan nature of LHON and RP, we believe a limited and targeted sales and marketing organization would be able to reach specialized ophthalmology centers and their patients.

Our Management and Scientific Team

We believe that we have a significant competitive advantage as a result of the collective experience of our management and scientific team in the biotechnology industry, specifically in the areas of ophthalmology and gene therapy. Our Chief Executive Officer and co-founder, Bernard Gilly Ph.D., has over 20 years of experience in the pharmaceutical sector and as an entrepreneur. Other members of our executive management team have significant experience in the discovery and development of gene therapy and ophthalmology drug products. Our co-founder, José-Alain Sahel M.D. Ph.D., is the Director of *Institut de la Vision* and Chairman of Departments of Ophthalmology at the *Centre Hospitalier National d'Ophtalmologie des XV-XX* and the Rothschild Ophthalmology Foundation in Paris, France. Since July 2016, Dr. Sahel has also been appointed Chairman of the Department of Ophthalmology at the University of Pittsburgh Medical Center. Such experience plays a critical role in our core MTS and optogenetics technology platforms and reflects substantial cross-disciplinary knowledge.

6.2
OUR PRODUCT DEVELOPMENT PIPELINE

Our pipeline is comprised of two lead product candidates for the treatment of sight-threatening retinal degenerative diseases, together with preclinical development programs targeting ophthalmic and neurodegenerative diseases. Below is a table summarizing our development programs:

Technology	Product Candidate	Indication	Research	Preclinical	Phase I/II	Phase III	Registration	Next Expected Events
MTS platform	GS010 (FDA & EMA Orphan Drug Designation)	LHON ND4	→	→	→	→		REVERSE: Phase III top-line data reported in Apr (48w) and Oct (72w) 2018. 96w expected in May 2019. RESCUE: Phase III top-line data reported in Feb (48w) and Apr (72w) 2019. 96w expected end in Sep 2019. REFLECT*: Phase III recruitment ongoing, top-line data expected in Q2 2020
	GS011	LHON ND1	→					Initiate preclinical studies following GS010 Phase III clinical data
	Undisclosed Mitochondrial Target	Undisclosed	→					
Optogenetics	GS030 (FDA & EMA Orphan Drug Designation)	RP	→	→	→			PIONEER: First cohort enrolled in ongoing Phase I/II clinical trial. Report interim data one year after last subject treated
	GS030	Dry AMD & Geographic Atrophy	→					

*Conducting this trial under a special protocol assessment with the FDA

Subject to the successful completion of clinical trials, we currently expect to file for regulatory approval for GS010 in Europe at the end of 2019, and in the United States in the second half of 2020. Depending on the progress of our interactions with regulatory authorities, GS010 could then potentially be in a position to be approved in Europe in the third quarter of 2020, and in the first half

of 2021 in the United States, subject however to a variety of factors, including changes in regulatory requirements, evolutions in guidance from the FDA, the EMA or other European regulatory authorities, and the occurrence of unexpected events in the approval process, preparation for commercialization or otherwise, any of which could impact our anticipated timeline and our ability to obtain regulatory approval and commercialize GS010. For a description of such factors, see Section 4 "Risk Factors" of this Document.

6.3 OUR STRATEGY AND OBJECTIVES

Our goal is to transform the lives of patients suffering from severe degenerative diseases of the eye and central nervous system through the development and commercialization of novel therapies by combining gene therapy-based approaches with our proprietary MTS and optogenetics technology platforms. The key elements of our strategy are the following:

- **Complete clinical development and obtain regulatory approval for our lead product candidate, GS010, for the treatment of LHON.**

We reported top-line results of our two most advanced ongoing Phase III clinical trials of GS010 for the treatment of LHON, RESCUE and REVERSE, in 2018 and 2019. We expect additional data from both trials through 2019. If compelling, we intend to meet with the FDA and apply for Fast Track Designation, which if granted, would allow us to file a BLA and seek priority review and rolling submission, and/or Regenerative Medicines Advanced Therapies designation (RMAT) allowing, in addition to priority review, for eligibility for accelerated approval, while we continue to conduct our ongoing REFLECT trial pursuant to a special protocol assessment with the FDA. In addition, we expect that the complete results at 96 weeks of our Phase III REVERSE trial and RESCUE trial, if compelling, will be sufficient to support filing for marketing authorization in the European Union. GS010 has received orphan drug designation for the treatment of LHON in the United States and the European Union. We believe that GS010 has the potential to be the first FDA-approved therapy for LHON.

- **Rapidly advance clinical development of our second most advanced product candidate, GS030, using our optogenetics technology for the treatment of RP.**

GS030 has demonstrated that it can restore light sensitivity in the retina in animal models. In late 2017, we received MHRA approval to conduct a Phase I/II clinical trial of GS030 in blind RP subjects. We treated the first subject in October 2018 and expect to complete recruitment in the first half of 2020. We anticipate receiving interim data within one year after the last subject is treated. GS030 has received orphan drug designation for the treatment of RP in the United States and the European Union. We believe that due to its ability to introduce a gene encoding for light-sensitive protein into target cells, GS030 has the potential to be the first therapy that partially or fully restores sight to RP patients.

- **Expand our pipeline by leveraging our proprietary MTS technology platform.**

Mitochondrial defects are associated with several severe degenerative diseases of the optic nerve as well as diseases of the central nervous systems. We believe our discovery capabilities and clinical experience will allow us to pursue the preclinical and clinical development of treatments using our MTS technology platform to more broadly target degenerative diseases such as other forms of LHON or diseases of the central nervous system. For example, while our later stage Phase III LHON trials are designed to treat subjects with the mutation in the ND4 gene, we plan to initiate preclinical development for GS011 using our MTS technology to treat LHON due to mutation in the ND1 gene. In addition, our MTS technology platform has the potential to address neurodegenerative diseases of the central nervous system caused by mitochondrial defects, such as Kearns-Sayre syndrome, Alpers disease, Parkinson's disease and ALS.

- **Pursue preclinical development of other indications using our optogenetics technology platform.**

The initial focus of our optogenetics technology platform using GS030 is for disorders of the photoreceptor cells, in particular RP. However, because GS030 can address diseases of photoreceptor degeneration regardless of the type of mutation, we believe that GS030 may be extended to address patients suffering from dry AMD and GA, both areas of significant unmet medical need. We plan to explore other indications outside of ophthalmology where we are able to use light to stimulate the neurons, such as congenital deafness, pain treatment and vagus nerve stimulation.

- **Directly commercialize our lead product candidate, GS010, in key geographies and retain the option to commercialize GS030 by ourselves.**

We hold worldwide commercialization rights to our platform technologies, product candidates and development programs. If approved, we intend to commercialize GS010, initially in the United States and the European Union, ourselves. Due to the orphan nature of LHON, we believe a targeted sales and marketing organization would be able to reach specialized ophthalmology centers and their patients. We have built, and continue to expand upon, key relationships with ophthalmic experts and patients of severe retinal neurodegenerative diseases around the globe, since we anticipate that a large majority of patients suffering from this disease will be referred to a limited number of large, well-equipped centers with neuro-ophthalmologists and retina specialists in each country. Due to the broad patient populations that GS030 may address, we may enter into strategic partnerships to maximize commercial value of our product candidate.

- **Acquire or in-license complementary technologies and product candidates.**

In addition to our current product candidates, we will evaluate acquisition or in-licensing opportunities with the potential to expand and diversify our pipeline in ophthalmology and other neurodegenerative disorders. We believe that our management team's expertise in the gene therapy field and the broad applicability of our proprietary technology platforms provide us with a competitive advantage in evaluating product opportunities.

6.4 GENE THERAPY IN THE EYE: A WELL-VALIDATED APPROACH

The eye is a validated target organ for gene therapy due to its accessibility, small size, compartmentalization and relative immune privileged status. In addition to having a validated manufacturing process, vectors based on adeno-associated virus, or AAV, are believed to be especially well suited for treating severe retinal diseases because AAV is a small, replication-deficient virus that is non-pathogenic and has a well-documented safety profile. The vectors can be directly injected into the diseased tissue and their effects can be non-invasively observed for efficacy and safety. The blood-ocular barrier prevents the widespread dissemination of locally administered vectors throughout the body. Given the small volume of the eye, the amount of vector needed to achieve a therapeutic effect is low, reducing the amount of vector required to be administered to the patient and reducing potential systemic side effects or immune response. In addition, the reduced volume requirement provides us with the advantage of small-scale manufacturing requirements for clinical trials and potential commercialization.

Our Gene Therapy Approach

Building on our scientific expertise and clinical experience of our team, we have developed two proprietary technology platforms, MTS and optogenetics. These technologies are combined with a gene therapy based approach and have the potential to reverse vision loss, thereby improving the quality of their lives.

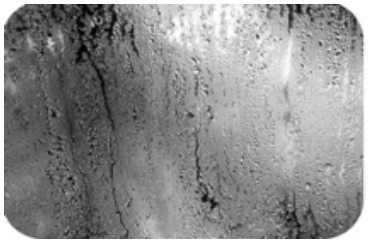
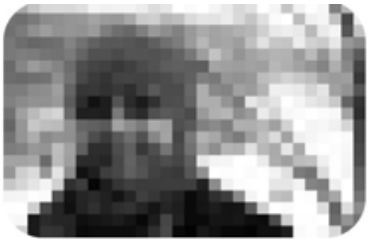
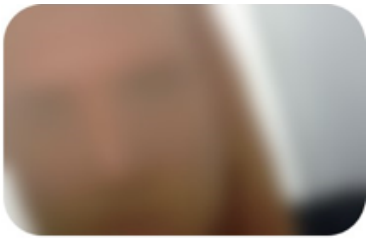
- *Our MTS technology platform* allows for efficient expression of a mitochondrial gene by active delivery of mRNA to polysomes located at the mitochondrial surface. This allows for the synthesis, translocation, internalization and proper localization of the mitochondrial protein into the matrix of the mitochondrion. We believe that our MTS technology is the only existing technology that permits missing mitochondrial proteins to be actively shuttled into the mitochondrion, to enable the restoration of mitochondrial function necessary to potentially treat a variety of diseases involving defects of the mitochondrion.
- *Our novel optogenetics technology platform* permits the introduction of proteins sensitive to light stimulation and may have broad applicability to indications within ophthalmology and others that are receptive to light stimulation, such as congenital deafness, pain treatment and vagus nerve stimulation.

6.5 OUR LEAD PRODUCT CANDIDATE: GS010 FOR THE TREATMENT OF LHON

We are leveraging our MTS technology platform to develop GS010 as a treatment for LHON due to a mutation in the ND4 gene, a rare mitochondrial genetic disease that leads to blindness in teens and young adults. We believe that GS010 has the potential to be the first therapy approved by the FDA for the treatment of LHON. We have received orphan drug designation for GS010 in the United States and the European Union. GS010 is currently being studied in Phase III clinical trials. We reported top-line data from our Phase III clinical trials REVERSE in April 2018 and RESCUE in February 2019.

LHON Overview

LHON is a rare maternally inherited disease caused by defects in mitochondrial genes encoding for proteins called NADH dehydrogenase. LHON causes sudden and dramatic loss of vision, leading to bilateral blindness in less than a year, which reduces patients' autonomy and greatly alters the patient's ability to perform daily life activities, including recognizing facial features and expressions. In addition, LHON causes patients and their families trauma socially, emotionally and financially, and the quality of life of patients with LHON is generally poor. The onset of vision loss due to LHON typically occurs between 15 and 35 years of age. The following images are representative of the early onset of vision loss due to LHON, as described by patients.

LHON is caused by defects in mitochondrial genes encoding for proteins called NADH dehydrogenase. These proteins are part of a large enzyme complex known as the respiratory chain complex I, or complex I, which is active in the mitochondrion. Complex I is one of several enzyme complexes necessary for the creation of adenosine triphosphate, or ATP, which is the main energy source within the cell. Three different genes encoding for three NADH dehydrogenases have been linked to LHON and are considered to be the primary mutations for the disease to manifest: ND1, ND4 and ND6.

Although the genetic mutation is present throughout the body, LHON symptoms are almost uniquely limited to retinal ganglion cells, or RGCs. RGCs receive visual information from photoreceptors, and collectively transmit visual information from the retina to the brain *via* the optic nerve. Over the months after onset, LHON is associated with a significant thinning of the RGC layer. Once the RGCs degenerate, signals can no longer be transmitted to the brain.

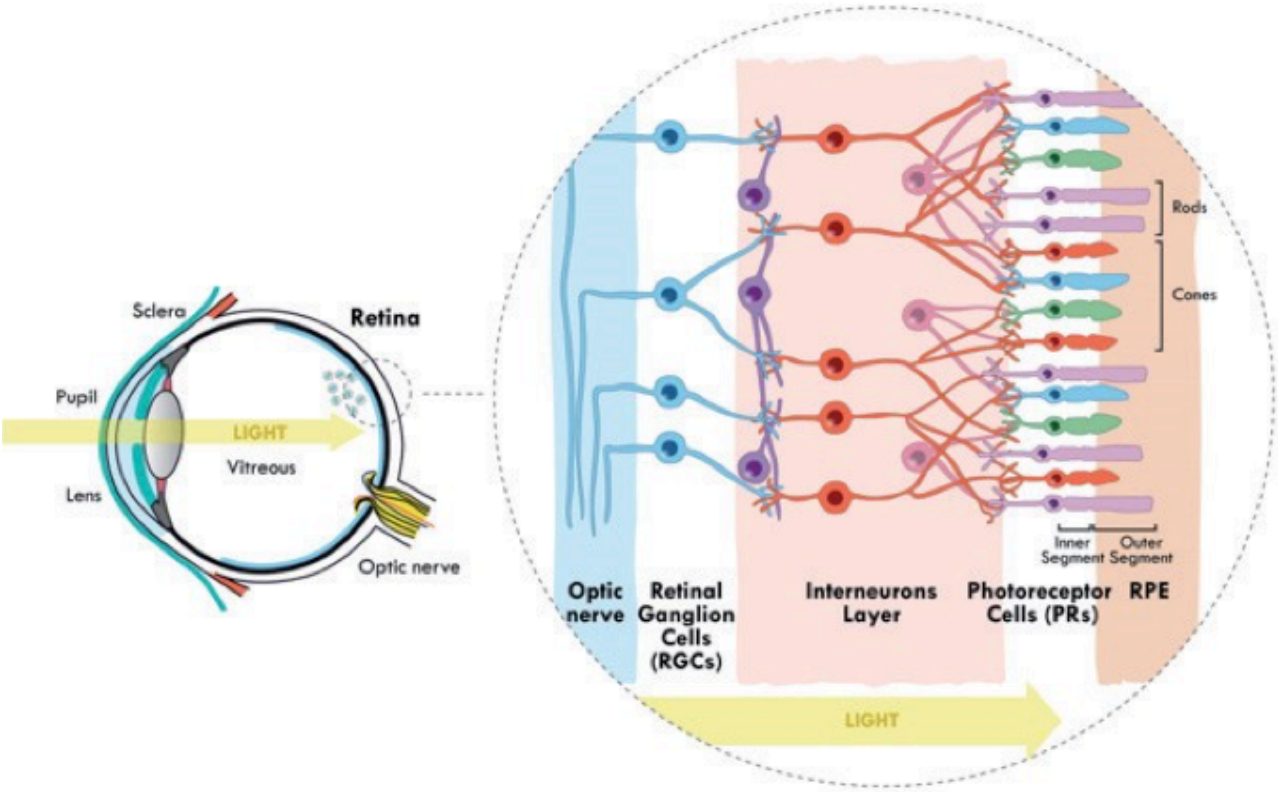
Patients with LHON typically suffer vision loss over a period of weeks and overwhelmingly both eyes are ultimately affected.

Commonly, vision loss is sequential, although some patients report simultaneous bilateral onset. Within six months after onset, there is atrophy of the optic nerve. Although maintaining some small element of peripheral vision, the majority of patients with the ND4 mutation become legally blind. For most patients with the ND4 mutation, vision is not recovered.

For ND4 patients, the delay between the first affected and second affected eye averages 1.8 months and the duration of progression of vision loss averages 3.2 months. The mean Early Treatment Diabetic Retinopathy Study, or ETDRS, score at 12 months is 14.4 letters in patients. The normal visual acuity score is 20/20 or 20/25, equivalent to an ETDRS score of 85 and 80 letters, respectively.

For patients with the most severe vision loss, specifically those who cannot count the fingers of the examiner held very close to their face, even small improvements such as going from off-the ETDRS chart to on the-chart or an improvement by five to 10 ETDRS letters can have a positive impact on functionality and quality of life.

The following close-up image depicts a cross-section of the human retina:



The layers of the retina are visible in the right panel, and the left panel is a cross-section of the eye including unlabeled viral particles.

No Effective Existing Therapies for the Treatment of LHON

No treatments for LHON have been approved in the United States. In the European Union, the European Medicines Agency, or EMA, granted Marketing Authorization, or MAA, for Raxone/Idebenone under "exceptional circumstances" as a treatment for LHON in September 2015, though no clinically significant effect of this agent has been demonstrated or studied in randomized clinical trials. A MAA under exceptional circumstances is when comprehensive data cannot be provided, and therefore the MAA is reviewed annually to re-assess the risk-benefit balance, in an annual re-assessment procedure.

Market Opportunity for LHON

LHON is the most common illness caused by mitochondrial DNA mutations. We estimate the incidence of LHON to be approximately 1,400 to 1,500 new patients who lose their sight every year in the United States and Europe. LHON is estimated to have a prevalence of between one in 31,000 and one in 40,000 in Northern Europe. European and North American studies of LHON patients indicate that the ND4 mutation accounts for up to 70% of LHON cases. In Asian countries, the proportion of ND4 mutation is higher, ranging from 80% to 85%.

Our Solution: GS010 for the Treatment of LHON

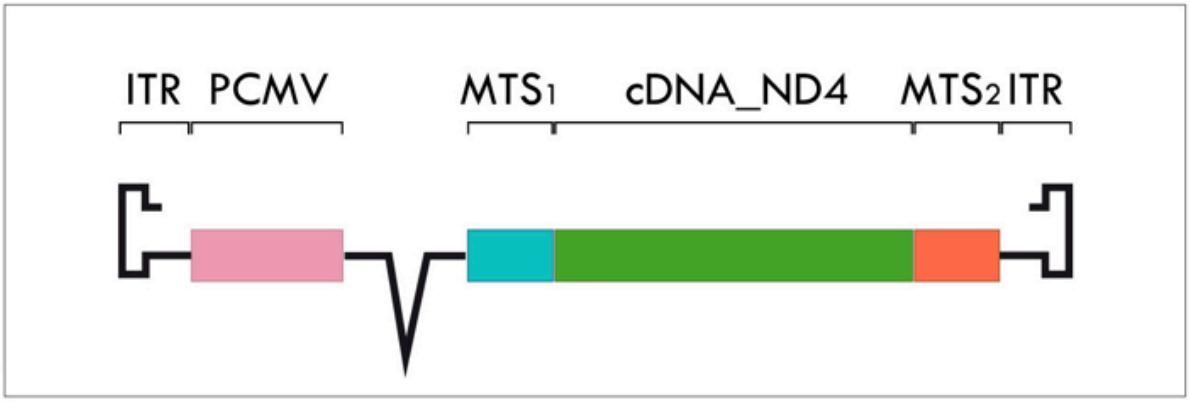
GS010 is developed through our MTS technology platform and is designed to restore the function of NADH dehydrogenase and therefore improves vision. Our GS010 product candidate is a recombinant AAV vector, serotype 2, or AAV2, containing the human wild-type mitochondrial ND4 gene combined with our proprietary MTS technology. We are developing GS010 for the treatment of LHON due to the ND4 gene mutation with visual loss of less than one year.

Our novel, proprietary MTS platform technology has enabled us to develop GS010 with potential advantages, including:

- IVT administration, a straightforward and common approach well-accepted by ophthalmologists, in contrast to subretinal injections;
- use of the AAV2 vector, which is the most studied of all AAVs, with a demonstrated safety profile and validated manufacturing process; in addition, there are currently no IP rights attached to AAV2 and thus no royalty payments associated with its use;
- small viral load administered, decreasing the risk of systemic immunologic response;
- injection of small volumes, reducing the likelihood of ophthalmic complications; and
- small required volumes, resulting in ease of manufacturing.

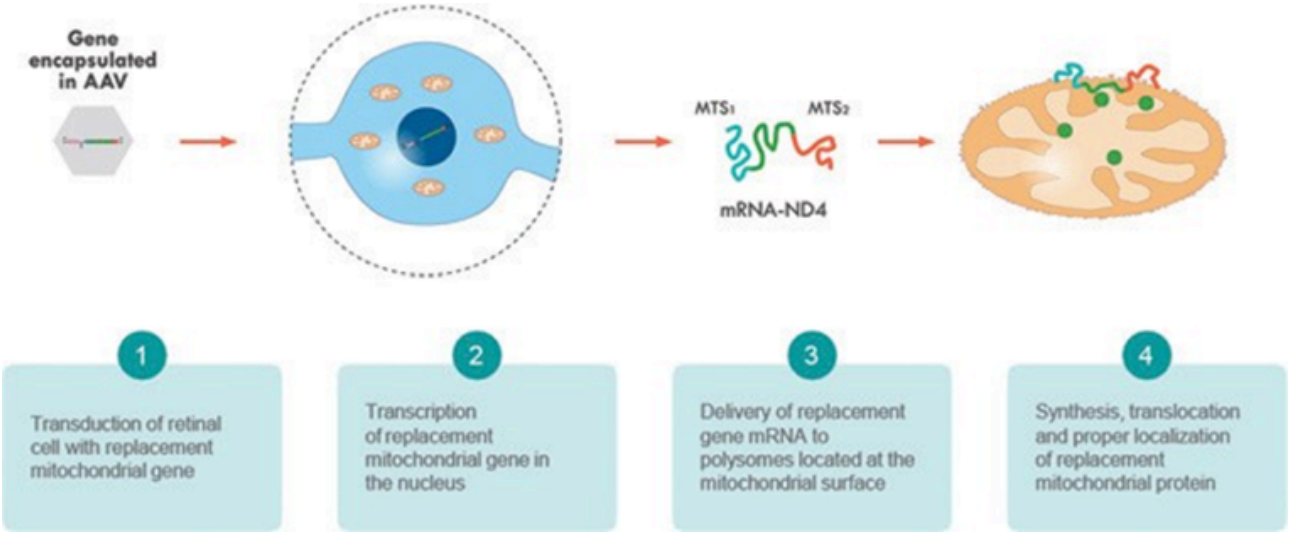
The following image depicts the schematic design of GS010, which includes the steps listed below the image. GS010 allows an efficient expression in the cell nucleus of a mitochondrial wild-type ND4 gene, encoding for a protein which is normally produced in the mitochondrion.

ITR: Inverted Terminal Region; PCMV: Promoter cytomegalovirus; cDNA: complementary DNA; ND4: NADH Dehydrogenase Subunit 4



- The *ND4* transgene is flanked by two oligonucleotide sequences, referred as MTS1 and MTS2 in the above diagram.
- MTS2 allows the *ND4* mRNA to be addressed to polysomes that are attached to the outer mitochondrial membrane, where it is translated into ND4 protein.
- MTS1, in turn, allows the *ND4* protein to be transported through the mitochondrion membrane into the matrix where it integrates the complex I of the respiratory chain in order to restore normal function.

Our construction of GS010, that includes the two MTSs and the functional transgene, is what actively drives this into the mitochondrial matrix, and characterizes the unique nature of our MTS platform, as depicted in the following image.



Clinical Development Program for GS010

We have completed a Phase I/II clinical trial for GS010 and our two most advanced Phase III clinical trials, RESCUE and REVERSE, reported top-line results in 2018 and 2019. Both of these Phase III trials are designed as randomized, double-masked, sham-controlled, multi-center clinical trials in Europe and the United States, of LHON subjects with the ND4 mutation with vision loss. RESCUE has enrolled 39 subjects with an onset of vision loss of less than six months in duration and REVERSE has enrolled 37 subjects with an onset of vision loss between six and 12 months. Based on our regulatory interactions, subjects as young as 15 are included in our Phase III clinical trials.

Time since onset of vision loss is considered a major factor in the ability to intervene therapeutically due to the neuro-degenerative nature of LHON and the cell death of the RGCs. We have therefore chosen to evaluate two subject groups in these two Phase III clinical trials based on the onset of vision loss of less than one year. This will allow us to define the efficacy of GS010 in early affected populations of subjects at different stages of the disease and to compare an otherwise homogeneous patient population.

Our Phase III clinical trials are intended to determine if GS010 is an effective treatment in halting or reversing vision loss associated with LHON due to the ND4 mutation. A dose level of 9E10 vg/eye was administered once by IVT injection in both trials to a randomly chosen single eye of each subject. The dose level of GS010 in our Phase III clinical trials was determined based on outcomes of the safety and tolerability in our Phase I/II clinical trial.

The primary endpoint of the RESCUE and REVERSE clinical trials is based on Best Corrected Visual Acuity, or BCVA, as measured with the ETDRS at 48 weeks post-injection relative to baseline. The patients' log of the Minimal Angle of Resolution, or logMAR, scores, which are derived from the number of letters they read on the ETDRS chart, will be used for statistical analysis. Both trials have been adequately powered to evaluate a clinically relevant difference of at least 15 ETDRS letters between treated and untreated eyes adjusted to baseline.

The secondary efficacy endpoints compare the best seeing eyes that received GS010 to those that received sham, and compare worse seeing eyes that received GS010 to those that received sham. We will evaluate the proportion of subjects who maintain vision (< ETDRS 15L loss), the proportion of subjects who gain 15 ETDRS letters from baseline, and the proportion of subjects with Snellen acuity of > 20/200. Complementary vision metrics will include automated visual fields, optical coherence tomography, or OCT, and color and contrast sensitivity, in addition to quality of life scales, bio-dissemination and the time course of immune response.

<u>REVERSE : Results at 48 and 72 weeks</u>

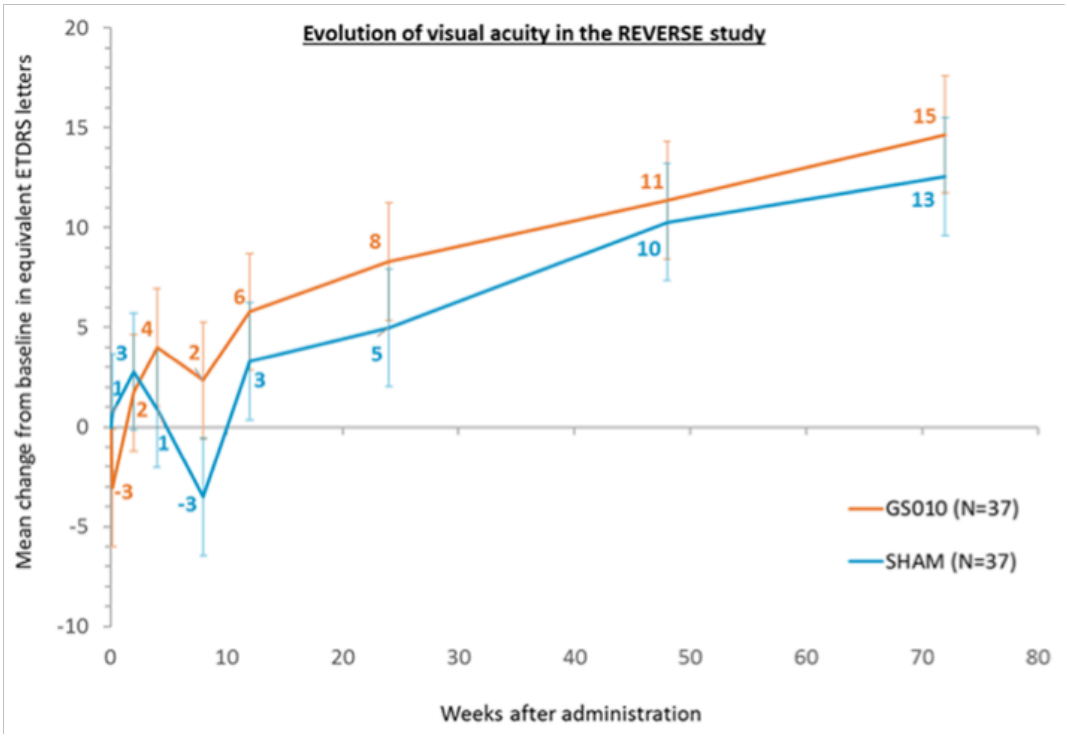
In April 2018, we reported top-line results from REVERSE, our first Phase III clinical trial evaluating the safety and efficacy of a single intravitreal injection of GS010 (rAAV2/2-ND4) in 37 subjects whose visual loss due to 11778-ND4 Leber Hereditary Optic Neuropathy (LHON) commenced between 6 and 12 months prior to study treatment.

Top-line results highlight the favorable safety and tolerability profile of GS010, and demonstrate a clinically meaningful improvement of +11 ETDRS letters (-0.218 LogMAR) in treated eyes at 48 weeks as compared to baseline in all 37 patients. Unexpectedly, untreated contralateral eyes (treated with a sham injection) show a similar improvement of +11 ETDRS letters (-0.211 LogMAR). Due to this improvement in untreated eyes, the trial did not meet its primary endpoint, defined as a difference of improvement in visual acuity in GS010-treated eyes compared to sham-treated eyes at 48 weeks.

We reported additional results at 72 weeks in October 2018, showing a continued clinically meaningful improvement of visual acuity of +15 ETDRS letters (-0.294 LogMAR) in treated eyes, and of +12 ETDRS letters (-0.246 LogMAR)[1] in untreated eyes. This improvement, which extends the positive trend that had been reported at week 48, points to a sustained functional outcome for the trial subjects.

The improvement of visual acuity in sham-treated eyes was unexpected based on the natural history of LHON, for which limited partial spontaneous recovery is reported in only 8 to 22% of patients with the G11778 ND4 mutation (Lam et al. 2014, Riordan-Eva et al. 1995). It is currently being investigated further.

The graph below shows the mean change from baseline in visual acuity, in both treated (GS010) and untreated (sham) eyes, over time in ETDRS letters:



Continued improvement was also observed in contrast sensitivity as determined by Pelli-Robson low-contrast testing. At 72 weeks, GS010-treated eyes and sham-treated eyes gained on average +0.21 LogCS and +0.15 LogCS versus baseline, respectively. The proportion of treated eyes that achieved a clinically meaningful improvement of at least 0.3 LogCS (45.9%) was statistically significantly higher than that of sham-treated eyes (24.3%; p = 0.0047).

In a generalized estimating equation (GEE) model used to assess treatment effect on VA of ≧ 20/200 acuity, GS010-treated eyes were significantly more likely to achieve or surpass the 20/200 threshold than sham-treated eye (p = 0.0012; odd ratio = 4.07).

The objectively measured endpoints were the effects of GS010 on parameters measured with high resolution Spectral-Domain Optical Coherence Tomography (SD-OCT). The critical secondary endpoint of the change in retinal ganglion cell macular volume measured from baseline to week 72 demonstrated a statistically significant difference (p = 0.0060) between all GS010-treated eyes and all sham-treated eyes, with untreated eyes losing -0.044 cubic mm of macular ganglion cell volume while treated eyes preserved their ganglion cell volume (+0.000 cubic mm).

The secondary endpoint of change in thickness of the papillo-macular bundle of the retinal nerve fiber layer from baseline to week 72 demonstrated a large statistically significant difference (p = 0.0362) between all GS010-treated eyes and all sham-treated eyes, with untreated eyes showing a loss of -1.4 µm while treated eyes showed a thickening of +1.6 µm. The change in thickness of the temporal quadrant of the retinal nerve fiber layer from baseline to week 72 demonstrated a difference between all GS010-treated eyes and all sham-treated eyes, with untreated

(1) A mixed model of repeated measures (MMRM) was used for the analysis of the time course of visual acuity illustrated in the above graph. A mixed model of analysis of covariance (ANCOVA) was used for the analysis of the primary endpoint. Both statistical models used different covariates, accounting for minor differences in the rounding of ETDRS letters.

eyes showing a loss of -3.6 µm while treated eyes showed a limited loss of -1.6 µm (p = 0.0521).

In December 2018, we reported sustained quality of life improvements at 72 weeks. All 37 patients in REVERSE were asked to complete the National Eye Institute Visual Function Questionnaire-25 (NEI VFQ-25), a reliable and valid vision-specific quality-of-life instrument that measures patients' perception of their ability to perform daily activities requiring high-acuity vision and their general sense of well-being. The test defines sub-scales for functions such as near-distance vision and vision-related dependency as well as measures of well-being such as ocular pain and vision-related mental health. These sub-scale scores are aggregated into a composite score, excluding the general health rating question.

Well-accepted as a source of patient-reported measures of vision-related function, the questionnaire has been used in many clinical trials. A study in neovascular AMD – which, like LHON, leads to loss of central vision – showed that a clinically meaningful 15-letter change in BCVA was associated with a 4- to 6-point change in the NEI VFQ-25 composite score and in sub-scores in three pre-specified areas (near activities, distance activities, and vision-specific dependency).

At week 72, REVERSE patients reported mean improvement from baseline for NEI VFQ-25 scores in domains important to patients with loss of central vision: near activities, distance activities, vision-specific dependency and composite score. An improvement had already been observed at Week 48, confirming sustained enhancement of ability to perform activities of daily living. In addition, large improvements were also noted in other domains relevant to LHON patients: role difficulties, general vision, and overall mental health. Again, the improvements observed at Week 48 were sustained at Week 72. The relevant comparison in REVERSE is against patients' own baseline, because the NEI VFQ-25 is assessed by patient; by design, all REVERSE patients received an injection in one eye.

NEI VFQ-25 Results from REVERSE

Mean change from baseline (absolute score and percent)

	Composite Score**	Near Activities	Distance Activities	Dependency	Role Difficulties	General Vision	Mental Health
Week 48	+7.2	+10.4	+9.6	+12.4	+14.5	+10.3	+11.2
	23.2%	65.1%	49.8%	100.6%	65.0%	50.9%	81.9%
Week 72	+8.1	+9.5	+8.2	+18.9	+15.2	+11.9	+15.2
	25.2%	58.1%	42.5%	130.2%	70.9%	54.1%	105.6%
Clinically relevant difference*	+3.90 to +4.34	+4.67 to +6.06	+5.15 to +5.38	+4.72 to +4.98	+3.31 to +4.70	+4.38 to +4.82	+4.70 to +4.88

* Suñer *et al.* (2009): clinically relevant score differences based on a clinically significant 15-letter BCVA improvement at 12 months.

** The composite score is an average of the vision-targeted sub-scale scores, excluding the general health rating question.

Improvement from baseline at Week 72 for other sub-scales: social functioning: +2.4 (23.3%); ocular pain: +1.4 (5.6%); color vision: +5.6 (20.8%); peripheral vision: +1.4 (15.5%). Missing values for general health subscale. Driving questions not pertinent to LHON patients.

Based on preliminary analysis of the safety data, GS010 was well tolerated after 48 weeks. The ocular adverse events most frequently reported in the therapy group were mainly related to the injection procedure, except for the occurrence of intraocular inflammation (accompanied by elevation of intraocular pressure in some patients) that is likely related to GS010, and which was responsive to conventional treatment and without sequelae. There were no withdrawals from the trial.

RESCUE : Results at 48 and 72 weeks

In February 2019, we reported top-line results from RESCUE, our second Phase III clinical trial evaluating the safety and efficacy of a single intravitreal injection of GS010 (rAAV2/2-ND4) in 39 subjects whose visual loss due to 11778-ND4 Leber Hereditary Optic Neuropathy (LHON) commenced up to 6 months prior to study treatment.

Visual loss in LHON usually progresses such that vision reaches a nadir in 3 to 5 months, before stabilizing; the duration of this progression to nadir varies from patient to patient. In RESCUE, mean best-corrected visual acuity (BCVA) of GS010-treated eyes and sham-treated eyes evolved with similar trajectories, worsening to a low point before showing an improvement at week 48. At week 48, change from baseline for GS010-treated eyes was -+0.380 LogMAR (-19 ETDRS letters), while that for sham-treated eyes was +0.392 LogMAR (-20 ETDRS letters). These figures incorporate a recovery from the nadir of vision loss for drug- and sham-treated eyes: mean improvement over the nadir of vision loss was +13 ETDRS letters equivalent in GS010-treated eyes and +11 ETDRS letters equivalent in sham-treated eyes. Due to this bilateral improvement, the primary efficacy endpoint, defined as a +15-letter difference in visual

acuity improvement for GS010-treated eyes compared to sham-treated eyes at 48 weeks, was not met.

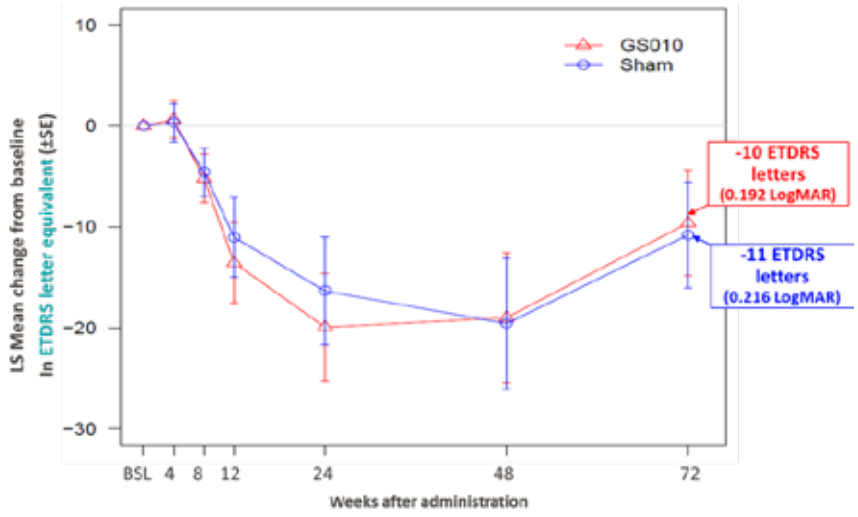
Planned analysis of other visual functions and anatomic measures showed results broadly consistent with the direction of BCVA evolution: similar trajectories for GS010-treated and sham-treated eyes with the difference in change from baseline not being statistically significant at week 48. The difference between GS010-treated and sham-treated eyes in change from baseline of temporal retinal nerve fiber layer missed statistical significance (p = 0.0513). The changes from baseline in GS010-treated eyes of papillo-macular bundle thickness and ganglion cell volume were numerically superior to those in sham-treated eyes, though not statistically significant (p values > 0.05).

Even at an early readout at week 48, some trends point toward GS010 efficacy. GS010-treated eyes were significantly more likely than sham-treated eyes to have 20/200 or better vision, the threshold for legal blindness (statistically significant with p = 0.0347; odds ratio = 2.9). Subject responder analysis showed that in 24% of subjects, the change from baseline of high-contrast visual acuity in GS010-treated eyes was at least 0.3 LogMAR (15 ETDRS letters) better than in sham-treated eyes. Another subject responder analysis showed that in 24% of subjects, the change from baseline of low-contrast acuity (measured on the Pelli Robson scale) in GS010-treated eyes was at least 0.3 LogCS better than in sham-treated eyes.

Based on preliminary analysis of the safety data, GS010 was well-tolerated through 48 weeks. There were no serious ocular adverse events or discontinuations due to ocular issues. The most frequently seen ocular adverse events were related to the injection procedure itself. Transient elevations of intraocular pressure were occasionally seen but were thought secondary to intraocular inflammation and thought likely due to administration of GS010. Such episodes were without sequelae and responded to conventional treatment. There were no systemic serious adverse events or discontinuations related to study treatment or study procedure.

We reported follow-up results at 72 weeks in April 2019, showing sustained recovery from the lowest point, or nadir, experienced in the acute phase of the disease. By Week 72, GS010-treated eyes improved by -0.413 LogMAR (+21 ETDRS letters) from nadir, compared to the Week 48 improvement of -0.257 LogMAR (+13 ETDRS letters). This recovery at Week 72 could not yet completely offset deterioration from baseline through the acute phase: GS010-treated eyes were still below baseline by 0.192 LogMAR (-10 ETDRS letters), compared to 0.380 LogMAR (-19 ETDRS letters) at Week 48. The U-shaped curve thus closely matched that of GS010-treated eyes, so a statistically significant difference in visual acuity between GS010- and sham-treated eyes could not be shown.

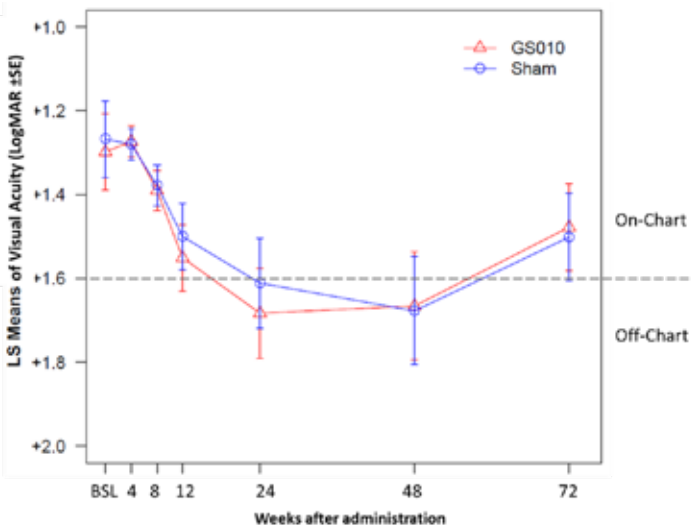
Time Course Visual Acuity, Change from Baseline to Week 72 in ETDRS Letters Equivalent in RESCUE



Note: LS Means = Least Squares Means

The strength of the bilateral recovery shifted the mean BCVA in both sets of eyes from off-chart values at Week 48 to on-chart values at Week 72. In addition, 40% of GS010- and sham-treated eyes improved by a clinically meaningful difference of -0.3 LogMAR (+15 ETDRS letters) from nadir. Similarly, 58% of GS010-treated and 50% of sham-treated eyes improved by a clinically meaningful difference of -0.2 LogMAR (+10 ETDRS letters) from nadir.

Time Course LogMAR Visual Acuity to 72 Weeks in RESCUE



Note: LS Means = Least Squares Means

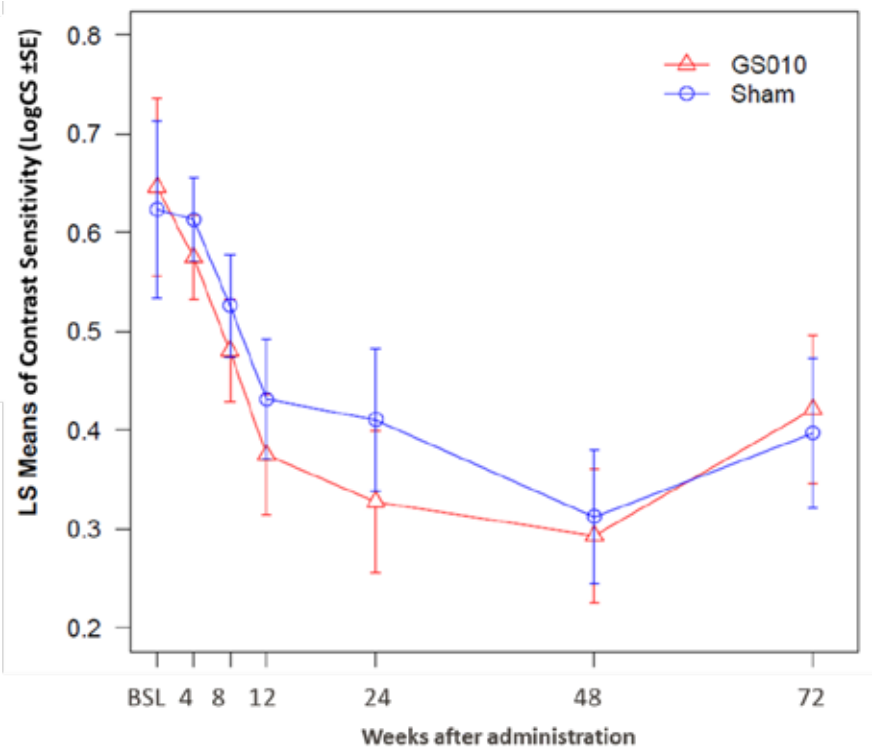
Change from Nadir* in Best-Corrected Visual Acuity (LogMAR and ETDRS Letter Equivalents)

	LogMAR Visual Acuity			ETDRS Letter Equivalent		
		Week 48	Week 72		Week 48	Week 72
	n	Mean (SD)		n	Mean (SD)	
GS010-Treated eyes	36	-0.257 (0.358)	-0.413 (0.527)	34	+12.8 (17.9)	+20.6 (26.3)
Sham-Treated Eyes	36	-0.236 (0.319)	-0.435 (0.501)	33	+11.8 (15.6)	+21.7 (25.1)

Note: *As per Statistical Analysis Plan (SAP), nadir was defined as the lowest post-treatment LogMAR value up to week of interest. Light Perception/No Light Perception, or LP/NLP, vision was not included in the analysis.

Contrast sensitivity (CS), a second visual function, evolved in a manner similar to BCVA: while values for GS010-treated eyes and sham-treated eyes remained below baseline, CS also recovered so that the gap to baseline diminished at Week 72 compared to Week 48. The two sets of eyes closely matched each other, so that the difference between their CS values was not statistically significant.

Time Course LogCS Contrast Sensitivity to 72 Weeks in RESCUE



Note: LS Means = Least Squares Means

Change of Contrast Sensitivity from Baseline (LogCS)

	Week 48		Week 72	
	n	Least-Squares Mean (Standard Error)	n	Least-Squares Mean (Standard Error)
All GS010-Treated eyes	36	-0.34 (0.07)	38	-0.25 (0.07)
All Sham-Treated Eyes	36	-0.32 (0.07)	38	-0.28 (0.07)

Note: A mixed model of analysis of covariance (ANCOVA) was used with change from baseline at week 72 as the response.

One difference between results from the REVERSE and RESCUE trials of GS010 lies in anatomic findings. The data so far do not indicate differential protection for the anatomy of GS010-treated eyes: in both drug-treated and sham-treated eyes, the relevant anatomy, as shown by various OCT measurements (tRNFL thickness, PMB thickness, GCL volume), continued to thin at Week 72, although the rate of thinning decreased between Week 48 and Week 72. Among the OCT measures in the trial at Week 72, the ETDRS macular volume showed a difference between GS010-treated and sham-treated eyes (0.096 mm^3, p = 0.0012). Some experts believe that heterogeneity among RESCUE patients is creating a confounding effect in the OCT readings, which will be resolved when the data are unmasked.

REVERSE and RESCUE subjects will be evaluated again at 96 weeks, and then data will be unmasked, allowing more detailed subject-level analyses to be conducted. Results from RESCUE at Week 96 are expected to be available by the end of Q3 2019. Week 96 data from the REVERSE trial are expected earlier, in May 2019.Rescue 72 weeks data to be inserted on monday, including graphs

GS010 is currently being investigated in an additional ongoing Phase III trial, REFLECT, while patients in REVERSE and RESCUE continue to be followed for a total period of 5 years post-injection.

Upon completion of RESCUE, if compelling, we intend to meet with the FDA and apply for Fast Track Designation, which if

granted, would allow us to file a BLA and seek priority review, and/or Regenerative Medicines Advanced Therapies designation (RMAT) allowing, in addition to priority review, for a rolling submission and eligibility for accelerated approval, while we continue to conduct our ongoing REFLECT trial pursuant to a special protocol assessment with the FDA. In addition, we expect that the complete results at 96 weeks of our Phase III REVERSE trial and RESCUE trial, if compelling, will be sufficient to support filing for marketing authorization in the European Union.

Based on the data from our Phase III trials, we plan to initiate preclinical studies of GS011, our product candidate for the treatment of LHON subjects with the ND1 mutation with vision loss.

Phase I/II Dose-Escalation Safety Trial for GS010

In 2014, we initiated a 15 subject Phase I/II safety trial of GS010 (CLIN-01), which was designed to test the safety and tolerability profile of GS010 with ascending doses in subjects with LHON due to the ND4 mutation. Each subject received a single IVT injection of GS010 in the more severely affected eye. Subjects enrolled were required to have severe vision loss, with acuities of less than 20/200. The trial included four ascending dose cohorts each comprised of three subjects: 9E9 vector genome per eye, or vg/eye in cohort 1, 3E10 vg/eye in cohort 2, 9E10 vg/eye in cohort 3 and 1.8 E11 vg/eye in cohort 4. Once the maximum tolerated dose was established, according to the protocol, we included three additional subjects in the trial.

Overall, GS010 was well tolerated with no unexpected treatment-emergent adverse events, no serious adverse events related to the treatment or procedure, and no suspected unexpected serious adverse reactions. The most common ocular side effects were elevated intraocular pressure, or IOP, and ocular inflammation. These side effects were mostly mild, transient and, when required, treatment responsive to standard therapies, without vision loss.

The secondary endpoints included immuno-monitoring and vector bio-dissemination, visual acuity, color and contrast vision as well as structural tests such as OCT and electrophysiological tests related to the functioning of the RGCs and the optic nerve.

The results of our Phase I/II clinical trial, which were released in June 2016, demonstrated that:

- all 15 subjects completed 48 weeks of follow-up;
- consistent with the protocol requiring treatment of the worst functioning eye, baseline mean logMAR, visual acuity was worse in the treated eyes than non-treated fellow eyes;
- the magnitude of the treatment effect was impacted by disease duration and baseline vision status at the time of treatment;
- a greater magnitude of treatment effect was observed when disease duration was less than two years compared to greater than two years; and
- the magnitude of treatment effect was greater when the baseline vision status was relatively better.

After talks with consultants, we designed our ongoing Phase III trials to target a more homogeneous patient population, with more recently diagnosed (less than 12 months) vision loss, to maximize the benefits and efficacy of treatment.

Visual Function Evolution: Trends of Improved Acuity at 2.5 Years of Follow-up

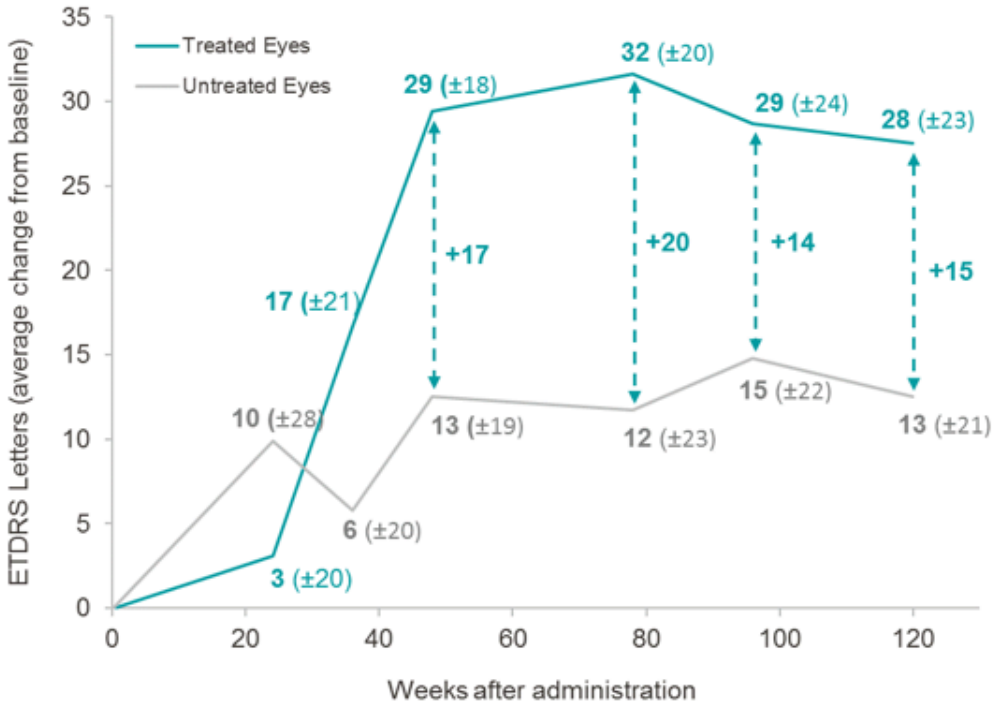
In December 2017, we reported results in 14 subjects after 2.5 years of follow-up (one subject withdrew its consent after 48 weeks of follow-up). As described in the following table, we continued to observe a greater magnitude of treatment effect when the disease duration was less than two years as compared to a disease duration that was greater than two years.

ETDRS letters (LogMAR) Visual Acuity change from baseline **Δ Treated Eye vs Untreated Eye**	**1.0 year**	**1.5 year**	**2.0 years**	**2.5 years**
All subjects (n = 14)	+3 letters (-0.06)	+8 letters (-0.16)	+0 letters (-0.00)	+7 letters (-0.14)
Subjects with ≤ 2y disease duration (n = 5)*	+17 letters (-0.34)	+20 letters (-0.40)	+14 letters (-0.28)	+15 letters (-0.30)

Note (*) Excludes "hand motion" subjects, in accordance with the Phase III protocol.

In the following chart, five letters correspond to one line on the ETDRS chart. Therefore, a difference of 15 letters is equivalent to three lines on the ETDRS chart, the widely recognized standard of clinically significant improvement.

Evolution of visual acuity in the treated eye vs. untreated eye at 2.5 years of follow-up in subjects with vision loss duration ≤ 2 years and Baseline LogMAR ≤ 2.79 (n = 5)



(*i.e.*, excludes "hand motion" subjects, in accordance with the Phase III protocol).

Additional Studies

We are also conducting a registry study to further advance present knowledge of the natural history of LHON and its socio-economic impact on subjects affected. This study evaluates the natural history of vision loss associated with genetic, sociodemographic, and/or environmental factors that may play a role in phenotypic expression of LHON as current knowledge of factors contributing to the LHON phenotype is limited.

Regulatory Interaction for GS010

In October 2014, we initiated our first discussions with the FDA regarding the prerequisites for future initiation of clinical trials in the United States. In June 2015, we submitted an application in the United States, which was cleared by the FDA on August 19, 2015.

Following our meetings with the FDA in April and December 2016, the FDA made recommendations with respect to our RESCUE and REVERSE studies, as well as the bilateral treatment of LHON subjects. Based on these recommendations, a special protocol assessment, or SPA, of a bilateral clinical protocol was submitted to the FDA in July 2017 for subjects with vision loss due to the ND4 mutation. The design and planned analysis of the REFLECT protocol (GS-LHON-CLIN-05) testing the safety and efficacy of bilateral injections of GS010 has been agreed to with FDA. Based on REVERSE data and post-hoc analyses, we plan on meeting with the FDA to ensure that the GS010 clinical development plan continues to meet their expectations to support a regulatory submission. The primary endpoint for the REFLECT trial is the BCVA reported in LogMAR at 1-Year post- treatment in the second affected/not yet affected eye. The change from baseline in second affected/not yet affected eyes receiving GS010 and placebo will be the primary response of interest. The secondary efficacy endpoints include: BCVA reported in LogMAR at 2-Years post-treatment in the second affected/not yet affected eye compared to both placebo and the first affected eye receiving GS010, OCT, color and contrast sensitivity and quality of life scales. The first subject in REFLECT was treated in March 2018. Based on results of RESCUE and REVERSE, if compelling, we intend to meet with the FDA and apply for Fast Track Designation, which if granted, would allow us to file a BLA and seek priority review and rolling submission, and/or Regenerative Medicines Advanced Therapies designation (RMAT) allowing, in addition to priority review, eligibility for accelerated approval, while we continue to conduct our ongoing REFLECT trial pursuant to a special protocol assessment with the FDA. In addition, we expect that the complete results at 96 weeks of our Phase III REVERSE trial and RESCUE trial, if compelling, will be sufficient to support filing for marketing authorization in the European Union.

6.6 OUR SECOND PRODUCT CANDIDATE: GS030 FOR THE TREATMENT OF PHOTORECEPTOR DEGENERATION

We are leveraging our optogenetics technology platform to develop GS030 for the treatment of diseases of photoreceptor degeneration that include RP, dry AMD and GA. Our most advanced clinical program using our optogenetics platform is for the treatment of RP, which is an orphan family of diseases caused by multiple mutations in over 100 genes involved in the visual cycle. There is currently no existing treatment for RP. GS030 has received orphan drug designation for the treatment of RP in the United States and the European Union and advanced therapy medicinal product, or ATMP, classification for the treatment of RP in the European Union. We are currently conducting a Phase I/II clinical trial in end stage, non-syndromic RP subjects. The first subject was treated in October 2018, and we expect to complete enrollment in the first half of 2020. We anticipate receiving interim data within one year after the last subject is treated. Upon evidence of clinical proof of concept in RP and demonstration of our approach, we believe this technology would be immediately transferable to any disease in which photoreceptors are lost while RGCs remain, such as dry AMD and GA. Given this, we expect to initiate clinical trials of GS030 for the treatment of dry AMD and GA.

No Existing Therapies for the Treatment of RP

No treatments for RP have been approved in the United States or the European Union. Other gene therapy approaches under development to treat vision loss due to RP are focused on specific mutations and these therapies, if approved, would be limited to specific patient subpopulations. Another alternative to treat vision loss from RP involves medical devices in the form of retinal implants, certain of which products have received marketing approval in Europe and the United States. Retinal implants have proven to restore some visual perception in patients and are intended for patients with advanced RP who have lost their photoreceptors. Therefore, treatment of RP is considered a significant unmet medical need.

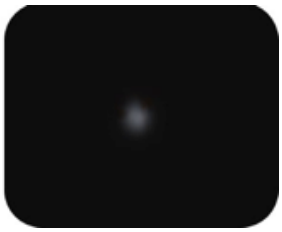
Market Opportunity in RP

RP is the leading cause of hereditary blindness in developed countries, with a prevalence of about 1.5 million people throughout the world. In Europe and the United States, about 265,000 to 350,000 patients suffer from RP, and every year an estimated 10,000 to 15,000 patients with RP lose their sight.

RP Overview

RP is the leading cause of hereditary blindness in developed countries. RP represents a group of related genetic eye disorders that clinically manifest in visual disability. The mutations that cause RP are heterogeneous and include recessive, dominant and X-linked forms of more than 100 genes.

RP causes progressive vision loss due to degeneration of rod photoreceptors resulting in the loss of peripheral vision followed by degeneration of cone photoreceptors resulting in loss of central vision. The first symptom of RP is usually difficulty with night vision, which may occur as early as childhood. The disease progresses over a period of years or decades and often ultimately leads to complete loss of vision. Some patients become blind as early as age 30, and the majority of patients become legally blind before the age of 60. RP reduces patients' autonomy and greatly alters the patients' ability to perform daily life activities. The following images illustrate a representation of the deterioration of normal vision to blindness in RP.



Some studies of prevalence rates of RP may underestimate the number of severely visually impaired patients with RP because they are based on patients with active follow-up care in ophthalmology clinics. We believe that many patients stop seeing ophthalmologists within a few years after reaching blindness because of a perceived lack of treatment and difficulty in traveling to medical centers.

Our Solution: GS030 for the Treatment of Photoreceptor Degeneration

GS030 is developed through our optogenetics platform and is designed to confer light sensitivity to normally light insensitive retinal neurons, specifically RGCs, in order to restore vision. While there is significant loss of photoreceptor cells in these diseases, RGCs are preserved.

Our novel, proprietary optogenetics platform technology has enabled us to develop GS030 with potential advantages over other therapies currently in development, including:

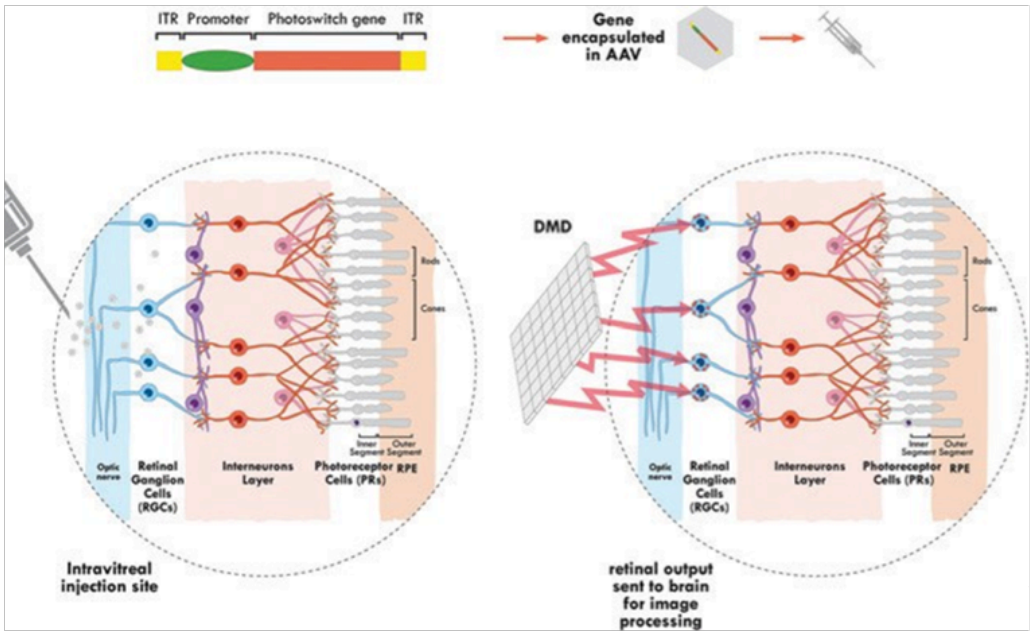
- potential to address any photoreceptor degenerative disease independent of genotype;

- IVT administration, a straightforward and common approach well-accepted by ophthalmologists, in contrast to subretinal injections;
- small viral load administered, decreasing the risk of systemic immunologic response;
- injection of small volumes, reducing the likelihood of ophthalmic complications; and
- small required volumes, resulting in ease of manufacturing.

Our primary optogenetics strategy consists of introducing ChrimsonR, a light-sensitive protein belonging to the channel rhodopsin family into normally light insensitive cells present in the inner retinal layer, particularly RGCs, *via* a gene therapy product injected into the vitreous of an affected eye. Upon light stimulation, the ChrimsonR protein is activated leading to an electrical response of the cell, which in turn carries electrical signals encoding visual information through the optic nerve into the visual cortex of the brain. This process mimics the natural function of the retina without the need for the initial step of the transduction cascade, which normally occurs in the outer segments of the cone. By stimulating RGCs, partial restoration of retina performance allowing daily life tasks is expected.

The figure below illustrates our optogenetics strategy aimed at restoring vision in retinal degenerative diseases, which includes the following steps:

- The photoswitch gene (gene encoding for ChrimsonR protein) is packaged into an AAV2 7m8 vector.
- The AAV2 7m8 carries the transgene into RGCs, resulting in synthesis of ChrimsonR protein within the membrane of the RGCs.
- When appropriate light (590nm wavelength) is shed onto the RGCs expressing ChrimsonR, it results in a depolarization of the cells, creating an action potential which is then transmitted to the visual cortex by the optic nerve.
- The visual cortex will then assemble the signals to form a useful image.



Because cells expressing optogenetic protein are less light sensitive than normal photoreceptors, vision under regular daylight conditions is unlikely to be possible. However, amplifying the light source and mimicking the normal retinal activity of capturing visual information will then amplify the light signal at the appropriate wavelength to enable vision restoration.

Product Structure for GS030

GS030 consists of two components:

- a gene therapy product comprising a gene encoding a photoactivatable channelrhodopsin protein, ChrimsonR, delivered *via* a modified AAV2 known as AAV2 7m8; and

- an external wearable device in the form of biomimetic goggles that stimulate the engineered retinal cells. The images are projected by a light source that uses a specific wavelength onto the retina.

Development Program of GS030 for the Treatment of RP

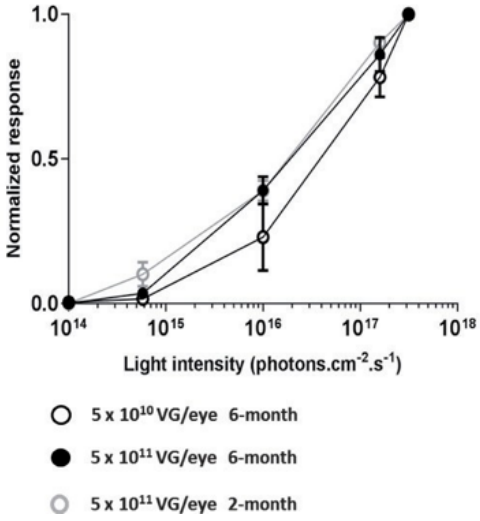
We have conducted numerous preclinical studies including a local tolerance study in mice and a long-term toxicity and biodistribution study in monkeys. GS030 for the treatment of RP is currently in an ongoing Phase I/ II trial. The first subject was treated in October 2018, and we expect to complete enrollment in the first half of 2020.

Preclinical Studies of GS030 in Non-Human Primates

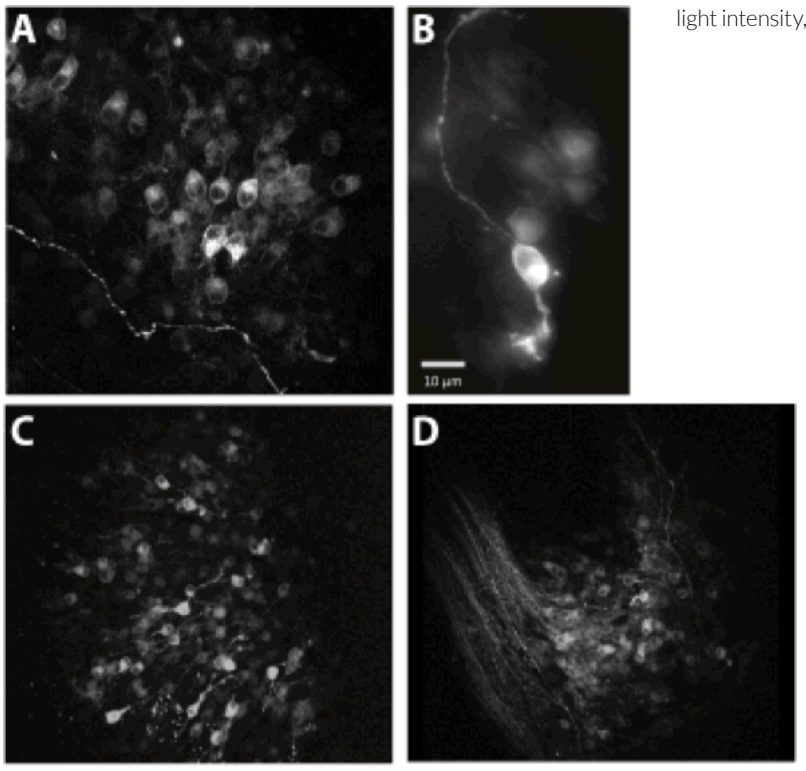
GS030 was injected intravitreally in both eyes of monkeys. After two months, the retinas were dissected and connected to a multi-electrode array system to record the electrical activity of RGCs. At regular intervals (two months and six months) the firing activity of the transduced RGCs was measured upon light activation at the appropriate wavelength and at varying intensities. The results demonstrate that two months post-injection, the RGCs of non-human primates are active, and have the ability to transmit visual information as normal RGCs would.

We conducted a confirmatory study in monkeys to assess the activity of GS030 at various doses and at six months post-injection.

GS030 proof-of-concept in non-human primates at six months post-injection



In healthy retinas, RGCs fire electric spikes to the visual cortex at frequencies that are proportional to light intensity, which is referred to as irradiance. In this experiment, monkeys are treated with GS030 and their retina is sampled after one month. Retina are put on a multielectrode array and 590nm light is then shed onto the retina at increasing intensity. As irradiance increases, the electrodes are measuring the increase of the firing frequency of each transduced RGC. As shown in the chart above, the firing frequency of the RGCs increases almost proportionally to the light intensity, which is what one would expect in a normal eye.



These photographs above show microscopic views of monkey retinas after receiving treatment with GS030. (A) and (C) show that GS030 achieves efficient transfection of the central part of the retina (fovea and peri-fovea region). (B) shows a magnification of one RGC showing that the protein is in the cytoplasm and in the membrane of the cell, as confirmed in (D) with the view of the RGCs and their axons.

This study confirmed the initial data and supports the expression of ChrimsonR in the retina of monkeys.

GLP Toxicity Studies to Assess Phototoxicity

This study assessed the phototoxicity of three levels of light intensities following GS030 injection of rd1 mice, a relevant model of RP. One dose level of GS030, which was the highest dose, was combined to a single two-hour exposure to 600nm light at three levels of intensity in order to cover the intended use in our Phase I/II clinical setting. The purpose of the study was to determine the local tolerability of light exposure on transduced RP retinas based on the following endpoints: histopathology of the retina, outer layer thickness, number of RGCs, cell viability and/or apoptosis.

GLP Toxicity Study to Evaluate Toxicity and Biodistribution

This study evaluated the toxicity, biodistribution and shedding of viral particles as well as immunogenicity of GS030 vector and ChrimsonR protein after IVT injection in non-human primates. Two dose levels of GS030 were injected bilaterally. The study allowed us to evaluate and confirm at three and six months the safety and local tolerability of the vector and protein, the biodistribution and shedding of the vector in tissues and fluids, as well as systemic and local ocular immunogenicity.

Proof-of-Concept Study Showing Restoration of Retinal Electrical Activity in a Mouse Model of RP

An rd1 mouse is affected by the degeneration of rods followed by the degeneration of cones, leading to the loss of vision five to six weeks after birth. When the retinas of such mice are dissected *post-mortem* and connected to a multi-electrode array, an electrical response to light is not detected. Using the same method with the retinas from rd1 mice that have received an IVT injection of GS030, an electrical response to light is produced and detected with the multi-electrode array and this response is a function of light intensity.

A New Generation of Channelrhodopsin-Based Gene Therapy

An Optimized Optogenetic Protein

We have conducted proof-of-concept studies with channelrhodopsin-2, or ChR2, which when introduced into RGCs, has proven to restore vision in a murine model of RP. However, activation of ChR2 requires high- intensity blue light at 470nm wavelength which has been shown to be toxic for the retina and is not practical for clinical use.

We have therefore developed a novel channelrhodopsin protein, known as ChrimsonR, which responds to light at near-red wavelength, where light scattering decreases and absorption by endogenous chromophores is reduced, meaning that long-term safety should be significantly improved compared to other channelrhodopsins.

A Powerful Gene Delivery Vector

Since RGCs are the cells closest to the vitreo-retinal surface, they are amenable to AAV infection with IVT injection, a major advantage from a surgical standpoint given the relative ease of administration. Our AAV is an AAV2 modified in its capsid with an inserted 7m8 sequence. Experiments have demonstrated that AAV2 7m8 has markedly improved expression in RGCs and other retinal cells compared to AAV2 in both rodents and non-human primates.

Optoelectronic External Wearable Medical Device: The Biomimetic Goggles

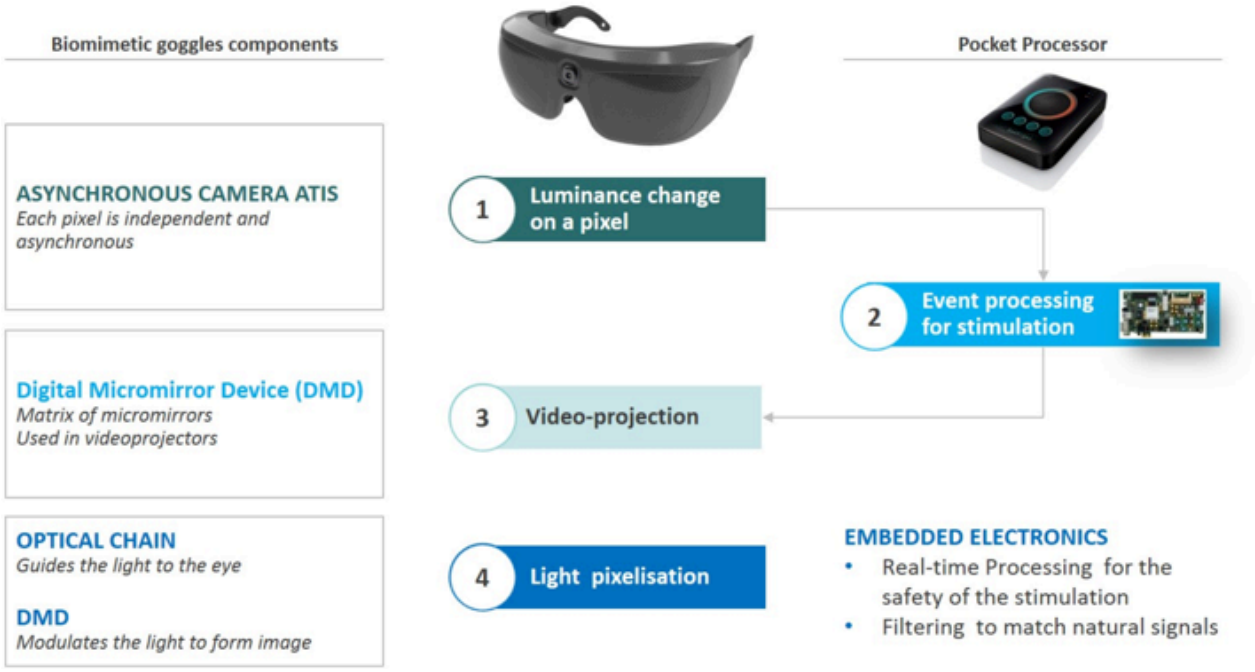
The natural range of light sensitivity of human photoreceptor cells is broader than that of channelrhodopsins. To achieve adequate stimulation of transduced RGCs, we combine our gene therapy-based treatment with an external wearable medical device, which allows the amplification of the image at specific optimal wavelength of the selected opsin.

We are developing an external wearable medical device composed of:

- a visual interface integrating an asynchronous time-based image sensor, or ATIS (also called a neuromorphic video camera), and a digital micromirror array, or DMD, driven by a microprocessor, that convey the visual information signal and light to the macula; and
- a pocket processor connected to an optoelectronic stimulation device that processes the visual information and controls a light source in order to encode and amplify corresponding light signals at a specific narrowband wavelength of 580-610 nm.

Software is provided to medical centers that allows the tuning and definition of parameters to optimize the patient response.

External Wearable Medical Device Components



We determined the necessary specifications for the external wearable medical device to optimize the specific light wavelength for activation of the ChrimsonR proteins while taking into account the particular anatomy of the eye. Our team is developing the algorithms necessary to operate the device in close collaboration with the Laboratory of Mathematics Applied to Vision of the Université Pierre et Marie Curie, or UPMC, in Paris, France. We have designed a prototype that will be further developed in advance of Phase III clinical trials and commercialization.

Preclinical Development of GS030 for RP

We have also conducted several studies in order to support the clinical Phase I/II CTA submission.

Preliminary Toxicity Study Showing Safety of GS030 in Non-human Primates

We conducted an exploratory ocular histopathology study in non-human primates to investigate potential ocular toxicity following single bilateral IVT administration of GS030. No ophthalmological signs of intolerance or toxicity, structural modifications or inflammation of the retina were observed up to six months post-injection. A slight and transient increase in the serum anti-AAV2 immunogenicity, or neutralizing antibodies, was observed. GS030 was thus locally and systemically well tolerated up to six months.

We submitted a request for a non-clinical scientific advice recommendation from the EMA in April 2016, as well as a request for a Type C meeting with the FDA in December 2016, to validate the non-clinical program and future requirements for the device. Both the EMA and the FDA have agreed with our strategy in principle to evaluate toxicity in a rodent disease model and in non-human primates, and we therefore initiated the studies during the fourth quarter of 2016.

Clinical Development Program of GS030 for RP

We have initiated a Phase I/II, open-label, multi-center trial to evaluate the safety and tolerability of GS030 and the external wearable medical device in RP subjects. Our CTA was authorized in the United Kingdom in December 2017, in France in May 2018 and our IND was released in August 2018 in the United States. The trial includes secondary endpoints that could serve to demonstrate proof of concept of the efficacy of our optogenetics approach in RP patients. Restoration of visual perception would serve as a proof-of-concept for the combination of GS030 treatment with the use of biomimetic goggles.

We plan to enroll up to 18 subjects across up to four cohorts. The first subject was treated in October 2018 at the Moorfields Eye Hospital in London, United Kingdom, and we expect to complete recruitment in the first half of 2020. The initial three cohorts will undergo dose escalation to determine the maximum tolerated or feasible dose of GS030. In the fourth cohort, either the maximum tolerated or maximum feasible dose will be administered for safety analysis and proof-of-concept data collection. We anticipate receiving interim data within one year after the last subject is treated.

The trial is planned to include adult subjects with documented diagnosis of RP. The initial cohorts will enroll RP subjects with virtually no light perception. Pending safety outcomes, RP subjects with higher levels of visual acuity may be considered for inclusion in the fourth cohort. As RP is a disease of photoreceptor degeneration, the restoration of vision sense will require some level of intactness of the downstream components of the visual apparatus, including the neuronal elements of the retina, RGCs, optic nerve and primary visual cortex. We believe that subjects with higher degree of visual acuity would derive greater benefit from treatment with our GS030 product candidate by virtue of their visual apparatus being better preserved.

The trial is planned to encompass the testing of traditional ophthalmic parameters, such as visual acuity tests and electrophysiology, and also functional vision tests, such as avoiding obstacles or moving in unfamiliar or changing environments. We plan to carry out subject evaluation prior to GS030 administration with and without the biomimetic goggles to establish baseline parameters. Subsequent to IVT injection of GS030, a visual rehabilitation program will ensue, comprising a training period for learning to use the biomimetic goggles in a controlled laboratory environment, including in fixed and mobile simulations and subsequently in common indoor and outdoor environmental conditions.

Baseline ophthalmological testing will be completed before and after IVT injection of GS030 with and without biomimetic goggles. Given the varied levels of disease state, it is not expected that all subjects will show improvement in all secondary outcome measures. Furthermore, use of the biomimetic goggles will require training and, therefore, we expect that the learning period will vary among subjects. As a result, the time point of demonstrating efficacy may vary among subjects. Improvement will be assessed by whether a subject can perform a visual task with "goggles on" when light-induced activation of the optogenetic protein is expected to occur compared to baseline and also compared to "goggles off" when no or insufficient photo-activation of the optogenetic protein should take place.

Regulatory Interaction for GS030

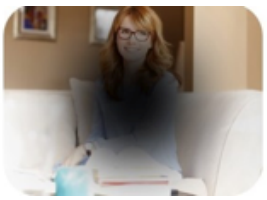
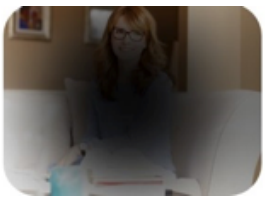
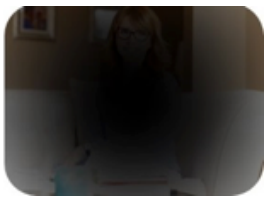
In April 2016, we requested the EMA's Committee for Advanced Therapies, or CAT, to issue a recommendation on the classification of our GS030 product, which is constituted of the biological product, in the form of gene therapy, and an external wearable medical device, in the form of biomimetic goggles. We sought the same advice at the FDA's Office of Combination Products. GS030 has been classified as a combination product whose primary mode of action is provided by the gene therapy part of GS030-DP, and the Center for Biologics Evaluation and Research, or CBER, is the jurisdiction in charge of evaluation. The regulatory pathway is based on the following classification: an IND will be necessary for clinical trial initiation, and a BLA will be required at the time of marketing authorization. In order to validate the adequacy of our non-clinical toxicology and safety program designed to support the first-in-man study, we submitted a request for non-clinical scientific advice from the EMA in April 2016 and an early Type C meeting with the FDA. Both the EMA and FDA have agreed with our strategy in principle to evaluate toxicity in a rodent disease model and in non-human primates, and we completed these toxicology studies in 2017.

In order to obtain agreement on the adequacy of the data presented to support initiation of an IND in the United States, a formal Type B Pre-IND meeting was held with the FDA in December 2017. During this meeting, the FDA agreed in principle with our Phase I/II clinical trial design, as well as CMC and medical device aspects to support an IND.

Market Opportunity for GS030 in Dry AMD and GA

AMD is a degenerative disorder characterized by loss of the photoreceptors and preservation of the RGCs, and is driven by genetic and environmental factors. Central vision, which is essential to read, perform precise tasks and recognize faces, is lost. Peripheral visual field is usually preserved. Macular degeneration typically occurs in patients over the age of 55. The early form of AMD is called dry AMD and can evolve over time to late AMD. Late AMD can take two forms, either wet AMD or GA. Dry AMD is six times more prevalent than wet AMD. Approximately 15 million people are affected with AMD in the United States, with a global prevalence of 170 million, and dry AMD accounts for approximately 80% of all cases of late-stage AMD. The prevalence of AMD increases significantly in those older than 75, reaching 22% in the population over 90.

The following image illustrates the deterioration of normal vision to blindness in AMD:

GS030: Our Planned Strategy for the Treatment of Dry AMD and GA

We believe that our optogenetics technology platform could be used for the treatment of dry AMD or GA. Because GS030 uses optogenetics and can address diseases of photoreceptor degeneration regardless of the type of mutation, we believe that GS030, if successful in the treatment of RP, would be entirely transferable to the dry form of AMD and would offer enormous benefit to a common disease currently unamenable to therapy. Although RP and GA have very different origins, both diseases are characterized by the degeneration of the photoreceptor cells in the patient's retina. Upon evidence of clinical proof-of-concept in RP, we may initiate clinical trials of GS030 for the treatment of dry AMD and GA.

6.7 LEVERAGING OUR PLATFORMS TO ADDRESS CENTRAL NERVOUS SYSTEM DISORDERS

We have established an integrated development platform to replace or restore the function of retinal cells that have degenerated in order to regain quality of sight for patients, thereby transforming their lives. We intend to pursue the application of our integrated development platform to other indications beyond ophthalmology, in particular, for degenerative diseases of the central nervous system.

6.8 PHARMACO-ECONOMICS OF BLINDNESS AND VISUAL IMPAIRMENT

Blindness and visual impairment impact not only the individual but also the family, caregivers, and the community, leading to significant societal costs. The total annual cost of vision disorders and blindness in the United States was estimated to be $139 billion in 2013, and the total cost of blindness alone in the European Union was estimated at €32 billion, or up to €60,000 per patient per year. These figures include direct costs such as medical treatment, medical visual prostheses, adaptations and assistance devices, and special training and assistance programs, as well as indirect costs resulting from impaired vision, the loss of productivity and the need for supportive care, long-term care and the costs of social programs. These conditions also can have significant, multidimensional effects on patients' quality of life, including their physical and emotional well-being.

6.9 MANUFACTURING

We have chosen to outsource manufacturing to specialized contract manufacturing organizations, or CMOs. As part of this strategy, we have hired experienced chemistry, manufacturing and controls, or CMC, and quality assurance personnel in order to (i) assess potential CMO partners, (ii) conduct the necessary audits and due diligence in connection with partner CMOs, (iii) oversee, review and audit the CMC process to be used for all regulatory submissions and (iv) oversee, review and control all the methods and protocols used to ensure that the final product meets our quality specifications.

We partner with leading CMOs in gene therapy manufacturing, including BrammerBio and Lonza, to produce non-clinical and clinical drug products for clinical development and future commercialization. We have made significant efforts to scale up and optimize the manufacturing process with a view to the delivery of commercial batches.

Our AAV-based gene therapy products are produced using transient triple transfection process for GS010 and the baculovirus process for GS030. Production is carried out in compliance with current good manufacturing practices, or cGMP, by CMOs that have been certified by national regulatory authorities.

Manufacturing Process Using Transient Triple Transfection for GS010

The transient triple transfection-based production process uses adherent HEK293 cells amplified in multi- tray cell-culture systems. Cells are co-transfected with three independent plasmids. Transfected cells are harvested and cell lysate is then clarified in order to eliminate cellular debris.

Purification of the AAV vector is then achieved by immunoaffinity and filtration in the final formulation buffer, leading to drug substance.

The concentration of the drug substance is adjusted to a defined concentration, before being sterile filtered and filled into individual vials, to eventually become the drug product. Drug product is stored at <-60°C.

Batches for the ongoing Phase III trials were produced at the Henogen S.A., which was acquired by Groupe Novasep, facility in Belgium in compliance with cGMPs. In anticipation of our commercial needs and process validation, we implemented the transfer of the manufacturing process to the BrammerBio facility in Cambridge, Massachusetts in October 2017, to ensure commercial supply for the European Union and the United States. For each batch production, a series of quality control tests are performed during the process and at release to assess product strength, quality, purity and safety under controlled and validated standard operating procedures in accordance with cGMP.

Manufacturing Process Using Baculovirus Production for GS030

The AAV is produced in SF9 insect cells using two recombinant baculovirus vectors. One vector carries the viral genome, and the other carries elements for the expression of functions required for replication of the AAV genome and assembly of the viral capsids.

The SF9 cells are cultivated in suspension in a serum-free medium in single-use bioreactors. Production of AAV by the SF9 insect cells/baculovirus method has proven to be an efficient and scalable means of recombinant AAV production.

During the manufacturing process, the AAV vector is isolated from lysed, harvested cells by affinity chromatography. The vector is further purified by ion-exchange chromatography to create the bulk drug substance, or BDS. To produce the drug product, the BDS is adjusted to a defined concentration with formulation buffer, then sterile filtered before being filled into individual vials. Drug product is stored at <-60°C.

We are currently conducting a process development program with Lonza in the United States on a scale that will support nonclinical safety evaluation, clinical trials and potentially commercial needs with full GMP compliance.

Manufacturing Process for the GS030 Medical Device

The goggles will be manufactured and tested at an established ISO13485-certified site in France, under the control of our Quality Assurance team. The devices will be certified to initially meet European and US requirements, and will be extended to other countries *via* the international MDSAP program.

6.10 SALES AND MARKETING

We hold worldwide commercialization rights to our platform technologies, product candidates and development programs. If approved, we intend to commercialize GS010, initially in the United States and the European Union, ourselves. Due to the orphan nature of LHON, we believe a targeted sales and marketing organization would be able to reach specialized ophthalmology centers and their patients. We have built, and continue to expand upon, key relationships with ophthalmic experts and patients of severe retinal neurodegenerative diseases around the globe, since we anticipate that a large majority of patients suffering from this disease will be referred to a limited number of large, well-equipped neuro-ophthalmologists and retina specialists in each country. Due to the broad patient populations that GS030 may address, we may enter into strategic partnerships to maximize commercial value of our product candidate.

6.11 COMPETITION

The biopharmaceutical industry, including the gene therapy field, is characterized by rapid scientific technological changes and significant competition. Any product candidates that we successfully develop and commercialize will have to compete with therapies that may become available in the future. We face competition from pharmaceutical and biotechnology companies, as well as from academic institutions, governmental agencies and public and private research institutions.

We are aware of a number of companies focused on developing gene therapies in various indications, including Adverum, Dimension Therapeutics, Inc., Applied Genetic Technologies Corporation, Asklepios BioPharmaceutical, Inc., Audentes Therapeutics, Inc., bluebird bio, Inc., GlaxoSmithKline, Nightstar Therapeutics Ltd., Spark Therapeutics, Inc., uniQure N.V. and Voyager Therapeutics, Inc., as well as several companies addressing other methods for modifying genes and regulating gene expression. Any advances in gene therapy technology made by a competitor may be used to develop therapies that could compete against any of our product candidates.

For our specific retinal gene therapy products, the main competitors include:

- **GS010 for the Treatment of LHON:** The Bascom Palmer Eye Institute of the University of Miami Miller School of Medicine in the United States has enrolled the first five participants in its Phase I trial of virus-based gene transfer for this mitochondrial disorder. The Huazhong University in China, which completed Phase I/II studies in 2013 using gene therapy, recently published data with nine months follow-up and the evaluation of both safety and some visual acuity outcomes. The purpose of these studies is exclusively academic and, to our knowledge, Huazhong University is not currently developing any drug candidates. We are aware of other companies and institutions focused on developing therapies in the LHON space that do not involve gene therapy, including: Santhera Pharmaceuticals Holding AG using a chemical entity, Idebenone, approved under exceptional circumstances in Europe; and Stealth Biotherapeutics Inc. using an antioxidant agent known as Ocuvia, which is currently in Phase II clinical trials.
- **GS030 for the Treatment of RP:** To our knowledge, we are the only company in the Clinic with a technology that utilizes light at near-red wavelength with goggles. RetroSense Therapeutics, LLC, or RetroSense, is developing a ChR2-based optogenetic product that is in Phase I studies that will have to utilize blue light to stimulate the ChR2 without goggles. Retrosense was acquired by Allergan plc in September 2016. Applied Genetic Technologies Corporation, or AGTC, is partnering with Bionic Sight to develop an optogenetic therapy combining a ChR-based gene therapy and a neuro-prosthetic device using an algorithm for retinal coding. This program is still in preclinical development. In addition, the only approved non-therapeutic treatment for RP is retinal implants.
- **GS030 for the Treatment of GA:** No approved therapy currently exists for GA. Most major clinical- stage therapeutic treatments for GA are in the field of cell therapy, including

lampalizumab, an anti-Factor D, the development of which F. Hoffmann-La Roche Ltd. terminated post unsuccessful Phase III data. GlaxoSmithKline plc's anti-amyloid beta monoclonal for patients with GA is in Phase II clinical trials. Novartis' LFG-316 C5 monoclonal antibody for patients with GA is in Phase II clinical trials. Apellis Pharmaceuticals, Inc. is currently developing a C3 inhibitor, which has completed Phase II and initiated Phase III clinical trials.

- **GS030 for the Treatment of Dry AMD:** No approved therapy currently exists for dry AMD. Ophthotech Corporation's Zimura, a complement C5 inhibitor, is currently in a Phase IIb clinical trial. Johnson and Johnson is developing Palucorcel, which utilizes human embryonic stem cells that recently completed a Phase I/II trial. Similarly, Astellas Pharma Inc. is developing a stem cell treatment currently in Phase II. BioTime, Inc. is developing OpRegen, a dry AMD-targeted therapy that replaces missing retinal pigment epithelium cells with OpRegen cells and is currently in a Phase I/IIa dose escalation study. Regenerative Patch Technologies requires a subretinal implant of stem cells and is in a Phase I/II trial.

Many of our potential competitors, alone or with their strategic partners, have substantially greater financial, technical and other resources than we do, such as larger research and development, clinical, marketing and manufacturing organizations. Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated among a smaller number of competitors. Our commercial opportunity could be reduced or eliminated if competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. Additionally, technologies developed by our competitors may render our potential product candidates uneconomical or obsolete, and we may not be successful in marketing our product candidates against competitors.

6.12

PROPERTY, PLANT AND EQUIPMENT

6.12.1 SIGNIFICANT EXISTING OR PLANNED PROPERTY, PLANT AND EQUIPMENT

Effective as of January 1, 2015, we leased office space, consisting of approximately 656 square meters located in Paris, France. The head lease for this facility expires on December 31, 2024.

In addition, pursuant to a lease agreement dated September 6, 2017, we leased office space consisting of approximately 5,575 square feet located in New York, New York for a term of seven years and five months.

We believe our current office space is sufficient to meet our needs in the immediate foreseeable future and we do not expect any additional needs before 2020.

6.12.2 ENVIRONMENTAL ISSUES

In accordance with legal and regulatory requirements of Grenelle II Law and its implementing decree, we have published for the 2017 fiscal year an annual social and environmental responsibility report annexed to the management report of the Board of Directors, such report having been completed by a report issued by an independent expert. Since the fiscal year beginning January 1, 2018, we are no longer required to publish such a report.

6.13
RESEARCH AND DEVELOPMENT, PATENTS AND LICENSES

6.13.1 OVERVIEW

We engage in substantial research and development efforts to develop innovative product candidates. Research and development expenses consist primarily of:

- sub-contracting, collaboration and consultant expenses, that primarily include the cost of third-party contractors such as CROs, who conduct our non-clinical studies and clinical trials;
- personnel costs, including salaries, related benefits and share-based compensation, for our employees engaged in scientific research and development functions;
- licensing and intellectual property costs, including upfront payment for exclusive licensing;
- purchases, real-estate leasing costs and rental income received from sublease agreements, as well as conferences and travel costs; and
- depreciation and amortization.

Our research and development expenses in the periods presented, and for the current period to date, mainly relate to the following activities:

- **GS010:** Our Phase I/II dose-escalation safety study for GS010 was initiated in 2014, recruitment was completed in April 2015 and a follow-up study is currently ongoing. GS010 entered into two parallel Phase III trials, RESCUE and REVERSE, in the fourth quarter of 2015, following the release of our IND application by the FDA. The trials are designed as a double-masked, sham-

controlled, multi-center, multi-country clinical trial in Europe and the United States. We completed enrollment of all 37 patients for REVERSE in February 2017, and completed the enrollment of 39 patients for RESCUE in July 2017. A third Phase III trial was initiated in the fourth quarter of 2017, REFLECT. This trial is designed as a randomized, double masked, placebo-controlled, multi-center clinical trial. As of December 2018, more than 50% of the target enrollment was completed. Recruitment is expected to be completed in the second quarter of 2019.

- **GS030:** In 2015, we conducted preclinical, proof-of-concept studies with different molecules that led to the definition of GS030. We initiated GLP, toxicology studies on non-human primates. We obtained the approval to initiate Phase I/II PIONEER clinical trials from MHRA in December 2017. The first patient was treated in October 2018 in the United Kingdom.

Our direct research and development expenses consist principally of external costs, such as manufacturing expenses, non-clinical studies, startup fees paid to investigators, consultants, central laboratories and CROs in connection with our clinical studies, acquiring and manufacturing clinical study materials and costs related to collaborations, which we allocate to our specific research programs. In addition, we allocate personnel-related costs, depreciation and other indirect costs to specific programs.

Research and development activities are central to our business. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. We expect that our research and development expenses will continue to increase in the foreseeable future as we initiate clinical trials for certain product candidates and pursue later stages of clinical development of other product candidates.

A change in the outcome of any of these variables with respect to the development of GS010, GS030 or any other product candidate that we are developing could mean a significant change in the costs and timing associated with the development of such product candidates. For example, if the FDA, the EMA or other regulatory authority were to require us to conduct non-clinical and clinical studies beyond those which we currently anticipate will be required for the completion of clinical development, or if we experience significant delays in enrollment in any clinical trials, we could be required to spend significant additional financial resources and time on the completion of clinical development. For a discussion on the risks associated with completing the development projects on schedule, see Section 4.2, "Risks Related to the Discovery and Development of and Obtaining Regulatory Approval for Our Product Candidates" of this Document.

6.13.2 RESEARCH AND DEVELOPMENT EXPENDITURES

From 2017 to 2018, the total amount spent by us for research and development activities strongly increased, from €18.7 million in 2017 to €29.0 million as at December 2018.

Our research and development expenses for the periods presented, and for the current period to date, mainly relate to GS010 and GS030, see Section 8.3, "Results of Operations – Comparisons for the Twelve Months Ended December 31, 2017 and 2018 – Research and Development Expenditures" of this Document.

Our research and development expenses consist principally of external costs, such as manufacturing expenses, non-clinical studies, startup fees paid to investigators, consultants, central laboratories and CROs in connection with our clinical studies, costs related to acquiring and manufacturing clinical study materials and costs related to collaborations, which we allocate to our specific research programs. In addition, we allocate personnel-related costs and other indirect costs to specific programs.

The following table sets forth the cost for our research and development for the fiscal years ending December 31, 2017 and 2018:

	As of December 31,	
In thousands of euros	**2017**	**2018**
Personnel expenses (1)	4,734	4,691
Sub-contracting, collaborations and consultants	11,672	21,288
Licensing and intellectual property	155	752
Office costs	516	727
Travel and entertainment expenses	1,065	760
Allowance for amortization	184	270
Others	348	543
Total research and development expenses	**18,675**	**29,031**

(1) Includes €1,543 K and €950 K related to share-based compensation expense as of December 31, 2017 and 2018 respectively.

6.13.3 MEDICAL AND SCIENTIFIC COMMITTEE

In addition to our own research and development teams, we have a Scientific Advisory Board comprised of seven renowned scientists from different countries who are opinion leaders in their specialities and key assets to our business. The function of the Scientific Advisory Board is to identify new technological advances that may be of interest for our business.

Since our inception, our Scientific Advisory Board has been comprised of the following members:

- **Dr. Botond Roska (Chairman of our Scientific Advisory Board)** is senior group leader at the Friedrich Miescher Institute in Basel, Switzerland. Dr. Roska was educated at the University of California Berkeley, Harvard University and Harvard Medical School as well as at Semmelweis Medical School. Dr. Roska's group studies the structure and function of the retina and pioneered retina cell type specific optogenetic vision restoration.
- **Professor José-Alain Sahel (Vice-Chairman of our Scientific Advisory Board)** chairs the *Institut de la Vision*, a center of excellence in ophthalmology assembling scientific teams (UPMC, INSERM and CNRS) as well as the French National Eye Hospital, featuring access to cohorts of well-diagnosed patients and a state-of-the-art Clinical Investigation Center.
- **Professor Jean Bennett (Vice-Chairman of our Scientific Advisory Board)** is Professor of Ophthalmology and Cell and Developmental Biology and a Senior Investigator in the F. M. Kirby Center for Molecular Ophthalmology at the University Of Pennsylvania School Of Medicine. Professor Bennett also has an appointment as a Senior Investigator at the Center for Cellular and Molecular Therapeutics, The Children's Hospital of Philadelphia.
- **Luk H. Vandenberghe,** Ph.D., is Assistant Professor at Harvard Medical School and runs an active research laboratory at the Massachusetts Eye and Ear Infirmary and the Schepens Eye Research Institute. He directs the Grousbeck Gene Therapy Center which is focused on the biology of somatic gene transfer, the development of enabling technologies in gene therapy and the translation of clinical programs with a particular emphasis on vision and hearing restoration.
- **Professor Ernst Bamberg** is Professor of Biophysical Chemistry at University of Frankfurt, and Director of the Department of Biophysical Chemistry of the Max Planck Institute für Biophysik in Frankfurt. Pr. Bamberg is the inventor of the optogenetics approach and has been at the fore front of this technology since its discovery.
- **Professor Connie Cepko** is Professor at Harvard Medical School. Professor Cepko works on the mechanisms that direct development of the central nervous system of vertebrates and, in particular, on the vertebrate retina. Professor Cepko has produced seminal works in the mechanisms that lead to the death of photoreceptors in the many inherited forms of human blindness.
- **Dr. Serge Picaud,** Ph.D., is director of research at the *Institut de la Vision* in Paris. Over the last 15 years, Dr. Picaud has developed many cellular and animal models of different retinal diseases for assessing the efficacy of neuroprotection or other therapeutic strategies. Dr. Picaud thus developed the culture of *post-mortem* human retinal tissue, which provides the means to test AAV vectors efficacy on human retinal neurones.

To our knowledge, as of the date of this Document, there are no conflicts of interest between the position of Dr. Botond Roska and Professor José-Alain Sahel in the Company and their position in FMI and Institut de la Vision, respectively.

6.13.4 COLLABORATION, PARTNERSHIP AND RELATED AGREEMENTS

To our knowledge, as of the date of this Document, there are no conflicts of interest between the duties of our directors and officers and their personal interests, as they have no interest of any kind in the companies that are parties to the collaboration, partnership and related agreements mentioned below.

Our main collaboration, partnership and related agreements include the following as of this Document:

Agreements Relating to GS010

Genethon

Partnership Agreement Relating to the Research, Development and Commercialization of GS010

- Object:

In February 2013, we entered into a partnership agreement with Genethon. Under the terms of this agreement, Genethon is free to exploit the data, know-how, materials and inventions, whether patentable or not, developed or generated in the course of performing a given research and development project that relate to the processes, materials and assays used to manufacture biological products for any purpose without further obligation or payment to us. We may exploit the data, know-how, materials and inventions, whether patentable or not, developed or generated in the course of performing a given research and development project that relate to a product being developed by the parties pursuant to a given research and development project for any purpose at our own discretion, subject to the payment to Genethon of any milestone payments and royalties negotiated and agreed in a product addendum.

- Obligations of GenSight:

Under the terms of the partnership agreement, we are primarily responsible for (i) the performance of all *in vitro* and *in vivo*

preclinical studies and for all clinical activities and, as sponsor, for the initiation, conduct and management of all clinical trials to be conducted in the context of the research and development project, and (ii) all regulatory affairs matters related to the development of the product(s) (other than matters specific to product manufacturing) with support from Genethon.

- Obligations of Genethon:

Genethon is primarily responsible for (i) the development of the processes to manufacture product(s) and for the manufacture of product(s) required for preclinical and clinical studies; and (ii) all regulatory affairs matters related to the manufacture of the product(s), including the elements of clinical trial and marketing authorization submissions that relate to the manufacture of the product(s).

- Financial obligations:

Costs are shared between us and Genethon in accordance with certain principles set forth in the partnership agreement. Each party bears its own internal costs incurred in the performance of preclinical activities. We are responsible for all external costs incurred by the parties in the performance of preclinical activities. Genethon is responsible for all internal and external costs incurred to manufacture research quality grade batches of the products in the context of preclinical activities. Genethon also assumes the internal and external costs incurred to manufacture all batches, whether GMP or not, of products used for regulatory preclinical toxicology studies, and one GMP batch for the initial Phase I clinical studies. We are responsible for all internal and external costs incurred by the parties in the performance of clinical activities. In addition, we bear all internal and external costs for the manufacture of all GMP batches of products other than any GMP preclinical toxicology batches, and the initial GMP both for Phase I clinical studies, the costs of which are borne by Genethon. Genethon bears all internal costs associated with activities of regulatory support in connection with manufacturing a product, while all such external costs are borne by us.

- Proprietary rights:

Under the terms of the partnership agreement, Genethon is free to exploit the data, know-how, materials and inventions, whether patentable or not, developed or generated in the course of performing a given research and development project that relate to the processes, materials and assays used to manufacture biological products for any purpose without further obligation or payment to us. We may exploit the data, know-how, materials and inventions, whether patentable or not, developed or generated in the course of performing a given research and development project that relate to a product being developed by the parties pursuant to a given research and development project for any purpose at our own discretion, subject to the payment to Genethon of any milestone payments and royalties negotiated and agreed in a product addendum.

- Term and termination:

The partnership agreement will continue in full force and effect for the longer of (i) a period of 10 years; or (ii) until the expiration/termination of the last project addendum duly executed between us and Genethon, unless otherwise terminated under the terms of the partnership agreement.

Agreements Relating to GS030

Friedrich Miescher Institute

Research Collaboration Agreement Relating to the Development and Testing of Optogenetic Tools for GS030

- Object:

On March 1, 2014, we entered into a research collaboration agreement with the Friedrich Miescher Institute, or FMI, under which the parties agreed to collaborate in research comprising the design, planning and carrying out of experiments on different animal models with the aim of testing new therapeutic approaches, including the development and testing of optogenetic tools.

- Financial obligations:

Under the terms of this research collaboration agreement, we agreed to pay €111 K to FMI in each of 2014, 2015, 2016 and 2017 as a contribution to the cost of the research work.

- Proprietary rights:

Under the agreement, research materials developed using our research materials or developed jointly by us and FMI in the course of the research project will be jointly owned. Under certain circumstances, when the research materials are owned and developed solely by FMI, we will have an option to obtain a worldwide exclusive or non-exclusive license, with the right to create sub-licenses to affiliates, including the right to use the materials in research and to make, to make use of or to sell such materials.

- Term and termination:

Either party may terminate the research collaboration agreement in the event that the other party materially breaches the agreement where such breach remains uncured for 15 days after written notice from the non-breaching party. The provisions relating to our rights to use the inventions created by the agreement shall survive termination of the agreement. The agreement remained in force until May 31, 2018 and has not been renewed.

Sight Again Program

Consortium Agreement Relating to the Research and Development of Complimentary Therapeutic Remedies for GS030

- Object:

In July 2014, we entered into a consortium agreement with Pixium Vision S.A., a company based in France that develops

vision restoration systems and *Fondation Voir et Entendre*, or FVE, a scientific foundation that funds scientific programs in the field of ophthalmic diseases. This consortium agreement, known as "Sight Again," or the Program, aims to further unlock technology hurdles in the development of new therapeutic approaches to restore sight to legally blind patients suffering from differing stages of RP. Sight Again is part of *Programme d'Investissement d'Avenir*, a major investment initiative launched and organized by the French Government. Under the agreement, we, in conjunction with Pixium Vision and FVE, are focusing on two complementary therapeutic remedies: an optogenetic gene therapy developed by us, GS030, and a vision restoration system comprising a sub-retinal implant developed by Pixium Vision, PRIMA, designed to deliver improved visual perception. Both therapeutic remedies require a visual stimulation device, comprising a visual interface, a mobile processor and software.

During the collaboration period, the Program is governed by a joint steering committee, or JSC, consisting of representatives of the parties to the collaboration agreement. The JSC is responsible for, among other things, monitoring and assessing the progress of collaboration activities, validating the results and information provided by working groups, modifying or suspending the program in whole or in part and approving amendments to the agreement.

- Obligations of GenSight:

Under the terms of this agreement we are responsible for conducting all research and development activities in relation to our product candidates, from proof of concept to request for marketing authorizations.

- Proprietary rights:

Under the terms of the agreement, results obtained become the property of the party responsible for carrying out the research. In the case of joint research, results become the property of the parties involved with the research on a *prorata* basis in accordance with their respective contributions. We may freely use our own and joint results, except for research benefiting third-parties. We may be granted an operating license should we need specific knowledge of results of another party, and a free use of rights of products developed by FVE under the Program as well as a right of first review on any of the results of FVE. We and Pixium Vision have been granted a joint-exclusive operating license, each in our respective fields, on joint results obtained within the program.

- Financial obligations:

In consideration for this joint exclusivity, we and Pixium Vision pay royalties to FVE, calculated as a percentage of net sales generated by the joint results and joint patents. Such royalties may not exceed 0.6 percent of revenues generated by the commercial use of the patent, and an annual threshold of €50 K per company, and shall expire when the cumulated amount of royalties paid reaches a total of €500 K.

- Term and termination:

The term of the agreement is five years and six months, subject to prior termination.

Master Agreement Relating to the Sight Again Program

In December 2014, we entered into a master agreement relating to the Program with Bpifrance Financement, Pixium Vision and FVE setting forth the characteristics of the Program, to fix the amount and conditions for awarding funding granted by Bpifrance Financement as well as to clarify the principles and arrangements for monitoring the implementation of the Program by Bpifrance Financement.

Financial Aid Agreement Relating to the Sight Again Program

In December 2014, we entered into a financial aid agreement relating to the Program with Bpifrance Financement setting forth the amounts and conditions upon which Bpifrance Financement shall grant financial aid to the Program. We will benefit from approximately €6.8 million, of which €1.1 million is available as subsidies and approximately €5.7 million as repayable advances. The approximately €5.7 million repayable advances and any interest thereon will only be repayable if and when the product hits the market. Should we, within two years following the termination of this financial aid agreement, reach cumulated revenues of €80.0 million (excluding taxes) for a period of 15 years from the first year of repayment we shall be required to make an additional payment to Bpifrance Financement of a maximum aggregate amount of approximately €2.7 million. The financial aid from Bpifrance Financement is intended to cover both industrial research and experimental development.

Amendments Relating to GS030

The terms of the consortium agreement, master agreement and financial aid agreement originally applied to the development of the optogenetics product candidate targeting RP known as GS020, a precursor to GS030. The parties have supplemented the agreements to include provisions relating to the development of GS030.

Agreements Relating to GS010 and GS030

Institut de la Vision

Framework Agreement Relating to Research and Development in Ophthalmic Diseases (GS010 and GS030)

- Object:

In December 2013, we entered into a framework agreement with Université Pierre et Marie Curie or UPMC, *Institut National de la Santé et de la Recherche Médicale*, *Centre National de la Recherche Scientifique* and *Centre de Recherche Institut de la Vision* under

which the parties agree to create a partnership in the field of research and development in ophthalmic diseases.

The framework agreement covers research activities, such as research on small molecules, proteins and expression of therapeutic genes, the study of therapeutic candidates on which we hold rights, cooperation in the field of sight restoring strategy by means of an optogenetic approach for persons suffering from RP or GA, in the field of mitochondria and therapeutic genetic remedies of LHON and by a transfer of biological equipment.

- Financial obligations:

Under the terms of this framework agreement, as amended, we agree to pay approximately €2.3 million, excluding taxes, through March 14, 2018, in consideration for the specific research and development activities undertaken by the laboratory and the exclusive right of use in the field granted to us by our partners on joint results.

- Term and termination:

The framework agreement has been terminated on March 14, 2018 and has not been renewed.

Specific Research Agreements Under the Framework Agreement Relating to Research and Development in Ophthalmic Diseases (GS010 and GS030)

In October 2014, as a part of the framework agreement, we entered into a specific agreement with UPMC, *Institut National de la Santé et de la Recherche Médicale* and *Centre National de la Recherche Scientifique* for the development and evaluation of the visual stimulation goggles, for a duration of 24 months. This agreement terminated on October 2016.

In November 2014, as a part of the framework agreement, we entered into a specific research agreement with UPMC, *Institut National de la Santé et de la Recherche Médicale* and *Centre National de la Recherche Scientifique* for a program aiming to restore high acuity vision with optogenetic therapy, and defining the technical means required and the milestones to be achieved.

In June 2015, as a part of the framework agreement, we entered into a specific research agreement with UPMC, *Institut National de la Santé et de la Recherche Médicale* and *Centre National de la Recherche Scientifique* for a program aiming to develop and approve clinical prototypes of glasses for the stimulation of an optogenetically transfected retina.

6.13.5 INTELLECTUAL PROPERTY

6.13.6 IN-LICENSE AGREEMENTS

To our knowledge, as of the date of this Document, there are no conflicts of interest between the duties of our directors and officers and their personal interests as they have no interest of any kind in the companies that are parties to the in-license agreements mentioned below.

We rely on licenses granted by third-parties to develop our product candidates. We have rights to use and exploit certain issued patents and pending patent applications under license from certain third-parties.

Our main in-license agreements include the following:

Agreements Relating to GS010

Inserm Transfert

License Agreement for Patents Relating to GS010

- Object:

On October 12, 2012, we entered into a license agreement with Inserm Transfert S.A. (acting as delegatee of Inserm). Under the license agreement, Inserm Transfert and Inserm granted us (i) an exclusive, royalty-bearing worldwide license under certain patent rights and biological material in the treatment of ocular diseases in humans (including mitochondrial diseases of the ocular area), (ii) a non-exclusive, royalty-bearing worldwide license under certain patent rights and biological material in the treatment of mitochondrial diseases in humans together with (iii) a non-exclusive, royalty-bearing worldwide license under certain know-how, to develop, make, have made, use, and sell or otherwise distribute certain products, in the treatment of mitochondrial diseases and ocular diseases in humans, with a limited right to grant sublicenses.

- Proprietary rights:

Inserm Transfert and Inserm reserved the right on their behalf and that of all other non-profit academic research institutions to practice and use the patent rights and biological material in the treatment of ocular diseases in humans (including mitochondrial diseases of the ocular area) (i) for any academic purposes as well as (ii) for the performance of research programs performed in the frame of industrial partnerships and (iii) with our prior written approval on the clinical protocol, for certain non-profit clinical research. Inserm Transfert reserved (a) the right to practice and use the know-how for any purposes and (b) the right to practice and use as the patent rights and biological material for any purposes outside the treatment of ocular diseases in humans. Under the agreement, we have the first right of negotiation for exploitation rights of any results that may issue from such non-profit clinical research in the treatment of ocular diseases in humans (including mitochondrial diseases of the ocular area) and under certain conditions.

- Obligations of GenSight:

We are required to use our best efforts to develop the products in compliance with a certain development plan and to use our reasonable efforts to introduce the product into the commercial

market, in each case, as soon as practicable, consistent with reasonable business practices. Under the agreement, we manage the prosecution, defense and maintenance of the licensed patent rights, at our own cost and in consultation with Inserm Transfert.

- Financial obligations:

Upon entering into the license agreement we paid an upfront license fee and reimbursed Inserm Transfert for all expenses incurred by it prior to entry into the license agreement in connection with the filing, prosecution, defense and maintenance of the patent rights. We are responsible for the payment of all future fees and costs relating to the prosecution, defense and maintenance of the patent rights during the term of the license agreement. In addition, we are required to make certain milestone payments to Inserm Transfert upon the achievement of certain development, regulatory and commercial milestone events. Under the terms of the license agreement, we also are required to pay Inserm Transfert low-to mid-single-digit royalties on incremental annual worldwide net sales of the product.

- Term and termination:

The license agreement will continue in full force and effect until the later of (i) the expiration of the last to expire patent right covering the manufacture, use or sale of the licensed product in any country of the world and (ii) ten years after the first commercial sale of the licensed product in a country in which a royalty is paid, unless otherwise earlier terminated under the terms of the license agreement. Inserm Transfert may at its sole discretion convert the license in the treatment of ocular diseases in humans into a non-exclusive license or terminate the agreement if (a) we have not timely met any of the development milestones in the development plan and fail to cure within 60 days of written notice from Inserm; (b) we interrupt certain development activities in respect of any licensed product for more than nine months; (c) we interrupt commercialization of a licensed product for more than 12 months after a first commercialization of such product in a country; (d) there is no commercialization of a licensed product within two years following the obtaining of its commercialization approval in a country; (e) we have not put the licensed product into commercial use and are not keeping the products reasonably available to the public within ten years of the effective date of the agreement; or (f) if we cease business operations or become the subject of a petition in bankruptcy.

Association Française contre les Myopathies

License Agreement for Scientific Data Relating to GS010

- Object:

On December 2, 2013, we entered into a license agreement for use of scientific data with the *Association Française contre les Myopathies*, or AFM, the French Muscular Dystrophy Association, Genethon and Inserm Transfert, acting as a delegate of Inserm and on behalf of the UPMC, or UPMC collectively, the licensors. Under the agreement, the licensors granted us a worldwide, exclusive, royalty-bearing license, with a limited right to grant sublicenses, for the use of certain scientific data and information developed, owned or controlled by the licensors, to develop, make, have made, use, and sell or otherwise distribute certain products, including to obtain authorization to develop and commercialize products for the treatment of mitochondrial diseases and ocular diseases in humans as described in our license agreement with Inserm Transfert. The scientific data are defined as data needed to obtain agencies authorizations.

- Obligations of GenSight:

We are required to use all commercially reasonable efforts to develop the products in compliance with the development plan set forth in our license agreement with Inserm Transfert and to use our reasonable efforts to introduce the product into the commercial market, in each case, as soon as practical, consistent with our reasonable business practices.

Under the license agreement, we have committed to achieving certain milestones relating to the development, manufacture and commercialization of the licensed products, including certain regulatory, clinical and commercial objectives. Under certain circumstances, such as the imposition of government regulation restricting the implementation of the development program or requiring changes thereto, unforeseen results in preclinical experiments or clinical trials or technical constraints, we and Inserm Transfert may reasonably extend the development plan.

- Financial obligations:

We paid the licensors a one-time license fee of €10 K. We also are obliged to make milestone payments ranging from €13 K to €375 K upon the achievement of certain development, regulatory and commercial milestone events. We have paid the residual licensors €187 K in connection therewith. Under the terms of the license agreement, we are required to pay to the licensors low single-digit royalty payments on annual worldwide net sales.

- Term and termination:

The license agreement will continue in full force and effect until the later of (i) the expiration of the patent rights licensed to us under our license agreement with Inserm Transfert and (ii) ten years after the first commercial sale of the product in a country in which a royalty is paid, unless otherwise earlier terminated under the terms of the license agreement. Inserm Transfert may at its sole discretion convert the exclusive license under the agreement into a non-exclusive license or terminate the agreement if (a) we have not timely met any of the development milestones in the development plan; (b) we interrupt certain development activities in respect of any product for more than nine months; (c) we have

not put the product into commercial use and are not keeping the products reasonably available to the public within ten years of the effective date of the agreement; or (d) if we cease business operations to become the subject of a petition in bankruptcy.

Agreements Relating to GS030

Adverum Biotechnologies (formerly Avalanche Biotechnologies)

License Agreement for Patents Relating to GS030

- Object:

On February 23, 2014, we entered into a non-exclusive license agreement with Adverum. Under the license agreement, Adverum granted us a worldwide non-exclusive royalty-bearing sublicense, with a limited right to grant further sublicenses, under certain patents and patent applications to which Adverum has obtained certain rights from the Regents of the University of California, or the Regents, to use, make, have made, import, sell, and offer for sale products and services that comprise a recombinant adeno-associated virus serotype 2 7m8 vector, or AAV2 7m8, to deliver any of three genes (channelrhodopsin, halorhodospin or rod-derived cone viability factor) for the treatment of ocular diseases in humans.

- Obligations of GenSight:

Under our license agreement with Adverum, we are obliged to use commercially reasonable efforts to develop, manufacture and commercialize the licensed products at our own cost and expense in accordance with a specific development plan under the Adverum agreement and are obligated to achieve certain specified milestones, including regulatory approvals, by certain target dates. If we fail to achieve any of these milestones by its target date, we have the option to extend the target date by 12 months upon the payment of $50 K to Adverum for each such extension.

- Financial obligations:

We paid Adverum a one-time license fee of $30 K in addition to $145 K as reimbursement for past costs for preparing, filing, prosecuting and maintaining the licensed patent rights. Under the terms of the license agreement, we also are required to reimburse Adverum for all such present and future costs up to a maximum of $30 K per year, together with an annual license maintenance fee of $30 K (minus the patent expenses paid in the prior year). Further milestone payments on a product-by-product basis will be due, upon the achievement of certain milestone events.

Further, upon the sale of any products or services licensed under the Adverum agreement, we are required to pay to Adverum low-to mid-single-digit royalties on annual worldwide net sales of such licensed products and services. Our royalty payment obligations to Adverum endure on a country-by-country and product/service-by-product/service basis for so long as at least one valid claim of any patent sublicensed from Adverum covers the manufacture, use or sale of a given product/service in a given country.

- Obligations of Adverum:

Adverum is responsible for and retains sole control over the prosecution, filing, maintenance and enforcement of all patents licensed to us under the agreement.

- Term and termination:

The license agreement will continue in full force and effect on a country-by-country basis until there are no remaining royalty obligations in any country, at which time the agreement shall expire in such country, unless otherwise terminated by the parties in accordance with the terms of the license agreement. We may terminate the agreement at any time upon 90 days' prior written notice to Adverum, and Adverum may terminate the agreement in part or its entirety upon written notice to us if we assign the agreement in violation of its terms or fail to timely meet any of our specified development or milestones achievement obligations.

Upon the termination of the license agreement between Adverum and Regents, our license agreement with Adverum will survive, provided that, among other things, we will be required to make any monetary payments that Adverum would have been required to make under its agreement with Regents had it not been terminated.

Massachusetts Institute of Technology

License Agreement for Patents Relating to GS030

- Object:

On January 6, 2016, we entered into a license agreement with the Massachusetts Institute of Technology, or M.I.T., upon exercising an option right granted under the patent option agreement between M.I.T. and us, dated January 9, 2015. Under this license agreement, M.I.T. granted to us a royalty-bearing, license to certain patent rights jointly owned by M.I.T. and the University of Alberta, for use of the ChrimsonR or photoactivatable halorhodopsin protein (known as Jaws) gene expression sequences, in the retina for the prevention and treatment of blindness in humans. The license is exclusive but subject to the rights of M.I.T., the University of Alberta and any other non-profit research institute to practice under the patent for research, teaching and educational purposes, the U.S. government's royalty-free, non-exclusive, non-transferrable license to practice the patent, and certain mandatory third-party sublicensing requirements.

- Financial obligations:

Under the terms of this license agreement, we agreed to pay a license issue fee of $45 K, license maintenance fees up to $100 K per year and variable payments up to $7.3 million depending on the achievement of milestone events. We also agreed to pay running mid-single-digit royalties on future net sales.

This license agreement has been amended in April 2017, under which we will provide the M.I.T. with a written research and development plan no later than July 1, 2018.

This license agreement has been amended a second time in May 2018, under which we will provide the M.I.T. with a written research and development plan no later than July 1, 2019.

This license agreement shall remain in effect until the expiration or abandonment of all issued patents and patent applications under this license agreement, unless earlier terminated. We have the right to terminate this license agreement, for any reason, upon at least six months prior written notice to M.I.T., and upon payment of all amounts due to M.I.T. under the agreement. M.I.T. has the right to terminate this license agreement (i) immediately upon written notice if we cease to carry on our business related to the agreement, or (ii) if we fail to pay any amounts due and payable within 30 days.

6.13.6.1 Our Intellectual Property Estate Patents

We strive to protect and enhance the proprietary technology, inventions and improvements that are commercially important to the development of our business, including seeking, maintaining and defending certain patent rights licensed from third-parties. We also rely on trade secrets and know-how, continuing technological innovation and in-licensing opportunities to develop, strengthen and maintain our proprietary position in the fields of allogeneic transfer, optogenetics, gene therapy and specific optics and algorithms that may be important for the development of our business. We additionally may rely on regulatory protection afforded through data exclusivity, market exclusivity and patent term extensions where available. See Section 10, "Regulatory environment" of this Document.

Our future commercial success may depend, in part, on our ability to obtain and maintain patent and other proprietary protection for commercially important technologies, inventions and know-how related to our business; defend and enforce our in-licensed patents and any patents that we may own in the future; preserve the confidentiality of our trade secrets and proprietary know-how; and operate without infringing the patents and proprietary rights of third-parties. Our ability to stop third-parties from making, using, selling, offering to sell or importing our products may depend on the extent to which we have rights, either owned or in-licensed, under valid and enforceable patents, trade secrets or other know-how that cover these activities. In some cases, these rights may need to be enforced by third-party licensors.

Our rights to intellectual property, whether in-licensed, owned or co-owned are generally directed to methods of treatment or prevention of clinical indications important for our development programs, allotopic expression, mitochondrial trafficking, optogenetics, AAV vectors, transferring genetic material into cells, processes to manufacture and purify our product candidates, optics and other proprietary technologies and processes related to our product candidates. We also possess significant know-how and trade secrets relating to our product candidates.

In-licensed Patent Rights

As of the date of this Document, we in-licensed at least 16 U.S. and foreign patent applications and at least 8 U.S. and foreign patents, that have been filed by or on behalf of our licensors.

Product candidate	Owner	Title	Patent Term	Countries	Current status
LHON (GS010)	Inserm	Expression of mitochondrial protein by an enhanced allotopic approach	2026	United States European Union	European Union: granted, no opposition filed United States: one patent granted and one divisional pending
RP (GS030)	University of California (Adverum)	Adeno-associated virus virions with variant capsid and methods of use thereof	2032	Australia, Canada, Singapore, Israel, China, European Union, Korea, Japan, United States (2x), Russia, Mexico	Granted in US, EP, JP, CN and AU
RP (GS030)	M.I.T.	Channelrhodopsins for optical control of cells	2032	Korea, United States, European Union, Hong Kong	United-States: pending Granted in Europe, no opposition filled

With regard to the GS010 product candidate, as discussed above, we have in-licensed a patent family from Inserm Transfert that relates to an expression vector for the delivery of a protein into the mitochondrion of a mammalian cell and the uses thereof. This patent family contains one issued U.S. patent, one pending U.S. application and one granted European patent. The granted European patent and the pending U.S. application, if issued, are expected to expire in 2026, subject to possible patent term extensions.

With regard to the GS030 product candidate, as discussed above, we have exclusively in-licensed from M.I.T. patent applications pending in the United States, Hong Kong and South Korea and a granted European patent directed to ChrimsonR. The granted European patent and pending applications, if issued, are expected to expire in 2032, subject to possible patent term extensions. In addition, as discussed above, we have non- exclusively in-licensed from Adverum a patent family that relates to the AAV2 7m8

vector, with patents granted in the U.S., Europe, China, Australia, and Japan, and patent applications pending in Canada, Israel, South Korea, Mexico, Singapore, Russia, South Africa and Brazil, where the granted patents and pending applications, if issued, are expected to expire in 2032, subject to possible patent term extensions.

Product candidate	Owner	Title	Patent Application Number	Filing date	Countries	Current status
RP (GS030)	GenSight Biologics UPMC CNRS INSERM	Optogenetic visual restoration using ChrimsonR	US62/329692	29/04/2016	United States, European Union, China, Japan, Korea, Canada, Australia	Pending
RP (GS030)	GenSight Biologics UPMC CNRS INSERM	Device for illuminating an object with a controlled light intensity and associated method	EP16305741.7	17/06/2016	United States, European Union, China, Japan, Korea, Canada, Australia	Pending
RP (GS030)	GenSight Biologics UPMC CNRS INSERM	Medical device intended to be worn in front of the eyes	EP16306005.6	02/08/2016	United States, European Union	Pending
RP (GS030)	GenSight Biologics UPMC CNRS INSERM	Objective, camera and system adapted for optogenetics	EP17305805.8	28/06/2017	PCT	International phase
RP (GS030)	GenSight Biologics	Method and device for processing asynchronous signals generated by an event-based light sensor	EP 18305020.2	11/01/2018	PCT	International phase
LHON (GS010)	GenSight Biologics	Recombinant AAV2 vectors and methods of using the same	US62/683,501	11/06/2018		Priority filing
RP (GS030)	GenSight Biologics	Method for controlling an optogenetic device using a command law for the radiant power of a light source and associated devices	EP19305135.6	05/02/2019		Priority filing
RP (GS030)	GenSight Biologics	Method for controlling an optogenetic device using filtering and associated devices	EP19305136.4	05/02/2019		Priority filing

Trademarks

GenSight is a registered Community Trade Mark covering all 28 member States of the European Union. We may, in the future, file additional applications to register "GenSight" in other territories and/or file applications for trademarks covering our products and/or services in certain markets of interest. See Section 4.5, "Legal Risks and Risks Related to our Intellectual Property – Our trademarks and trade names may not be adequately protected and we may not be able to build name recognition in our markets of interest" and Section 19.6, "Legal and Arbitration Proceedings" of this Document.

ORGANIZATIONAL CHART

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On April 28, 2017, the Company incorporated its first subsidiary, Gensight Biologics Inc., a Delaware corporation, registered and located in the United States of America. This US-based subsidiary is wholly owned by GenSight Biologics S.A.

OPERATING AND FINANCIAL REVIEW

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The following information concerning our financial condition and results of operations is derived from our consolidated financial statements prepared in accordance with IFRS as adopted by the European Union as of and for the fiscal year ended December 31, 2018 and should be read in conjunction with our consolidated financial statements prepared in accordance with IFRS as adopted by the European Union as of and for the fiscal year ended December 31, 2018 included in Section 19.1.1, "Company's Annual Consolidated Financial Statements (IFRS) for the Fiscal Year Ending December 31, 2018" to this Document.

Our consolidated financial statements were prepared in accordance with IFRS as adopted by the European Union for the fiscal years in question. Deloitte & Associés and Becouze have audited our consolidated financial statements as of and for the fiscal year ended December 31, 2018. The report of our Statutory Auditors for the consolidated financial statements included in this Document is included in Section 19.1.2.

The main differences between IFRS as adopted by the European Union and French GAAP affecting the financial position and results of operations of the Company are broken down as follows for the year ended December 31, 2018:

In thousands of euros	*2018*
Statutory net loss under French GAAP	***(32,188)***
GenSight Inc. result (loss)	*(653)*
Share-based payments	*(2,422)*
Financial provisions	*1,745*
Intangible assets	*(18)*
Employee benefits	*(29)*
Net (gain) / loss from the sale of Treasury Stocks	*36*
Unrealized gains on financial assets	*77*
Net loss under IFRS	***(33,453)***

Share-based payments

Under French GAAP, share-based compensation related to the grant of equity instruments is not recognized in the income statement. Under IFRS, the cost of the transactions paid with equity instruments is recognized as an expense in exchange for an increase in the shareholders' equity.

Financial provisions

Under French GAAP, a provision related to the current account with the subsidiary has been booked for a total amount of €1,745K.

Intangible assets

Under IFRS, an intangible asset was recognized and amortized in the context of a license agreement. The acquisition of this license has resulted in the issuance of ordinary shares as consideration paid for the license.

Employee benefits

Under French GAAP, the Company has chosen not to recognize liabilities in relation to long-term employee benefits. Under IFRS, a liability has to be recognized for employee benefits for the defined benefit obligation and is measured as the present value of benefits that have accrued to employees through services rendered up to that date, based on actuarial methods of calculation.

Net (gain) / loss from the sale of Treasury Stocks

Under IFRS, the Net (gain) / loss from the sale of treasury stocks are not recognized in the income statement, but as part of equity, in Consolidation Adjustments.

Unrealized gains on financial assets

Under French GAAP, the Company recorded financial assets at cost, being the acquisition price. Potential loss at year end is recognized through income and unrealized gains are not recognized. Under IFRS, money market funds are measured at fair value, with unrealized gains being recognized through income as the Company has designated these financial assets at fair value through profit and loss.

The table below sets forth the statements of income data as of December 31, 2018 and 2017:

	As of December 31,	
In thousands of euros	2017	2018
Operating income		
Revenues	—	—
Other income	3,702	4,346
Total operating income	**3,702**	**4,346**
Operating expenses		
Research and development	18,675	29,031
General and administrative	8,173	7,010
Sales and marketing	844	1,350
Total operating expenses	**27,692**	**37,391**
Operating profit (loss)	**(23,990)**	**(33,045)**
Financial income	34	44
Financial expenses	(156)	(452)
Financial income (loss)	**(122)**	**(408)**
Income tax	—	—
Net income (loss)	**(24,112)**	**(33,453)**
Basic and diluted earnings (loss) per share[1]	**(1.10)**	**(1.37)**
Number of shares used for computing basic and diluted earnings (loss) per share	21,936,006	24,466,559

(1) See Note 21 to our consolidated financial statements as of and for the fiscal year ended December 31, 2018 for further details on the calculation of basic and diluted earnings (loss) per share.

8.1 OVERVIEW

We are an innovative clinical-stage gene therapy company with an initial focus on discovering, developing and commercializing novel therapies for severe retinal neurodegenerative diseases. We are developing a pipeline of proprietary product candidates to provide patients with a long-lasting cure for severe inherited retinal diseases for which there are no currently approved treatments. Our current product candidates are designed to be administered in a single treatment to each eye by intravitreal, or IVT, injection. We are leveraging our expertise in ophthalmology, gene therapy and drug development to restore vision by combining a gene therapy-based approach with our proprietary technology platforms of mitochondrial targeting sequence, or MTS, and optogenetics. We believe our technology platforms have broad applicability both within and outside of ophthalmology as well as central nervous system, or CNS, disorders. Our lead product candidate, GS010, is a recombinant AAV2-based gene therapy for the treatment of Leber Hereditary Optic Neuropathy, or LHON, and is currently in Phase III clinical trials. We reported data from our two most advanced ongoing Phase III clinical trials for GS010, REVERSE and RESCUE, in April 2018 and February 2019, respectively. Our second most advanced product candidate, GS030, for the treatment of Retinitis Pigmentosa, or RP, is currently in an ongoing Phase I/II trial. We enrolled the first subject in this orphan family of diseases in October 2018.

We have never generated any revenues from product sales. We do not expect to generate material revenue from product sales unless and until we successfully complete development of, and obtain marketing approval for, one or more of our product candidates, which we expect will take a number of years and is subject to significant uncertainty. To date, we have financed our operations primarily through private placements of ordinary shares and preferred shares, and through conditional advances and non-refundable subsidies received from Bpifrance Financement, part of Bpifrance, a French public investment bank, and sales of our ordinary shares in connection with the initial public offering of our ordinary shares on Euronext Paris in July 2016.

All of our operating losses resulted from costs incurred in connection with our development programs and from general and administrative expenses associated with our operations. See Section 4.1, "Financial Risks". We expect to incur substantial losses from operations in the foreseeable future as we continue our research and development efforts, advance GS010, GS030 and other product candidates through preclinical and clinical development, seek regulatory approval and prepare for and, if approved, proceed to commercialization. Specifically, we have

incurred and we expect to continue to incur substantial expenses in connection with any Phase III clinical trials, as well as Chemistry Manufacturing and Controls, or CMC, activities that we may conduct for GS010 and our planned preclinical and clinical studies for GS030. We anticipate that our expenses will increase substantially in connection with our ongoing activities, as we:

- continue the development of our product candidates, including planned and future clinical trials;
- seek regulatory approvals for our product candidates;
- prepare for the potential launch and commercialization of our product candidates, if approved;
- establish a sales and marketing infrastructure for the commercialization of our product candidates, if approved; and
- add operational, financial and management information systems and personnel, including personnel to support our product development and commercialization efforts and operations as a French public company.

Until such time that we can generate substantial revenue from product sales, we expect to finance these expenses and our operating activities through a combination of our existing liquidity and proceeds from any additional future financing. If we are unable to generate revenue from product sales, in particular from GS010, in accordance with our desired timeframes, we will need to raise additional capital. However, we may be unable to raise additional funds or enter into other funding arrangements when needed on favorable terms, or at all, which would have a negative impact on our financial condition and could force us to delay, limit, reduce or terminate our development programs or commercialization efforts or grant other rights to develop or market product candidates that we would otherwise prefer to develop and market ourselves. Failure to receive additional funding could cause us to cease operations, in part or in full.

As indicated in Note 2 of our consolidated financial statements for the period ended December 31, 2018, such consolidated financial statements have been prepared in accordance with International Financial Reporting Standards, or IFRS, issued by the International Accounting Standards Board, or IASB, as adopted by the European Union. IFRS includes the International Accounting Standards, or IASs, approved by the IASB and the accounting interpretations issued by the International Financial Reporting Interpretations Committee, the former Standing Interpretations Committee.

8.2 FINANCIAL OPERATIONS OVERVIEW

8.2.1 OPERATING INCOME

Our operating income consists of revenues and other income.

8.2.2 REVENUES

To date, we have not generated any revenue from the sale of our products.

Our ability to generate product revenue and become profitable depends upon our ability to successfully develop and commercialize our product candidates. Because of the numerous risks and uncertainties associated with product development, we are unable to predict the amount or timing of product revenue. None of our product candidates have completed clinical development. We reported top-line results from our two most advanced Phase III trials for GS010, REVERSE and RESCUE, in April 2018 and February 2019, respectively. Even if we are able to bring GS010 or our other product candidates at earlier stages of development through to commercialization, we may be unable to continue our operations at planned levels and be forced to reduce our operations.

8.2.3 OTHER INCOME

Our other income consists of subsidies and conditional advances and research tax credits.

Subsidies and Conditional Advances

Due to the innovative nature of our product candidate development programs, we have benefited from subsidies and conditional advances from Bpifrance Financement. Bpifrance Financement's mission is to provide assistance and support to emerging French companies to facilitate the development and commercialization of innovative technologies.

The funds we have received are intended to finance our research and development efforts and the recruitment of specific personnel. Such funding is in the form of non-refundable subsidies and conditional advances.

We account for non-refundable subsidies as other income ratably over the duration of the funded project. Funds are recognized in other income in our statement of income (loss) for the fiscal year in which the financed expenses or expenditures were recorded. Since inception, we have received a grant from Bpifrance Financement of a non-refundable subsidy of €1,147 K (of which €865 K was received in December 2014) in connection with our development of product candidates using our optogenetics technology platform. The received non-refundable subsidy was fully amortized over 2014 and 2015, and we do not expect to receive any additional subsidies.

Funds received from Bpifrance Financement in the form of conditional advances have been recognized as financial liabilities, as we are obligated to reimburse Bpifrance Financement for such conditional advances in cash based on a repayment schedule and are not included in other income.

For more information with respect to the subsidies and conditional advances, see Section 9.3, "Funding Sources" of this Document.

Research Tax Credits

The research tax credit *(crédit d'impôt recherche)*, or CIR is granted to companies by the French tax authorities in order to encourage them to conduct technical and scientific research and included as other income. Companies demonstrating that they have expenditures that meet the required criteria, including research expenditures located in France or, since January 1, 2005, within the European Community or in another State that is a party to the Agreement on the European Economic Area that has concluded a tax treaty with France that contains an administrative assistance clause, receive a tax credit that can be used against the payment of the corporate tax due the fiscal year in which the expenditures were made and during the next three fiscal years, or, as applicable, can be reimbursed for the excess portion. The expenditures taken into account for the calculation of the CIR only involve research expenses.

The main characteristics of the CIR are the following:

- the CIR results in a source of cash inflow for us from the tax authorities, since it is used to offset the payment of corporate tax or is paid directly to us for the portion that remains unused for corporate tax;
- a company's corporate tax liability does not limit the amount of the CIR – a company that does not pay any corporate tax can request direct cash payment of the research tax credit; and
- the CIR is not included in the determination of the corporate tax.

As a result, we have concluded that the CIR meets the definition of a government grant as defined in IAS 20 Accounting for Government Grants and Disclosure of Government Assistance and, as a result, it has been classified as other income within operating income in our statement of income (loss).

We requested the reimbursement of the 2016 CIR under the Community tax rules for small and medium-sized companies in compliance with the regulatory texts in effect and we received the reimbursement in August 2017. We requested the reimbursement of the 2017 CIR in the amount of €3.7 million, which was received in September 2018. We have requested the reimbursement of the 2018 CIR in the amount of €4.3 million but which is expected to be reimbursed during fiscal year 2019.

Legislative or regulatory changes relating to CIR or challenges by the French tax authorities with respect to our research expenditures or our eligibility to receive CIR could have a material adverse effect on our ability to operate our business and our financial condition, results of operations and prospects.

8.2.4 OPERATING EXPENSES

Since inception, our operating expenses have consisted primarily of research and development activities and general and administrative costs and since 2017, marketing and sales expenses.

8.2.4.1 Research and Development

We engage in substantial research and development efforts to develop innovative pharmaceutical product candidates. Research and development expenses consist primarily of:

- sub-contracting, collaboration and consultant expenses, that primarily include the cost of third-party contractors such as contract research organizations, or CROs, who conduct our non-clinical studies and clinical trials;
- personnel costs, including salaries, related benefits and share-based compensation, for our employees engaged in scientific research and development functions, and which includes contributions required by French law related to certain share-based compensation, which we refer to as social contributions;
- licensing and intellectual property costs, including upfront payment for exclusive licensing;
- purchases, real-estate leasing costs and rental income received from sublease agreements, as well as conferences and travel costs; and
- depreciation and amortization.

Our research and development expenses in the periods presented, and for the current period to date, mainly relate to the following activities:

- **GS010:** Our Phase I/II dose-escalation safety study for GS010 was completed in 2016 and a follow-up study is currently ongoing. In 2017, we reported additional clinical trial results with the product candidate after two and two and a half years of follow-up in our Phase I/II study. GS010 entered into Phase III trials, RESCUE and REVERSE, in the fourth quarter of 2015, following the release of our investigational new drug, IND, application by the U.S. Food and Drug Administration, or the FDA. The trials are designed as a double-masked, sham-controlled, multi-center, multi-country clinical trial in Europe and the United States. We completed enrollment of all 37 subjects for REVERSE and 39 subjects for RESCUE in February and August 2017, respectively. Top-line results for REVERSE at 48 and 72 weeks were reported in April and October 2018, respectively. Top-line results for RESCUE at 48 and 72 weeks were reported in February and April 2019, respectively. REFLECT, a bilateral Phase III clinical trial conducted pursuant to a special protocol assessment with the FDA, was initiated in 2018. We plan to complete the enrollement of the 90 patients by the end of Q2 2019.

- **GS030:** From 2014 to 2016, we conducted preclinical proof-of-concept studies with different molecules that led to the discovery of GS030. In 2017, we have initiated good laboratory practice, toxicology studies on non-human primates. We received the approval to initiate Phase I/II clinical trials in December 2017. The first subject was treated in the United Kingdom in October 2018.

Our direct research and development expenses consist primarily of external costs, such as manufacturing expenses, non-clinical studies, startup fees paid to investigators, consultants, central laboratories and CROs in connection with our clinical trials, acquiring and manufacturing clinical trial materials and costs related to collaborations, which we allocate to our specific research programs. In addition, we allocate personnel-related costs, depreciation and other indirect costs to specific programs.

Research and development activities are central to our business. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of preclinical and clinical development, primarily due to the increased size and duration of later-stage clinical trials, as well as the ramp-up of CMC and manufacturing activities in preparation for regulatory submission, and ultimately commercialization. We expect that our research and development expenses will continue to increase in the foreseeable future as we initiate clinical trials for our product candidates, and complete clinical development and prepare for commercialization of other product candidates.

We cannot determine with certainty the duration or costs of the current or future clinical trials of our product candidates or if, when, or to what extent we will generate revenue from the commercialization and sale of any of our product candidates that obtain regulatory approval. We may never succeed in achieving regulatory approval for any of our product candidates. The duration, costs and timing of clinical trials and development of our product candidates will depend on a variety of factors, including:

- the scope, rate of progress and expense of our ongoing, as well as any additional, non-clinical studies, clinical trials and other research and development activities;
- clinical trial and early-stage results;
- the terms and timing of regulatory approvals;
- the expense of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights; and
- the ability to market, commercialize and achieve market acceptance for GS010, GS030 or any other product candidate that we may develop in the future.

A change in the outcome of any of these variables with respect to the development of GS010, GS030 or any other product candidate that we are developing could mean a significant change in the costs and timing associated with the development of such product candidates. For example, if the FDA, the EMA or other regulatory authority were to require us to conduct non-clinical and clinical studies beyond those which we currently anticipate will be required for the completion of clinical development, or if we experience significant delays in enrollment in any clinical trials, we could be required to spend significant additional financial resources and time on the completion of clinical development. For a discussion on the risks associated with completing the development projects on schedule, see Section 4.2, "Risks Related to the Discovery and Development of and Obtaining Regulatory Approval for Our Product Candidates.".

8.2.4.2 General and Administrative

General and administrative expenses consist primarily of personnel costs and share-based compensation for personnel other than research and development or sales and marketing staff. General and administrative expenses also consist of fees for professional services, mainly related to audit, IT, accounting, recruitment and legal services, communication and travel costs, real-estate leasing costs, office furniture and equipment costs, allowance for amortization and depreciation, directors' attendance fees, insurance costs and overhead costs, such as telecommunications expenses.

We anticipate that our general and administrative expenses will increase in the future as we grow our support functions for the expected increase in our research and development activities and the potential commercialization of our product candidates. We also anticipate increased expenses associated with being a public company in France, including costs related to audit, legal, regulatory and tax-related services associated with maintaining compliance with Euronext Paris listing and AMF requirements, director and officer insurance premiums, and media and investor relations costs.

8.2.4.3 Sales and Marketing

Sales and marketing expenses consist primarily of professional fees, communication and branding fees and personnel costs. If and when we believe that regulatory approval of the first product candidate appears likely, we anticipate an increase in payroll and related expenses as a result of our preparation for commercial operations.

In the meantime, we anticipate some increased expenses related to our current activities and pursuing investments, as required.

8.2.4.4 Finance Income (Expense)

Our financial expenses exclusively relate to foreign currency losses related to the purchase of services denominated in U.S. dollars.

Our cash and cash equivalents have been deposited only in a non-interest bearing current account. We expect to follow an investment philosophy whereby our cash and cash equivalents are deposited primarily in savings and money market and time deposit accounts with original maturities of three months or less. We expect our savings and deposit accounts and marketable securities to generate a modest amount of interest income.

8.2.5 CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our consolidated financial statements are prepared in accordance with IFRS. Some of the accounting methods and policies used in preparing our financial statements under IFRS are based on complex and subjective assessments by our management or on estimates based on past experience and assumptions deemed realistic and reasonable based on the circumstances concerned. The actual value of our assets, liabilities and shareholders' equity and of our earnings could differ from the value derived from these estimates if conditions change and these changes had an impact on the assumptions adopted. We believe that the most significant management judgments and assumptions in the preparation of our financial statements are described below. See Note 3 to our consolidated financial statements for the period ended December 31, 2018 for a description of our other significant accounting policies.

Licenses Recognized as Intangible Assets

As of December 31, 2013, we recorded an intangible asset relating to exclusive in-licenses for two patent families from Novartis Pharma AG. We issued 670,588 ordinary shares as consideration paid for the exclusive licenses. Given that the fair value of the licenses cannot be reliably estimated, in accordance with IFRS2 Share-based Payment, or IFRS2, the amount of the intangible asset being recognized was determined by reference to the fair value of the ordinary shares that we issued based on an independent valuation. The licenses are being amortized over 15 years from February 2013, the date the licenses were entered into, which corresponds to the expected useful life of the licenses.

Conditional Advances

In 2014, we received a grant from Bpifrance Financement of both subsidies and conditional advances in relation to the development of our optogenetics technology platform. The program will be funded according to a specified schedule set forth in the contract, subject to completion of milestones. As the program advances, we will provide Bpifrance Financement with interim progress reports and a final report when the funded project ends. Based on these reports, we are entitled to conditional advances from Bpifrance Financement.

Each award of an advance is made to help fund a specific development milestone. The total amount of the conditional advances initially granted was €5.7 million, of which €678 K was received in December 2014 and €2.3 million was received in July 2016 and recognized as non-current liabilities in our statement of financial position, as this conditional advance is repayable by us according to a repayment schedule.

Our contract with Bpifrance Financement sets forth a repayment schedule that totals a maximum amount of €6.5 million, based on the assumption that we received the €5.7 million for total conditional advances. Following the repayment of the conditional advances, we may be required to make additional payments over a period of two years of up €2.7 million (€1.2 million the first year and €1.6 million the second year), depending on whether we reach cumulative revenues, excluding taxes, of €80.0 million by 2037. Our obligation to repay these amounts is based on the technical and commercial success of the funded program, as determined by the revenue forecasts or revenues deriving from direct or indirect exploitation of the products and results of our optogenetics technology platform. In the event Bpifrance Financement determines that the program is not successful, Bpifrance Financement will meet with us to assess the impact on the repayments and the repayment schedule.

Actual results related to the development of these programs may differ from these estimates in which case the financial liability reflected in our consolidated financial statements for the conditional advances may be reduced. Notably, after review and analysis of the stage of completion of the remaining milestones, level of expenses that have been incurred as of December 31, 2018, and given that the term of the initial agreement is set on November 30, 2019; the Group has made the assumption that it would not be able to complete the key milestones on time and therefore should not receive any more conditional advance from Bpifrance Financement. As a consequence, the remaining conditional advance contractually agreed, representing a total amount of €2,333 K should not be received by the Company.

The current and non-current portions of the financial liability recognized in our consolidated financial statements associated with these conditional advances are determined based on the applicable reimbursement schedules at the end of each reporting period and measured using the effective rate method. The portion of the conditional advances for terms longer than one year are classified as non-current liabilities while the portion for terms of less than one year are classified as current liabilities.

Share-Based Compensation

We have granted share-based warrants in the form of share warrants for founders (*Bons de Souscription de Parts de Créateur d'Entreprise*, or BCE) and share warrants (*Bons de Souscription d'Actions*, or BSA), stock options (*Options de souscription ou d'achat d'actions*, or SO) and free shares (*Attributions gratuites d'actions*, or AGA), since January 1, 2016 with the following exercise prices for each of the grant dates reflected below:

Grant date	Number of **warrants granted**	Exercise price per share	Ordinary share fair market value per share at grant date	Per share fair value of warrants granted
July 8, 2013	892,000	€0.025	€1.025	€0.44
July 8, 2013	328,000	€0.025	€1.025	€0.36
April 9, 2014	193,800	€0.025	€1.025	€0.44
April 9, 2014	33,000	€0.025	€1.025	€0.36
December 3, 2014	60,000	€0.025	€2.150	€2.15
July 8, 2015	733,298	€3.275	€7.800	€5.56
July 8, 2015	121,000	€3.275	€7.800	€5.31
July 26, 2016	205,000	€8.080	€8.000	€2.94
July 27, 2017	165,000	€5.040	€5.15	€1.64
September 18, 2018	20,000	€2.22	€3.74	€2.02

Grant date	Number of **stock options** granted	Exercise price per share	Ordinary share fair market value per share at grant date	Per share fair value of warrants granted
July 27, 2017	220,000	€5.04	€5.12	€2.09
December 19, 2017	300,000	€5.55	€5.55	€2.20
March 14, 2018	175,000	€6.98	€6.98	€2.63
September 18, 2018	30,000	€2.19	€2.10	€0.91

Grant date	Number of **free shares granted**	Ordinary share fair market value per share at grant date
July 26, 2016	766,000	€8.00
July 27, 2017	593,500	€5.12
December 19, 2017	72,500	€5.55
September 18, 2018	380,000	€2.10
December 19, 2018	135,000	€4.04

We account for share-based compensation in accordance with IFRS2. Under the fair value recognition provisions of this guidance, share-based compensation is measured at the grant date based on the fair value of the award and is recognized as expense, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the respective award. Our determination of the fair value of the warrants and ordinary shares is described below:

Fair Value of Our Warrants

We use the Black-Scholes option-pricing model to determine the fair value of warrants. Use of this valuation method requires management to apply judgment and make estimates, including:

- the expected term of our share-based warrants;
- the volatility of our ordinary shares;
- the risk-free rate for a period that approximates the expected term of our share-based warrants;
- the expected dividend yield; and
- the fair value of our ordinary shares on date of grant.

To determine the grant date fair value of share-based warrants, these complex and subjective variables are estimated as follows:

Expected Term. The expected term represents the period that our share-based awards are expected to be outstanding. As we do not have sufficient historical experience for determining the expected term of the warrant awards granted, we have based our expected term on the simplified method, which represents the average period from vesting to the expiration of the award.

Expected Volatility. As we do not have a sufficient amount of trading history for our ordinary shares to make reliable volatility estimates, the expected share price volatility for our ordinary shares was estimated by taking the average historic price volatility for industry peers based on daily price observations over a period equivalent to the expected term of the warrant grants. We did not rely on implied volatilities of traded warrants and options in our industry peers' shares because the volume of activity was relatively low. We intend to continue to consistently apply this process using the same or similar public companies until a sufficient amount of historical information regarding the volatility of our own ordinary share price becomes available.

Risk-Free Interest Rate. The risk-free interest rate is based on the yields of France Treasury securities with maturities similar to the expected term of the warrant for each warrant group.

Dividend Yield. We have never declared or paid any cash dividends and do not presently plan to pay cash dividends in the foreseeable future. Consequently, we used an expected dividend yield of zero.

If any of the assumptions used in the Black-Scholes model changes significantly, share-based compensation for future awards may differ materially compared with the awards granted previously.

The following table presents the weighted-average assumptions used to estimate the fair value of warrants and stock options granted during the periods presented:

BCE / BSA

	As of December 31,	
	2017	2018
Volatility	49.37%	58.02%
Risk-free interest rate	-0.2%	0.1%
Expected life (in years)	4.25 years	4.25 years
Dividend yield	— %	— %

Stock Options

	July 27, 2017	December 19, 2017	March 14, 2018	September 18, 2018
Volatility	51.09%	50.36%	48.75%	58.02%
Risk-free interest rate	-0.1%	-0.2%	-0.1%	0.1%
Expected life (in years)	4.25 years	4.25 years	4.25 years	4.25 years
Dividend yield	— %	— %	— %	— %

Fair Value of Our Ordinary Shares.

Since being listed on Euronext Paris in July 2016, the fair value of our ordinary shares generally has been determined by reference to the closing price of a share on the grant date.

8.3 RESULTS OF OPERATIONS

Comparisons for the Twelve Months Ended December 31, 2017 and 2018

Operating Income

We generated operating income of €3.7 million in 2017 and €4.3 million in 2018, an increase of 17.4%. Operating Income was mainly generated by our CIR.

	As of December 31,	
In thousands of euros	2017	2018
Revenues	—	—
Other income	3,702	4,346
CIR	3,692	4,322
Subsidies	10	24
Total operating income	3,702	4,346

As no research and development expenditure is capitalized before obtaining a marketing authorization, the CIR related to a research program is entirely recorded as operating income.

For 2017, we recorded other income related to CIR of €3.7 million, which was reimbursed in cash in September 2018. We requested the reimbursement of the 2018 but which is expected to be reimbursed during fiscal year 2019.

Research and Development Expenditures

From 2017 to 2018, the total amount spent by us for research and development activities significantly increased, from €18.7 million in 2017 to €29.0 million as at December 2018.

	As of December 31,	
In thousands of euros	2017	2018
Personnel expenses[1]	4,734	4,691
Sub-contracting, collaboration and consultants	11,672	21,288
Licensing and intellectual property	155	752
Offices costs	516	727
Travel and entertainment expenses	1,065	760
Allowance for amortization	184	270
Others	348	543
Total research and development expenses	**18,675**	**29,031**

(1) Includes €1.5 million and €1 million related to share-based compensation expense for 2017 and 2018, respectively.

The increase of research and development expenditures from year to year resulted from:

- 82.4% or €9,616 K increase in sub-contracting, collaborations and consultants, that includes the costs of service providers in connection with conducting our clinical trials in 2018, and notably our Phase III trials for GS010, RESCUE, REVERSE and REFLECT, as well as our Phase I/II trial for GS030, PIONEER.
- 385.2% or €597 K increase in licensing and intellectual property, explained by the achievement of the contractual milestone following the enrollement of the first patient in the phase I trial of GS030.

The table below summarizes our research and development expenses incurred by program:

	As of December 31,	
In thousands of euros	2017	2018
Direct research and development expense by program:		
GS010	8,295	18,074
GS030	3,968	4,011
Total direct research and development expense	12,263	22,085
Personnel related (including share-based compensation)	4,734	4,691
Indirect research and development expense	1,678	2,255
Total research and development expenses	**18,675**	**29,031**

General and Administrative Expenses

During the period presented, our general and administrative expenses decreased from €8.2 million in 2017 to €7.0 million in 2018.

Our general and administrative expenses are broken down as follows:

	As of December 31,	
In thousands of euros	2017	2018
Personnel expenses[1]	5,824	2,993
Fees	756	2,062
Communication and travel expenses	897	1,051
Real estate property rental	288	255
Office furniture and small equipment	68	146
Postal and telecommunication expenses	14	25
Allowance for amortization and depreciation	40	45
Directors attendance fees and expenses	136	150
Insurance and banking fees	56	48
Equipment rental	11	3
Others	86	232
Total G&A expenses	**8,173**	**7,010**

(1) Includes €3.2 million and €1.1 million related to share-based compensation expense as of December 31, 2017 and 2018, respectively.

The decrease in our general and administrative expenses (14.2% or €1.1 million) from year to year mainly results from:

- a 48.6% or €2.8 million decrease in total payroll. It derived from a decrease of €2.1 million in share-based compensation expenses related to the grant of warrants and free shares to employees; as well as a decrease of €835 K in the accrual for social contribution related to the free shares; partly offset by the following:
  - an increase of €1.3 million in professional fees, related mainly to lawyers and audit fees,
  - an increase of €154 K in communication and travel expenses, and
  - an increase of €160 K in office furniture and small equipment.

Sales and Marketing Expenses

The majority of the sales and marketing expenses in 2018 correspond to consulting fees.

	As of December 31,	
In thousands of euros	2017	2018
Personnel expenses[1]	53	658
Fees	627	493
Communication and travel expenses	129	39
Office costs	26	108
Others	8	52
Total S&M expenses	844	1,350

(1) Includes €13 K and €340 K related to share-based compensation expense as of December 31, 2017 and 2018, respectively.

The increase in Personel expenses is explained by the full-year impact of the salary of our VP, Marketing, as well as the increase of €327 K in share-based compensation expenses.

Operating Loss

Our operating loss increased from €(24.0) million in 2017 to €(33.0) million in 2018. As described above, this is mainly due the greater costs related to conducting our clinical trials and notably our Phase III trials for GS010, RESCUE, REVERSE and REFLECT, as well as our phase I/II trial for GS030, PIONEER.

Financial Loss

Our net financial loss increased from €(122)K in 2017 to €(408) K in 2018. Our financial income increased from €34 K in 2017 to €44 K in 2018. We did not invest in securities and cash equivalents in 2018, therefore the financial income only arose from the foreign exchange gains coming from the purchase of services denominated in U.S. dollars. We generated foreign exchange losses of €(77) K in 2017 and €(43) K in 2018, also related to the purchase of services denominated in foreign currencies, primarily in U.S. dollars. Our interest expenses corresponding to accrued interests of conditional advances have increase from €(76) K to €(408) K.

CAPITAL RESOURCES

9

9.1 OVERVIEW

We have financed our operations since inception primarily through private placements of equity securities and sale of ordinary shares, raising a total of €112.4 million net of transaction-related costs as of December 31, 2018 including, *inter alia*, the sale of Series B preferred shares for which we received net proceeds of €30.8 million in a private placement which occurred on July 2015, the sale of ordinary shares in our initial public offering on Euronext Paris in July 2016 for which we received net proceeds of €41.4 million, the capital increase in June 2017 whose net proceeds amounted to €20.7 million, as well as the capital increase in February 2019, entirely subscribed by Sofinnova, whose net proceeds amounted to €7.9 million.

9.2 ANALYSIS OF CASH FLOW

The table below summarizes our sources and uses of cash for the years ended December 31, 2017 and 2018:

	As of December 31,	
In thousands of euros	2017	2018
Net cash flows from operating activities	(18,782)	(28,383)
Net cash flows from investment activities	(684)	(663)
Net cash flows from financing activities	20,946	(115)
Net (decrease)/increase in cash and cash equivalents	**1,480**	**(29,160)**

Our net cash flows from operating activities were €(18.8) million and €(28.4) million for 2017 and 2018, respectively. During 2018, we pursued our efforts in advancing our research and development programs, mainly GS010, that progressed into three Phase III trials, as well as the ramp-up of CMC and manufacturing activities in preparation for regulatory submission, and ultimately commercialization. Our net cash from operating activities in 2018 consisted primarily of a net loss of €(33.5) million adjusted of non-cash items, including share-based payments of €2.4 million, retirement pension obligations of €28 K, amortization and depreciation of €315 K and other financials items of €408 K.

Changes in working capital amounted to €202 K and €1,896 K for 2017 and 2018, respectively. The significant items in the change in working capital in 2018 include an increase in the trade payables of €5,233 K - mainly coming from the increase in subcontracting and collaborations costs that includes the costs of service providers in connection with conducting manufacturing activities, non-clinical studies and clinical trials in 2018, partially offset by an increase in prepaid expenses of €2,565 K, mainly deriving from advances paid to manufacturers, as well as an increase in other taxes receivables and Research Tax Credit, for a total amount of €914 K.

Our net cash flows from investment activities were €(684) K and €(663) K in 2017 and 2018, respectively. These mainly derive from the purchase of leasehold improvement, furnitures and technical equipments for a total amount of €(789) K, mostly for our U.S. subsidiary.

Our net cash flows from financing activities decreased from €20.9 million in 2017 to €(115) K in 2018. In June 2017, we received net proceeds of €20.7 million from the issuance of ordinary shares.

9.3 FUNDING SOURCES

During 2016 and 2017, we obtained new financing by both issuance of securities and receipt of conditional advances from Bpifrance Financement.We did not get any new financing in the course of 2018 and completed a capital increase of €7.9 million in the beginning of 2019.

In K€	Equity capital	Conditional advances	Subsidies	Total
2014 (including financing and advances received prior to 2014)	19,436	678	865	20,979
2015	30,837	–	–	30,837
2016	41,439	2,279	–	43,718
2017	20,724	–	–	20,724
2019 (as of the date of this Document)	7,912	–	–	7,912
Total	**120,348**	**2,957**	**865**	**124,170**

On July 7, 2015, we sold 4,624,871 Series B preferred shares for which we received net proceeds of €30.9 million in a private placement.

On July 8, 2015, we issued 1,833,247 warrants for which we received proceeds of €30 K.

On July 13, 2016, we issued 5,000,000 ordinary shares for which we received net proceeds of €36.4 million in our initial public offering on Euronext Paris.

On August 10, 2016, we issued 655,859 ordinary shares for which we received net proceeds of €5.0 million after exercising the overallotment option in connection with our initial public offering on Euronext Paris.

On September 3, 2016, we issued 112,000 ordinary shares for which we received net proceeds of €3 K in connection with the exercise of share warrants.

On October 6, 2016, we issued 32,720 ordinary shares for which we received net proceeds of €4 K in connection with the exercise of share warrants.

On October 31, 2016, we issued 205,000 warrants for which we received proceeds of €133 K.

On June 27, 2017, we issued 3,750,000 ordinary shares for which we received net proceeds of €20.7 million.

On February 25, 2019, we issued 3,921,568 ordinary shares for which we received net proceeds of €7.9 million.

We have incurred net losses in each year since our inception. Substantially all of our net losses resulted from costs incurred in connection with our development programs and from general and administrative expenses associated with our operations.

We have not incurred any bank debt.

In 2014, we received a grant from Bpifrance Financement of both non-refundable subsidies and conditional advances in relation to the development of our optogenetics technology platform. The program will be funded according to a specified schedule set forth in the contract, subject to completion of milestones. As the program advances, we provide Bpifrance Financement with interim progress reports and a final report when the funded project ends. Based on these reports, we are entitled to conditional advances from Bpifrance Financement. Each award of an advance is made to help fund a specific development milestone. The total intended amount of the conditional advances initially granted was €5.7 million, of which €678 K was received in December 2014 and €2.3 million received in July 2016, and recognized as non-current liabilities in the statement of financial position, as this conditional advance is repayable by us according to a repayment schedule.

Bpifrance Financement Conditional Advances

The original payment schedule for conditional advances under the program is summarized below:

- €678 K received in December 2014;
- €2.3 million received in July 2016 (initially estimated to be €2.7 million based on the payment schedule and reduced as a result of lower costs incurred by us than anticipated);
- €494 K originally to be received in the second quarter of 2018;
- €853 K originally to be received in November 2018; and
- €986 K originally to be received in November 2019.

The advances bear interest depending on the level of success of the funded program. The repayment schedule for a total amount of €6.5 million, including interest at an annual rate of 1.44%, based on the assumption of the reception of a total amount of €5.7 million of conditional advances, would be as follows:

- €550 K on or before June 30, 2022;
- €1.0 million on or before June 30, 2023;
- €1.5 million on or before June 30, 2024;
- €1.7 million on or before June 30, 2025; and
- €1.7 million on or before June 30, 2026.

Following the repayment of all of the conditional advances, we may be required to make additional payments over a period of two years of up to €2.7 million, depending on whether we reach cumulative revenue, excluding taxes, of €80.0 million by 2037. Our obligation to repay these amounts is based on the technical and commercial success of the funded program, as determined by the revenues forecasts or revenues deriving from direct or indirect exploitation of the products and results of our optogenetics technology platform. In the event Bpifrance Financement determines that the program is not successful, Bpifrance Financement would meet with us to assess the impact on the repayments and the repayment schedule.

After review and analysis of the stage of completion of the remaining milestones, level of expenses that have been incurred as of December 31, 2018 and given that the term of the initial agreement is set on November 30, 2019, the Group considers that it would not be able to complete the remaining key milestones on time. The 2 payments that were initially planned to be received in 2018 for a total amount of €1,347 K, were not received in 2018. The Group considers it should not receive any more conditional advance from Bpifrance Financement.

The updated repayment schedule for a total amount of €3,303 K (€2,957 K of cash received + €346 K of capitalized interests) of all of the conditional advances is as follows:

- €550 K on or before June 30, 2022;

- €1,000 K on or before June 30, 2023;
- €1,500 K on or before June 30, 2024; and
- €253 K on or before June 30, 2025.

Following the repayment of all of the conditional advances, the Company may be required to make additional payments over a period of two years of up to €1.4 million (€603 K the first year and €823 K the second year), depending on whether the Company reaches cumulative revenues, excluding taxes, of €80.0 million. These additional repayments should be done within 15 years following the first year of reimbursement, *i.e.* 2037. The obligation to repay these amounts is based on the technical and commercial success of the funded program, as determined by the revenues forecast or revenues deriving from direct or indirect exploitation of those products and results of its optogenetics technology platform. In the event Bpifrance Financement determines that the program is not successful, Bpifrance Financement will meet with the Company to assess the impact on the repayments and the repayment schedule.

Bpifrance Financement non-refundable subsidy

We have been granted a total of €1.1 million in non-refundable subsidies as follows:

- €866 K received in December 2014;
- €173 K originally to be received in November 2018; and
- €111 K originally to be received in November 2019.

In the same way as for the conditional advances, as of December 31, 2018, the Group considers that it would not be able to complete the remaining key milestones on time and therefore the Groupe did not receive any subsidy in 2018 and should not receive any more non-refundable subsidy from Bpifrance Financement.

The table below summarizes the aggregate amounts of subsidies and conditional advances we have received as of December 31, 2018:

In K€	Entitled	Granted	Repayed	To be granted
Conditional advances	5,686	2,957[1]	–	–
Subsidies	1,147	866	–	–
Total	**6,833**	**3,823**	**–**	**–**

(1) The estimated amount from the initial payment schedule was €2.7 million. The costs occurred by us amounted to a lower amount than expected, therefore the amount of this milestone was reduced accordingly.

9.4 PRINCIPAL USES OF CASH

9.4.1 CONTRACTUAL OBLIGATIONS AND COMMITMENTS

The following table discloses aggregate information about our material contractual obligations and the periods in which payments are due as of December 31, 2018. Future events could cause actual payments and timing of payments to differ from the amounts set forth below.

In thousands of euros	Total	Less than one year	One to three years	Four to five years	More than five years
Conditional advances	3,441[1]	–	–	1,550	1,891
Pension and employee benefits	65	–	–	–	65
Rental agreements	5,833	820	1,792	1,858	1,363
Collaborations and licensing arrangements	–	–	–	–	–
Total	**9,339**	**820**	**1,792**	**3,408**	**3,319**

(1) The estimated amount from the initial payment schedule was €2.7 million. The costs occurred by us amounted to a lower amount than expected, therefore the amount of this milestone was reduced accordingly.

On January 1, 2015, we entered into a lease agreement for our headquarters premises with *Passage de l'Innovation*, which was amended on October 1, 2015, January 1, 2016, May 1, 2017, January 2018, July 2018 and October 2018. As the company pursued its development, additional spaces were included in the contract. The main space's lease ends in December 2024, however, our engagement with smaller surfaces ends in 2027. Pursuant to the last agreement, we will have to pay €494 K excluding taxes, on an annual basis, comprised of €285 K for rent, €18 K for rental charges and up to €190 K for other services provided by the lessor through the end of 2024.

On September 6, 2017, we signed a lease agreement for our premises in New York with Winter Properties LLC. Pursuant to this agreement, we will pay $440 K annually during the first four years of leasing; and $463 K annually covering the rest of the leasing period. The lease term is seven years and five months.

The amounts of contractual obligations set forth in the table above are associated with contracts that are enforceable and legally binding and that specify all significant terms, fixed or minimum services to be used, fixed, minimum or variable price provisions, and the approximate timing of the actions under the contracts. The table does not include obligations under agreements that we can cancel without a significant penalty.

9.4.2 OPERATING CAPITAL REQUIREMENTS

We believe that our existing cash and cash equivalents, amounting to €24.0 million as of March 31, 2019 as well as the reimbursement of the 2018 Research Tax Credit in the amount of €4.3 million expected during the second half of 2019 should enable the Group to cover its cash requirements through the next 12 months.

Until we can generate a sufficient amount of revenue from our product candidates, if ever, we expect to finance our operating activities through our existing liquidity.

Our present and future funding requirements will depend on many factors, including, among other things:

- the size, progress, timing and completion of our clinical trials for any current or future product candidates, including our lead product candidates, GS010 and GS030;
- the number of potential new product candidates we identify and decide to develop;
- the costs involved in filing patent applications and maintaining and enforcing patents or defending against claims of infringement raised by third-parties;
- the time and costs involved in obtaining regulatory approval for our product candidates and any delays we may encounter as a result of evolving regulatory requirements or adverse results with respect to any of these product candidates;
- selling and marketing activities undertaken in connection with the anticipated commercialization of the GS010 product candidate and any other current or future product candidates, including GS030 and other product candidates in preclinical development, together with the costs involved in the creation of an effective sales and marketing organization; and
- the amount of revenues, if any, we may derive either directly, or in the form of royalty payments from any future potential partnership agreements, on the GS010 platform or relating to our other product candidates.

For more information as to the risks associated with our future funding needs, see the section of this Document entitled Section 4 "Risk Factors".

9.4.3 CAPITAL EXPENDITURES

Our main capital expenditures in 2017 and 2018 were primarily related to leasehold improvements and office and IT equipment for our headquarters and to license and software fees. Clinical research and development costs are not capitalized until marketing authorizations are obtained.

	As of December 31,	
In thousands of euros	2017	2018
Licenses, software	–	2
Property, plant and equipment	236	789
Non-current financial assets	–	–
Total	236	791

In 2018, our capital expenditures primarily related to acquiring technical equipment and installations €(214 K), leasehold improvement €(355 K), furniture €(192 K) and computer equipment €(28 K).

As of December 31, 2018, we had no material contractual commitments to acquire property, plant or equipment.

REGULATORY ENVIRONMENT

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We are subject to a variety of laws and regulations in France, the United States and the European Union (or EU). Our product candidates use biological products and medical devices that are subject to laws and regulations regarding testing, manufacturing, safety, efficacy, labeling, packaging, storage, record keeping, distribution, export and import, reporting, approval, advertising and other promotional practices.

Clinical Trials on Human Subjects

Before testing any biological product candidate, including a gene therapy product, in humans, the product candidate enters the preclinical testing stage. Preclinical tests, also referred to as non-clinical studies, include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies to assess the potential safety and activity of the product candidate. Preclinical tests must comply with the laws and regulations and other requirements, including Good Laboratory Practices (GLP), in each jurisdiction in which they are conducted.

Clinical trials involving human beings are typically conducted in three sequential phases that may overlap or be combined:

- **Phase I.** The biological product is initially introduced into healthy human subjects and tested for safety, dose tolerance, absorption, metabolism, distribution and excretion. In the case of some products for severe or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients.
- **Phase II.** The biological product is evaluated in a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance, optimal dosage and dosing schedule.
- **Phase III**. Studies in Phase III are designed to confirm the preliminary evidence accumulated in Phase II that a drug is safe and effective for use in the intended indication and recipient population. These studies are intended to provide an adequate basis for marketing approval. Studies in Phase III may also further explore the dose-response relationship, or explore the drug's use in wider populations, in different stages of disease, or in combination with another drug.

Clinical trials may, at times, be necessary after marketing in order to explain certain side effects, explore a specific pharmacological effect, or obtain additional data that is more precise. A regulatory authorization is required for the conduct of clinical trials.

The regulatory authorities may block the protocols for clinical trials suggested by the companies that apply to test products, suspend them, or require significant modifications in them. Moreover, the patient must be kept informed of the objective, the methodology, and the time period of the research, as well as of the anticipated benefits, constraints, and foreseeable risks resulting from the administration of the products that are the object of the clinical trials. The information communicated is summarized in a written document delivered to the patient prior to any administration of products, and the latter must confirm his or her agreement to participate in the clinical trial by signing an informed consent form.

Government Regulation in the European Union

Regulatory Authorization/Approval Required for the Conduct of a Clinical Trial in the EU

In the EU, requirements for the conduct of clinical trials on medicinal products are currently provided for in the European Directive No. 2001/20/EC of the European Parliament and of the Council of April 4, 2001 relative to the implementation of good clinical practices (or GCP) in the conduct of clinical trials on medicinal products for human use, or Clinical Trials Directive. Each country of the European Union had to implement this Directive into national law by eventually adapting it to its own regulatory framework.

Although the European Directive No. 2001/20/EC has sought to harmonize the EU clinical trials regulatory framework, setting out common rules for the control and authorization of clinical trials in the EU, the EU Member States have transposed and applied the provisions of the Directive differently. This has led to significant variations in the Member State regimes. To improve the current system, the Clinical Trials Directive has been amended by Regulation (EU) No. 536/2014 of the European Parliament and of the Council of April 16, 2014 on clinical trials on medicinal products for human use, adopted on April 16, 2014 and published in the *Official Journal* of the EU on May 27, 2014 (the "Clinical Trials Regulation").

The Clinical Trials Regulation entered into force on June 16, 2014 and will take effect six months after the publication of the notice referred to in Article 82(3) delivered by the European Commission on the EU clinical trial portal and database. The entry into application of the Regulation is expected to occur at some point in 2019 according to the European Commission's website. To our knowledge, this notice has not been published yet. Until the Clinical Trials Regulation comes into effect, all clinical trials performed in the European Union are required to be conducted in accordance with the Clinical Trials Directive.

Under the current regime, before a clinical trial can be initiated it must be approved in each of the EU Member States where the trial is to be conducted by two distinct bodies: the National Competent Authority, or NCA, and/or one or more Ethics Committees (or ECs). The authorization and oversight of clinical trials remains the responsibility of each Member State.

Regulatory Authorization/Approval Required for the Conduct of a Clinical Trial in France

General framework. In France, the Clinical Trials Directive has been notably implemented by Act No. 2004-806 of August 9,

2004 relative to the public health policy, as amended, and by Decree No. 2006-477 of April 26, 2006, modifying the title of the French Public Health Code, or PHC, on research involving human beings, this for all categories of products concerned: medicinal products, medical devices, biological products, ATMP, etc.

French Order No. 2016-800 of June 16, 2016 on research involving human beings and Act No. 2012-300 of March 5, 2012 (or *"Loi Jardé"*) related to biomedical research involving human beings have recently adapted French law to the new provisions of Clinical Trials Regulation. France adopted several changes to the laws and regulations on clinical trials since then.

Applicable provisions. The main French provisions applicable to the conduct of clinical trials are the following:

- Decree No. 2017-884 of 9 May 2017 modifying some regulatory provisions on research involving human beings;
- Order of 3 May 2017 establishing the list of researches referred to in Article L.1121-1, 2°, of the French Public Health Code;
- Decree No. 2016-1538 of November 16, 2016 on the unique agreement for the implementation of commercial clinical trials involving human beings in health care institutions;
- Decree No. 2016-1537 of November 16, 2016 on research involving human beings;
- Order No. 2016-800 of June 16, 2016 on research involving human beings;
- Act No. 2016-41 of January 26, 2016 for the modernization of our health system;
- Decision of December 29, 2015 establishing the rules for good clinical practice;
- Act No. 2012-300 of March 5, 2012 (or *"Loi Jardé"*) related to biomedical research involving human beings;
- Act No. 2011-2012 of December 29, 2011 aiming to strengthen health safety of medicinal and health products;
- Decree No. 2007-454 of March 25, 2007 on agreements and relationships between companies and members of some healthcare professions, amending the PHC;
- Decision of December 11, 2006 establishing the rules of good manufacturing practice;
- Decision of November 24, 2006 establishing the rules for good clinical practice for research involving human subjects;
- Decree No. 2006-477 of April 26, 2006 amending Chapter I of Title II of Book I of the first part of the PHC on biomedical research;
- Act No. 2004-806 of August 9, 2004 on public health policy;
- Act No. 2002-3003 of March 4, 2002 on rights of patients and on the quality of the healthcare system and its implementing decrees;
- European Directive No. 2001/20/EC of the European Parliament and of the Council of April 4, 2001 relative to the implementation of good clinical practices in the conduct of clinical trials on medicinal products for human use;
- Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/CE (General Data Protection Regulation), and the Act No. 78-17 of January 6, 1978 on Information Technology, Data Files and Civil Liberties, as last amended in 2018, and its implementing decrees.
- Decision No. 2018-154 of May 3, 2018 concerning the approval of a standard methodology for processing personal data in the context of research in the field of health, which does not require the express consent of the person involved (methodology MR-003); and
- Decision No. 2018-153 of May 3, 2018 concerning the approval of a standard methodology for processing personal data in the context of research in the field of health, which requires the express consent of the person involved (standard methodology MR-001).

Ethics Committee assessment. Under French law, a favorable opinion of a competent research and ethics committee (*Comité de Protection des Personnes* or "CPP") of the jurisdiction in which the investigator exercises its activity is always required for the conduct of clinical trials. Under Article L. 1123-7 of the PHC, the competent Ethics Committee – selected randomly by drawing lots under Article L. 1123-6 of the PHC – shall notably assess whether the conditions in which the trial will be conducted are valid. This assessment should be based on whether: adequate protection is offered to individuals, in particular to participants; adequate information is provided to the participants and appropriate procedure is in place to obtain their informed consent; the project is relevant; the benefits/risks assessment is satisfactory; the objectives of the trial are adequate to the means implemented; the qualification of the investigator(s) is satisfactory; the conditions and amount of patients' remuneration is compliant; and the method for recruiting participants is adequate.

ANSM authorization. A prior authorization issued by the ANSM is required for some types of clinical trials (interventional clinical trials implying an intervention on a natural person that is not justified by his/her usual medical care).

In practice, the applicant must submit to the ANSM a request for authorization of a clinical trial along with a file, which shall, in particular, contain information on the clinical protocol and specific product data and its quality control, as well as results of preclinical studies. After submission of the complete file, the ANSM may inform the sponsor that it objects to the implementation of the

research. The sponsor can then modify the contents of its research project and submit an amended or supplemented request to the ANSM; this procedure may not, however, be applied more than once. If the sponsor does not alter the content of its request, the request is considered rejected.

Under French law, the time limit for the examination of a request for authorization of a clinical trial cannot exceed 60 days from the date of receipt of the complete file by ANSM (Article R.1123-38 PHC) and 45 days for the CPP (Article R.1123-23 PHC). In the case of trials involving medicinal products for gene therapy or somatic cell therapy or medicinal products containing genetically modified organisms the time limit for the examination by ANSM and CPP is a 90-day period may which can be extended by a further 90 days in the event of consultation of a group (Article R.1125-8, R.1125-10, R.1125-11 PHC).

In the event of a risk to public health or if the ANSM considers that the conditions in which the research is implemented no longer correspond to the conditions indicated in the request for authorization or does not comply with the provisions of the PHC, the ANSM may at any time request changes to procedures for the realization of research, and suspend or ban this research (Article L.1123-11 PHC).

Under Article L.1123-7 PHC, the CPP shall deliver its opinion on the conditions of validity of the research, particularly with respect to the protection of participants, their information and how they collect informed consent, as well as the project's general relevance, the satisfactory nature of the assessment of benefits and risks and the adequacy between the objectives pursued and the means implemented.

The decision of November 24, 2006 sets forth the rules for good clinical practice ("GCP"), for biomedical research on medicines for human use provided for in Article L.1121-3 PHC. The purpose of the rules for GCP is to ensure both the reliability of data arising from clinical trials and the protection of persons participating in these clinical trials. GCPs shall apply to all clinical trials, including pharmacokinetics, bioavailability and bioequivalence studies in healthy volunteers and Phase II to IV clinical trials.

Under French law, a specific authorization issued by the Director General of ANSM is required before commencing clinical trials involving some advanced therapy medicinal products, including in particular medicinal products for gene therapy and somatic cell therapy including xenogenic (see Article L.4211-9-1 PHC).

Protection of Clinical Trial Subjects. Under French law (Article L.1121-2 PHC), a clinical trial may be undertaken only if (i) it is based on the latest stage of scientific knowledge and on sufficient preclinical testing, (ii) the foreseeable risk incurred by the subjects is outweighed by the benefit expected for these persons or the interest of the research, (iii) it aims at expanding scientific knowledge and the means possible to improve the human condition and (iv) the research was designed to reduce the pain, inconveniences, fear and other predictable inconvenience connected to the disease or to the research, by taking into account in particular the degree of maturity of minors and the capacity of understanding of adults unable to express an informed consent. All these conditions must be fulfilled in order to start a clinical trial.

A clinical trial (Article L.1121-3 PHC) may be undertaken under the following technical conditions: (a) under the direction and the supervision of a qualified physician and (b) under adapted material and technical conditions, compatible with the rigorous imperatives of science and the safety of the clinical trial subjects.

Two documents must be provided to clinical trial subjects before the conduct of the trial. First, the patient must receive a patient information sheet which must contain in particular a description of the objective, the methodology and the time period of the research, as well as a description of the alternative treatments, the number of subjects expected to take part in the study, the anticipated benefits, the constraints and the foreseeable risks resulting from the administration of the products that are the object of the clinical trials but also the favorable opinion of the ethics committee and the authorization of the ANSM, and information on processing of personal data. The information communicated must be summarized in a written document delivered to the patient prior to any administration of products by the investigator or a physician (Article L.1122-1 PHC).

Second, the patient must confirm his or her agreement to participate in the clinical study by signing an informed consent form (Article L.1122-1-1 PHC). For each study, patient information must include a right to refuse to participate and to withdraw consent at any time and by any means without further consequences or prejudice. A clinical trial on a minor may be undertaken only if, in particular, the informed consent of the parents or legal representative has been obtained. Furthermore, a clinical trial on adults under guardianship requires the informed consent of the adult's legal representative.

Responsibility of the sponsor and insurance obligation of the sponsor. The sponsor shall indemnify the subject of the trial in case of damage arising as a consequence of the research, unless he proves that the damage does not result from his fault or the fault of any other person intervening in the trial (Article L.1121-10 PHC). The sponsor must have an insurance covering its civil liability and the liability of any person intervening in the research, for any damage arising from the trial for a minimum of 10 years as of the end of the trial (Article L.1121-10 PHC).

Market protection in the European Union

To obtain regulatory approval of an investigational biological product under European Union regulatory systems, we must submit a Marketing Authorization Application (MAA). The application format used to file the MAA, *i.e.* the Common Technical

Document (CTD), is harmonized between Europe, USA and Japan, with the exception of, among other things, country-specific document requirements. The European Union also provides data protection. In the European Union, upon receiving marketing authorization (or MA), new chemical entities receive eight years of data exclusivity and an additional two years of market protection.

Data exclusivity prevents regulatory authorities in the European Union from referencing the innovator's data to assess a generic application. During the additional two-year period of market exclusivity, a generic marketing authorization can be submitted, and the innovator's data may be referenced, but no generic product can be marketed until the expiration of the 10 years. This market protection period may be extended by one year in case of new indication.

Orphan Medicinal Products

The European Union provides opportunities for market exclusivity. Pursuant to abovementioned Regulation (EC) No. 141/2000, products receiving orphan designation in the EU can receive ten years of market exclusivity following the marketing approval, during which time no similar medicinal product may be placed on the market for the same therapeutic indication. Under Article 37 of the Regulation (EC) No 1901/2006, an orphan product can also obtain an additional two years of market exclusivity in the EU for pediatric studies (in this case for orphan drugs no extension to any supplementary protection certificate can be granted, see further detail below).

Under Article 3 of the Regulation (EC) No 141/2000, a medicinal product may be designated as orphan if: (1) (a) it is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition affecting not more than five in ten thousand persons in the EU when the application is made, or (b) it is intended for the diagnosis, prevention or treatment of a life-threatening, seriously debilitating or serious and chronic condition in the EU and that without incentives it is unlikely that the marketing of the drug in the EU would generate sufficient return to justify the necessary investment; and (2) that there exists no satisfactory method of diagnosis, prevention or treatment of the condition in question that has been authorized in the EU or, if such method exists, that the drug will be of significant benefit to those affected by that condition, as defined in Regulation (EC) 847/2000.

Pursuant to Regulation (EC) No. 847/2000 of April 27, 2000 laying down the provisions for implementation of the criteria for designation of a medicinal product as an orphan medicinal product and definitions of the concepts "similar medicinal product" and "clinical superiority," a sponsor applying for designation of a medicinal product as an orphan medicinal product shall apply for designation at any stage of the development of the medicinal product.

Where a marketing authorization in respect of an orphan medicinal product is granted pursuant to Regulation (EC) No. 726/2004 or where all the Member States have granted marketing authorizations for this product, in accordance with the procedures for mutual recognition, the Community and the Member States shall not, for a period of 10 years, accept another application for a marketing authorization, or grant a marketing authorization or accept an application to extend an existing marketing authorization, for the same therapeutic indication, in respect of a similar medicinal product.

The 10-year market exclusivity may however be reduced to six years if, at the end of the fifth year, it is established, in respect of the medicinal product concerned, that the above-mentioned criteria no longer met, *inter alia*, where it is shown on the basis of available evidence that the product is sufficiently profitable not to justify maintenance of market exclusivity (Article 8).

Pursuant to Regulation No. 1901/2006 on medicinal products for pediatric use, for orphan medicinal products, instead of an extension of the supplementary protection certificate, the 10 year period of orphan market exclusivity should be extended to 12 years if the requirement for data on use in the pediatric population is fully met (*i.e.* when the request contain the results of all studies carried out under the approved Pediatric Investigation Plan ("PIP") Plan and when the declaration attesting the conformity of the request to this PIP is included in the marketing authorization).

However, by way of derogation, a marketing authorization may be granted, for the same therapeutic indication, to a similar medicinal product if:

- the holder of the marketing authorization for the original orphan medicinal product has given his consent to the second applicant, or
- the holder of the marketing authorization for the original orphan medicinal product is unable to supply sufficient quantities of the medicinal product, or
- the second applicant can establish in the application that the second medicinal product, although similar to the orphan medicinal product already authorized, is safer, more effective or otherwise clinically superior.

The abovementioned Regulation (EC) No. 141/2000 provides for other incentives regarding orphan medicinal products. Orphan medicinal products are eligible for financial incentives such as reduction of fees or fee waivers and scientific assistance for study proposals (Articles 6 and 9). The application for orphan drug designation must be submitted before the application for marketing authorization (Article 5). The applicant will receive a fee reduction for the marketing authorization application if the orphan drug designation has been granted, but not if the designation is still pending at the time the marketing authorization is submitted. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

Regulation (EC) No. 141/2000 also provides that medicinal products designated as orphan medicinal products under the provisions of this Regulation shall be eligible for incentives made available by the Community and by the Member States to support research into, and the development and availability of, orphan medicinal products and in particular aid for research for small- and medium-sized undertakings provided for in framework programmes for research and technological development.

Protection of Personal Data

The Regulation 2016/679, known as the General Data Protection Regulation, or GDPR, as well as EU Member State implementing legislations, apply to the collection and processing of personal data, including health-related information, by companies located in the EU, or in certain circumstances, by companies located outside of the EU and processing personal information of individuals located in the EU.

These laws impose strict obligations on the ability to process personal data, including health-related information, in particular in relation to their collection, use, disclosure and transfer.

Also, in certain countries, in particular France, the conduct of clinical trials is subject to compliance with specific provisions of the Act No.78-17 of 6 January 1978 on Information Technology, Data Files and Civil Liberties, as amended, and in particular Chapter IX relating to the processing of personal data in the health sector. These provisions require, among others, the filing of compliance undertakings with "standard methodologies" adopted by the French Data Protection Authority (the CNIL), or, if not complying, obtaining a specific authorization from the CNIL.

The most common standard methodologies are the following:

- Decision No. 20186-263 154 of July 21, 2018 concerning the approval of a standard methodology for processing personal data in the context of research in the field of health, which does not require the express consent of the person involved (methodology MR-003);
- Decision No. 20186-153262 of July 21, 2018 concerning the approval of a standard methodology for the processing of personal data carried out within the context of research in the field of health clinical trials, which requires the express consent of the person involved (standard methodology MR-001);

In certain specific cases, entities processing health personal data may have to comply with article L1111-8 of the French Public Health Code which imposes certain certifications for the hosting service providers.

Expedited Programs at the EMA Expedited Development and Review Programs

EMA is authorized to expedite the review of MAAs in several ways.

Accelerated assessment, which shortens the CHMP review timeline to 150 days. In order to qualify, the sponsor must justify in their application that the drug is "of major public health interest". Typically, this requires evidence that the drug in question addresses an unmet medical need "to a significant extent".

Conditional marketing authorization pathway, which allows the CHMP to grant a conditional, annually renewable approval for drugs that meet certain criteria. In order to qualify, a drug must be aimed at treating, preventing, or diagnosing a serious or life-threatening disease; intended for emergency use; or designated as an orphan drug. Additionally, the CHMP must determine that the drug meets four key criteria: 1) based on the existing evidence, the drug's benefits outweigh the risks, 2) the sponsor will be able to collect comprehensive post-market data, 3) the drug fulfills an unmet medical need, and 4) the benefits of its immediate availability outweigh the risks associated with approving it with more limited data. The sponsor must continue to collect post-market data on the drug to confirm its benefit. The authorization may be converted to a standard approval once sufficient data is available, or revoked if it is determined that the drug's benefits do not outweigh its risks. In certain exceptional circumstances, EMA may also grant conditional authorization for a therapy that does not have comprehensive data on safety and efficacy (referred to as "authorization under exceptional circumstances"). This may occur when the condition or disease to be treated is very rare, or collection of full information is either not possible or would be considered unethical

PRIME scheme fosters frequent and early interaction between sponsors and regulators, and is aimed at improving trial design and streamlining the development process. Sponsors whose product has been approved under the PRIME pathway benefit from a designated CHMP liaison, early feedback on development and regulatory strategy, and scientific advice when certain development milestones have been met. While large pharmaceutical companies are eligible for PRIME following proof-of-concept trials, smaller companies and academic groups – which would particularly benefit from earlier scientific consultation and advice – can apply at an earlier stage, on the basis of compelling non-clinical and tolerability data from initial clinical trials.

European Union Marketing Authorizations

In the EEA, medicinal products can only be commercialized after obtaining a marketing authorization or MA, from the competent regulatory authorities.

There are different types of marketing authorizations including:

Centralized Procedure

Regulation (EC) No. 726/2004 of the European Parliament and of the Council of March 31, 2014 provides for the Centralized authorization procedure. It results in a single marketing

authorization, or MA, granted by the European Commission that is valid across the European Economic Area, or the EEA (*i.e.*, the EU as well as Iceland, Liechtenstein and Norway).

Under the annex to this Regulation, the centralized procedure is compulsory for the following medicinal products: (1) medicinal products developed by means of one of the following biotechnological processes: recombinant DNA technology, controlled expression of genes coding for biologically active proteins in prokaryotes and eukaryotes including transformed mammalian cells, hybridoma and monoclonal antibody methods; (2) advanced therapy medicinal products as defined in Article 2 of Regulation (EC) No 1394/2007; (3) medicinal products containing a new active substance which, on the date of entry into force of this Regulation, was not authorized in the Community, for which the therapeutic indication is the treatment of any of the following diseases: HIV/AIDS, cancer, neurodegenerative disorder, diabetes, auto-immune diseases and other immune dysfunctions and viral diseases; and (4) medicinal products that are designated as orphan medicinal products pursuant to Regulation (EC) No 141/2000.

Under Article 3 of this Regulation, the Centralized procedure is optional for any medicinal product not appearing in the Annex if: (1) the medicinal product contains a new active substance which, on the date of entry into force of this Regulation, was not authorized in the Community; or (2) the applicant shows that the medicinal product constitutes a significant therapeutic, scientific or technical innovation or that the granting of authorization in accordance with this Regulation is in the interests of patients or animal health at Community level.

The European Medicines Agency, or EMA, shall ensure in the scope of the Centralized procedure that the opinion of the Committee for Medicinal Products for Human Use, or CHMP, is given within 210 days after receipt of a valid application (Article 6.3). This excludes so-called clock stops, during which additional written or oral information is to be provided by the applicant in response to questions asked by the Committee for Medicinal Products for Human Use, or CHMP (Article 7). At the end of the review period, the CHMP provides an opinion to the European Commission. If this is opinion favorable, the Commission may then adopt a decision to grant a MA.

When an application is submitted for a MA in respect of medicinal products for human use which are of major interest from the point of view of public health and in particular from the viewpoint of therapeutic innovation, the applicant may request an accelerated assessment procedure. The request shall be duly substantiated. If the CHMP accepts the request, the time-limit laid down in Article 6(3), first subparagraph, shall be reduced to 150 days (Article 14(9)).

National authorization procedure

National MAs issued by the competent authorities of the Member States of the EEA, through the Mutual Recognition Procedure or Decentralized Procedure, only cover their respective territory. These procedures are not applicable to gene therapy product as they are available only for products not falling within the mandatory scope of the centralized procedure.

Regulatory Approval of Medical Devices in the European Union

CE Marking Requirements

Manufacturers of medical devices, in the EU are required under the EU Medical Devices Directive (Council Directive 93/42/EEC, the "MDD") to affix a CE marking of conformity (a "CE mark") to their products in order to sell these products in Member States of the EU. The CE mark is a symbol that demonstrates conformity to certain essential principles of safety and performance mandated in the MDD, which are referred to as the "Essential Requirements".

Subject to national restrictions, CE marked products may be sold within the European Economic Area (the "EEA"), which is composed of the 28 Member States of the EU plus Norway, Iceland and Liechtenstein, as well as in other countries that recognize the validity of the CE mark.

Devices in the EU are classified in four different classes (I, IIa, IIb and III) depending on a number of factors that are defined in the MDD. Typically, the highest class (Class III) regroups those devices that are deemed to present the highest risk and are therefore subject to more stringent requirements.

Conformity Assessment Procedures

Premarket approval of medical devices does not exist in the European Union; however, the European Union has adopted numerous directives and standards regulating, among other things, the design, manufacture, clinical trials, labeling, approval and adverse event reporting for medical devices.

The conformity assessment of medical devices with the essential requirements varies depending on the classification of the device and the directive that is applicable. The lowest-risk devices require only a self- declaration of conformity by the manufacturer. Higher-risk devices require the involvement of third-party bodies called "notified bodies," which are certification organisations designated by the competent authorities of member states to carry out the conformity assessment procedures described in the Medical Devices Directives. The notified body's tasks will vary depending on the classification of the products concerned and the conformity assessment route a manufacturer has chosen.

Under the conformity assessment procedure, Notified Body will audit and examine the technical file and the quality system applied to the manufacture, design and final inspection of the products. Following successful completion of the applicable procedure,

the Notified Body will issue an EC Certificate of Conformity. This certificate entitles a manufacturer to affix the CE mark to its medical devices after having prepared and signed a "EC Declaration of Conformity" indicating that the product meets the Essential Requirements. Such certificate is valid for a maximum of five years, and may be extended on application for a further period of five years.

Medical devices which comply with the essential requirements of the Medical Devices Directives must bear the conformity CE-marking when marketed in EU Member States. The CE-marking has to be placed visibly and legibly on the product or, if not possible due to the nature of the product, be affixed to the packaging and the accompanying documentation. If a notified body has been involved in the conformity assessment procedure, its identification number must also be displayed.

Compliance with these requirements is a prerequisite to be able to affix the CE Mark of Conformity to medical devices, without which they cannot be marketed or sold in the EEA. Actual implementation of these directives, however, may vary on a country-by-country basis.

If the devices are substantively modified, one may need to broaden, or re-perform, the certification underlying the CE marking of the modified product. The CE marking can be suspended or withdrawn. The same may be true for any new products that we may develop in the future.

The Medical Devices Regulation

New rules have recently been adopted in the EU on medical devices which will have a direct impact on our business in the near future. Specifically, on May 25, 2017, the new Medical Devices Regulation (Regulation (EU) 2017/745, the "MDR") entered into force, with a three-year transition period. The MDR will progressively replace the MDD and introduce substantial changes to the current regulatory regime applicable to medical devices.

Under the transitional provisions of the MDR, until May 26, 2020, the certification procedures underlying the CE marking of medical devices can be carried out, at the manufacturer's choice, either in accordance with the MDR or in accordance with the MDD. Should a manufacturer elect to perform certification under the MDD, the related certificates will remain valid until the earlier of: a) the end of the period indicated on the certificate (typically five years, but it could be less); and b) May 27, 2024. The medical devices to which these certificates apply may only be sold in the EEA if they continue to comply with the MDD and provided that no significant changes are brought to these devices' design or intended purpose. Moreover, the manufacturers of those devices that are certified under the MDD will have to comply with a number of requirements of the MDR, *e.g.*, those relating to post-market surveillance and vigilance, and they will be able to sell such devices only up until May 27, 2025 at the latest. After that date, all devices sold in the EEA will have to be fully compliant with the MDR.

Under the MDR, all devices incorporating or consisting of nanomaterials will be classified as Class III if they present a high or medium potential for internal exposure. The MDR introduces higher clinical data requirements for such Class III devices. In particular, manufacturers will be required to conduct new clinical investigations in case they do not have "sufficient" clinical data to support the safety, performance and clinical benefit claims of their devices.

The MDR also introduces increased scrutiny of conformity assessments by Notified Bodies for implantable Class III devices. For such devices, the MDR requires that relevant European Commission expert panels scrutinize, as part of the conformity assessment procedure, the clinical assessment of the concerned Notified Body. Such devices will be further subject to a mechanism allowing competent authorities of the EEA and the European Commission Medical Device Coordination Group to scrutinize the documentation submitted by the manufacturer as well as the documentation produced by the Notified Body and the relevant expert panels, in the context of the applicable conformity assessment procedure.

In addition, under the MDR, manufacturers of Class III devices will be subject to a new annual safety reporting requirement called the Periodic Safety Update Report, aimed at capturing the analyses of the post-market surveillance data gathered, including data from their Post-Market Clinical Follow-Up.

The amount of guidance available on these new requirements is currently very limited and the European Commission is set to adopt a number of delegated and implementing acts to further specify applicable requirements and obligations under the MDR.

EU France: Coverage and Reimbursement

In certain countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. In some countries, pricing and reimbursement coverage also depend on assessments performed by national Health Technology Assessment (HTA) bodies. These assessments may be completed before or after a product is available in the market and may affect the net price of an approved drug.

The European Union provides options for its Member States of the EEA to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A Member State may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. For example, in France, effective access

to the market assumes that our future products will be supported by the hospital (through an agreement for local communities) or reimbursed by social security. The price of medications in France is negotiated with the Economic Committee for Health Products, or CEPS.

The EU has legislation that provides for some harmonization of access to drugs that treat rare diseases. For example, Cross Border Healthcare Directive requires member states to reimburse, possibly with restrictions, a treatment approved in the EU but currently unavailable locally. But the pricing and market access is dynamic, as the EU is evaluating multiple initiatives to provide access to rare disease therapies, particularly regenerative treatments like gene therapy, and national bodies are assessing their reimbursement pathways and valuation methodologies in light of the curative promise from these therapies.

France: Post-marketing requirements

Any pharmaceutical product or medical device distributed in France will be subject to pervasive and continuing regulation by the ANSM, including, among other things, record-keeping requirements, reporting of adverse experiences with the product, providing updated safety and efficacy information, distribution requirements, complying with promotion and advertising requirements.

France: Advertising

French law strictly regulates labeling, advertising, promotion and other types of information on products that are placed on the market and imposes requirements and restrictions on drug manufacturers, such as those related to direct-to-consumer advertising, the prohibition on promoting products for uses or in patient populations that are not described in the product's approved labeling (known as "off-label use"), industry-sponsored scientific and educational activities.

Although general requirements for advertising and promotion of medicinal products are established under EU directives, the details are governed by regulations in each EU Member State and can differ from one country to another.

French Pharmaceutical Company Status

To commercialize a product in France, it is mandatory to have the pharmaceutical establishment license directly, either as distributor "exploitant" or as manufacturer. This license can be obtained after the submission of a request file specific to each of the two qualifications with the ANSM, and only granted after review and evaluation by the ANSM, usually after verification that the company has adequate premises, the necessary personnel and an adapted structure with satisfactory procedures for carrying out the proposed pharmaceutical activities, in particular pharmaceutical supply and pharmacovigilance.

France: Declarations of Financial Interests

"Transparency" or "French Sunshine Act"

The French Public Health Code (PHC) contains certain provisions regarding transparency of fees and rewards received by some healthcare professionals from industries, *i.e.* companies manufacturing or marketing health products, resulting from Act No. 2011-2012 of December 29, 2011 aiming at strengthening health safety of medicinal and health products, amended by an Act No. 2016-41 of 26 January 2016, and corresponding implementing decrees. It results from these provisions (Article L.1453-1 and D. 1453-1 *et seq.* PHC) that companies manufacturing or marketing healthcare products (medicinal products, medical devices, etc.) in France shall publicly disclose (on a specific public website available at: https://www.entreprises-transparence.sante.gouv.fr) the advantages and fees paid to healthcare professionals amounting to 10 euros or above, as well as the agreements concluded with the latter, along with detailed information about each agreement (the precise subject matter of the agreement, the date of signature of the agreement, its end date, the total amount paid to the healthcare professional, etc.).

"Anti-gift"requirements

The French Public Health Code also contains "anti-gift" provisions setting out a general prohibition of payments and rewards from industries, *i.e.* companies manufacturing or marketing health products, to healthcare professionals, with limited exceptions and strictly defines the conditions under which such payments or rewards are lawful. The provisions resulting from an Act No. 2011-2012 were amended by an Order No. 2017-49 of January 19, 2017 which notably extended their application to a broader range of legal and physical persons, specified the scope of the operations excluded from the prohibition and those authorized under some conditions, and provided for a new authorization process. The changes of the "anti-gift" rules were aimed to enter into force on a date provided by decree or, at the latest, on the July 1, 2018. In the absence of implementing texts to date, the new provisions (Articles L.1453-3 to L.1453-12 PHC) entered into force on July 1, 2018. The implementing texts are still missing. In the meantime, since the former implementing provisions (article R.4113-104 *et seq.* PHC) have not been abrogated they remain applicable to the extent that they are accurate and not in contradiction with the new enacted rules. Some of the new legal provisions can already be applied without awaiting the new implementing provisions.

Failure to comply with the above applicable regulatory requirements may result in restrictions on the marketing of a product or withdrawal of the product from the market as well as possible administrative or criminal sanctions.

Regulatory Framework in the United States

In the United States, biological products, including gene therapy products and medical devices are subject to regulation under the

Federal Food, Drug, and Cosmetic Act, or FD&C Act, and the Public Health Service Act, or PHS Act, and other federal, state, local and other national statutes and regulations. Both the FD&C Act and the PHS Act and their corresponding regulations govern, among other things, the testing, manufacturing, safety, efficacy, labeling, packaging, storage, record keeping, distribution, export and import, reporting, approval, advertising and other promotional practices involving biological and medical device products.

Food and Drug Administration (FDA) approval must be obtained before marketing of biological products. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and national statutes and regulations require the expenditure of substantial time and financial resources, and regulatory approval is not guaranteed.

The FDA works closely with the National Institute of Health (NIH) and its Recombinant DNA Advisory Committee (RAC), which makes recommendations to the NIH on gene therapy issues and engages in a public discussion of scientific, safety, ethical and societal issues related to proposed and ongoing gene therapy protocols. The FDA and the NIH have published guidance documents with respect to the development and submission of gene therapy protocols.

U.S. Biological Products Development Process

The process required by the FDA before a biological product may be marketed in the United States generally involves the following:

- completion of non-clinical laboratory tests and animal studies according to GLP, and applicable requirements for the humane use of laboratory animals or other applicable regulations;
- submission to the FDA of an application for an Investigational New Drug (IND), which must become effective before human clinical trials may begin;
- performance of adequate and well-controlled human clinical trials according to the FDA's regulations, commonly referred to as GCPs, and any additional requirements for the protection of human research subjects and their health information, to establish the safety and efficacy of the proposed biological product for its intended use;
- submission to the FDA of a BLA for marketing approval that includes substantive evidence of safety, purity and potency from results of non-clinical testing and clinical trials;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities where the biological product is produced to assess compliance with Good Manufacturing Practice (GMP), to assure that the facilities, methods and controls are adequate to preserve the biological product's identity, strength, quality and purity and, if applicable, the FDA's current good tissue practices, or GTPs, for the use of human cellular and tissue products;
- potential FDA audit of the non-clinical and clinical trial sites that generated the data in support of the Biological License Application (BLA); and
- FDA review and approval, or licensure, of the BLA.

Where a gene therapy study is conducted at, or sponsored by, institutions receiving NIH funding for recombinant DNA research, prior to the submission of an IND application to the FDA, a protocol and related documentation is submitted to and the study is registered with the NIH Office of Biotechnology Activities, or OBA, pursuant to the NIH Guidelines for Research Involving Recombinant DNA Molecules, or NIH Guidelines. Compliance with the NIH Guidelines is mandatory for investigators at institutions receiving NIH funds for research involving recombinant DNA; however, many companies and other institutions not otherwise subject to the NIH Guidelines voluntarily follow them. Institutions that receive NIH funding also are potentially subject to review by the NIH Office of Biotechnology Activities' RAC; the RAC will only publicly review clinical trials if the trials cannot be evaluated by standard oversight bodies and pose unusual risks.

The clinical trial sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and a proposed clinical protocol, to the FDA as part of the IND. Some preclinical testing may continue even after the IND is submitted. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA places the clinical trial on a clinical hold within that 30-day time period. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. The FDA may impose clinical holds on a biological product candidate at any time before or during clinical trials due to safety concerns or non-compliance. If the FDA imposes a clinical hold, studies may not recommence without FDA authorization and then only under terms authorized by the FDA.

Clinical trials involve the administration of the biological product candidate to healthy volunteers or patients under the supervision of qualified investigators, generally physicians not employed by or under the study sponsor's control. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria, and the parameters to be used to monitor subject safety, including stopping rules that assure a clinical trial will be stopped if certain adverse events should occur. Each protocol and amendments to the protocol must be submitted to the FDA as part of the IND. Clinical trials must be conducted and monitored in accordance with the FDA's regulations comprising the GCP requirements, including the requirement that all research subjects provide informed consent. Further, each clinical trial must be reviewed and approved by an Institutional Review Board (IRB) at or servicing each institution at which the clinical trial will be conducted. An IRB is charged with protecting the

welfare and rights of study participants and considers such items as whether the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the form and content of the informed consent that must be signed by each clinical trial subject or his or her legal representative and must monitor the clinical trial until completed. Clinical trials also must be reviewed by an institutional biosafety committee, or IBC, a local institutional committee that reviews and oversees basic and clinical research conducted at that institution. The IBC assesses the safety of the research and identifies any potential risk to public health or the environment.

In some cases, the FDA may condition approval of a BLA for a product candidate on the sponsor's agreement to conduct additional clinical trials after the product's approval. In other cases, a sponsor may voluntarily conduct additional clinical trials post approval to gain more information about the product. Post-approval clinical trials, sometimes referred to as Phase IV clinical trials, may be conducted after initial marketing approval. These clinical trials are used to gain additional information from the treatment of patients in the intended therapeutic indication, particularly for long-term safety follow-up. The FDA recommends that sponsors observe subjects for potential gene therapy-related delayed adverse events for a 15-year period, including a minimum of five years of annual examinations followed by ten years of annual queries, either in person or by questionnaire, of study subjects.

During all phases of clinical development, regulatory agencies require extensive monitoring and auditing of all clinical activities, clinical data and clinical trial investigators. Annual progress reports detailing the results of the clinical trials must be submitted to the FDA. Written IND safety reports must be promptly submitted to the FDA, the NIH and the investigators for serious and unexpected adverse events, any findings from other studies, tests in laboratory animals or *in vitro* testing that suggest a significant risk for human subjects, or any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. The sponsor must submit an IND safety report within 15 calendar days after the sponsor determines that the information qualifies for reporting. The sponsor also must notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction within seven calendar days after the sponsor's initial receipt of the information. Phase I, Phase II and Phase III clinical trials may not be completed successfully within any specified period, if at all. The FDA or the sponsor or its data safety monitoring board may suspend a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the biological product has been associated with unexpected serious harm to patients.

Sponsors of clinical trials of investigational products are required to register on clinicaltrials.gov, a National Institute of Health website registry database, and disclose certain clinical trial information. Information related to the product, patient population, phase of investigation, study sites and investigators, and other aspects of the clinical trial is then made public as part of the registration. Sponsors are also obligated to discuss the results of their clinical trials after completion. Disclosure of the results of these trials can be delayed until the new product or new indication being studied has been approved. Competitors may use this publicly-available information to gain knowledge regarding the progress of development programs.

The NIH and the FDA have a publicly accessible database, the Genetic Modification Clinical Research Information System which includes information on gene transfer studies and serves as an electronic tool to facilitate the reporting and analysis of adverse events on these studies.

Concurrent with clinical trials, companies usually complete additional animal studies and must also develop additional information about the physical characteristics of the biological product as well as finalize a process for manufacturing the product in commercial quantities in accordance with GMP requirements. To help reduce the risk of the introduction of adventitious agents (unwanted viruses or bacteria), with use of biological products, the PHS Act emphasizes the importance of manufacturing control for products whose attributes cannot be precisely defined. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, the sponsor must develop methods for testing the identity, strength, quality, potency and purity of the final biological product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the biological product candidate does not undergo unacceptable deterioration over its shelf life.

U.S. Biological Product Review and Approval Processes

After the completion of clinical trials of a biological product, FDA approval of a BLA must be obtained before commercial marketing of the biological product. The BLA must include results of product development, laboratory and animal studies, human studies, information on the manufacture and composition of the product, proposed labeling and other relevant information. In addition, under the Pediatric Research Equity Act, or PREA, a BLA or supplement to a BLA must contain data to assess the safety and effectiveness of the biological product for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may grant deferrals

for submission of data or full or partial waivers. Unless otherwise required by regulation, PREA does not apply to any biological product for an indication for which orphan designation has been granted. The testing and approval processes require substantial time and effort and there can be no assurance that the FDA will accept the BLA for filing and, even if filed, that any approval will be granted on a timely basis, if at all.

Under the Prescription Drug User Fee Act, or PDUFA, as amended, each BLA must be accompanied by a user fee. The FDA adjusts the PDUFA user fees on an annual basis. PDUFA also imposes an annual program fee on prescription biologics. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business. Additionally, no user fees are assessed on BLAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

Within 60 days following submission of the application, the FDA reviews a BLA submitted to determine if it is substantially complete before the agency accepts it for filing. The FDA may refuse to file any BLA that it deems incomplete or not properly reviewable at the time of submission and may request additional information. In this event, the BLA must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review of the BLA. The FDA reviews the BLA to determine, among other things, whether the proposed product is safe and potent, or effective, for its intended use, and has an acceptable purity profile, and whether the product is being manufactured in accordance with GMP to assure and preserve the product's identity, safety, strength, quality, potency and purity. The FDA may refer applications for novel biological products or biological products that present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions. During the biological product approval process, the FDA also will determine whether a Risk Evaluation and Mitigation Strategies (REMS) is necessary to assure the safe use of the biological product. If the FDA concludes REMS is needed, the sponsor of the BLA must submit proposed REMS; the FDA will not approve the BLA without REMS, if required.

Before approving a BLA, the FDA will inspect the facilities at which the product is manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with GMP requirements and adequate to assure consistent production of the product within required specifications. For a gene therapy product, the FDA also will not approve the product if the manufacturer is not in compliance with the Good Tissue Practices (GTPs). The GTPs are FDA regulations that govern the methods used in, and the facilities and controls used for, the manufacture of human cells, tissues, and cellular and tissue based products, or HCT/Ps, which are human cells or tissue intended for implantation, transplant, infusion, or transfer into a human recipient. The primary intent of the GTP requirements is to ensure that cell and tissue based products are manufactured in a manner designed to prevent the introduction, transmission and spread of communicable disease. FDA regulations also require tissue establishments to register and list their HCT/Ps with the FDA and, when applicable, to evaluate donors through screening and testing. Additionally, before approving a BLA, the FDA will typically inspect one or more clinical sites to assure that the clinical trials were conducted in compliance with IND study requirements and GCP requirements. To assure cGMP, GTP and GCP compliance, an applicant must incur significant expenditure of time, money and effort in the areas of training, record keeping, production and quality control.

Notwithstanding the submission of relevant data and information, the FDA may ultimately decide that the BLA does not satisfy its regulatory criteria for approval and deny approval. Data obtained from clinical trials are not always conclusive and the FDA may interpret data differently than we interpret the same data. If the agency decides not to approve the BLA in its present form, the FDA will issue a complete response letter that usually describes all of the specific deficiencies in the BLA identified by the FDA. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical trials. Additionally, the complete response letter may include recommended actions that the applicant might take to place the application in a condition for approval. If a complete response letter is issued, the applicant may either resubmit the BLA, addressing all of the deficiencies identified in the letter, or withdraw the application.

If a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling. The FDA may impose restrictions and conditions on product distribution, prescribing, or dispensing in the form of a risk management plan, or otherwise limit the scope of any approval. In addition, the FDA may require post marketing clinical trials, sometimes referred to as Phase IV clinical trials, designed to further assess a biological product's safety and effectiveness, and testing and surveillance programs to monitor the safety of approved products that have been commercialized.

One of the performance goals agreed to by the FDA under the PDUFA is to review 90% of standard BLAs in 12 months of receipt and 90% of priority BLAs in eight months of receipt, whereupon a

review decision is to be made. The FDA does not always meet its PDUFA goal dates for standard and priority BLAs, and its review goals are subject to change from time to time. The review process and the PDUFA goal date may be extended by three months if the FDA requests or the BLA sponsor otherwise provides additional information or clarification regarding information already provided in the submission within the last three months before the PDUFA goal date.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biological product intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making a drug or biological product available in the United States for this type of disease or condition will be recovered from sales of the product. Orphan product designation must be requested before submitting a BLA. After the FDA grants orphan product designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan product designation does not shorten the duration of the regulatory review and approval process. If a product that has orphan designation subsequently receives the first FDA approval for the disease or condition for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications to market the same drug or biological product for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity. Competitors, however, may receive approval of different products for the indication for which the orphan product has exclusivity or obtain approval for the same product but for a different indication for which the orphan product has exclusivity. Orphan product exclusivity also could block the approval of one of our products for seven years if a competitor obtains approval of the same biological product as defined by the FDA or if our product candidate is determined to be contained within the competitor's product for the same indication. If a drug or biological product designated as an orphan product receives marketing approval for an indication broader than what is designated, it may not be entitled to orphan product exclusivity. Orphan drug status in the European Union has similar, but not identical, benefits.

Expedited Development and Review Programs

The FDA is authorized to expedite the review of BLAs in several ways. For example, the Fast Track program is intended to expedite or facilitate the process for reviewing new drugs and biological products that meet certain criteria. Specifically, new drugs and biological products are eligible for Fast Track designation if they are intended to treat a serious or life-threatening condition and demonstrate the potential to address unmet medical needs for the condition. Fast Track designation applies to the product and the specific indication for which it is being studied. The sponsor of a new drug or biologic may request the FDA to designate the drug or biologic as a Fast Track product at any time during the clinical development of the product. Unique to a Fast Track product, the FDA may consider for review sections of the marketing application on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the application, the FDA agrees to accept sections of the application and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the application.

Any product submitted to the FDA for marketing, including under a Fast Track program, may be eligible for other types of FDA programs intended to expedite development and review, such as breakthrough therapy designation, priority review and accelerated approval.

Priority review. Any product is eligible for priority review if it has the potential to provide safe and effective therapy where no satisfactory alternative therapy exists or a significant improvement in the treatment, diagnosis or prevention of a disease compared to marketed products. The FDA will attempt to direct additional resources to the evaluation of an application for a new drug or biological product designated for priority review in an effort to facilitate the review.

Accelerated approval.A product may be eligible for accelerated approval. Drug or biological products studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may receive accelerated approval, which means that they may be approved on the basis of adequate and well-controlled clinical trials establishing that the product has an effect on a surrogate endpoint that is reasonably likely to predict a clinical benefit, or on the basis of an effect on a clinical endpoint other than survival or irreversible morbidity that is likely to reasonably predict a clinical benefit. As a condition of approval, the FDA may require that a sponsor of a drug or biological product receiving accelerated approval perform adequate and well-controlled post marketing clinical trials. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product.

Breakthrough therapy designation. To qualify for the breakthrough therapy program, product candidates must be intended to treat a serious or life-threatening disease or condition and preliminary clinical evidence must indicate that such product candidates may demonstrate substantial improvement on one or more clinically significant endpoints over existing therapies. The

FDA will seek to ensure the sponsor of a breakthrough therapy product candidate receives intensive guidance on an efficient development program, intensive involvement of senior managers and experienced staff on a proactive, collaborative and cross-disciplinary review, and rolling review.

Fast Track designation, breakthrough designation, priority review and accelerated approval do not change the standards for approval, but may expedite the development or approval process.

Biological product manufacturers and other entities involved in the manufacture and distribution of approved biological products are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with GMPs and other laws. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain GMP compliance. Discovery of problems with a product after approval may result in restrictions on a product, manufacturer, or holder of an approved BLA, including withdrawal of the product from the market. In addition, changes to the manufacturing process or facility generally require prior FDA approval before being implemented and other types of changes to the approved product, such as adding new indications and additional labeling claims, are also subject to further FDA review and approval.

U.S. Patent Term Restoration and Marketing Exclusivity

Depending upon the timing, duration and specifics of the FDA approval of the use of our product candidates, some of the U.S. patents that we in-license may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period is generally one-half the time between the effective date of an IND and the submission date of a BLA plus the time between the submission date of a BLA and the approval of that application. Only one patent applicable to an approved biological product is eligible for the extension and the application for the extension must be submitted prior to the expiration of the patent. The USPTO, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we may apply for restoration of patent term for one of our currently owned or in-licensed patents to add patent life beyond its current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant BLA.

A biological product can obtain pediatric market exclusivity in the United States. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric study in accordance with an FDA-issued "Written Request" for such a study. This is not a patent term extension, but it effectively extends the regulatory period during which the FDA cannot accept or approve a biosimilar application.

The Biologics Price Competition and Innovation Act, or BPCIA, created an abbreviated approval pathway for biological products shown to be biosimilar to, or interchangeable with, an FDA-licensed reference biological product. A reference biologic is granted twelve years of exclusivity from the time of first licensure of the reference product. Biosimilarity, which requires that there be no clinically meaningful differences between the biological product and the reference product in terms of safety, purity and potency, can be shown through analytical studies, animal studies and a clinical trial or trials. Interchangeability requires that a product is biosimilar to the reference product and the product must demonstrate that it can be expected to produce the same clinical results as the reference product and, for products administered multiple times, the biologic and the reference biologic may be switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic. However, complexities associated with the larger and often more complex structure of biological products, as well as the process by which such products are manufactured, pose significant hurdles to implementation that are still being worked out by the FDA.

Review and Approval of Medical Devices in the United States

Medical devices in the United States are strictly regulated by the FDA. Under the FD&C Act, a medical device is defined as an instrument, apparatus, implement, machine, contrivance, implant, *in vitro* reagent, or other similar or related article, including a component part, or accessory which is, among other things: intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease, in man or other animals; or intended to affect the structure or any function of the body of man or other animals, and which does not achieve its primary intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized for the achievement of any of its primary intended purposes. This definition provides a clear distinction between a medical device and other FDA regulated products such as drugs. If the primary intended purpose of the product is achieved through chemical action or by being metabolized by the body, the product is regulated as a drug or biological product.

Unless an exemption applies, a new or modified medical device may not be marketed in the United States unless and until it has

been cleared through filing of a 510(k) premarket notification, or 510(k), or approved by the FDA pursuant to a Premarket Approval, or PMA, application. The information that must be submitted to the FDA in order to obtain clearance or approval to market a new or modified medical device varies depending on how the medical device is classified by the FDA. Medical devices are classified into one of three classes on the basis of the controls deemed by the FDA to be necessary to reasonably ensure their safety and effectiveness.

Class I devices are low risk devices for which reasonable assurance of safety and effectiveness can be provided by adherence to the FDA's general controls for medical devices, which include applicable portions of the FDA's Quality System Regulation, or QSR, facility registration and product listing, reporting of adverse medical events and malfunctions and truthful and non-misleading labeling. Many Class I devices are exempt from premarket regulation; however, some Class I devices require premarket clearance by the FDA through the 510(k) premarket notification process.

Class II devices are moderate risk devices and are subject to the FDA's general controls, and any other special controls, such as performance standards, post-market surveillance and FDA guidelines, deemed necessary by the FDA to provide reasonable assurance of the devices' safety and effectiveness. Premarket review and clearance by the FDA for Class II devices are accomplished through the 510(k) premarket notification procedure, although some Class II devices are exempt from the 510(k) requirements. Premarket notifications are subject to user fees, unless a specific exemption applies.

Class III devices are deemed by the FDA to pose the greatest risk, such as those for which reasonable assurance of the device's safety and effectiveness cannot be assured solely by the general controls and special controls described above and that are life-sustaining or life-supporting. A PMA application must provide valid scientific evidence, typically extensive preclinical and clinical trial data and information about the device and its components regarding, among other things, device design, manufacturing and labeling. PMA applications (and supplemental PMA applications) are subject to significantly higher user fees than are 510(k) premarket notifications.

510(k) Premarket Notification

To obtain 510(k) clearance, a manufacturer must submit a premarket notification demonstrating that the proposed device is "substantially equivalent" to a predicate device, which is a previously cleared 510(k) device or a pre-amendment device that was in commercial distribution before May 28, 1976, for which the FDA has not yet called for the submission of a PMA application. The FDA's 510(k) clearance pathway usually takes from three to 12 months from the date the application is submitted and filed with the FDA, but it can take significantly longer and clearance is never assured. The FDA has issued guidance documents meant to expedite review of a 510(k) and facilitate interactions between applicants and the agency. To demonstrate substantial equivalence, a manufacturer must show that the device has the same intended use as a predicate device and the same technological characteristics, or the same intended use and different technological characteristics and is as safe and as effective as the predicate device and does not raise new questions of safety and effectiveness than the predicate device.

Most 510(k)s do not require clinical data for clearance, but the FDA may request such data. The FDA seeks to review and act on a 510(k) within 90 days of submission, but it may take longer if the agency finds that it requires more information to review the 510(k). If the FDA determines that the device is substantially equivalent to a predicate device, the subject device may be marketed. However, if the FDA concludes that a new or modified device is not substantially equivalent to a predicate device, the new or modified device will be classified in Class III and the manufacturer will be required to submit a PMA application to market the product. Devices of a new type that the FDA has not previously classified based on risk are automatically classified into Class III by operation of the FD&C Act, regardless of the level of risk they pose. To avoid requiring PMA review of low- to moderate-risk devices classified in Class III by operation of law, the FD&C Act allows the FDA to classify a low- to moderate-risk device not previously classified into Class I or II, a process known as the *de novo* process. A company may apply directly to the FDA for classification of its device as *de novo* or may submit a *de novo* petition within 30 days of receiving a not substantially equivalent determination.

Modifications to a 510(k)-cleared device may require the submission of a traditional 510(k), but modifications meeting certain conditions may be candidates for FDA review under a Special 510(k). A new 510(k) is required when the modification constitutes a major change in the device's intended use or would significantly affect the safety or effectiveness of the device. A Special 510(k) allows a manufacturer to declare conformance to design controls without providing new data. When the modification involves a change in material, the nature of the "new" material will determine whether a traditional or Special 510(k) is necessary.

A modification to a 510(k)-cleared product that would constitute a major change in its intended use or any change that would significantly affect the safety or effectiveness of the device may, in some circumstances, even cause the product to be a new, Class III device. In that case, the significant changes would require the submission of a PMA application, if the change raises complex or novel scientific issues or the product has a new intended use. A manufacturer may be required to submit extensive preclinical and clinical data depending on the nature of the changes.

The FDA requires every manufacturer to make the determination regarding the need for a new 510(k) submission in the first instance, but the FDA may review any manufacturer's decision. If the FDA disagrees with the manufacturer's determination and requires a new 510(k) clearance, or even PMA application approval, for modifications to previously cleared products for which the manufacturer concluded that new a clearance or approval is unnecessary, the manufacturer may be required to cease marketing or distribution of the products or to recall the modified product until it obtains clearance or approval, and the manufacturer may be subject to significant regulatory fines or penalties. In addition, the FDA may make substantial changes to industry requirements regarding the 510(k) process.

Premarket Approval Application

The PMA application process for approval to market a medical device is more complex, costly and time-consuming than the 510(k) clearance procedure. A PMA application must be supported by extensive data, including technical information regarding device design and development, preclinical studies, clinical trials, manufacturing and controls information and labeling information that demonstrate the safety and effectiveness of the device for its intended use. After a PMA application is submitted, the FDA has 45 days to determine whether it is sufficiently complete to permit a substantive review. If the PMA application is complete, the FDA will file the PMA application. If the FDA accepts the application for filing, the agency will begin an in-depth substantive review of the application. By statute, the FDA has 180 days to review the application although, generally, review of the application often takes between one to three years, and may take significantly longer. If the FDA has questions, it will likely issue a first major deficiency letter within 150 days of filing. It may also refer the PMA application to an FDA advisory panel for additional review, and will conduct a preapproval inspection of the manufacturing facility to ensure compliance with the Medical Device Quality System Regulation, or QSR, either of which could extend the 180-day response target. In addition, the FDA may request additional information or request the performance of additional clinical trials in which case the PMA application approval may be delayed while the trials are conducted and the data acquired are submitted in an amendment to the PMA. Even with additional trials, the FDA may not approve the PMA application.

If the FDA's evaluations of both the PMA application and the manufacturing facilities are favorable, the FDA will either issue an approval letter authorizing commercial marketing or an approvable letter that usually contains a number of conditions that must be met in order to secure final approval. If the FDA's evaluations are not favorable, the FDA will deny approval of the PMA application or issue a not approvable letter. The PMA application process, including the gathering of clinical and non-clinical data and the submission to and review by the FDA, can take several years, and the process can be expensive and uncertain. Moreover, even if the FDA approves a PMA application, the FDA may approve the device with an indication that is narrower or more limited than originally sought. The FDA can impose post-approval conditions that it believes necessary to ensure the safety and effectiveness of the device, including, among other things, restrictions on labeling, promotion, sale and distribution. After approval of a PMA application, a new PMA application or PMA application supplement may be required for a modification to the device, its labeling, or its manufacturing process. PMA application supplements often require submission of the same type of information as an initial PMA application, except that the supplement is limited to information needed to support any changes from the device covered by the approved PMA application and may or may not require as extensive technical or clinical data or the convening of an advisory panel. The time for review of a PMA application supplement may vary depending on the type of change, but it can be lengthy. In addition, in some cases the FDA might require additional clinical data.

Investigational Device Exemption

A clinical trial is typically required for a PMA application and, in a small percentage of cases, the FDA may require a clinical trial in support of a 510(k) submission. A manufacturer that wishes to conduct a clinical study trial involving the device is subject to the FDA's IDE regulation. The IDE regulation distinguishes between significant and nonsignificant risk device studies and the procedures for obtaining approval to begin the study differ accordingly. A significant risk device presents a potential for serious risk to the health, safety, or welfare of a subject. Significant risk devices are devices that are substantially important in diagnosing, curing, mitigating, or treating disease or in preventing impairment to human health. Studies of devices that pose a significant risk require both FDA and an IRB approval prior to initiation of a clinical trial. Nonsignificant risk devices are devices that do not pose a significant risk to the human subjects. A nonsignificant risk device study requires IRB approval prior to initiation of a clinical trial, and FDA approval of the study is deemed to be in effect if certain conditions are met.

An IDE application must be supported by appropriate data, such as animal and laboratory testing results, showing that it is safe to test the device in humans and that the testing protocol is scientifically sound. An IDE application is considered approved 30 days after it has been received by the FDA, unless the FDA otherwise informs the sponsor prior to 30 calendar days from the date of receipt, that the IDE is approved, approved with conditions, or disapproved. IDE approval permits a specified number of subjects to be enrolled at specified study centers. The clinical trial must be conducted in accordance, and FDA approval of the study is deemed to be in effect if certain conditions are met. with applicable regulations, including, but not limited to, the FDA's IDE regulations and GCP.

The investigators must obtain subject informed consent, rigorously follow the investigational plan and study protocol, control the disposition of investigational devices, and comply with all reporting and record keeping requirements. A clinical trial may be suspended or terminated by the FDA, the IRB or the sponsor at any time for various reasons, including a determination that the risks to the study participants outweigh the benefits of participation in the trial. Approval of an IDE does not bind the FDA to accept the results of the trial as sufficient to prove the product's safety and efficacy, even if the trial meets its intended success criteria.

Post-Approval Regulation of Biological Products and Medical Devices in the United States

After a biological product or device is placed on the market, numerous regulatory requirements apply including, but not limited to:

- submitting and updating establishment registration and device listings with the FDA;
- compliance with the manufacturing regulations and standards, including cGMP, for biological products, and the QSR, which require device manufacturers to follow stringent design, testing, control, documentation, record maintenance, including maintenance of complaint and related investigation files, and other quality assurance controls during the manufacturing process;
- unannounced routine or for-cause inspections by the FDA, which may include suppliers' facilities;
- advertising and promotion regulations, which prohibit the promotion of products for uncleared or unapproved or "off-label" uses and impose other restrictions on advertising and labeling;
- post-approval restrictions or conditions, including requirements to conduct post-market surveillance studies to establish continued safety data or tracking products through the chain of distribution to the patient level; and
- compliance with the regulations requiring the reporting of adverse events and certain device malfunctions to the FDA.

The failure to comply with applicable regulatory requirements can result in enforcement action by the FDA, which may include any of the following sanctions:

- untitled letters, warning letters, fines, injunctions or civil penalties;
- recalls, detentions or seizures of products;
- operating restrictions;
- delays in the introduction of products into the market;
- total or partial suspension of production;
- delay or refusal of the FDA or other regulators to grant 510(k) clearance or PMA application approvals of new products;
- withdrawals of 510(k) clearance or PMA application approvals; or
- criminal prosecution.

Review and Approval of Combination Products in the United States

Certain products may be comprised of components that would normally be regulated under different types of regulatory authorities, and frequently by different Centers at the FDA. These products are known as combination products. Specifically, under regulations issued by the FDA, a combination product may be:

- a product comprised of two or more regulated components that are physically, chemically, or otherwise combined or mixed and produced as a single entity;
- two or more separate products packaged together in a single package or as a unit and comprised of drug and device products;
- a drug or device packaged separately that according to its investigational plan or proposed labeling is intended for use only with an approved individually specified drug or device where both are required to achieve the intended use, indication, or effect and where upon approval of the proposed product the labeling of the approved product would need to be changed, *e.g.*, to reflect a change in intended use, dosage form, strength, route of administration, or significant change in dose; or
- any investigational drug or device packaged separately that according to its proposed labeling is for use only with another individually specified investigational drug, device, or biological product where both are required to achieve the intended use, indication, or effect.

Under the FD&C Act, the FDA is charged with assigning a center with primary jurisdiction, or a lead center, for review of a combination product. That determination is based on the "primary mode of action" of the combination product. Thus, if the primary mode of action of a device-drug combination product is attributable to the drug product, the FDA Center responsible for premarket review of the drug product would have primary jurisdiction for the combination product, but the other relevant FDA Centers would consult on the review. The FDA has also established an Office of Combination Products to address issues surrounding combination products and provide more certainty to the regulatory review process. That office serves as a focal point for combination product issues for agency reviewers and industry. It is also responsible for developing guidance and regulations to clarify the regulation of combination products, and for assignment of the FDA center that has primary jurisdiction for review of combination products where the jurisdiction is unclear or in dispute.

Other Healthcare Laws and Regulations

Healthcare providers, physicians and third-party payors in the United States and elsewhere will play a primary role in the

recommendation and prescription of any product candidates for which we obtain marketing approval. Our current and future arrangements with healthcare professionals, principal investigators, consultants, customers and third-party payors may expose us to broadly applicable fraud and abuse and other healthcare laws, including, without limitation, the federal Anti-Kickback Statute and the federal civil False Claims Act, that may constrain the business or financial arrangements and relationships through which we sell, market and distribute any product candidates for which we obtain marketing approval. In addition, we may be subject to physician payment transparency laws and patient privacy and security regulation by the federal government and by the states and foreign jurisdictions in which we conduct our business. The applicable federal, state and foreign healthcare laws that may affect our ability to operate include the following:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, lease, order or recommendation of, any good, facility, item or service, for which payment may be made, in whole or in part, under federal and state healthcare programs such as Medicare and Medicaid;
- federal civil and criminal false claims laws, including, without limitations, the federal civil False Claims Act, which impose criminal and civil penalties, including through civil whistleblower or *qui tam* actions, against individuals or entities for, among other things, knowingly presenting, or causing to be presented, to the federal government, including federal health care programs, such as, the Medicare and Medicaid programs, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- the civil monetary penalties statute, which imposes penalties against any person or entity who, among other things, is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent;
- HIPAA, which created additional federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of whether the payor is public or private, knowingly and willfully embezzling or stealing from a health care benefit program, willfully obstructing a criminal investigation of a health care offense and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters;
- HIPAA, as amended by HITECH, and their respective implementing regulations, which impose obligations on "covered entities," including healthcare providers, health plans, and healthcare clearinghouses, as well as their respective "business associates" that create, receive, maintain or transmit individually identifiable health information for or on behalf of a covered entity, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- the Physician Payments Sunshine Act, created under Section 6002 of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively the ACA, imposed annual reporting requirements for certain manufacturers of drugs, devices, biologics and medical supplies for certain payments and "transfers of value" provided to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members; and
- analogous state and foreign laws, such as state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; state and foreign laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or to adopt compliance programs as prescribed by state laws and regulations, or that otherwise restrict payments that may be made to healthcare providers; state and foreign laws that require manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Further, the ACA, among other things, amended the intent requirement of the federal Anti-Kickback Statute and the healthcare fraud statute. A person or entity no longer needs to have actual knowledge of these statutes or specific intent to violate them. In addition, the ACA provided that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act.

Efforts to ensure that our future business arrangements with third parties will comply with applicable healthcare laws and regulations may involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, including, without limitation, damages, fines, imprisonment, disgorgement, exclusion from participation in government healthcare programs, such as Medicare and Medicaid, additional reporting requirements and/or oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, and the curtailment or restructuring of our operations, as well as reputational harm, which could significantly harm our business.

Coverage and Reimbursement

Our ability to commercialize any product candidates successfully will depend, in part, on the extent to which coverage and adequate reimbursement for our product candidates will be available from government payor programs at the federal and state levels, including Medicare and Medicaid, private health insurers, managed care plans and other third-party payors. Government authorities and other third-party payors, such as private health insurers and health maintenance organizations, decide which medical products they will pay for and establish reimbursement levels. A number of gene therapy products have been approved over the past year by the FDA. Although the Center for Medicare and Medicaid Services, or CMS, subsequently approved its first method of coverage and reimbursement for one such product, the methodology has been subject to challenge by members of Congress. CMS's decision as to coverage and reimbursement for one product does not mean that all similar products will be eligible for analogous coverage and reimbursement. As there is no uniform policy for coverage and reimbursement amongst third-party payors in the United States, even if CMS approves coverage and reimbursement for any of our product candidates, it is unclear what affect, if any, such a decision will have on our ability to obtain and maintain coverage and adequate reimbursement from other private payors.

In addition, third-party payors are increasingly requiring that manufacturers provide them with predetermined discounts from list prices and are challenging the prices charged for products. Coverage and reimbursement may not be available for any product that we commercialize and, even if these are available, the level of reimbursement may not be adequate, which may adversely affect the demand for, or the price of, any product candidate for which we obtain marketing approval. Obtaining and maintaining adequate reimbursement may be difficult. Third-party payors are also increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. We may be required to conduct expensive pharmacoeconomic studies to justify coverage and reimbursement or the level of reimbursement compared to other therapies. If coverage and adequate reimbursement are not available or reimbursement is available only to limited levels, we may not be able to successfully commercialize any product candidates for which marketing approval is obtained.

Further, the United States government, state legislatures and other governments have shown significant interest in implementing cost containment programs to limit the growth of government-paid health care costs, including price controls, restrictions on reimbursement and requirements for substitution of generic products for branded prescription drugs. There has been heightened governmental scrutiny recently over the manner in which manufacturers set prices for their marketed products, which have resulted in several Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, reduce the cost of products under Medicare, and reform government program reimbursement methodologies for products. At the federal level, the Trump administration's budget proposal for fiscal year 2019 contains further price control measures that could be enacted during the 2019 budget process or in other future legislation, including, for example, measures to permit Medicare Part D plans to negotiate the price of certain products under Medicare Part B, to allow some states to negotiate product prices under Medicaid, and to eliminate cost sharing for generics for low-income patients. While any proposed measures will require authorization through additional legislation to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control pharmaceutical costs. At the state level, legislatures are increasingly passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our products or additional pricing pressure.

Healthcare Reform

Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in

healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives. In March 2010, then-President President Obama signed into law the ACA, a sweeping law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for the healthcare and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms.

The ACA established an annual, nondeductible fee on any entity that manufactures or imports certain specified branded prescription drugs and biologic agents, addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected, increased the minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program, extended the Medicaid Drug Rebate program to utilization of prescriptions of individuals enrolled in Medicaid managed care organizations, and provided incentives to programs that increase the federal government's comparative effectiveness research. In addition, the ACA implemented payment system reforms including a national pilot program on payment bundling to encourage hospitals, physicians and other providers to improve the coordination, quality and efficiency of certain healthcare services through bundled payment models.

There have been judicial and Congressional challenges to certain aspects of the ACA, as well as recent efforts by the Trump administration to repeal or replace certain aspects of the ACA. Since January 2017, President Trump has signed two Executive Orders and other directives designed to delay the implementation of certain provisions of the ACA or otherwise circumvent some of the requirements for health insurance mandated by the ACA. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the ACA. While Congress has not passed comprehensive repeal legislation, two bills affecting the implementation of certain taxes under the ACA have been signed into law. The Tax Cuts and Jobs Act includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate." Additionally, on January 22, 2018, President Trump signed a continuing resolution on appropriations for fiscal year 2018 that delayed the implementation of certain ACA-mandated fees, including the so-called "Cadillac" tax on certain high cost employer-sponsored insurance plans, the annual fee imposed on certain health insurance providers based on market share, and the medical device excise tax on non-exempt medical devices. Further, the Bipartisan Budget Act of 2018, or the BBA, among other things, amends the ACA, effective January 1, 2019, to increase from 50 percent to 70 percent the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D and to close the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole." Congress could consider additional legislation to repeal or repeal and replace certain elements of the ACA.

In addition, other legislative changes have been proposed and adopted since the ACA was enacted. On August 2, 2011, then-President President Obama signed into law the Budget Control Act of 2011, which, among other things, created the Joint Select Committee on Deficit Reduction to recommend to Congress proposals in spending reductions. The Joint Select Committee did not achieve a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, triggering the legislation's automatic reduction to several government programs. This includes reductions to Medicare payments to providers of 2% per fiscal year, which went into effect on April 1, 2013 and, due to subsequent legislation, including the BBA, will remain in effect through 2027 unless additional Congressional action is taken. On January 2, 2013, then-President President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

There are several proposals being tabled in Congress, with industry participants providing input, to allow the use of value-based contracts and other innovative payment models for regenerative therapies while remaining consistent with rebate and price reporting requirements such as Medicaid Best Price.

Additional new laws may result in additional reductions in funding to Medicare and other federal health care programs. Further, new laws may, among other things, increase drug rebates or discounts owed under federal health care programs, impose additional reporting or compliance obligations, and/or otherwise put additional downward pressure on drug prices or increase the burden of compliance on pharmaceutical manufacturers.

Government Regulation Outside of the European Union and the United States

In addition to regulations in the European Union and the United States, we will be subject to a variety of regulations in other jurisdictions governing, among other things, clinical trials, commercial sales and distribution of our products, and pricing and reimbursement. The requirements and process governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. If we fail to comply with applicable national regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

TREND INFORMATION

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11.1
MOST SIGNIFICANT RECENT TRENDS SINCE THE END OF THE LAST FINANCIAL YEAR

Please refer to Section 19.7, "Significant Change in Financial position" of the Document.

11.2
INFORMATION ON ANY KNOWN TRENDS, UNCERTAINTIES, DEMANDS, COMMITMENTS OR EVENTS THAT ARE REASONABLY LIKELY TO HAVE A MATERIAL EFFECT ON THE COMPANY'S PROSPECTS

None.

PROFIT FORECASTS OR ESTIMATES

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We have elected not to include a profit forecast or a profit estimate in this Document.

13

ADMINISTRATIVE, MANAGEMENT AND SUPERVISORY BODIES AND SENIOR MANAGEMENT

13.1 COMPOSITION OF MANAGEMENT AND SUPERVISORY BODIES

We are a French corporation with limited liability *(société anonyme)* with a Board of Directors. A description of the main provisions of our bylaws relating to the functioning and powers of the Board of Directors as well as a summary of the main provisions of the internal regulations of the Board of Directors and of the special board committees that we have implemented, are included in Section 15, "Board Practices" and in Section 20, "Additional Information" of this Document.

13.1.1 DIRECTORS AND OFFICERS

We currently have six directors and three non-voting members. Since the listing of our shares on Euronext Paris, Mr. Florent Gros, Mr. Earl Collier and Mr. Genghis Loyd-Harris and Guido Magni have resigned from their director positions and Bpifrance Participations, represented by Ms. Charlotte Corbaz, Ms. Simone Seiter and Ms. Natalie Mount respectively, have been coopted by the board as directors.

The table below gives the identity of our directors and officers as of the date of this Document and the main positions and offices held by them outside of the Company during the last five years. Unless otherwise stated, the business address for our directors and officers is c/o GENSIGHT BIOLOGICS S.A., 74, rue du Faubourg Saint-Antoine, 75012 Paris, France.

Name	Expiration date of term of office(*)	Main position within the Company(**)	Main positions and offices held outside the Company during the last 5 years
Bernard Gilly	2021	Chief Executive Officer Director Co-Founder	Position and offices held as of the date of this Document: • Chairman of the Boards of Directors of Pixium Vision S.A., BrainEver SAS, Prophesee S.A., Eye TechCare S.A., Chronolife SAS, IBionext SAS, Tilak Healthcare SAS and Brainiac SAS Position and offices held during the last 5 years that are no longer held: • Chairman of the Board of Directors of the Company • Chief executive officer at Pixium Vision S.A. • Chairman of the Board of Directors of Enterome S.A. • Member of the Board of Directors of Kala Pharmaceuticals Inc. • Chairman of the Board of Directors and Chief Executive Officer of Général Mnemosyme • Chairman of the Board of Directors of Gecko Biomedicals S.A.
Michael Wyzga	2021	Chairman of the Board of Directors Independent Director	Position and offices held as of the date of this Document: • President of MSW Consulting Inc., a strategic consulting group focused in the life science area • Member of the Board of Directors, audit and compensation commitees of Exact Sciences Corporation • Member of the Board of Directors and chair of the audit committee of OncoMed Pharmaceuticals, Inc. • Member of the Board of Directors of Mereo Pharmaceuticals and LogicBio • Chairman of the Board of Directors of X4 Pharmaceuticals, Inc. Position and offices held during the last 5 years that are no longer held: • Member of the Board of Directors, member of the compensation committee and chair of the audit committee of Akebia Therapeutics, Inc. • Member of the Board of Directors of Altus Pharmaceuticals, Inc. • Member of the Board of Directors of Idenix Pharmaceuticals, Inc. • Served as a member of the supervisory board of Prosensa Holding B.V.

Name	Expiration date of term of office(*)	Main position within the Company(**)	Main positions and offices held outside the Company during the last 5 years
Thomas Gidoin	–	Chief Financial Officer	Position and offices held as of the date of this Document: • None Position and offices held during the last 5 years that are no longer held: • Vice President Finance at DBV Technologies S.A.
Barrett Katz	–	Chief Medical Officer	Position and offices held as of the date of this Document: • None Position and offices held during the last 5 years that are no longer held: • Francis DeJur Chair of Ophthalmology at the Montefiore Medical Center and Albert Einstein College of Medicine in New York • Chief Executive Officer of Danube Pharmaceuticals Inc. • Chief Medical Officer of Fovea Pharmaceuticals • Vice President for Medical Affairs and Strategy at Erytech
Peter Goodfellow	2020	Independent Director	Position and offices held as of the date of this Document: • Science advisor and consultant for Abingworth LLP, or Abingworth, Sanofi and the Bill and Melinda Gates Foundation • Chairman of the Board of Directors of GammaDelta Therapeutics Ltd. Non-Executive Board Member of Virion Health. Position and offices held during the last 5 years that are no longer held: • Director of the Muscular Dystrophy Group • Director Institute of Cancer Research • Non-Executive Board Member of Prosensa
Simone Seiter	2020	Independent Director	Position and offices held as of the date of this Document: • None Position and offices held during the last 5 years that are no longer held: • Vice President at IQVIA
Natalie Mount	2020	Independent Director	Position and offices held as of the date of this Document: • Serves as Chief Scientific Officer at GammaDelta Therapeutics Position and offices held during the last 5 years that are no longer held: • Chief Clinical Officer at the Cell and Gene Therapy Catapult • Board member of Cell and Gene Therapy Catapult, CTTCR and Chimeric Therapeutics
Bpifrance Participations (as represented by Charlotte Corbaz)	2019	Director	Position and offices held as of the date of this Document: • Serves on the Board of Directors of Ekinops SA • Serves as an observer of the Board of Directors of Colibri SAS Position and offices held during the last 5 years that are no longer held: • Member of the Board of Directors of Vi Technology SAS

(*) According to our bylaws, the duration of the term of office of the members of our Board of Directors is 3 years. The Expiration date is only provided for directors' current terms. The term expires at the end of the ordinary general meeting convened to approve the accounts for the previous financial year during the year in which their term office expires.

(**) Please note that, except for the Chief Executive Officer, none of the officers is a representative *(mandataire social)* of the Company.

Mr. Collier has resigned from the Board of Directors and has been replaced by Ms. Seiter on April 19, 2017.

Ms. Mount joined the Board of Directors on May 31, 2017.

Mr. Lloyd-Harris has resigned from the Board of Directors on March 16, 2018.

Mr. Magni has resigned from the Board of Directors on April 24, 2019.

In consideration for the subscription by Sofinnova Crossover I SLP for the capital increase of €8 million implemented in February 2019, we have undertaken to put on the agenda of our next shareholders' meeting a proposal to appoint Sofinnova Partner SAS and one independent member to be proposed by Sofinnova with our approval, as members of the Board of Directors of the Company.

The table below gives the identity of our non-voting observers are also attending board meetings as of the date of this Document:

Name	Expiration date of term of office
José-Alain Sahel	2021
Thibaut Roulon	2019
Laurent Higueret	2020

Separation of the Offices of Chairman of the Board and Chief Executive Officers

On March 2, 2016, our Board of Directors decided to separate the offices of the Chairman of the Board of Directors and of the Chief Executive Officer. As of the date of this Document, Bernard Gilly is Co-Founder, Director and Chief Executive Officer and Michael Wyzga is the Chairman of our Board of Directors.

Director Independence

We consider that, under the recommendations of the MiddleNext Code, four current directors are "independent directors."

The MiddleNext Code sets out the five following criteria justifying the independence of directors, characterized by the absence of any significant financial, contractual or family relationship likely to affect their independence of judgment:

- they must not be a salaried employee or corporate officer of us or our Group and must not have held such a position within the last five years;
- they must not be in a significant business relationship with us or our Group (*e.g.*, client, supplier, competitor, provider, creditor, banker, etc.) within the last two years;
- they must not be a reference shareholder or hold a significant number of voting rights;
- they must not have close relationships or family ties with any of our corporate officer or reference shareholder; and
- they must not have been our auditor within the last six years.

Based on these criteria, our Board of Directors determined that Mr. Wyzga, Dr. Seiter, Ms. Mount and Dr. Goodfellow are "independent directors" under the independence criteria of the MiddleNext Code. In making such determination, the Board of Directors considered the relationships that each non-employee director has with us and all other facts and circumstances the Board of Directors deemed relevant in determining the director's independence, including the number of ordinary shares beneficially owned by the director and his or her affiliated entities, if any.

13.1.2 BIOGRAPHICAL INFORMATION ABOUT THE MEMBERS OF THE BOARD OF DIRECTORS AND OFFICERS OF THE COMPANY

Officers

Bernard Gilly, Ph.D., one of our founders, has served as our Chief Executive Officer since our creation. From our creation through 2016, Dr. Gilly served as Chairman of our Board of Directors. From 2011 through 2014, Dr. Gilly served as Chief Executive Officer at Pixium Vision and from which date he has served as non-executive Chairman of the Board of Directors. Additionally, Mr. Gilly currently serves on the boards of Prophesee S.A. (formerly Chronocam) and Gecko Biomedical. From 2005 to 2009, he founded and was Chairman and Chief Executive Officer of Fovea Pharmaceuticals S.A., or Fovea, a privately funded biotech company, which was acquired by Sanofi S.A., or Sanofi. He then became Senior Vice President of the Ophthalmology Division of Sanofi and served in that role until March 2012. Prior to Fovea, Dr. Gilly was a partner at Sofinnova Partners S.A.S. from December 2000 to November 2005. From January 1992 to October 2000, he was Chief Executive Officer of Transgene S.A., a company listed on the NASDAQ stock exchange and the *Nouveau Marché* of Euronext Paris, France. Dr. Gilly received an engineering degree from École Nationale d'Agronomie and a Ph.D. from Université de Rennes.

Thomas Gidoin has been our Chief Financial Officer since June 2015. From 2012 to mid-2015, Mr. Gidoin was Vice President Finance at DBV Technologies S.A., where he led the Corporate Finance team and participated in public offerings and private placements, including the dual listing of DBV Technologies S.A. on the NASDAQ Global Select Market in 2014. From 2008 to 2011, Mr. Gidoin served in various positions at Ipsen S.A., including UK Operations Controller in London and Senior Financial Analyst in the Global Operations division in Paris. He started his career in audit at Ernst & Young. Mr. Gidoin received a Master's degree in International Finance from ESGF Paris and a Master's degree

in International Management from Neoma Business School in France.

Barrett Katz, M.D, MBA has served as our Chief Medical Officer since November 2017. Prior to joining GenSight, Dr. Katz was the Francis DeJur Chair of Ophthalmology at the Montefiore Medical Center and Albert Einstein College of Medicine in New York where he also served as Professor of Ophthalmology, Neurology and Neurosurgery, and the Executive Director of Clinical Trials from, January 2010 to October 2017. He has been engaged in the biotech industry and drug development space for many years, served as Chief Executive Officer of Danube Pharmaceuticals Inc., Chief Medical Officer of Fovea Pharmaceuticals, and Vice President for Medical Affairs and Strategy at Eyetech Group Ltd.. He studied at the National Hospital for Nervous Disease at Queen's Square in London, and served fellowships at Harvard and the University of California San Francisco. He interned in Internal Medicine at Parkland Hospital in Dallas, went to the National Institutes of Health in Neuro-Virology, completed a Neurology residency at Harvard Medical School and an Ophthalmology residency at Tufts-New England Medical Center. Dr. Katz received his M.D. from Case-Western Reserve University School of Medicine after graduating from Colgate University, and obtained an MBA from the University of Rochester's Simon School of Business.

Directors

Michael Wyzga has served as a director since October 2013 and as our Chairman since March 2016. Mr. Wyzga is currently the President of MSW Consulting Inc., a strategic consulting group focused in the lifesciences area. From December 2011 until November 2013, Mr. Wyzga served as President and Chief Executive Officer and a member of the Board of Directors of Radius Health, Inc., a publicly traded biopharmaceutical company. Prior to that, Mr. Wyzga served in various senior management positions at Genzyme Corporation, a publicly traded global biotechnology company. Mr. Wyzga joined Genzyme in February 1998 and most recently served as Executive Vice President, Finance from May 2003 until November 2011 and as chief financial officer from July 1999 until November 2011. From February 2014 to December 2018, Mr. Wyzga served as a member of the Board of Directors of Akebia Therapeutics, Inc., a publicly traded biopharmaceutical company, where he was also a member of the compensation committee and chair of the audit committee. Since February 2015, Mr. Wyzga has also served as a member of the Board of Directors of Exact Sciences Corporation, a publicly traded medical technology company, where he is also a member of the audit and compensation committees. Since October 2013, Mr. Wyzga has also served as a member of the Board of Directors of Oncomed Pharmaceuticals, Inc., where he is also a member of the audit committee. Since July 2018, Mr. Wyzga has also served as Chairman of the Board of Directors of X4 Pharmaceuticals. Mr. Wyzga also previously served as a member of the Board of Directors of Idenix Pharmaceuticals, Inc., a publicly traded biotechnology company that was acquired by Merck in August 2014, where he also served as the chair of the audit committee and a member of the compensation committee, and as a member of the Supervisory Board of Prosensa Holding B.V., a publicly traded biopharmaceutical company, from June 2014 until the Prosensa acquisition by BioMarin Falcon B.V. in December 2014. He received an M.B.A. from Providence College and a B.S. from Suffolk University.

Peter Goodfellow, Ph.D. has served as a director since June 2014. Dr. Goodfellow is a scientific consultant for Abingworth, Sanofi and the Bill and Melinda Gates Foundation. Dr. Goodfellow was previously the Balfour Professor of Genetics at Cambridge University before working for SmithKline Beecham (later GlaxoSmithKline) as head of research. He has founded several biotechnology companies and has sat on the boards of Prosensa deCode and several medical charities. Dr. Goodfellow currently serves as the chairman of the Board of Directors of GammaDelta Therapeutics, a biotech developing novel immunotherapies for cancer and other diseases. Dr. Goodfellow holds doctorates from Oxford and Bristol Universities.

Simone Seiter, M.D., Ph.D. has served as a director since April 2017. Dr. Seiter has worked as a Vice President with IQVIA (formerly QuintilesIMS) based in Frankfurt, Germany from 2006 to 2019. Prior to joining IQVIA she worked at Capgemini as a consultant for six years and served as a postdoctoral Fellow at the National Institutes of Health (United States) for two years. Previously, Dr. Seiter worked at the Universities of Heidelberg and Homburg, Germany as board certified dermatologist. Dr. Seiter holds an M.D. Ph.D. degree from the University of Heidelberg and an MBA from the University of Applied Sciences in Neu-Ulm Germany.

Natalie Mount, Ph.D. has served as a director since May 2017. Dr. Mount is currently Chief Scientific Officer, leading Research and Development activities at GammaDelta Therapeutics. Previously, she was Chief Clinical Officer at the Cell and Gene Therapy Catapult where she was responsible for the translational, regulatory and clinical development activities for a wide range of cell and gene therapies. Prior to that, Natalie spent 16 years at Pfizer leading development activities across various therapeutic areas, including cell based therapies in the Regenerative Medicine Unit. Dr. Mount has also sat on the boards of directors of the Cell and Gene Therapy Catapult, CTTCR and Chimeric Therapeutics. Dr. Mount has a first class degree in Natural Sciences from the University of Cambridge and a Ph.D. from University College, London.

Charlotte Corbaz has served as the representative of Bpifrance Participations on our Board of Directors since December 2017. Ms. Corbaz has worked in the Large Venture Fund of Bpifrance Participations since the creation of the fund in 2013, and she currently serves as Investment Principal of the fund. In 2011, Ms. Corbaz began her career in the Valuation and Modeling Department of Eight Advisory, and in 2012 she joined *Fonds Strate´gique d'Investissement* as an analyst. Ms. Corbaz previously sat on the Board of Directors of VI Technology SAS and currently serves on the Board of Directors of Ekinops SA and as an observer of the Board of Directors of Colibri SAS. She has a degree in Management from Audencia Nantes.

13.1.3 BALANCE IN THE COMPOSITION OF THE BOARD OF DIRECTORS

Further to the nomination by the shareholders' meeting held on May 31, 2017 of Simone Seiter and Natalie Mount as members of the Board of Directors, the Board of Directors held on May 31, 2017 stated that since this date the Company complies with the balanced representation of men and women required by article L 225-18-1 of the French Commercial Code, which provides that the proportion of directors of each gender shall be no less than 40% or no more than a difference of two.

Therefore, the Board of Directors held on May 31, 2017 has decided to release the payment of attendance fees, which was suspended insofar as such requirement was not met on January 1, 2017, including any arrears.

13.1.4 LIMITATION OF AUTHORITY OF THE CHIEF EXECUTIVE OFFICER

Limitation of authority of the Chief Executive Officer

The rules of procedure of the Board of Directors provide that decisions deemed "important" as mentioned below are subject to prior approval of the board ruling by simple majority:

"Any decision to make a transfer of any substantial asset or any substantial intellectual/industrial property belonging to the Company;

Any decision to make an acquisition of strategic assets, in particular an industrial property element for the benefit of the Company;

Any investment or divestment decision of any kind (whether in the form of CAPEX or OPEX), commitments or decommitments, acquisition or disposal of assets not provided for in the annual budget and for a unit amount in excess of €500,000 or a cumulative amount in excess of €1,000,000;

Any acquisition or sale, taking or disposal of stakes in other entities or joint ventures, exchanges concerning property, shares or securities within the scope of acquisition or sale transactions, for a unit amount in excess of €1,000,000 or a cumulative amount in excess of €2,000,000;

Any entry into financing (including credit facilities and leasing arrangements) not provided for in the annual budget, for a unit amount in excess of €1,000,000 or a cumulative amount in excess of €2,000,000;

Any decision to set up a structure outside French territory, in particular through offices, branches or establishments, including with regard to R&D activities, or withdrawal from any such structures, it being specified that the transfer of the Company's registered office or its management team outside France will require the express prior authorization of the director appointed upon the proposal of Bpifrance Participations, which may not be refused without reasonable cause duly substantiated to the Board;

Any decision to proceed with the creation of a subsidiary or any trading in the securities of any subsidiary of the Company;

Any significant transaction that could affect the Company's strategy or change its financial structure or its scope of business.

Furthermore, the Chief Executive Officer shall submit for the Board's approval the Company's annual budget and any revision of such budget and shall act within the limits set by the budget approved by the Board.

The Board carries out the controls and verifications it deems appropriate and may ask for the documents that it considers useful for the accomplishment of its tasks to be provided to it."

13.1.5 STATEMENT REGARDING THE EXECUTIVE OFFICERS OR DIRECTORS

As of the date of this Document, to our knowledge, there are no family relationships among any of our executive officers or directors.

To our knowledge, over the course of the past five years: (i) none of the above persons has been convicted of fraud; (ii) none of the above persons has been associated with any bankruptcy, receivership or liquidation; (iii) no accusations or official public sanctions have been brought against any of the above persons by statutory or regulatory authorities (including designated professional bodies); and (iv) none of the above persons has been disqualified by a court from acting as a member of the administrative, management or supervisory body of any company, or from being involved in the management or performance of business of any company.

13.1.6 SUMMARY STATEMENT REGARDING TRANSACTIONS BY EXECUTIVE OFFICERS AND DIRECTORS INVOLVING SHARES OF THE COMPANY DURING THE FISCAL YEAR ENDED DECEMBER 31, 2018

During the fiscal year ended December 31, 2018, no transactions were carried out by the executive officers and directors on the Company's shares.

13.2 CONFLICTS OF INTEREST

To our knowledge, and subject to the relationships described in Section 18, "Related Party Transactions" and Section 4.4, "Risk Related to Our Business Operations," as of the date of this Document there are no potential conflicts of interest between the duties of the members of our Board of Directors and officers and their private interests (including Bernard Gilly's interests as non-executive Chairman of the Board of Directors of Pixium Vision, given the difference of technologies developed by Pixium Vision and the Company).

To our knowledge, as of the date of this Document, there are no conflicts of interest between Bernard Gilly's position in the Company and his positions as Chairman of the Boards of Directors of Brain Ever SAS, Pixium Vision S.A., Gecko Biomedical S.A., Prophesee S.A., Eye TechCare S.A., Chronolife SAS, IBionext SAS, Tilak Healthcare SAS and Brainiac SAS.

In addition, following his resignation as President of *Passage de l'Innovation*, Bernard Gilly retained approximately 27 per cent. of the shares of this company.

To our knowledge, as of the date of this Document, there are no agreements or undertakings of any kind with shareholders, clients, suppliers or others pursuant to which any member of our Board of Directors or officers has been appointed to such position.

As of the date of this Document, the members of the Board of Directors have not agreed to any restriction on their right to transfer shares of the Company, with the exception of rules relating to the prevention of insider trading and the recommendations of the MiddleNext Code, as amended in September 2016, with respect to obligation to retain shares.

As of the filing date of this Document and subject to certain customary lockup agreements entered into with the underwriters in connection with our capital increase on June 27, 2017 (a description of which has to be included in the prospectus for that transaction), the members of our Board of Directors and officers have not agreed to any restrictions relating to the sale of their holdings in our share capital except for the rules relating to the prevention of insider trading.

Management of conflicts of interest within the Board of Directors

Concerning the prevention and management of conflicts of interest, the Board's rules of procedure provide:

"2.5 Conflict of interest – non-competition obligation – obligation of loyalty

Each director has the duty and obligation to inform the Board spontaneously of any conflict of interest situation, even a potential or future conflict, with the Company, or one of its subsidiaries, in which he/she is to be found or may find him/herself. He/she must refrain from participating in the discussions and the voting on the corresponding deliberation(s), and furthermore undertakes, in such event, to exit the Board meeting during the discussions and voting on such deliberation(s).

Any agreement of which the signature is planned, to be entered into between a director and the Company, directly or indirectly or via an intermediary, or between the Company and a company or an undertaking of which he/she is the owner, partner with unlimited liability, managing director, director, member of the Supervisory Board or, in general, a senior manager, except, in accordance with the provisions of Article L.225-39 of the French Commercial Code, (i) those concerning day-to-day transactions and entered into under arm's length conditions, and (ii) those entered into between two companies, one of which holds, directly or indirectly, the entire share capital of the other (where applicable, after deduction of the minimum number of shares required to satisfy the requirements of Article 1832 of the French Civil Code or Articles L.225-1 and L.226-1 of the French Commercial Code), must be communicated by the interested director to the Chairman of the Board. At the time of the Board's deliberation having the effect of authorizing the signature of that agreement, the director will refrain from taking part in the voting.

In general, the Board of Directors takes preventive action with regard to conflicts of interest by raising the awareness of directors and asking them to update their declarations regularly.

Finally, the Board of Directors reviews known conflicts of interest at least once a year.

For regulated related-party agreements, the Board may have an independent expert appraisal carried out when it considers this relevant.

A director or the permanent representative if the director is a legal entity cannot engage, on a personal basis, in companies or businesses that compete with the Company, without having previously informed the Board and without having received its authorization. The director is bound by a duty of loyalty.

A director who no longer believes he/she is in a position to fulfill his/her duties on the Board or the Committees of which he/she is a member, must resign."

COMPENSATION AND BENEFITS

14

The tables below summarize the compensation and benefits of any kind paid to our Chief Executive Officer and to our directors, in accordance with the tables on executive compensation of the AMF recommendation No. 2014-14.

The aggregate compensation paid and benefits in kind granted by us to our current executive officers and directors, including share-based compensation, for the year ended December 31, 2018, was €964,072. For the year ended December 31, 2018, no amounts have been set aside or accrued to provide pension, retirement or similar benefits to our employees was attributable to our executive officers.

14.1 COMPENSATION AND BENEFITS OF SENIOR EXECUTIVES

14.1.1 CRITERIA FOR DETERMINATION, ALLOCATION AND ATTRIBUTION OF THE FIXED, VARIABLE AND EXCEPTIONAL ELEMENTS COMPRISING THE REMUNERATION AND BENEFITS OF ALL KINDS ATTRIBUTABLE TO THE CHAIRMAN OF THE BOARD OF DIRECTORS AND TO THE CHIEF EXECUTIVE OFFICER

This part constitutes the report of the Board of Directors drawn up by application of articles L.225-37-2 and R.225-29-1 of the Commercial Code, that has been approved by our shareholders' meeting held on April 12, 2018, in its 11th and 12th resolutions.

Within the context of the determination of the global remuneration of the directors who are company representatives, the Board of Directors, at the proposal of the remuneration committee, has taken into consideration the following principles, pursuant to the recommendations of R13 of the Middlenext corporate governance code of September 2016:

- Exhaustiveness: the determination of the remuneration of directors who are company representatives shall be exhaustive: fixed part, variable part (bonus), stock options, bonus shares, attendance fees, retirement conditions and specific benefits shall be considered in the global assessment of remuneration.
- Equilibrium between the elements of the remuneration: each element of the remuneration shall be grounded and shall correspond to the general interest of the company.
- Benchmark: this remuneration shall be assessed, as far as possible, in the context of a business and of the reference market and proportional to the situation of the company, while paying attention to its inflationary effect.
- Consistency: the remuneration of the director who is a company representative shall be determined in accordance with that of the other directors and of the company's employees.
- Comprehensibility of the rules: the rules shall be simple and transparent; the performance criteria used to establish the variable part of the remuneration or, as appropriate, for the attribution of options or bonus shares, shall be linked to the performance of the company, correspond to its objectives, be demanding, explainable and, as far as possible, sustainable. These shall be detailed, albeit without calling into question the confidentiality which may be justified for certain elements.
- Measurement: the determination of the remuneration and attributions of options or of bonus shares must strike a fair balance and take account of the general interest of the company, of market practices and of the performances of the directors.
- Transparency: the annual information annual of "shareholders" on all of the remuneration and benefits received by the directors shall be carried out pursuant to the applicable regulations.

14.1.1.1 Principles and criteria of determination, allocation and attribution of the elements comprising the total remuneration and benefits of all kinds attributable to the Chairman of the Board of Directors

These principles and criteria set by the Board, at the recommendation of the remuneration committee, are as follows:

Fixed remuneration

The Chairman of the Board of Directors shall receive fixed remuneration, payable in 12 monthly instalments. This amount shall be revised each year on the basis of market practices observed in comparable companies, through recommendations of the specialist external consulting firm.

Attribution of Equity Warrants (BSA)

The Chairman of the Board of Directors shall be eligible for attribution of equity warrants. These unlisted equity warrants may be exercised for 10 years for the plans approved before 2016 and 7 years for 2016, 2017and 2018 plans after their issue for a price set by the board equal to at least 8% of the market value of an ordinary share on the date of attribution. The exercise price shall be equal to the weighted average of the price of the last 20 trading sessions preceding the attribution date.

14.1.1.2 Principles and criteria of determination, allocation and attribution of the elements comprising the total remuneration and benefits of all kinds attributable to the Chief Executive Officer

These principles and criteria, set by the Board, at the recommendation of the remuneration committee, are as follows:

Fixed remuneration

The Chief Executive Officer shall receive fixed remuneration, payable in 12 monthly instalments. This amount shall be revised each year on the basis of market practices observed in comparable

companies, through recommendations of the specialist external consulting firm.

Annual variable remuneration

The annual variable remuneration is capped at a maximum of 50% of the fixed annual remuneration.

In view of the profile of the company, the criteria for determining the annual variable remuneration are exclusively qualitative. The qualitative criteria have been pre-established by the Board of Directors, at the proposal of the remuneration committee, but are not made public on grounds of confidentiality. They principally represent operational milestones linked to the development of research and development projects, the conduct of operations and the development of the company in general.

Attribution of Free Shares (AGA)

The Chief Executive Officer is eligible for the attribution of free shares. The shares are subject to an acquisition period, conditional on the presence and achievement of performance criteria, as well as of a mandatory holding period.

The amount of attributions of free shares is set on the basis of market practices observed in comparable companies, through recommendations of the specialist external consulting firm.

Benefits in kind

The Chief Executive Officer shall benefit from a company flat.

Exceptional remuneration

The Board of Directors may decide, at the proposal of the remuneration committee, to grant exceptional remuneration to the Chief Executive Officer in view of very special circumstances. The payment of this type of remuneration must be justifiable by an event, such as the execution of a major transaction for the company, or an operational outperformance measure.

The payment of the elements of variable remuneration and, as appropriate, exceptional remuneration attributed for a financial year, is conditional on approval by the Ordinary General Meeting of the elements of remuneration of the Chief Executive Officer, paid or attributed by way of the said financial year *(ex post vote)*.

14.1.1.3 Commitments with regard to the Chief Executive Officer on the basis of article L.225-42-1 of the Commercial Code

Departure indemnities

The amount of the sudden termination indemnity shall be equal to twelve (12) months' remuneration calculated on the basis of the last annual remuneration (fixed and variable) in the event of cessation by Mr Bernard Gilly of his duties as Chief Executive Officer (or of Chairman and Chief Executive Officer, in the event that the Board of Directors subsequently decides to combine the functions of Chairman of the Board of Directors and those of Chief Executive Officer) for whatever reason.

As an exception to the above, this Termination Indemnity shall not be due:

(i) in the event of dismissal of Mr. Bernard Gilly from his duties as Chief Executive Officer (or of Chairman and Chief Executive Officer, in the event that the Board of Directors subsequently decides to combine the functions of Chairman of the Board of Directors and those of Chief Executive Officer) for serious misconduct or gross negligence, as these notions are defined by the case law applicable to Labour law, or

(ii) in the event of resignation by Mr. Bernard Gilly from his mandate as Chief Executive Officer (or of Chairman Chief Executive Officer, in the event that the Board of Directors subsequently decides to combine the functions of Chairman of the Board of Directors and those of Chief Executive Officer), unless this resignation is due to illness or for family reasons, it being specified that in these latter two cases, the Termination Indemnity shall then be due to Mr. Bernard Gilly.

The Termination Indemnity shall not be due if Mr. Bernard Gilly changes position within the Group or leaves the Company at his own initiative in order to take up new positions.

The payment of the Termination Indemnity shall be contingent on meeting the following conditions: Achievement of at least 50% of the annual objectives for the past year. These objectives are established annually by the Board of Directors, at the proposal of the remuneration committee, but are not made public for reasons of confidentiality. They principally represent operational milestones linked to the development of research and development projects, the conduct of operations and the development of the company in general.

Non-competition commitment

The monthly non-competition commitment to the benefit of Mr. Bernard Gilly, Chief Executive Officer, authorised by the Board Meeting of March 9, 2017 for a period of one (1) year starting from his departure from the Company, equal to 40% of his last net monthly remuneration, excluding any bonus (after deduction of any other amount received in any capacity by way of a non-competition obligation) as consideration for the commitment made by this latter party for the same duration of one year starting from his departure:

- not to hold in Europe, Canada, the United States or any country in which the Company exercises its Activity, a position of manager, director, employee or consultant in a company conducting the Activity; or
- not to hold shares in the share capital of a company carrying out the Activity, with the exception of a holding in any listed company representing at most 1% of the share capital held exclusively for financial reasons.

14.1.2 SUMMARY TABLE OF COMPENSATION, OPTIONS AND SHARES GRANTED TO SENIOR EXECUTIVES FOR THE FISCAL YEARS 2016, 2017 AND 2018

Following the entry into force of the Sapin 2 Law (French law no. 2016-1691 of December 9, 2016), the payment of the elements of variable remuneration and, as appropriate, exceptional remuneration attributed for a financial year to Chairman of the Board, the Chief Executive Officer and of the Deputy CEOs is conditional on approval by the next ordinary general meeting of their elements of remuneration, paid or attributed during the said financial year (ex post vote). Our shareholders' meeting will be held on June 11, 2019, and will be asked in its 12th and 13th resolutions, to vote accordingly on the elements of remuneration granted to Michael Wyzga and Bernard Gilly during the financial year 2018, that will be described in the report of the Board of Directors included in the notice of General Meeting.

The tables below constitute the information given accordingly to the article L.225-37-3 of the French Commercial Code and comply with AMF recommendation 2014-14.

Table 1 (AMF definition)

(in euros)	Fiscal year ending December 31, 2017	Fiscal year ending December 31, 2018
Michael Wyzga Chairman		
Compensation due for the fiscal year *(as detailed in Section 14.1.3 of this Document*	145,154	145,154
Valuation of multi-year variable compensation granted in the course of the fiscal year	—	—
Valuation of share warrants granted during the fiscal year *(as detailed in Section 14.3.2 of this Document)*	24,600	20,200
Valuation of share warrants for founders granted during the fiscal year *(as detailed in Section 14.3.2 of this Document)*	—	—
Valuation of shares warrants granted during the fiscal year *(as detailed in Section 14.3.2 of this Document)*	—	—
TOTAL	169,754	165,354

(in euros)	Fiscal year ending December 31, 2017	Fiscal year ending December 31, 2018
Bernard Gilly Chief Executive Officer		
Compensation due for the fiscal year *(as detailed in Section 14.1.3 of this Document*	534,018	534,018
Valuation of multi-year variable compensation granted in the course of the fiscal year	—	—
Valuation of share warrants granted during the fiscal year *(as detailed in Section 14.3.2 of this Document)*	—	—
Valuation of share warrants for founders granted during the fiscal year *(as detailed in Section 14.3.2 of this Document)*	—	—
Valuation of free shares granted during the fiscal year *(as detailed in Section 14.3.2 of this Document)*	1,024,000	94,500
TOTAL	1,558,018	628,518

14.1.3 COMPENSATION OF SENIOR EXECUTIVES

Table 2 (AMF definition)

	Fiscal year ending December 31, 2017		Fiscal year ending December 31, 2018	
(in euros)	Due	Paid	Due	Paid
Michael Wyzga Chairman				
Fixed Compensation (1)	145,154	145,154	145,154	145,154
Variable Compensation	—	—	—	—
Valuation of multi-year variable compensation granted in the course of the fiscal year	—	—	—	—
Exceptional Compensation	—	—	—	—
Directors' Fees	—	—	—	—
Benefits in kind	—	—	—	—
TOTAL	**145,154**	**145,154**	**145,154**	**145,154**

	Fiscal year ending December 31, 2017		Fiscal year ending December 31, 2018	
(in euros)	Due	Paid	Due	Paid
Bernard Gilly Chief Executive Officer				
Fixed Compensation	365,000	365,000	365,000	365,000
Variable Compensation (2)	127,750	125,004	127,750	127,750
Valuation of multi-year variable compensation granted in the course of the fiscal year	—		—	
Exceptional Compensation	—		—	
Directors' Fees	—		—	
Benefits in kind (3)	41,268	41,268	41,268	41,268
TOTAL	**534,018**	**531,272**	**534,018**	**534,018**

(1 Mr. Wyzga was appointed Chairman of the Board of Directors on March 2, 2016. On March 9, 2017, the Board of Directors set Mr. Wyzga's fixed compensation at €145,154 gross for the fiscal year ended December 31, 2018.

(2) On December 1, 2016, the Board of Directors of the Company awarded Mr. Gilly a variable compensation of €125,004 as a bonus for achieving qualitative and quantitative objectives regarding the fiscal year ended December 31, 2016, mainly related to research and development programs progressing as planned, as well as to the successful IPO of the Company conducted in July 2016 on Euronext Paris.
On December 19, 2017, the Board of Directors of the Company awarded Mr. Gilly a variable compensation of €127,750 as a bonus for achieving qualitative and quantitative objectives regarding the fiscal year ended December 31, 2017. It should be remembered that the payment of this variable was subject to a favorable vote at the Ordinary General Meeting held on April 12, 2018, pursuant to the "say-on-pay" regulation introduced by the Sapin 2 Law.
On December 19, 2018, the Board of Directors of the Company awarded Mr. Gilly a variable compensation of €127,750 as a bonus for achieving qualitative and quantitative objectives regarding the fiscal year ended December 31, 2018. It should be remembered that the payment of this variable is subject to a favorable vote at the Ordinary General Meeting which will be held on June 11, 2019, pursuant to the "say-on-pay" regulation introduced by the Sapin 2 Law.

(3) Consisting of a housing allowance.

14.2 DIRECTORS' COMPENSATION

Our shareholders at the mixed general shareholders' meeting held on May 19, 2016 set the total annual attendance fees to be distributed among non-employee directors except those who are affiliated with one of our significant shareholders at €300,000 as a maximum for the 2016 fiscal year and for the following fiscal years. As of the date of this Document, upon recommendation of the compensation committee, the Board of Directors set the annual attendance fee for an independent director at €45,000 for each director, and an additional €15,000 as a chair of a committee,

regardless of the number of meetings held. The following table sets forth information regarding the compensation earned by our directors who are not executive officers or affiliated with one of our significant shareholders for service on the Board of Directors during the year ended December 31, 2018. Mr. Wyzga and Mr. Gilly, respectively our Chairman of the Board of Directors and our Chief Executive Officer and Co-Founder, are directors but do not receive any additional compensation for their services as directors.

Table 3 (AMF definition)

(in euros)	Paid 2017	Paid 2018
Earl Miller J. Collier[1]		
Directors' fee	18,123	–
Other Compensation	–	–
Peter Goodfellow		
Directors' fee	60,000	60,000
Other Compensation[2]	16,400	–
Genghis Lloyd-Harris[3]		
Directors' fee	–	–
Other Compensation	–	–
Guido Magni[4]		
Directors' fee	–	–
Other Compensation	–	–
Charlotte Corbaz		
Directors' fee	–	–
Other Compensation	–	–
Natalie Mount[5]		
Directors' fee	26,371	45,000
Other Compensation[6]	49,200	10,100
Simone Seiter[7]		
Directors' fee	31,375	45,000
Other Compensation[8]	49,200	10,100
TOTAL	**250,669**	**170,200**

(1) Mr. Collier resigned from the Board of Directors on April 19,2017.
(2) Consisting of 10,000 share warrants (BSA) granted in 2017 at an exercise price of €5.04.
(3) Mr. Lloyd-Harris resigned from the Board of Directors on March 16, 2018.
(4) Mr. Magni resigned from the Board of Directors on April 24, 2019.
(5) Ms. Mount joined the Board of Directors on May 31, 2017.
(6) Consisting of 30,000 share warrants (BSA) granted in 2017 at an exercise price of €5.04 and 5,000 share warrants (BSA) granted in 2018 at an exercise price of €5.04.
(7) Ms. Seiter joined the Board of Directors on April 19, 2017.
(8) Consisting of 30,000 share warrants (BSA) granted in 2017 at an exercise price of €5.04 and 5,000 share warrants (BSA) granted in 2018 at an exercise price of €5.04.

BSA are subscribed by directors at a price of 8% of the exercise price, therefore, representing an investment risk and aligning directors and shareholders interest. The exercise price of share warrants is determined as the weighted average of the share price of the last 20 trading sessions preceding the attribution date. Amounts reported as Other Compensation in the above table represent the net fair value of granted share warrants (BSA), including the payment of the subscription price, as determined by an independent expert using a Black-Scholes model. See section 8.2.5, "Critical accounting policies and estimates" of this Document for more information on the valuation method.

Our other directors receive no compensation for their service as directors but are reimbursed for reasonable expenses incurred in connection with attending board and committee meetings.

Except as described in the Section 18.2 "Transactions with Key Management Persons" of this Document with respect to Mr. Gilly, there are no arrangements or understandings between us and any of our directors providing for benefits upon termination of their service as our directors.

14.3 SHARE WARRANTS, SHARE WARRANTS FOR FOUNDERS, STOCK OPTIONS AND FREE SHARES GRANTED TO SENIOR EXECUTIVES AND DIRECTORS

14.3.1 PRINCIPLES GOVERNING THE GRANTING OF SHARE WARRANTS, SHARE WARRANTS FOR FOUNDERS, STOCK OPTIONS AND FREE SHARES

We believe that our ability to grant incentive awards is a valuable and necessary compensation tool that allows us to attract and retain the best available personnel for positions of substantial responsibility, provides additional incentives to employees and promotes the success of our business. Due to French corporate law and tax considerations, historically, we have granted several different equity incentive instruments to our directors, executive officers, employees and other service providers. These are:

- share warrants for founders, otherwise known as *bons de souscription de parts de créateurs d'entreprise*, or BCE, granted to our officers and employees;
- share warrants, otherwise known as *bons de souscription d'actions*, or BSA, typically granted only to non-employee directors not eligible for share warrants for founders;
- stock options, otherwise known as *options de souscription ou d'achat d'actions*, or SO, granted to our officers and employees; and
- free shares, otherwise known as *attributions gratuites d'actions*, or AGA, granted to our officers and employees.

The Board of Directors' authority to grant these equity incentive instruments and the aggregate amount authorized to be granted must be approved by a two-thirds majority of the votes held by our shareholders present, represented or voting by authorized means at the relevant extraordinary shareholders' meeting. Once approved by the shareholders, the Board of Directors can continue to grant equity awards for 18 months for share warrants for founders and share warrants and for 38 months for stock options and free shares authorized by the shareholders. As a result, we typically request that our shareholders authorize new pools of equity incentive instruments at every annual general shareholders' meeting.

In general, share warrants for founders and share warrants no longer continue to vest following termination of the employment, office or service of the holder and all vested shares must be exercised within post-termination exercise periods set forth in the grant documents. In the event of certain changes in our share capital structure, such as a consolidation or share split or dividend, French law and applicable grant documentation provides for appropriate adjustments of the numbers of shares issuable and/or the exercise price of the outstanding warrants or share options.

As of December 31, 2018, BCE warrants and BSA warrants held by our directors could be exercised for the purchase of an aggregate of 384,000 ordinary shares at a weighted average exercise price of €3.807 per share. In addition, BCE warrants and BSA warrants could be exercised for the purchase of an aggregate of 1,431,676 ordinary shares at a weighted average exercise price of €2.912 per share. As of December 31, 2018, 145,000 AGA granted to our directors are outstanding and could be acquired subject to performance criteria.

14.3.2 SHARE WARRANTS OR SHARE WARRANTS FOR FOUNDERS GRANTED TO SENIOR EXECUTIVES AND DIRECTORS IN 2017 AND 2018

Table 4 (AMF definition)

Name	Grant Date	Type of Grant	Number of Ordinary Shares Underlying Awards (#)	Exercise Price (€)	Expiration Date
Peter Goodfellow	07/27/2017	BSA [1]	10,000	5.040	07/26/2024
Michael Wyzga	07/27/2017	BSA [1]	15,000	5.040	07/26/2024
	09/18/2018	BSA [1]	10,000	2.22	09/18/2025
Simone Seiter	07/27/2017	BSA [1]	30,000	5.040	07/26/2024
	09/18/2018	BSA [1]	5,000	2.22	09/18/2025
Natalie Mount	07/27/2017	BSA [1]	30,000	5.040	07/26/2024
	09/18/2018	BSA [1]	5,000	2.22	09/18/2025

(1) BCE refers to share warrants for founders. BSA refers to share warrants. AGA refers to free shares.

14.3.3 SHARE WARRANTS OR SHARE WARRANTS FOR FOUNDERS EXERCISED BY SENIOR EXECUTIVES AND DIRECTORS IN 2017 AND 2018

Table 5 (AMF definition)

Name	Grant Date	Number of Share Warrants and Share Warrants for Founders Exercised	Exercise Price (€)
Bernard Gilly	07/08/2013	594,496 [1]	0.025
Peter Goodfellow	—	—	—
Michael Wyzga	—	—	—
Simone Seiter	—	—	—
Natalie Mount	—	—	—

(1) All the coupons exercised were awarded before the grouping operations approved by the General Shareholders' Meeting of August 17, 2015. Five exercised coupons entitled the holder to subscription of two new shares of nominal €0.025 value, therefore 237,798 new shares were issued.

14.3.4 FREE SHARES TO SENIOR EXECUTIVES AND DIRECTORS GRANTED IN 2017 AND 2018

Table 6 (AMF definition)

Name	Grant Date	Number of Shares Granted	Value of Shares according to IFRS2	Beginning of Acquisition Period	End of Lock-up Period	Performance Criteria
Bernard Gilly	07/27/2017	200,000	1,024,000	07/27/2017 [1]	[2]	[3]
	09/18/2018	45,000	94,500	09/18/2018 [4]	[5]	[6]

(1) If the performance criteria are not fulfilled by July 27, 2019 at the latest, the free shares granted will be canceled.
(2) The lock-up period will end one (1) year after the end of the actual acquisition date.
(3) The AGA 2016 granted to Key Managers, including Mr. Gilly, are subordinate to the achievement of the following performance criteria at the latest on July 27, 2019:
- 50% of AGA 2016 have been acquired at the receipt of the definitive results of the GS010 REVERSE clinical trial, on July 27, 2018.
- 50% of the AGA 2016 will be acquired at the completion of the renrollement of 50% of the patients of the Phase I/II clinical trials with GS030 in retinitis pigmentosa.

(4) If the performance criteria are not fulfilled by September 18, 2020 at the latest, the free shares granted will be canceled.
(5) The lock-up period will end one (1) year after the end of the actual acquisition date.
(6) The AGA 2018 granted to Key Managers, including Mr. Gilly, are subordinate to the achievement of the following performance criteria at the latest on September 18, 2020:
- 50% of AGA 2018 will be acquired at the completion of the recruitment of the patients of the Phase I/II clinical trials with GS030 in retinitis pigmentosa.
- 50% of the AGA 2018 will be acquired at the completion of the production of the first PPQ batch of GS010.

14.3.5 FREE SHARES AVAILABLE IN 2018

The following free shares became available during the fiscal year ended December 31, 2018.

Name	Grant Date	Number of Shares Granted	Number of Shares which became available during the exercise	Performance Criteria
Bernard Gilly	07/26/2016	250,000	125,000	(1)
	07/27/2017	200,000	100,000	(2)

(1) 50% of AGA 2016 were acquired at the enrollment of the first patient in a Phase I/II clinical trial with GS030 in retinisis pigmentosa.
(2) 50% of AGA 2016 were acquired at the receipt of the definitive results of the GS010 REVERSE clinical trial, on July 27, 2018.

14.4 HISTORY OF ALLOCATION OF SHARE WARRANTS, SHARE WARRANTS FOR FOUNDERS AND STOCK OPTIONS

Table 8 (AMF definition)

14.4.1 HISTORY OF SHARE WARRANTS FOR FOUNDERS (BCE)

	BCE Issued July 2013	BCE Issued April 2014	BCE Issued December 2014	BCE Issued July 2015
Date of shareholders' meeting	02/05/2013	02/05/2013	06/25/2014	06/29/2015
Date of allocation by the Board of Directors	07/08/2013	04/09/2014	12/03/2014	07/08/2015
Total number of BCE authorized	2,334,959	2,334,959	2,334,959	856,000
Total number of BCE granted	892,000	193,800	60,000	733,298
Including those granted to Mr. Gilly	300,000	—	—	161,000
Including those granted to Mr. Wyzga	—	—	—	—
Start date for the exercise of the BCE	07/08/2013	04/08/2014	12/03/2014	07/08/2015
BCE expiry date	07/07/2023	04/07/2024	12/02/2024	07/07/2025
BCE exercise price	€0.025	€0.025	€0.025	€3.275
Number of shares subscribed as of December 31, 2018	768,280	193,800	—	71,765
Total number of BCE canceled or obsolete as of December 31, 2018	—	—	—	170,618
Total number of BCE outstanding as of December 31, 2018	123,720	—	60,000	490,916
Total number of shares available for subscription as of December 31, 2018	123,720	—	60,000	426,604

14.4.2 HISTORY OF SHARE WARRANTS (BSA)

	BSA Issued July 2013	BSA Issued April 2014	BSA Issued July 2015	BSA Issued July 2016	BSA Issued July 2017	BSA Issued September 2018
Date of shareholders' meeting	02/05/2013	02/05/2013	06/29/2015	05/19/2016	05/19/2016	04/12/2018
Date of allocation by the Board of Directors	07/08/2013	04/09/2014	07/08/2015	07/26/2016	07/27/2017	09/18/2018
Total number of BSA authorized	2,334,959	2,334,959	856,000	680,456		1,211,711
Total number of BSA granted	328,000	33,000	121,000	205,000	165,000	20,000
Including those granted to Mr. Gilly	–	–	–	–	–	–
Including those granted to Mr. Wyzga	–	–	40,000	31,000	15,000	10,000
Start date for the exercise of the BSA	07/08/2013	04/09/2014	07/08/2015	07/26/2016	07/27/2017	09/18/2018
BSA expiry date	07/07/2023	04/08/2024	07/07/2025	07/25/2023	07/26/2024	09/18/2025
BSA exercise price	€0.025	€0.025	€3.275	€8.08	€5.04	€5.04
BSA subscription price	€0.002	€0.002	€0.25	€0.65	€0.40	€0.18
Number of shares subscribed as of December 31, 2018	67,960	–	–	–	–	–
Total number of BSA canceled or obsolete as of December 31, 2018	–	–	–	47,000	–	–
Total number of BSA outstanding as of December 31, 2018	260,040	33,000	121,000	158,000	165,000	20,000
Total number of shares available for subscription as of December 31, 2018	260,040	33,000	121,000	158,000	165,000	20,000

14.4.3 HISTORY OF STOCK OPTIONS (SO)

	SO Issued July 2017	SO Issued December 2017	SO Issued March 2018	SO Issued September 2018
Date of shareholders' meeting	05/31/2017	05/31/2017	05/31/2017	04/12/2018
Date of allocation by the Board of Directors	07/27/2017	12/19/2017	03/14/2018	09/18/2018
Total number of SO authorized		977,022		1,211,711
Total number of SO granted	220,000	300,000	175,000	30,000
Including those granted to Mr. Gilly	–	–	–	–
Including those granted to Mr. Wyzga	–	–	–	–
Start date for the exercise of the SO	(1)	(2)	(2)	(2)
SO expiry date	07/26/2024	12/18/2024	03/14/2025	09/18/2025
SO exercise price	€5.040	€5.55	€6.98	€2.19
Number of shares subscribed as of December 31, 2018	–	–	–	–
Total number of SO canceled or obsolete as of Decembe 31, 2018	220,000	–	–	–
Total number of SO outstanding as of December 31, 2018	–	300,000	175,000	30,000
Total number of shares available for subscription as of December 31, 2018	–	300,000	175,000	30,000

(1) 25% of the stock options are exercisable at the grant date; the remaining 75% will become exercisable at a rate of 1/36 per month during the 3 following years.
(2) 25% of the stock options are exercisable at the first anniversary of the grant date, the remaining 75% will become exercisable at a rate of 1/36 per month during the 3 following years.

14.5
SHARE WARRANTS, SHARE WARRANTS FOR FOUNDERS OR STOCK OPTIONS OF THE COMPANY GRANTED TO THE COMPANY'S TOP TEN EMPLOYEES

Table 9 (AMF definition)

	Total number of options awarded / shares subscribed or purchased	Weighted average price
Options granted during the fiscal year ended December 31, 2018 by the Company to the ten employees of the Company who received the highest number of such options (overall figure)	30,000	2.19
Options on the Company exercised during the fiscal year ended December 31, 2018 by the ten employees of the Company who purchased or subscribed for the greatest number of options (overall figure)	—	—

14.6
HISTORY OF ALLOCATION OF FREE SHARES

Table 10 (AMF definition)

	AGA Issued July 2016	AGA Issued July 2017	AGA Issued December 2017	AGA Issued September 2018	AGA Issued December 2018
Date of shareholders' meeting	05/19/2016	05/19/2016	05/19/2016	04/12/2018	04/12/2018
Date of allocation by the Board of Directors	07/26/2016	07/27/2017	12/19/2017	09/18/2018	12/19/2018
Total number of AGA authorized	10% share capital at the grant date	10% share capital at the grant date	10% share capital at the grant date	10% share capital at the grant date	10% share capital at the grant date
Total number of AGA granted	766,000	593,500	72,500	380,000	135,000
Including those granted to Mr. Gilly	250,000	200,000	—	45,000	—
Including those granted to Mr. Wyzga	—	—	—	—	—
Date of definitive acquisition of AGA	07/26/2017 (1)	07/27/2018 (3)	12/19/2018 (3)	09/18/2019 (4)	12/19/2019 (4)
End of lock-up period	(2)	(2)	(2)	(2)	(2)
Number of shares definitively acquired as of December 31, 2018	602,000	277,500	36,250	—	—
Total number of AGA canceled or obsolete as of December 31, 2018	164,000	86,000	—	22,500	—
Total number of AGA outstanding as of December 31, 2018	—	230,000	36,250	357,500	135,000

(1) If the performance terms are not fulfilled by July 26, 2018 at the latest, the free shares granted will be canceled.
(2) The lock-up period will end one (1) year after the end of the actual acquisition date.
(3) If the performance terms are not fulfilled by July 27, 2019 at the latest, the free shares granted will be canceled.
(4) If the performance terms are not fulfilled by September 18, 2020 at the latest, the free shares granted will be canceled.

14.7
BENEFITS OF SENIOR EXECUTIVES

Table 11 (AMF definition)

	Employment Agreement		Supplemental Pension Plan		Benefits or advantages due or likely to be due as a result of termination or change of office		Benefits relating to a non-compete clause	
	Yes	No	Yes	No	Yes	No	Yes	No
Bernard Gilly Chief Executive Officer Beginning of term: 2018 End of term: 2021		X		X	X(1)		X(2)	
Michael Wyzga Chairman of the Board of Directors Beginning of term: 2018 End of term: 2021		X		X		X		X

(1) On February 14, 2013, our Board of Directors resolved that the Company may pay Mr. Gilly a termination payment equal to the last 12 months of his fixed and variable compensation and not capped except in the event of (1) dismissal by us for gross negligence or (2) resignation, other than resignation for health or family reasons.
On March 9, 2017, our Board of Directors resolved to replace this termination payment by a termination payment satisfying the requirements under Article L.225-42-1 of the French Commercial Code. Consequently, subject to the satisfaction of certain performance criteria, the Company may pay Mr. Gilly a termination payment equal to the last 12 months of his fixed and variable compensation, except in the event of (1) dismissal by us for gross negligence or (2) resignation, other than resignation for health or family reasons. The Board resolved that such termination payment shall not be paid in the case of a change in the duties performed by Mr. Gilly or in the event that he decides on his own initiative to leave the Company to perform new duties.

(2) On March 9, 2017, our Board of Directors resolved that the Company may pay Mr. Bernard Gilly for a period of one year from the termination of his duties with the Company, a monthly payment of 40% of his total net monthly compensation excluding any bonuses in consideration of his undertaking not to engage in certain competitive activities for a period of one year from the termination of his duties.
Pursuant to the Sapin 2 Law, the principle of the benefits of the senior executives during 2018 and the compensation policy for our senior executives for 2019 will be subject to a report that will be submitted to the shareholders' meeting called to approve the consolidated financial statements for the fiscal year ended December 31, 2018.

14.8
COMPLIANCE OF TOTAL EXECUTIVE DIRECTOR COMPENSATION WITH THE RECOMMENDATIONS OF MIDDLENEXT CODE

Since the listing of our shares on Euronext Paris, we comply with the MiddleNext Code, as amended on September 2016, (See Section 15.4, "Statement relating to Corporate governance" of this Document for more information).

The MiddleNext Code may be consulted on the Internet. We keep copies of such code available to the members of our governing bodies at all times.

14.9
AMOUNT OF PROVISIONS MADE OR RECORDED BY THE COMPANY FOR THE PAYMENT OF PENSIONS, RETIREMENT PLANS OR OTHER BENEFITS

We have not provisioned any amounts for payments of pensions, retirements or other similar benefits to our directors.

BOARD PRACTICES

15

15.1 TERMS OF OFFICE OF MEMBERS OF THE CORPORATE BODIES AND MANAGEMENT BODIES

The terms of office of the members of our Board of Directors and senior management can be found in Section 13.1, "Composition of Management and Supervisory Bodies" of this Document.

15.2 INFORMATION ON SERVICE CONTRACTS BETWEEN MEMBERS OF THE ADMINISTRATIVE AND MANAGEMENT BODIES AND THE COMPANY

To our knowledge, apart from the contract mentioned in the paragraph below, there are no service contracts between the members of our Board of Directors and us as of the date of this Document.

A consulting contract was signed between the Company and Dr. Sahel in the course of 2018. Pursuant to this agreement, Dr. Sahel is entitled to a remuneration based on a hourly rate of 350$, which shall not exceed a annual amount of €45,000. This agreement was signed for a 12 months period and is tacitly renewable with a limit of two renewals.

Dr. Sahel was appointed as non-voting observer *(censeur)* of our Board of Directors in 2013. His term was renewed at the ordinary general meeting held on April 12, 2018 and will expire at the end of the ordinary general meeting to be held in 2021 for rulling on the financial statements for the financial year ending December 31, 2020.

15.3 COMMITTEES OF THE BOARD OF DIRECTORS

Pursuant to the internal rules *(règlement intérieur)* of our Board of Directors, our Board of Directors may create committees charged with examining questions submitted to it by the Board or its Chairman.

Since the listing of our shares on Euronext Paris, three such board committees have been created: an audit committee, a compensation committee and a nominations committee. The composition and duties of these committees are described below. The composition and functioning of all of our committees comply with all applicable requirements of the French Commercial Code.

In accordance with French law, committees of our Board of Directors only have an advisory role and can only make recommendations to our Board of Directors. As a result, decisions will be made by our Board of Directors taking into account the non-binding recommendations of the relevant board committee.

15.3.1 AUDIT COMMITTEE

Our audit committee reviews our internal accounting procedures, consults with and reviews the services provided by our Statutory Auditors and assists the Board of Directors in its oversight of our corporate accounting and financial reporting.

15.3.1.1 Composition

The audit committee is composed of at least three members including at least one who is particularly knowledgeable in finance and accounting and one who is independent, nominated by our Board of Directors further to an opinion from the compensation committee.

The term of office of the audit committee members is renewable.

The length of the term of members of the audit committee coincides with the length of their term as a member of the Board of Directors.

The chairman of the audit committee is appointed by the members of the audit committee for the length of his term of office as a committee member, from among the independent directors.

Our audit committee is composed of Mr. Wyzga, Ms. Seiter and Bpifrance Participations represented by Ms. Corbaz. Mr. Wyzga is the Chairman of the audit committee. Mr. Wyzga and Ms. Seiter are independent members of the Board of Directors.

15.3.1.2 Duties

Under French law, the audit committee oversees matters related to the preparation and control of accounting and financial information. Our Board of Directors has specifically assigned the following duties to the audit committee:

- monitoring the process for preparing financial information and making recommendations to guarantee its integrity;
- ensuring the effectiveness of the internal control and risk management systems as well as of internal audit, with regard to the procedures relating to the preparation and processing of accounting and financial information, without infringing on its independence;
- making recommendations to the Board of Directors on the Statutory Auditors proposed for nomination to general meetings for appointment as well as renewal;
- monitoring the performance by the statutory auditors of their engagement;
- ensuring the independence of the Statutory Auditors and take appropriate enforcement action, if necessary;

- regularly reviewing the status of major disputes;
- approving the provision of non-audit services;
- reporting on a regular basis to the Board of Directors on the performance of its duties; and
- in general, providing advice and making appropriate recommendations in connection with the above matters.

The audit committee regularly reports to the Board of Directors on the performance of its tasks and the results of the statutory audit engagement, its contribution to the integrity of the financial information and the role that it played in this process. The audit committee must inform the Board of Directors without delay of any difficulty it encounters.

The Board of Directors or the Chairman of the Board of Directors may also submit any other issue to the audit committee for its opinion. In addition, the audit committee may decide to consider any issue and give its opinion thereon.

15.3.1.3 Activities of the committee during the last fiscal year

The audit committee met three times in 2018. The main topics discussed by the Committee, and on which it made recommendations to the Board of Directors, were the review and approval of 2017 full year financial statements, 2018 half year consolidated financial statements, and 2019 budget.

15.3.2 COMPENSATION COMMITTEE

Our compensation committee assists the Board of Directors in reviewing and making recommendations to the Board of Directors with respect to the compensation of our executive officers and directors.

15.3.2.1 Composition

The compensation committee is composed of at least three members, nominated by our Board of Directors, among which at least one will be chosen from the independent members of the Board of Directors.

The compensation committee may not include any senior executive or officer of the Company.

The term of office of the compensation committee members is renewable.

The length of the term of members of the compensation committee coincides with the length of their term as a member of the Board of Directors.

As of the date of this Document, following the resignation from the Board of Directors of Dr. Magni on April 24, 2019; we have a compensation committee composed of only two members, Dr. Seiter and Dr. Goodfellow. Dr. Seiter is the chairman of the compensation Committee. A third member will be appointed at the next Board meeting.

None of the members of the compensation committee has at any time during the prior three years been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the Board of Directors or compensation committee of any entity that has one or more executive officers serving on our board or compensation committee. For a description of any transactions between us and members of the compensation committee and affiliates of such members, please see Section 18, "Related Party Transactions" of this Document.

15.3.2.2 Duties

The principal duties and responsibilities of our compensation committee include:

- reviewing the main objectives proposed by executive management with respect to compensation of our managers who are not corporate officers, including free share plans and share subscription or purchase options;
- reviewing the compensation of our managers who are not corporate officers, including free share plans and share subscription or purchase options, retirement and insurance plans and benefits in kind;
- submitting recommendations and proposals to the Board of Directors concerning:
  - compensation, retirement, insurance and benefit plans, non-cash benefits, and other financial rights, including severance pay, of executive officers (*mandataires sociaux*). The committee proposes compensation amounts and structures, in particular the rules for calculating the variable component of compensation, taking into account our strategies, objectives and performance, as well as market practices; and
  - free share plans, share subscription or stock options, and any other similar incentive plan, in particular benefits granted to specific corporate officers who are eligible for such plans;
- reviewing the total amount of directors' fees and the method for distributing them among the directors, as well as the requirements for obtaining reimbursement of expenses that directors of the board may incur;
- preparing and submitting to the Board of Directors any reports that may be required by the internal rules;
- making any other recommendation concerning compensation that may be requested of it by the Board of Directors; and
- in general, the compensation committee provides advice and makes appropriate recommendations in connection with the above matters.

The Board of Directors or the Chairman of the Board of Directors may also submit any other issue to the compensation committee for its opinion. In addition, the compensation committee may decide to consider any issue and give its opinion thereon.

15.3.2.3 Activities of the committee during the last fiscal year

The compensation committee met five times in 2018. The main topics discussed by the committee, and on which it made recommendations to the Board of Directors, were the grant of share options (BSA) to independent directors and consultants, and free shares (AGA) and Stock Options (SO) to employees and senior executives, as well as the review of corporate objectives achievement for 2018 and the related variable compensation for officers.

15.3.3 NOMINATIONS COMMITTEE

Our nominations committee makes proposals to the Board of Directors relating to the appointment or renewal of the offices of directors submitted to the general meeting or relating to the cooptation of directors.

15.3.3.1 Composition

The nominations committee is composed of at least three members, nominated by our Board of Directors, among which at least one is chosen from the independent members of the Board of Directors.

The length of the term of members of the nominations committee coincides with the length of their term as member of the Board of Directors.

The term of office of the nominations committee members is renewable.

As of date of this Document, we have a nominations committee composed of Dr. Goodfellow, Mr. Wyzga, Ms. Mount and Bpifrance Participations represented by Ms. Corbaz. Dr. Goodfellow is the chairman of the nominations committee.

15.3.3.2 Duties

The principal duties and responsibilities of our nominations committee include:

- making all proposals to the Board of Directors related to the identification of candidates for the post of director, in particular both within the scope of the Company's obligation to comply with the provisions of Article L.225-18-1 of the French Commercial Code and in connection with the identification of independent directors and more generally in connection with the changes in the composition of the Board;
- assisting the Board of Directors in connection with the assessment of the independence criteria making it possible to classify a director as an independent director in the light of the code of corporate governance chosen by the Company;
- assisting the Board of Directors in setting up a succession plan for the executive officers, in particular, in the event of an unanticipated vacancy;
- assisting the Board of Directors in a review of the insurance coverage of the corporate officers' civil liabilities; and
- in general, making any proposal to the Board of Directors concerning the appointment or renewal of the offices of directors submitted to the general meeting of shareholders or concerning the cooptation of directors.

The Board of Directors or the Chairman of the Board of Directors may also decide to submit to it for its opinion any issue in relation with the appointment of directors and, more generally, the composition of the Board of Directors. Likewise, the nominations committee may decide to look at any issue and express any opinions.

15.3.3.3 Activities during 2018

The nomination committee did not meet in 2018.

15.4 STATEMENT RELATING TO CORPORATE GOVERNANCE

15.4.1 CORPORATE GOVERNANCE

Regarding the Code of Corporate Governance, our Company refers to the MiddleNext Code of Corporate Governance for Small and Medium-Sized Companies as amended in September 2016, available on the MiddleNext website (www.middlenext.com), hereinafter the Code of Practice.

The Board of Directors acknowledges that it is familiar with the information presented under the "due diligence points" (*Points de vigilance*) section of this Code of Practice. The Board of Directors considers that its organization and the procedures it has implemented allow it to satisfactorily address these due diligence points and all the Code of Practice's recommendations.

For the fiscal year ended December 31, 2018, in addition to the information provided in this section, the status of application of the guidelines in the MiddleNext Code is as follows:

Recommendations of the MiddleNext Code	Adopted	Will be adopted
I. The sovereign body		
This Code does not provide any recommendation intended for the shareholders.		
II. The supervisory body		
R 1: Ethics for the members of the Board of Directors	X	
R 2: Conflicts of interest	X	
R 3: Composition of the Board – Presence of independent members of the Board	X	
R 4: Information to the members of the Board	X	
R 5: Organization of the meetings of the Board and committees	X	
R 6: Creation of committees	X	
R 7: Implementation of an internal regulation of the Board	X	
R 8: Election of each director	X	
R 9: Term of office of the members of the Board	X	
R 10: Compensation of directors	X	
R 11: Implementation of an assessment of the work of the Board	X	
R 12: Relationship with the "shareholders"	X	
III. The executive body		
R 13: Definition and transparency of the compensation of senior executives	X	
R 14: Succession plan of senior executives	X	
R 15: Combined employment / corporate office contracts	X	
R 16: Severance compensation	X	
R 17: Supplementary pension schemes	X	
R 18: Stock options and allocation of bonus shares	X	
R 19: Review of points of vigilance	X	

15.4.2 CODE OF ETHICS *(CODE DE DÉONTOLOGIE)*

Each director shall refrain from engaging in any transaction involving our shares when such director, by virtue of his or her position within the Company, is in possession of material non-public information.

Sale and purchase transactions involving our securities or derivatives carried out by our corporate executives and directors whether on the open market or in off-market block trading, be it directly or indirectly, are forbidden during the period of:

- thirty (30) calendar days preceding the day of publication of our half-yearly and annual financial statements; and
- fifteen (15) calendar days preceding the day of publication of our quarterly information if applicable.

Persons subject to these black-out periods are not permitted to trade in our securities until the day after the information has been released.

In any case, the Board of Directors can decide, in the event of a material fact that could significantly affects the market price of our securities, to set a period during which sale and purchase transactions involving our securities or derivatives carried out by our corporate executives and directors whether on or off-market, be it directly or indirectly, will be forbidden.

15.5 OPERATING PRINCIPALS OF THE BOARD OF DIRECTORS

15.5.1 CONDITIONS OF PREPARATION FOR BOARD'S ACTIVITIES

To allow the Board members to usefully prepare meetings, the chairman seeks to provide all necessary information or documents in advance.

Thus, the draft of the annual consolidated financial statements was sent to the directors several days before the board meeting to approve them was held.

Whenever a Board member so requests, the Chairman shall send all possible additional information and documents requested.

15.5.2 CONTENT OF BOARD MEETINGS

Meetings are convened in writing at least five business days in advance.

Meetings are held at the corporate headquarters.

The Board of Directors met 8 times in 2018.

During this period, members' attendance at Board meetings was as follows:

- 50% of directors at the meeting on February 27, 2018;
- 88% of directors at the meeting on March 14, 2018;
- 100% of directors at the meeting on April 12, 2018;
- 100% of directors at the meeting on July 24, 2018;
- 100% of directors at the meeting on September 4, 2018;
- 86% of directors at the meeting on September 18, 2018;
- 100% of directors at the meeting on December 19, 2018;

Average attendance was thus 88% during the period.

The Statutory Auditors were convened to audit committee meetings in preparation for meetings of the Board of Directors convened to approve the half year and annual consolidated financial statements.

They effectively attended them.

15.5.3 RULES OF PROCEDURE OF THE BOARD OF DIRECTORS

Internal rules of the Board of Directors may be consulted on our website (www.gensight-biologics.com).

15.5.4 TOPICS DISCUSSED DURING BOARD MEETINGS AND ACTIVITY REPORT

During fiscal year 2018, the Board of Directors specifically discussed the following subjects:

- **Financial:** Preparation of the annual financial statements and half-year consolidated financial statements, examination of draft management documents, and review and approval of the 2019 budget and long-term strategic plan;
- **Compensation:** Examination and modification of the compensation of the chairman and Chief Executive Officer, grant of free shares to all employees, grant of share purchase warrants to independent directors, and certain consultants, review of corporate objectives and grant of 2018 performance bonuses, implementation and review of 2018 corporate objectives, review of compensation for independent directors and officers;
- **Strategy:** Review of the medium- and long-term strategic plan;
- **Governance:** Renewal of the term of Chairman of the Board of Directors, nomination of a new member of the audit committee, review of the status of independent Board Members.

15.5.5 SELF-EVALUATION OF THE BOARD OF DIRECTORS

In accordance with the recommendation of the Code of Practice, at its meeting of February 27, 2018 the Board of Directors undertook a review, followed by an evaluation, of its work and activities, and that of its special committees, as described in Paragraph 15.3 of this Document. This review, articulated around an open discussion, highlighted positive findings for the Board of Directors as to its operations, information and the quality of its discussions.

EMPLOYEES

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16.1 HUMAN RESOURCES MANAGEMENT

16.1.1 NUMBER AND BREAKDOWN OF EMPLOYEES

As of December 31, 2018, we had 33 employees, 31 of whom are full-time, 10 of whom hold Ph.D., Pharm.D. or M.D. degrees, 24 of whom are engaged in preclinical development and regulatory affairs, clinical development, research, engineering and production, 8 of whom are engaged in management and administration and 1 of whom is engaged in sales and marketing.

As of December 31, 2018, 28 of our employees were located in France, and five were located in the United States.

The table below shows the changes in the number of our employees over the last two years.

	2017	2018
As of January 1	27	34
New hires	13	12
Departures[1]	6	13
Dismissals[2]	—	—
As of December 31	34	33

(1) This category includes both voluntary and involuntary departures.
(2) Individual dismissals (for cause).

16.1.2 HUMAN RESOURCES POLICY

Our human resources management is organized around the following principles:

We apply the *"Convention collective nationale des ingénieurs et cadres de la métallurgie"*.

There are no company-wide agreements, other than our internal rules and regulations.

Standard employment contracts contain clauses that deal with inventions and copyright. As from the end of their employment contracts, our management employees are bound by a one-year covenant not to compete and a two-year obligation not to solicit our customers.

With respect to remuneration policy, all employees hired pursuant to permanent employment contracts receive a variable remuneration in addition to their fixed remuneration, which is a percentage ranging between 10% and 40% of their fixed salary.

16.1.3 CORPORATE SOCIAL RESPONSIBILITY

Employment

As at December 31, 2018, GenSight Biologics personnel totaled 33, distributed by contract type, sex and age range as follows:

	2017	2018
Headcount as at December 31	**34**	**33**
of which permanent	34	33
of which fixed-term	—	—
of which women	20	18
of which men	14	15
< 35 years old	10	9
> 35 years old	24	24

Employee movements during the fiscal year ended December 31, 2018 (hirings and departures) may be broken down as follows:

	2017	2018
Number of hirings[1]	**13**	**12**
of which permanent	13	12
of which fixed-term	—	—
Number of departures[2]	**6**	**13**

(1) These hirings are related to the activity growth of the Society as well as replacements.
(2) These departures correspond to voluntary departures.

There were no layoffs during the period.

Compensation

The payroll expense for the fiscal year ended December 31, 2018 was the following:

	2017	2018
Payroll expense (in Keuros)	5,784	5,889

Employees under a permanent employment contract are entitled to fixed salary and a variable compensation in the form of a bonus scheme based on both corporate and individual objectives and ranging from 10% to 40% of the fixed amount. They are eligible to receive employee share warrants (*bons de souscription de parts de créateur d'entreprise* or "BCEs") or free shares (*attributions gratuites d'actions*, or AGA).

Organization of work

As at December 31, 2018, out of 33 employees, 8 were senior managers (*"cadre dirigeant"*), 25 were managers (*"cadre"*). Managers worked 37 hours weekly and were compensated by 12 days of additional holiday (*"Réduction du Temps de Travail"*).

As at December 31, 2018, 94% of employees were full-time and 6% were part-time.

The table below presents the absenteeism rate for the years 2017 and 2018:

	2017	2018
Absenteeism rate	1.56%	3.23%

Corporate dialogue

Given the size of the Company and the number of employees, corporate dialogue is a natural component of the working environment at GenSight Biologics. Personnel representatives elections took place on April 3, 2015. The Company acknowledged the absence of a candidate.

Health & Safety

In compliance with regulations, GenSight Biologics has carried out in its *"Document Unique d'Entreprise"* a risk analysis of its activities and proposed an action plan to mitigate these risks.

No accident at work nor any work-related disease was declared in 2018.

GenSight Biologics considers that it does not expose its employees to any specific risk.

Training

The Company aims to provide its employees with training opportunities, to develop general skills (management and languages, etc.) as well as technical skills specific to each position.

	2017	2018
Number of training hours taken	262	173

Diversity

GenSight Biologics gives special attention to the diversity of its teams. The distribution by sex, as presented in the table below, is a meaningful measure of this commitment:

	2017	2018
Percentage of female employees	59%	55%

The proportion of women within the management committee was 44% in 2018, stable versus 2017.

GenSight Biologics does not employ any disabled persons, and will pay an annual financial contribution of €14,079 to the Agefiph, the French public agency that promotes integration into the workplace of disabled people.

85% of employees GenSight Biologics are based in France and 15% in United States. The Company complies with all applicable regulations.

Furthermore, France has ratified the eight fundamental conventions of the ILO. The ILO has qualified as "fundamental agreements" the conventions concerning the following principles and fundamental labor rights: freedom to unionize and effective recognition of the right of collective bargaining, elimination of forced or compulsory work, effective abolition of child labor and elimination of discrimination in the area of employment and profession.

GenSight Biologics shares these principles, which are implemented in the Company's social relations, its policy regarding recruitment and equality of opportunity.

16.2 SHAREHOLDINGS AND SHARE WARRANTS OR SHARE WARRANTS FOR FOUNDERS HELD BY MEMBERS OF THE BOARD OF DIRECTORS AND SENIOR MANAGEMENT

See Section 14, "Compensation and Benefits" of this Document.

16.3 EMPLOYEE SHAREHOLDING PLAN AND LONG-TERM INCENTIVE PLANS

See Section 14, "Compensation and Benefits" of this Document.

16.4 PROFIT-SHARING AGREEMENTS AND INCENTIVE SCHEMES

None.

MAJOR SHAREHOLDERS

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17.1 ALLOCATION OF SHARE CAPITAL

17.1.1 SHAREHOLDERS

As of the date of this Document, we are not controlled by any majority shareholder and our share capital is equal to €718,113.53 divided into 28,724,541 fully authorized, subscribed and paid-up ordinary shares with a nominal value of €0.025.

The table below sets forth the non-diluted share capital structure, based on available information as of the date of this Document.

Shareholders	Number of shares/ voting rights	% of share capital/ voting right (non-diluted)
5% Shareholders:		
Sofinnova	3,921,568	13.65%
Novartis Pharma AG	3,521,774	12.26%
Versant	3,280,381	11.42%
Abingworth Bioventures VI LP	3,139,973[1]	10.93%
Bpifrance Participations	2,000,000	6.96%
Bpifrance Investissement	975,666	3.40%
Directors and Executive Officers:		
Bernard Gilly	847,600	2.95%
Thomas Gidoin	195,000	0.68%
Barrett Katz	—	—
Peter Goodfellow	—	—
Michael Wyzga	—	—
Simone Seiter	—	—
Guido Magni	—	—
Natalie Mount	—	—
Charlotte Corbaz	—	—
Employee Shareholding	**241,750**	**0.84%**
Former employees	**1,121,244**	**3.90%**
Other Shareholders (total)	**9,479,585**	**33.01%**
TOTAL	**28,724,541**	**100%**

(1) This amount does not include 1.60 partial shares resulting from the share split on September 3, 2015.

The table below sets forth our fully-diluted share capital structure, based on available information as of the date of this Document.

Shareholders	Number of shares/ voting rights	% of share capital/ voting right (fully diluted)
5% Shareholders:		
Sofinnova	3,921,568	12.48%
Novartis Pharma AG	3,521,774	11.21%
Versant	3,280,381	10.44%
Abingworth Bioventures VI LP	3,139,973(1)	10.0%
Bpifrance Participations	2,000,000	6.37%
Bpifrance Investissement	975,666	3.11%
Directors and Executive Officers:		
Bernard Gilly	1,153,600	3.67%
Thomas Gidoin	445,000	1.42%
Barrett Katz	330,000	1.05%
Peter Goodfellow	57,000	0.18%
Michael Wyzga	96,000	0.31%
Simone Seiter	35,000	0.11%
Guido Magni	—	—
Natalie Mount	35,000	0.11%
Charlotte Corbaz	—	—
Employee Shareholding	**1,009,500**	**3.21%**
Other Shareholders (total)	**11,411,171**	**36.33%**
TOTAL	**31,411,633**	**100%**

(1) This amount does not include 1.60 partial shares resulting from the share split on September 3, 2015.

17.1.2 HISTORY OF ALLOCATION OF SHARE CAPITAL

Shareholders	As of December 31, 2015		As of December 31, 2016		As of December 31, 2017		As of December 31, 2018	
	Number of shares/ voting rights post-reverse stock split	% of share capital/ voting rights	Number of shares/ voting rights post-reverse stock split	% of share capital/ voting rights	Number of shares/ voting rights post-reverse stock split	% of share capital/ voting rights	Number of shares/ voting rights post-reverse stock split	% of share capital/ voting rights
Founders	**1,710,684**	**12.57%**	**1,710,684**	**8.65%**	**2,095,086**	**8.81%**	**2,320,086**	**9.35%**
Novartis Pharma AG	2,771,774	20.37%	3,521,774	14.53%	3,521,774	18.14%	3,521,774	14.20%
Abingworth Bioventures VI LP	2,322,056	17.06%	2,873,306	12.96%	3,139,973	14.80%	3,139,973	12.66%
Versant	2,322,048	17.06%	2,947,048	13.54%	3,280,381	15.18%	3,280,381	13.23%
Vitavest S.à.r.l	1,018,440	7.48%	1,206,373	5.53%	1,339,706	6.22%	1,339,706	5.40%
Bpifrance Investissement	663,166	4.87%	975,666	4.03%	975,666	5.03%	975,666	3.93%
Fidelity	1,284,680	9.44%	1,860,895	6.72%	1,628,865	9.59%	1,060,344[1]	4.28%
Bpifrance Participations	–	0%	1,500,000	8.25%	2,000,000	7.73%	2,000,000	8.06%
Other investors	1,516,274	11.14%	2,813,955	25.80%	6,252,772	14.50%	7,165,043	28.89%
Total	**13,609,122**	**100%**	**19,409,701**	**100%**	**24,234,223**	**100%**	**24,802,973**	**100%**

(1) as per public filing dated October 19, 2018.

During the last four years, the following events have changed the number and classes of the issued and our outstanding shares:

- In 2015:
  - On July 7, 2015, we canceled all share warrants attached to the Series A preferred shares.
  - On July 7, 2015, we issued 11,562,178 (corresponding to 4,624,871 post reverse stock split) Series B preferred shares in a private placement to 19 investors pursuant to an investment agreement dated June 30, 2015 which terminated upon completion of the listing of our shares on Euronext Paris.
- In 2016:
  - On July 13, 2016, we completed our Initial Public Offering (IPO) on Euronext Paris, raising €40.0 million, and issued 5,000,000 ordinary shares.
  - On August 10, 2016, we partly exercised the overallotment option as part of our IPO on Euronext Paris, raising an additional €5.2 million, and issued 655,859 ordinary shares.
  - These figures give effect to the 5-for-2 reverse split of our outstanding shares approved by the general shareholders' meeting on August 17, 2015, which became effective on September 3, 2015, 15 days after publication of the notice of the split in the French *Bulletin des Annonces Légales Obligatoires*, or BALO, pursuant to French law.
- In 2017:
  - On June 27, 2017, we issued 3,750,000 ordinary shares in a private placement on Euronext Paris for which we received net proceeds of €20,724 K.
- In 2019:
  - On February 25, 2019, we issued 3,921,568 ordinary shares in a private placement subscribed entirely by Sofinnova Crossover I SLP for which we received net proceeds of €7,906 K.

17.2 SHAREHOLDERS' VOTING RIGHTS

Each of our share, either ordinary or preferred, entitles the holder to one vote.

Our bylaws, by express derogation to article L.225-123 paragraph 3 of the French Commercial Code, do not grant double voting rights to our shares.

17.3 CONTROL STRUCTURE

As of the date of this Document, no shareholder has exclusive control over the Company.

17.4 SHAREHOLDERS' AGREEMENT

The pre-IPO shareholders' agreement was automatically terminated as of the date of the listing of our shares on Euronext Paris.

In connection with our initial public offering on Euronext Paris, Bpifrance Participations, Mr. José Sahel, Mr. Bernard Gilly, Novartis Pharma AG, Abingworth Bioventures VI L.P., Versant Venture Capital IV, L.P., Versant Side Fund IV, L.P., Vitavest S.à.r.l. and *Fonds Biothérapies Innovantes et Maladies Rares*, several of our major shareholders, have entered into a shareholders' agreement to organize their relationship as shareholders of our Company.

17.5 AGREEMENTS LIKELY TO LEAD TO A CHANGE OF CONTROL

To our knowledge, there are no provisions either in the Company's bylaws or in any internal charter or internal rules that could have the effect of delaying, postponing or preventing a change of control of the Company.

17.6 LOCK-UP AGREEMENT

There are currently no lock-up agreement as of the date of this Document.

17.7 PLEDGES ON COMPANY'S SHARES

We are not aware of any pledge relating to our shares.

RELATED PARTY TRANSACTIONS

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We comply with French law regarding approval of transactions with related parties. Since January 1, 2015, we have engaged in the following transactions with our directors, executive officers and holders of more than 5% of our outstanding voting securities and our affiliates, which we refer to as our related parties.

18.1 AGREEMENTS WITH THE COMPANY'S MAJOR SHAREHOLDERS

18.1.1 SHAREHOLDERS' AGREEMENT

In connection with our initial public offering on Euronext Paris, Bpifrance Participations, Mr. José Sahel, Mr. Bernard Gilly, Novartis Pharma AG, Abingworth Bioventures VI L.P., Versant Venture Capital IV, L.P., Versant Side Fund IV, L.P., Vitavest S.à.r.l. and *Fonds Biothérapies Innovantes et Maladies Rares*, several of our major shareholders, have entered into a shareholders' agreement to organize their relationship as shareholders of our Company.

18.1.2 LICENSE AGREEMENT WITH NOVARTIS PHARMA AG

On February 5, 2013, we entered into a license agreement with Novartis Pharma AG, or Novartis, pursuant to which we have an exclusive in-license to research, develop, make, use, sell, offer for sale or otherwise distribute, import and export any products within the scope of the patents and patent applications under two patent families for all ophthalmologic uses. This license agreement relates to our GS020 product candidate, which is not currently part of our product and development pipeline. As the licensee, we may grant and authorize sublicenses within the scope of the license granted by Novartis, as the licensor, provided that we notify Novartis for prior approval, which shall only be withheld by Novartis for duly justified ethical reasons. In consideration for the rights granted by Novartis to us, we paid Novartis an upfront license fee through the issuance of 670,588 (corresponding to 268,235 after taking into account the reverse share split on September 3, 2015) new ordinary shares, corresponding to 15% of our share capital. The subscription of such shares was made by offsetting the upfront license fee claim against Novartis. In compliance with IAS38, the rights acquired have been recorded as intangible assets at the fair value of the ordinary shares issued in payment. The fair value of the 670,588 ordinary shares is €0.41 per ordinary share. For more information, please see Note 19 to our consolidated financial statements as of December 31, 2018 and Section 6.6, "Business Overview Our Second Product Candidate: GS030 for the Treatment of Photoreceptor Degeneration" of this Document.

18.2 TRANSACTIONS WITH KEY MANAGEMENT PERSONS

18.2.1 FOUNDER NON-COMPETE UNDERTAKING

In March 2017, the Board of Directors authorized our entry into an agreement with Mr. Gilly pursuant to which Mr. Gilly would agree not to engage in certain competitive activities for a period of one year from his departure from the Company in the event that he terminates his duties with us. For a period of one year from the termination of this undertaking, and unless we elect to waive these restrictions, we will be required to make a monthly payment of 40% of Mr. Gilly's last total net monthly compensation excluding any bonuses for a period of one year following his termination.

18.2.2 LEASE AGREEMENT WITH *PASSAGE DE L'INNOVATION*

On January 1, 2015, we entered into a sublease agreement for our new premises with *Passage de l'Innovation*, amended on October 1, 2015, January 1, 2016, April 25, 2017, July 1, 2018 and October 1, 2018. Pursuant to this last amendment, we will have to pay €494 K excluding taxes, on an annual basis, comprised of €285 K for rent, €17 K for rental charges and up to €190 K for other services provided by the lessor through the end of 2024. In 2018, we paid an amount of €529 K, comprised of €323 K for rent, €17 K for rental charges and €189 K for other services (including reception desk, maintenance, cleaning services, IT management and services, access to shared areas such as equipped meeting rooms and a lunch area). The President of the *Passage de l'Innovation* and one of its shareholders was Bernard Gilly, our Chief Executive Officer, until he resigned from this position in *Passage de l'Innovation* on June 30, 2016. Mr. Gilly has retained a shareholding interest in this company. The amounts the Passage de l'Innovation has charged, and currently charges us are at fair market value.

18.2.3 EMPLOYMENT ARRANGEMENTS

Bernard Gilly

Mr. Gilly, our Chief Executive Officer, does not have an employment agreement with us. Mr. Gilly's compensation is determined by our Board of Directors upon recommendation of the compensation committee. On February 14, 2013, our Board of Directors resolved that we may pay Dr. Gilly a termination payment equal to the last 12 months of his fixed and variable compensation not capped except in the event of (1) dismissal by us for gross negligence or (2) resignation, other than resignation for health or family reasons. On March 9, 2017, our Board of Directors resolved to replace this termination payment by a

termination payment satisfying the requirements under Article L.225-42-1 of the French Commercial Code. Consequently, subject to the satisfaction of certain performance criteria, the Company may pay Mr. Gilly a termination payment equal to the last 12 months of his fixed and variable compensation, except in the event of (1) dismissal by us for gross negligence or (2) resignation, other than resignation for health or family reasons. The Board of Directors resolved that such termination payment shall not be paid in the case of a change in the duties performed by Mr. Gilly or in the event that he decides on his own initiative to leave the Company to perform new duties.

On March 9, 2017, our Board of Directors resolved that we may pay to Mr. Gilly for a period of one year from the termination of his duties, a monthly payment of 40% of his total net monthly compensation excluding any bonuses in consideration of his undertaking not to engage in certain competitive activities for a period of one year from the termination of his duties.

Pursuant to the Sapin 2 Law, the terms of Bernard Gilly's employment arrangement must be approved by the shareholders' meeting which will be held on June 11, 2019.

Employment Agreements with Key Management Persons

We have entered into employment agreements with Thomas Gidoin and Barrett Katz. These agreements have standard terms relating to base salary, bonuses, equity grants, termination and restrictions on competitive activities.

18.3 STATUTORY AUDITORS' REPORT ON REGULATED AGREEMENTS AND COMMITMENTS SHAREHOLDERS' MEETING HELD TO APPROVE THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2018

This is a free translation into English of the Statutory Auditors' report on regulated agreements and commitments with third parties that is issued in the French language and is provided solely for the convenience of English speaking readers. This report on regulated agreements and commitments should be read in conjunction, and construed in accordance with, French law and professional auditing standards applicable in France. It should be understood that the agreements reported on are only those provided by the French Commercial Code and that the report does not apply to those related party transactions described in IAS 24 or other equivalent accounting standards.

To the Shareholders,

In our capacity as Statutory Auditors of your Company, we hereby report to you on the regulated agreements and commitments.

The terms of our engagement require us to communicate to you, based on information provided to us, the principal terms and conditions of those agreements and commitments brought to our attention or which we may have discovered during the course of our audit, as well as the reasons justifying that such agreements and commitments are in the company's interest, without expressing an opinion on their usefulness and appropriateness or identifying such other agreements and commitments, if any. It is your responsibility, pursuant to Article R.225-31 of the French Commercial Code *(Code de Commerce)*, to assess the interest involved in respect of the conclusion of these agreements and commitments for the purpose of approving them.

Our role is also to communicate the information provided for in Article R.225-31 of the French Commercial Code in respect of the performance of agreements and commitments already approved by the General Shareholders' Meeting.

We conducted our procedures in accordance with the professional guidelines of the French National Institute of Statutory Auditors *(Compagnie Nationale des Commissaires aux Comptes)* relating to this engagement. These guidelines require that we verify the consistency of the information provided to us with the relevant source documents.

1- AGREEMENTS AND COMMITMENTS SUBMITTED TO THE GENERAL SHAREHOLDERS' MEETINGS

Agreements and commitments authorized during the fiscal year

In accordance with Article L.225-38 of the French Commercial Code, we inform you that we have not been advised of any agreement or commitment which has been submitted for approval to the General Shareholders' Meeting.

2- AGREEMENTS AND COMMITMENTS ALREADY APPROVED BY THE GENERAL SHAREHOLDERS' MEETING

Agreements and commitments approved during previous fiscal years and having continuing effect during the year

Pursuant to Article R.225-30 of the French Commercial Code, we have been informed of the following agreements and commitments previously approved by the General Shareholders' Meeting in prior years and having continuing effect during the year.

2-1 Type and purpose: granting of a severance payment

Person concerned: Mr. Bernard GILLY, Chief Executive Officer of GENSIGHT BIOLOGICS

Terms and conditions: it was decided that a severance payment, equal to twelve months of remuneration and calculated on the basis of the last annual remuneration (fixed and variable), will be granted to Mr. Bernard GILLY in the case of termination of his duties as Chief Executive Officer (or as Chairman-Chief Executive Officer, should the Board of Directors decide subsequently to combine the duties of Chairman of the Board of Directors and Chief Executive Officer) regardless of the reason.

As an exception to the above, the severance payment will not be paid:

(i) Should Mr. Bernard GILLY be removed from his duties as Chief Executive Officer for serious misconduct or gross negligence, as these notions are defined by applicable jurisprudence in French labor law or

(ii) Should Mr. Bernard GILLY resign from his term of office as Chief Executive Officer, except if this resignation relates to sickness or family matters, it being specified that in these two cases, the severance payment will be paid to Mr. Bernard GILLY.

Furthermore, it is specified that the severance payment will not be paid if Mr. Bernard GILLY changes his duties within the group or if he leaves the company, at his initiative, to perform new duties elsewhere.

Payment of the severance pay will be subject to the following performance condition: achieving at least 50 % of the annual objectives with respect to the fiscal year.

Reason justifying the interest of this agreement for the company:

The granting of this severance payment is justified insofar as it allows for, under certain conditions, a compensation mechanism for the Chief Executive Officer in the event of the loss of his term of office, by offering a protection to a corporate officer who does not have an employment contract and as a result, who is excluded from the protection and compensation provided by the existence of an employment contract.

(Agreement authorized by the Board of Directors on March 9, 2017).

2-2 Type and purpose: non-compete clause

Person concerned: Mr. Bernard GILLY, Chief Executive Officer of GENSIGHT BIOLOGICS

Terms and conditions: it was decided to grant a monthly non-compete payment during one year, as from the departure of Mr. Bernard GILLY from the company, equal to 40 % of his last monthly net remuneration, excluding all bonuses (less any other amount received irrespective of the reason in respect of a non-compete obligation), in consideration of the commitment made by Mr. Bernard GILLY, during the same period of one year as from his date of departure from the company:

- Not to hold in Europe, Canada, the United States and in any country where the company carries out its business activities, a term of office as a director, or a job position as senior executive, employee or consultant in any company performing the activity or
- Not to own shares in the share capital of a company performing the activity, excluding the holding of an interest in any listed company representing at the most 1 % of the share capital held exclusively for personal financial reasons.

It being specified that:

- The term activity means "the research and development, and the future marketing of all gene therapy products and equipment for orphan ophthalmic diseases",
- The Board of Directors may decide to release Mr. Bernard GILLY from this non-compete obligation; this decision should take place at the latest before the expiration of the first month following the date of departure, in which case no amount will be owed by the company.

as provided for in Article 17 of the *"Third Amendment and Restatement Shareholders' Agreement"* of June 30, 2015.

Reason justifying the interest of this agreement for the company:

The stipulation of such a non-compete clause and its related compensation is justified insofar as it offers the company the possibility to protect its interest should the Chief Executive Officer subsequently leave the company.

(Agreement authorized by the Board of Directors on March 9, 2017).

ANGERS and PARIS-LA DEFENSE, April 26, 2019

The Statutory Auditors

BECOUZE	DELOITTE & ASSOCIÉS
F. BROVEDANI Partner	S. LEMANISSIER Partner

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FINANCIAL INFORMATION CONCERNING THE GROUP'S ASSETS AND LIABILITIES, FINANCIAL POSITION AND PROFITS AND LOSSES

19.1 HISTORICAL FINANCIAL INFORMATION

The tables below present selected financial information and the income statement and other data of the Company, as of and for the periods ended on the dates indicated below.

This Document includes our annual consolidated financial statements prepared in accordance with IFRS as adopted by the European Union as of and for the fiscal year ended December 31, 2018 presented in this Document in Section 19.1.1, "Company's Annual Consolidated Financial Statements (IFRS) for the Fiscal Year Ending December 31, 2018."

This Document also includes the financial statements of the parent company, prepared in accordance with French accounting standards for the fiscal year ended December 31, 2018. These financial statements are presented in Section 19.1.3, "Company's Annual Financial Statements (French-GAAP) for the Fiscal Year Ending December 31, 2018" of this Document.

Unless otherwise indicated, the selected financial information as of and for the fiscal year ended December 31, 2018 has been derived from our consolidated financial statements prepared in accordance with IFRS as adopted by the European Union as of and for the fiscal years ended December 31, 2018. These consolidated financial statements for the fiscal year ended December 31, 2018 have been audited by Deloitte & Associés and Becouze, Statutory Auditors. The Statutory Auditors' report on the consolidated financial statements as of and for the fiscal year ended December 31, 2018 is included in Section 19.1.2, "Statutory Auditors' Report on the Company's Annual Consolidated Financial Statements (IFRS) for the Fiscal Year Ending December 31, 2018" of this Document.

The information in this section should be read together with (i) our consolidated financial statements contained in Section 19.1.1, "Company's Annual Consolidated Financial Statements (IFRS) for the Fiscal Year Ending December 31, 2018" of this Document, (ii) our analysis of our results presented in Section 8, "Operating and Financial Review," and (iii) our analysis of our liquidity and capital resources presented in Section 9, "Capital Resources."

19.1.1 COMPANY'S ANNUAL CONSOLIDATED FINANCIAL STATEMENTS (IFRS) FOR THE FISCAL YEAR ENDING DECEMBER 31, 2018

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

		As of December 31,	
In thousands of euros	Notes	2017	2018
ASSETS			
Non-current assets			
Intangible assets	4	185	168
Property, plant and equipment	5	889	1,396
Other non-current financial assets	6	327	331
Total non-current assets		**1,401**	**1,895**
Current assets			
Trade accounts receivable	7	12	2
Other current assets	7	5,351	8,840
Cash and cash equivalents	8	55,448	26,241
Total current assets		**60,811**	**35,084**
TOTAL ASSETS		**62,212**	**36,979**

In thousands of euros	Notes	As of December 31, 2017	2018
LIABILITIES			
Shareholders' equity	9		
Share capital		606	620
Premiums related to the share capital		112,140	112,135
Reserves		(33,638)	(55,432)
of wich cumulative translation adjustment		*9*	*(32)*
Net income (loss)		(24,112)	(33,453)
Total shareholders' equity		**54,996**	**23,870**
Non-current liabilities			
Conditional advances – non-current portion	10	3,033	3,441
Non-current provisions	11	88	65
Total non-current liabilities		**3,121**	**3,506**
Current liabilities			
Conditional advances – current portion	10	–	–
Trade accounts payable	12	2,225	7,593
Other current liabilities	12	1,870	2,009
Total current liabilities		**4,095**	**9,602**
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		**62,212**	**36,979**

CONSOLIDATED STATEMENTS OF INCOME (LOSS)

In thousands of euros	Notes	As of December 31, 2017	2018
Operating income			
Revenues		–	–
Other income	14	3,702	4,346
Total operating income		**3,702**	**4,346**
Operating expenses			
Research and development	15	18,675	29,031
General and administration	15	8,173	7,010
Sales and marketing	15	844	1,350
Total operating expenses		**27,692**	**37,391**
Operating profit (loss)		**(23,990)**	**(33,045)**
Financial income	17	34	44
Financial expenses	17	(156)	(452)
Financial income (loss)		**(122)**	**(408)**
Income tax	18	–	–
Net income (loss)		**(24,112)**	**(33,453)**
Basic and diluted earnings (loss) per share (in euro)	**21**	**(1.10)**	**(1.37)**

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	As of December 31,	
In thousands of euros	2017	2018
Net income (loss)	(24,112)	(33,453)
Actuarial gains and losses on employee benefits, net of income tax	12	16
Foreign currency translation differences, net of income tax	9	(32)
Total comprehensive income (loss)	**(24,091)**	**(33,469)**

CONSOLIDATED STATEMENTS OF CASH FLOWS

		As of December 31,	
In thousands of euros	Notes	2017	2018
Cash flows from operating activities			
Net profit (loss)		(24,112)	(33,453)
Operating activities			
Amortization and depreciation	4 & 5	224	315
Retirement pension obligations	11	26	28
Expenses related to share-based payments	16.5	4,800	2,422
Other financials items	17	77	410
Operating cash flows before change in working capital		**(18,984)**	**(30,278)**
Accounts receivable		19	9
Accounts payable, net of prepayments		384	5,233
Other receivables		(976)	(3,478)
Other current liabilities		775	132
Change in working capital		202	1,896
Net cash flows from operating activities		**(18,782)**	**(28,383)**
Cash flows from investment activities			
Acquisitions of property, plant, and equipment	5	(236)	(789)
Acquisitions of intangible assets	4	—	(2)
Acquisitions/reimbursement of non-current financial assets		(232)	8
Acquisitions/reimbursement of current financial assets		(216)	120
Sales of property, plant, and equipment		—	—
Net cash flows from investment activities		**(684)**	**(663)**
Cash flows from financing activities			
Conditional advances received	10	—	—
Treasury shares		(84)	(123)
Warrants issuance	16	257	8
Capital increases, net of transaction costs	9	20,774	—
Net cash flows from financing activities		20,946	(115)
Increase/(decrease) in cash and cash equivalents		**1,480**	**(29,160)**
Cash and cash equivalents at the beginning of the period		53,982	55,448
Effect of changes in exchange rates on cash and cash equivalents		(14)	(47)
Cash and cash equivalents at the close of the period		55,448	26,241

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

In thousands of euros, except for number of shares	Share Capital		Premiums related to the share capital	Reserves	Net income (loss)	Total Shareholders' Equity
	Number of shares	Amount				
At January 1, 2017	**19,409,701**	**485**	**91,230**	**(16,293)**	**(22,082)**	**53,340**
Net income (loss)	—	—	—	—	(24,112)	(24,112)
Cumulative translation adjustment	—	—	—	9	—	9
Other comprehensive income	—	—	—	12	—	12
Total comprehensive income (loss)	**—**	**—**	**—**	**21**	**(24,112)**	**(24,091)**
Allocation of prior period net income (loss)	—	—	—	(22,082)	22,082	—
Allocation to reserves	—	—	—	—	—	—
Capital increase by issuance of ordinary shares	3,750,000	94	22,406	—	—	22,500
Capital increase transaction costs	—	—	(1,726)	—	—	(1,726)
Capital increases related to exercises of warrants	1,074,522	27	230	—	—	257
Treasury shares	—	—	—	(84)	—	(84)
Share-based payments	—	—	—	4,800	—	4,800
At December 31, 2017	**24,234,223**	**606**	**112,140**	**(33,638)**	**(24,112)**	**54,996**
At January 1, 2018	**24,234,223**	**606**	**112,140**	**(33,638)**	**(24,112)**	**54,996**
Net income (loss)	—	—	—	—	(33,453)	(33,453)
Cumulative translation adjustment	—	—	—	(32)	—	(32)
Other comprehensive income	—	—	—	16	—	16
Total comprehensive income (loss)	**—**	**—**	**—**	**(16)**	**(33,453)**	**(33,469)**
Allocation of prior period net income (loss)	—	—	—	(24,112)	24,112	—
Allocation to reserves	—	—	—	—	—	—
Capital increase by issuance of ordinary shares	568,750	14	(5)	—	—	9
Capital increase transaction costs	—	—	—	—	—	—
Capital increases related to exercises of warrants	—	—	—	—	—	—
Treasury shares	—	—	—	(88)	—	(88)
Share-based payments	—	—	—	2,422	—	2,422
At December 31, 2018	**24,802,973**	**620**	**112,135**	**(55,432)**	**(33,453)**	**23,870**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Note 1: General information about the Company

Founded in 2012, GenSight Biologics S.A. (hereinafter referred to as **"GenSight Biologics"** or the **"Company"** and together with its subsidiary as the **"Group"**) is a clinical-stage biotechnology group discovering and developing novel therapies for neurodegenerative retinal diseases and diseases of the central nervous system. GenSight Biologics' pipeline leverages two core technology platforms, the Mitochondrial Targeting Sequence (MTS) and optogenetics, to help preserve or restore vision in patients suffering from severe degenerative retinal diseases. The Group focus is in ophthalmology where it develops product candidates to restore eyesight to patients suffering from retinal diseases that would otherwise lead to blindness.

The Company has incurred losses and negative cash flows from operations since its inception and shareholders' equity amounts to €23,870 K as of December 31, 2018 as a result of several financing rounds (see Note 9). The Group anticipates incurring additional losses until such time, if ever, that it can generate significant revenue from its product candidates in development. Substantial additional financing will be needed by the Company to fund its operations and to commercially develop its product candidates.

The Group's future operations are highly dependent on a combination of factors, including: (i) the success of its research and development; (ii) regulatory approval and market acceptance of the Group's proposed future products; (iii) the timely and successful completion of additional financing; and (iv) the development of competitive therapies by other biotechnology and pharmaceutical companies.

The presented consolidated Financial Statements are expressed in thousands of euros, unless stated otherwise. The reporting date for the consolidated financial statements is December 31, and covers a twelve- month period. The individual statements of the consolidated subsidiary GenSight Biologics Inc. are prepared at the same reporting date, *i.e.*, December 31, and cover a one-year period for both the parent company and its subsidiary.

The consolidated financial statements as of December 31, 2018 have been prepared under the responsibility of management of the Group and were approved on April 23, 2019 by the Board of Directors.

Note 2: Statement of compliance and transition to IFRS

2.1 Statement of compliance

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). As the shares of the Company are listed on Euronext Paris, in compliance with European regulation n°1606 / 2002 adopted on July 19, 2002 by the European Parliament and the European Council, the Group's consolidated financial statements for the year ended December 31, 2018 were prepared in accordance with IFRS, as endorsed by the European Union on the date of preparation.

The IFRS as adopted by the European Union differ in certain aspects with the IFRS published by the IASB. Nevertheless, the Group ensured that the financial information for the periods presented is not substantially different between IFRS published by the IASB and IFRS as adopted by the European Union. International accounting standards include IFRS, International Accounting Standards (IAS), as well as the interpretations issued by the Standing Interpretations Committee (SIC), and the International Financial Reporting Interpretations Committee (IFRIC).

New standards, amendments and interpretations that became applicable to the Group from January 1, 2018

The new standards, amendments to standards and interpretations published by IASB and mandatorily applicable from 2018 are listed below:

- On May 28, 2014, the IASB issued IFRS 15 *Revenue from Contracts with Customers* which specifies how and when to recognize revenue as well as requiring entities to provide users of financial statements with more informative and relevant disclosures. According to the new standard, revenue is recognized to depict the transfer of promised goods or services to a customer in an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. Revenue is recognized when, or as, the customer obtains control of the goods or services. The standard supersedes IAS 18 Revenue, IAS 11 Construction Contracts and a number of revenue-related interpretations. As the Group does not generate yet revenue from contracts with customers, there is no impact on the consolidated financial statements as of December 2018.
- On July 24, 2014, the IASB issued the final version of IFRS 9 Financial Instruments (2014) which replaces IAS 39 Financial Instruments: Recognition and Measurement ("IAS 39"), bringing together the classification and measurement, impairment and hedge accounting. IFRS 9 introduces a single approach for the classification and measurement of financial assets according to their cash flow characteristics and the business model they are managed in. It provides a new impairment model based on expected credit losses. IFRS 9 also includes new regulations regarding the application of hedge accounting to better reflect an entity's risk management activities especially with regard to managing non-financial risks. The adoption of this new

standard did not have any impact on the consolidated financial statements as of December 2018.

At the date of these financial statements, The Group has not applied the following new and revised IFRS Standards that have been issued but are not yet effective and, in some cases have not yet been adopted by the EU:

- On January 13, 2016, the IASB issued IFRS 16 Leases which specifies how an entity will recognize, measure, present and disclose leases. IFRS 16 eliminates the current classification model for lessee's lease contracts as either operating or finance leases and, instead, introduces a single lessee accounting model requiring lessees to recognize right-of-use assets and lease liabilities for leases with a term of more than 12 months. This brings the previous off-balance leases on the balance sheet in a manner largely comparable to current finance lease accounting. IFRS 16 is effective for annual periods beginning on or after January 1, 2019. The Group would opt for the simplified retrospective method and on the basis of the existing leases as of December 31, 2018, a financial debt of around €4.7 million has been estimated.
- In May 2017, the IASB issued IFRIC 23, *Uncertainty Over Income Tax Treatments*. The interpretation clarifies the recognition and measurement requirements when there is uncertainty over income tax treatments. In assessing the uncertainty, an entity shall consider whether it is probable that a taxation authority will accept the uncertain tax treatment. IFRIC 23 is effective for annual reporting periods beginning on or after January 1, 2019.
- Amendments to IAS 19 - Employee Benefits Plan Amendment, Curtailment or Settlement.
- Annual Improvements to IFRS Standards 2015–2017 Cycle Amendments to IFRS 3 Business Combinations, IFRS 11 Joint Arrangements, IAS 12 Income Taxes and IAS 23 Borrowing Costs.
- Amendments to IFRS 9 Prepayment Features with Negative Compensation.
- Amendments to IAS 28 Long-term Interests in Associates and Joint Ventures.
- IFRS 17 Insurance Contracts. This Standard is effective for annual reporting periods beginning on or after January 1, 2021.
- IFRS 10 Consolidated Financial Statements and IAS 28 (amendments) Sale or Contribution of Assets between an Investor and its Associate or Joint Venture.

The accounting policies and measurement principles adopted for the consolidated financial statements as of and for the year ended December 31, 2018 are the same for the comparative period presented.

2.2 Going concern

The historical deficit position of the Group is explained by the innovative character of the products developed, which thus involved a research and development phase of several years preceding the marketing thereof.

The available cash and cash equivalents as of December 31, 2018 in the amount of €26.2 million, the capital increase of €7.9 million completed in February 2019 (see Note 24: subsequent events) as well as the reimbursement of the 2018 Research Tax Credit in the amount of €4.3 million expected during the second half year of 2019 should enable the Group to cover its cash requirements through the next 12 months.

Note 3: Accounting principles

3.1 Consolidation scope and methods

On April 28, 2017 the Group incorporated GenSight Biologics Inc. in the United States. As 100% of the voting rights and ownership interests are held by the Group, GenSight Biologics Inc. is fully consolidated.

3.2 Functional currency and translation of financial statements in foreign currency

The Financial Statements are presented in thousands of euros ("KEuros"), which is also the functional currency of the parent Company GenSight Biologics S.A. The statements of financial position of GenSight Biologics Inc. having a functional currency different from the euro are translated into euros at the closing exchange rate (spot exchange rate at the statement of financial position date), and the statements of income, statements of comprehensive income and statement of cash flow of GenSight Biologics Inc. are translated at the average period to date exchange rate. The resulting translation adjustments are included in equity under the caption "Cumulative translation adjustment" in the Consolidated Statement of Changes in Shareholders' Equity.

3.3 Intangible assets

Pursuant to IAS 38 Intangible Assets (**"IAS 38"**), intangible assets acquired are recognized as assets on the Consolidated Statement of Financial Position at their acquisition cost.

Research and development

Research costs are recorded in the Financial Statements as expenses.

In accordance with IAS 38, development costs are recognized in the Financial Statements as intangible assets only if all of the following criteria are met:

(a) it is technically feasible to complete the development of the project;

(b) intention on the part of the Company to complete the project and to utilize it;

(c) capacity to utilize the intangible asset;

(d) proof of the probability of future economic benefits associated with the asset;

(e) availability of the technical, financial and other resources for completing the project; and

(f) reliable evaluation of the development expenses.

Because of the risks and uncertainties related to regulatory authorizations and to the research and development process, the Company believes that the six criteria stipulated by IAS 38 have not been fulfilled to date and the application of this principle has resulted in all development costs to be expensed as incurred in all periods presented.

Software

The costs related to the acquisition of licenses for software are recognized as assets on the basis of the costs incurred to acquire and to implement the software. They are amortized using the straight-line method over a period of one to three years depending on the anticipated period of use.

License

In February 2013, the Company entered into a partnership agreement with Novartis Pharma AG ("Novartis") which provides for exclusive in-licenses for two patent families. The Company issued 670,588 ordinary shares as consideration paid for the exclusive licenses. Given that the fair value of the licenses cannot be reliably estimated, in accordance with IFRS 2, the amount of the intangible asset being recognized has been determined by reference to the fair value of the ordinary shares that were granted by the Company, based on an independent valuation. The licenses are amortized over 15 years from the date the agreement was signed, which corresponds to the expected useful life of the licenses.

3.4 Property, plant and equipment

Property, plant and equipment are recorded at their acquisition cost or, if applicable, at their production cost.

Property, plant and equipment are depreciated using the straight-line method over the estimated useful period of the property. Rented fixtures are depreciated over the term of their lifetime or over the term of the rental agreement, whichever is shorter.

The depreciation periods used are the following:

Property, plant and equipment item	Depreciation period
Fixtures and improvements in structures	9 years
Research and development / production tools	5 to 10 years
Computer equipment	3 years
Office equipment and furniture	5 years

3.5 Financial assets

Financial assets include assets available for sale, assets owned until maturity, loans and receivables, cash and cash equivalents.

The valuation and the accounting treatment of the financial assets and liabilities are defined by IAS 39 *Financial Instruments: Recognition and Measurement* ("IAS 39"), with the exception of deposits and guarantees in relation to lease agreements, which are classified under non-current financial assets on the statement of financial position and measured at cost.

Assets owned until maturity

These securities are exclusively fixed income or determinable income and have fixed maturities, other than loans and accounts receivable, that the Company has the intention and the ability to keep until maturity. After their initial posting at their fair value, they are valued and recognized in the Financial Statements at the amortized cost on the basis of the effective interest rate ("EIR") method.

The assets owned until maturity are monitored for any objective indication of impairment. A financial asset is impaired if its carrying value is greater than its recoverable amount as estimated during impairment tests. The impairment is recognized in the Consolidated Statement of Income (Loss).

Loans and receivables

This category includes other loans and accounts receivable and commercial receivables.

These instruments are initially recognized in the Financial Statements at their fair value and then at the amortized cost calculated with the EIR method. The short-term receivables without an interest rate are valued at the amount of the original invoice, unless the application of an implicit interest rate has a significant effect. For the loans and variable-rate accounts receivable, a periodic re-estimation of the cash flows, in order to reflect the change in the market interest rate, modifies the effective interest rate and therefore the valuation of the loan or of the receivable.

The loans and receivables are monitored for any objective indication of impairment. A financial asset is impaired if its book value is greater than its recoverable amount as estimated during impairment tests. The impairment is recognized in the Consolidated Statement of Income (Loss).

Assets at fair value through the statement of income (loss)

The assets considered to be held for trading purposes include the assets that the Company intends to resell in the near future in order to realize a capital gain, which is part of a managed portfolio of financial instruments classified as cash, cash equivalents and marketable securities for which there exists a practice of selling in the short term. The assets held for trading may also include assets voluntarily classified in this category, in a manner that is independent of the criteria listed above, in accordance with the fair value option accounting principle under IFRS.

Assets available for sale

The assets available for sale include, primarily, securities that do not meet the criteria of the definition of the other categories of financial assets. They are valued at their fair value, and the changes in value are recognized in other comprehensive income within shareholders' equity.

The fair value corresponds to the market price for those securities that are listed on a stock exchange or to an estimate of the value for unlisted securities, determined on the basis of the financial criteria most appropriate for the specific security. When there is an objective indication of the impairment of these securities, the accumulated impairment is recognized in Consolidated Shareholders' Equity in the Consolidated Statement of Income (Loss).

3.6 Recoverable amount of the intangible assets and property, plant and equipment

The property, plant and equipment and intangible assets that have an established lifetime are subject to an impairment test when the recoverability of their book value is called into question by the existence of indications of impairment. An impairment is recognized in the Financial Statements up to the amount of the excess of the book value over the recoverable value of the asset. The recoverable value of an asset corresponds to its fair value minus the costs of sale or its use value, whichever is higher.

3.7 Cash and cash equivalents

Cash equivalents are owned for the purpose of meeting short-term cash commitments rather than for the objective of investment or for other purposes. They are readily convertible into a known amount of cash and are subject to a negligible risk of change in value. Cash and cash equivalents are liquid assets that are available immediately, long-term investments that can be liquidated immediately without a penalty and money market funds, which are readily convertible into a known amount of cash and are subject to a negligible risk of change in value. Cash equivalents are valued on the basis of the IAS 39 categories under which they fall.

Short-term investments are generally comprised of term deposits that have a maturity exceeding three months and are measured on the basis of the IAS 39 categories under which they fall.

Cash equivalents and short-term investments are measured at their fair value, and the changes in value are recognized through financial income or loss. Given the nature of these assets, their fair value is generally close to their net carrying value.

3.8 Share capital

The costs of share capital transactions that are directly attributable to the issue of new shares or options are recognized in shareholders' equity as a deduction from the revenue from the issue, net of tax.

3.9 Share-based payment

Free shares (*Attributions gratuites d'Actions*, or "AGA"), stock-options (*Options de souscription et/ou d'achat d'actions*, or "SO") and employee warrants (B*ons de souscription de parts de créateur d'entreprise*, or "BCE") are awarded to employees or executives. Non-employee warrants (*Bons de souscription d'actions*, or "BSA") are primarily awarded to directors and scientific consultants. Pursuant to IFRS 2, these awards are measured at their fair value on the date of grant. The fair value is calculated with the most relevant formula regarding the settlement and the conditions of each plan. The fair value is recorded in personnel expenses (allocated by function in the Consolidated Statement of Income) on a straight-line basis over each milestone composing the vesting period with a corresponding increase in shareholders' equity.

At each closing date, we re-examine the number of options likely to become exercisable. If applicable, the impact of the review of the estimate is recognized in the Consolidated Statement of Income with a corresponding adjustment in equity.

3.10 Financial liabilities

Borrowings and other financial liabilities are measured initially at their fair value and then at amortized cost, calculated on the basis of the EIR method.

The transaction expenses that are directly attributable to the acquisition or to the issue of a financial liability reduce that financial liability. These expenses are then amortized actuarially over the lifetime of the liability, on the basis of the EIR.

The EIR is the rate that equalizes the anticipated flow of future cash outflows with the current net book value of the financial liability in order to deduct its amortized cost therefrom.

3.11 Research tax credit, subsidies and conditional advances

Research tax credit

The research tax credit (*Crédit d'Impôt Recherche*, or "CIR") (the "Research Tax Credit") is granted to companies by the French tax authorities in order to encourage them to conduct technical and scientific research. Companies that prove that they have expenditures that meet the required criteria (research expenditures located in France or, since January 1, 2005, within the European Community or in another State that is a party to the Agreement on the European Economic Area that has concluded a tax treaty with France that contains an administrative assistance clause) receive a tax credit that can be used for the payment of the corporate tax due for the fiscal year in which the expenditures were made and the next three fiscal years, or, as applicable, can be reimbursed in cash. The expenditures taken into account for the calculation of the Research Tax Credit involve only research expenses.

The Company has received the Research Tax Credit since its inception.

The Company received the reimbursement of the Research Tax Credit for the year 2017 in September 2018 for an amount of €3,692 K. It will request the reimbursement of the 2018 Research Tax Credit in 2019 under the Community tax rules for small and medium firms in compliance with the regulatory texts in effect for the amount of €4,322 K.

The CIR is presented under other income in the Consolidated Statement of Income (Loss) as it meets the definition of government grant as defined in IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance*.

Subsidies and conditional advances

Due to the innovative nature of its product candidate development programs, the Company has benefited from certain sources of financial assistance from Bpifrance Financement. Bpifrance Financement's mission is to provide financial assistance and support to emerging French enterprises to facilitate the development and commercialization of innovative technologies.

The funds received by the Company are intended to finance its research and development efforts and the recruitment of specific personnel. The Company has received such funding in the form of non-refundable subsidies and conditional advances.

Subsidies

Subsidies received are grants that are not repayable by the Company and are recognized in the Financial Statements where there exists reasonable assurance that the Company will comply with the conditions attached to the subsidies and the subsidies will be received.

Subsidies that are upfront payments are presented as deferred revenue and recognized ratably through income over the duration of the research program to which the subsidy relates.

A public subsidy that is to be received either as compensation for expenses or for losses already incurred, or for immediate financial support of the Company without associated future costs, is recognized in the Financial Statements as other income for the period in which the grant is classified as a receivable.

Conditional advances

Funds received from Bpifrance Financement in the form of conditional advances are recognized as financial liabilities, as the Company has a contractual obligation to reimburse Bpifrance Financement based on a repayment schedule. Each advance is made to fund a specific development milestone. Details concerning conditional advances are provided in Note 10. Receipts and reimbursements of conditional advances are reflected as cash flows from financing activities in the Consolidated Statement of Cash Flows.

The rate used to determine the amount recognized annually as a finance cost, the EIR takes into account the estimated future cash flows.

In the event of a change in payment schedule of the stipulated repayments of the conditional advances, the Company recalculates the net book value of the debt resulting from the discounting of the anticipated new future cash flows at the initial EIR. The adjustment that results therefrom is recognized in the Consolidated Statement of Income (Loss) for the period during which the modification is recognized.

The conditional advance that can be subject to this type of modification is the advance received from Bpifrance Financement, presented in Note 10.1.

3.12 Retirement pension obligations

The employees of the Company receive the retirement benefits stipulated by law in France:

- compensation paid by the Company to employees upon their retirement (defined-benefit plan) and;
- a payment of retirement pensions by the Social Security agencies, which are financed by the contributions made by companies and employees (defined-contribution plans).

For the defined-benefit plans, the costs of the retirement benefits are estimated by using the projected credit unit method. According to this method, the cost of the retirement benefit is recognized in the Consolidated Statement of Income (Loss) so that it is distributed uniformly over the term of the services of the employees. The retirement benefit commitments are valued at the current value of the future payments estimated using, for discounting, the market

rate for high quality corporate bonds with a term that corresponds to that estimated for the payment of the benefits.

The difference between the amount of the provision at the beginning of a period and at the close of that period is recognized through profit or loss for the portion representing the costs of services rendered and the net interest costs, and through other comprehensive income for the portion representing the actuarial gains and losses.

The Company's payments for the defined-contribution plans are recognized as expenses on the Consolidated Statement of Income (Loss) of the period during which they become payable.

3.13 Provisions for risks and expenses

The provisions for risks and lawsuits correspond to the commitments resulting from lawsuits and various risks whose due dates and amounts are uncertain.

A provision is recognized in the Financial Statements when the Group has a legal or implicit obligation to a third party resulting from a past event, which is likely or certain to cause an outflow of resources to that third party, and provided that the future outflows of liquid assets can be estimated reliably.

The amount recognized in the Financial Statements as a provision is the best estimate of the expenses necessary to extinguish the obligation.

3.14 Leases

The leases involving property, plant and equipment are classified as finance lease agreements when the Group bears substantially all the benefits and risks inherent in the ownership of the property. The assets that are covered under finance lease agreements are capitalized as of the beginning date of the rental agreement on the basis of the fair value of the rented asset or the discounted values of the future minimum payments, whichever is lower. Each rental payment is distributed between the debt and the financial cost in such a manner to determine a constant interest rate on the principal that remains due. The corresponding rental obligations, net of the financial expenses, are classified as financial liabilities. The property, plant and equipment acquired within the framework of a finance lease agreement is amortized over the use period or the term of the lease agreement, whichever is shorter.

The rental agreements for which a significant portion of the risks and advantages is preserved by the lessor are classified as operating leases. The payments made for these operating leases, net of any incentive measures, are recognized as expenses on the Consolidated Statement of Income (Loss) in a linear manner over the term of the agreement.

3.15 Income tax

Deferred taxes are recognized for all the temporary differences arising from the difference between the tax basis and the accounting basis of the assets and liabilities that appear in the Financial Statements. The primary temporary differences are related to the tax losses that can be carried forward or backward. The legal tax rates as of the closing date are utilized to determine the deferred taxes.

The deferred tax assets are recognized in the Financial Statements only to the extent that it is likely that the future profits will be sufficient to absorb the losses that can be carried forward or backward. Considering its stage of development, which precludes the income projections from being sufficiently reliable to be made, the Group has not recognized deferred tax assets in relation to tax loss carryforward in the Consolidated Statement of Financial Position.

3.16 Segment information

The Company operates in a single operating segment: the conducting of research and development of novel therapies for mitochondrial and neurodegenerative diseases of the eye and central nervous system in order to market them in the future. The assets, liabilities and operating loss realized are located mainly in France.

3.17 Presentation of financial assets and financial liabilities measured at fair value

In accordance with IFRS 7 *Financial Statements: Disclosures*, financial instruments are presented in three categories based on a hierarchical method used to determine their fair value:

- level 1: fair value calculated using quoted prices in an active market for identical assets and liabilities;
- level 2: fair value calculated using valuation techniques based on observable market data such as prices of similar assets and liabilities or parameters quoted in an active market; and
- level 3: fair value calculated using valuation techniques based wholly or partly on unobservable inputs such as prices in an inactive market or a valuation based on multiples for unlisted securities.

3.18 Use of estimates

The Financial Statements are prepared in accordance with IFRS. The preparation of the Financial Statements requires management to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, income and expenses during the reporting period. The Group bases estimates and assumptions on historical experience when available and on various factors that it believes to be reasonable under the circumstances. The Group's actual results may differ from these estimates under different assumptions or conditions. There have been no significant changes from original estimates in any periods presented.

These estimates and judgments involve mainly:

- the estimate of the amount of the intangible asset recognized in the context of a license agreement. The acquisition of this

license in 2013 resulted in the issuance of ordinary shares as consideration paid for the license. The amount of the intangible asset recognized was determined based on the fair value of the ordinary shares, €0.41 per share, issued as consideration for the license (see Note 4);

- the estimate of the repayments of the conditional advances obtained by the Company from public institutions, such as Bpifrance Financement. The anticipated repayments of the conditional advances are analyzed at each reporting period (see Note 10), and the measurement of the conditional advances classified as financial liabilities based on the effective rate method;
- the measurement of the fair value of the various equity instruments granted to employees, executives or non-employee members of the Board of Directors as well as scientific consultants and service providers, such as AGA, SO, BCE or BSA, which is performed on the basis of actuarial models; these models require the use by the Company of certain calculation assumptions such as the expected volatility of the underlying security (see Note 16; and.
- research and development expenses include estimates of the amount recognized over the year for subcontracts. At year-end closing, an analysis of the services already performed but not invoiced and / or already invoiced but not performed is carried out by the project managers and validated by the company's management.

Note 4: Intangible assets

The intangible assets are broken down as follows:

	As of December 31,	
In thousands of euros	2017	2018
Patents, licenses, trademarks	275	275
Software	10	12
Total historical cost	**285**	**287**
Accumulated amort. of patents, licenses and trademarks	90	108
Accumulated depreciation of software packages	10	11
Accumulated amortization and depreciation	**100**	**119**
Net total	**185**	**168**

An intangible asset was recognized at December 31, 2013 as a result of the license agreement signed with Novartis. The initial recognition cost amounted to €275 K and was determined by reference to the fair value of the 670,588 ordinary shares, €0.41 per ordinary share, issued as consideration for the license.

There has been no recognition of impairment losses in application of IAS 36 Impairment of Assets over the periods presented.

Note 5: Property, plant and equipment

Changes in property, plant and equipment gross book values and accumulated depreciation are presented in the following table:

In thousands of euros	As of January 1, 2018	Increase	Decrease	Currency translation adjustment	As of December 31, 2018
Technical equipment and installations	372	214	—	—	586
Leasehold improvement	604	355	—	17	976
Office and computer equipment	144	28	—	—	172
Furniture	303	192	—	—	495
Fixed assests in progress	1	—	(1)	—	—
Total gross property, plant and equipment	**1,424**	**789**	**(1)**	**17**	**2,229**
Accumulated depreciation of technical equipment and installations	138	89	—	—	227
Accumulated depreciation of leasehold improvement	157	89	—	2	248
Accumulated depreciation of office and computer equipment	91	34	—	—	124
Accumulated depreciation of furniture	149	85	—	—	234
Accumulated depreciation of fixed assets in progress	—	—	—	—	—
Total accumulated depreciation	**535**	**297**		**2**	**833**
Total net property, plant and equipment	**889**	**492**	**(1)**	**15**	**1,396**

The increase in leasehold improvements as well as in technical equipment and installations as at December 31, 2018 is mainly explained by the investments made for the new premises of the US subsidiary GenSight Biologics Inc. located in New York City.

Note 6: Other non-current financial assets

The non-current financial assets correspond to the deposits paid to the lessor for the registered offices of the Group in Paris and New York.

	As of December 31,	
In thousands of euros	2017	2018
Guarantee deposits	327	331
Total non-current financial assets	**327**	**331**

Note 7: Accounts receivable and other current assets

7.1 Accounts receivable and related receivables

All accounts receivable have payment terms of less than one year.

No valuation allowance was recognized on accounts receivable as there is no past due receivable.

7.2 Other current assets

The other current assets are broken down as follows:

	As of December 31,	
In thousands of euros	2017	2018
Prepayments	240	370
Research tax credit	3,692	4,322
Other taxes receivable	538	822
Liquidity contract	367	247
Prepaid expenses	514	3,079
Other receivable	–	–
Total	**5,351**	**8,840**

Other taxes receivable essentially refers to VAT receivables.

As of December 31, 2018, prepaid expenses were primarily manufacturing costs, rental, scientific collaborations and travel expenses.

Research Tax Credit

The Company benefits from the provisions in Articles 244 *quater* B and 49 *septies* F of the French Tax Code related to the Research Tax Credit. In compliance with the principles described in Note 3.11, the Research Tax Credit is recognized in the Consolidated Statement of Income (Loss) in "other income" during the year in which the eligible research expenditures are incurred.

Changes in the Research Tax Credit over the last two periods are presented as follows:

	Amounts in K€
Opening balance sheet receivable as of January 1, 2017	2,930
Other operating income	3,692
Payment received	(2,930)
Closing balance sheet receivable as of December 31, 2017	3,692

	Amounts in K€
Opening balance sheet receivable as of January 1, 2018	3,692
Other operating income	4,322
Payment received	(3,692)
Closing balance sheet receivable as of December 31, 2018	4,322

Note 8: Cash and cash equivalents

Cash and cash equivalents items are broken down as follows:

	As of December 31,	
In thousands of euros	2017	2018
Cash	55,448	26,241
Cash equivalents	–	–
Total cash and cash equivalent as reported in the statements of financial position	55,448	26,241
Bank overdrafts	–	–
Total net cash and cash equivalents as reported in the statements of cash flows	55,448	26,241

The Group does not hold any short-term investment and all of its cash balances are cash at hand deposits with high-credit quality financial institutions.

Note 9: Capital

9.1 Share capital issued

The share capital as of December 31, 2018 amounts to €620,074.33. It is divided into 24,802,973 fully authorized, subscribed and paid-up ordinary shares with a nominal value of €0.025.

On July 13, 2016, the Company completed its Initial Public Offering (IPO) on Euronext Paris, raising €40.0 million in gross proceeds, and the Company issued 5,000,000 ordinary shares with a nominal value of €0.025 and a share premium of €7.975 per share.

On August 10, 2016, the Company partly exercised its overallotment option as part of its IPO on Euronext Paris, raising an additional €5.2 million in gross proceeds, and the Company issued 655,859 ordinary shares with a nominal value of €0.025 and a share premium of €7.975 per share.

On June 27, 2017, the Company operated a capital increase whose gross proceeds amounted to €22.5 million, by means of a private placement reserved to a category of persons, U.S. and European institutional investors specialized in healthcare and biotechnology. The majority of the new shares were allocated to U.S. investors. This increase corresponds to 3,750,000 new shares, par value €0.025 each.

The 24,802,973 outstanding shares does not include BSA, BCE, AGA and SO. BSA are granted to investors and other individual non-employees, BCE are granted to employees only, AGA are granted to employees and / or executives and SO are granted to U.S. subsidiary employees.

The table below shows the changes occurred in the share capital during the last two periods:

In thousands of euros, except for number of shares	Share Capital	Share premium	Number of shares
Balance as of January 1, 2017	**485**	**91,230**	**19,409,701**
Capital increase by issuance of ordinary shares	94	22,406	3,750,000
Less cost of issuance of shares	—	(1,726)	—
Issue of shares upon exercise of subscription warrants (1)	27	230	1,074,522
Total as of December 31, 2017	606	112,140	24,234,223
Balance as of January 1, 2018	**606**	**112,140**	**24,234,223**
Capital increase by issuance of ordinary shares	—	—	—
Less cost of issuance of shares	—	—	—
Issue of shares upon exercise of subscription warrants (1)	14	(5)	568,750
Total as of December 31, 2018	620	112,135	24,802,973

(1) The share premium includes the subscription price of non-employee warrants and the exercise price in excess of the share nominal value for employee and non-employee warrants.

All the changes relating to employee warrants, non-employee warrants and free shares, as well as their impact on the profit and loss for the period are detailed in Note 16.

Note 10: Financial liabilities

10.1 Conditional advances

In 2014, the Company received a grant from Bpifrance Financement in the form of both subsidies and conditional advances in relation to the development of its technology platform. The program will be funded according to a specified schedule set forth in the contract, subject to completion of milestones. As the program advances, the Company will provide Bpifrance Financement with interim progress reports and a final report when the funded project ends. Based on these reports, the Company is entitled to conditional advances from Bpifrance Financement. Each award of an advance is made to help fund a specific development milestone. The total amount initially planned of the conditional advances is €5,686 K. The Company has committed to reimburse a total amount of €6,490 K (included accrued interests; determined at an annual rate of 1.44%). If the total advances actually paid by Bpifrance Financement are less than €5,686 K, the reimbursements will be reduced in proportion to the advances actually paid.

The advances will be paid according to the following schedule, subject to completion of milestones:

- €678 K received in December 2014;
- €2,279 K received in July 2016[(1)];
- €494 K initially expected to be received in the first half of 2018[(2)];
- €853 K initially expected to be received in November 2018; and
- €986 K initially expected to be received in November 2019.

After review and analysis of the stage of completion of the remaining milestones, level of expenses that have been incurred as of December 31, 2018, and given that the term of the initial agreement is set on November 30, 2019; the Group has made the assumption that it would not be able to complete the key milestones on time and therefore should not receive any more conditional advance from Bpifrance Financement. As a consequence, the 3 last payments, representing a total amount of €2,333 K should not be paid to the Company.

The advances already paid in 2017 and 2016 and the corresponding accrued interests are both recognized as non-current liabilities in the statement of financial position.

The updated repayment schedule for a total amount of €3,303 K of all of the conditional advances received as of December 2018 is as follows:

- €550 K on or before June 30, 2022;
- €1,000 K on or before June 30, 2023;
- €1,500 K on or before June 30, 2024; and
- €253 K on or before June 30, 2025.

Following the repayment of all of the conditional advances, the Company may be required to make additional payments over a period of two years of up to €1.4 million (€603 K the first year and €823 K the second year), depending on whether the Company reaches cumulative revenues, excluding taxes, of €80.0 million. These additional repayments should be done within 15 years following the first year of reimbursement, *i.e.* 2037.

The obligation to repay these amounts is based on the technical and commercial success of the funded program, as determined by the revenues forecast or revenues deriving from direct or indirect exploitation of those products and results of its optogenetics technology platform. In the event Bpifrance Financement determines that the program is not successful, Bpifrance Financement will meet with the Company to assess the impact on the repayments and the repayment schedule.

The Company has decided to include the future cash flows resulting from the additional payments in the calculation of the EIR, based on the first sales projections of its second product.

The table below presents the details of the financial liabilities recorded on the statements of financial position:

In thousands of euros	
Balance as of January 1, 2018	**3,033**
Receipts	—
Repayments	—
Accrued interest	408
Other	—
Balance as of December 31, 2018	**3,441**
Non-current portion	3,441
Current portion	—

(1) The estimated amount from the initial payment schedule was €2,675 K. The costs occurred by Company amounted to a lower amount than expected, therefore the amount of this milestone was reduced accordingly.
(2) The corresponding milestone occured in November 2017.

10.2 Maturity dates

Maturity dates of financial liabilities as of December 31, 2017 are as follows:

In thousands of euros	Gross amount	Less than one year	One to five years	More than five years
Total financial liabilities	3,033	—	550	2,483

Maturity dates of financial liabilities as of December 31, 2018 are as follows:

In thousands of euros	Gross amount	Less than one year	One to five years	More than five years
Total financial liabilities	3,441	—	1,550	1,891

Note 11: Non-current provisions

Non-current provisions are exclusively composed of employee benefits relating to a compensation payable to French employees upon their retirement – *Indemnités de Fin de Carrière* ("IFC").

The following tables show the changes in the provision during the last two periods:

	In thousands of euros
As of January 1, 2017	**73**
Costs of services rendered (operating expense)	26
Interest expense	1
Benefits paid	—
Actuarial gain (loss)	(12)
As of December 31, 2017	**88**
As of January 1, 2018	**88**
Costs of services rendered (operating expense)	28
Interest expense	1
Benefits paid	—
Actuarial gain (loss)	(52)
As of December 31, 2018	**65**

The main assumptions used for the purposes of actuarial valuations are listed below:

- Social security contribution: 45% in 2017 and 2018;
- Salary increase: 3% in 2017 and 2018;
- Discount rate: iBoxx Corporates AA 10+ index, 1.30% and 1.57% in 2017 and 2018, respectively;
- Retirement age: 67;
- Terms of retirement: voluntary retirement;
- Life table: TGHF 2005;
- Collective agreement: *Convention Collective Nationale des Ingénieurs et des Cadres de la Métallurgie* (National Collective Agreement for Engineers and Executives in the Metalworking Industry); and
- Personnel turn-over: 10% (20-49), 0% above 50.

One retirement was recorded during the last period presented.

Note 12: Accounts payable and other current liabilities

12.1 Accounts payable and related parties

With respect to accounts payable and related payables, no discounting effect has been recognized to the extent that amounts did not represent payables on terms longer than one year at the end of each period presented.

Maturity dates of accounts payables as of December 31, 2018 are as follows:

In thousands of euros	Gross amount	Less than one year	One to five years	More than five years
Trade accounts payable	7,593	7,593	—	—

12.2 Other current liabilities

The following table provides the detail of other current liabilities for the presented periods:

	As of December 31,	
In thousands of euros	2017	2018
Employee-related payable	1,842	1,720
Other taxes liabilities	28	201
Deferred revenue	—	82
Other current liabilities	—	6
Total	**1,870**	**2,009**

The amount booked in deferred revenue corresponds to the rent free-period amounts related to the New York office.

Note 13: Financial instruments recognized in the consolidated statements of financial position and related effect on the consolidated statement of income (loss)

In thousands of euros	Book value on the statement of financial position	Fair value through profit and loss[1]	Loans and receivables[2]	At amortized cost[3]	Fair Value
As of December 31, 2017					
Financial assets					
Non-current financial assets	327	—	—	327	327
Current financial assets	367	367	—	—	367
Accounts receivable and related receivables	12	—	12	—	12
Cash and cash equivalents	55,448	55,448	—	—	55,448
Total financial assets	**56,154**	**55,814**	**12**	**327**	**56,154**
Financial liabilities					
Conditional advances (non-current portion)	3,033	—	—	3,033	3,033
Accounts payable and related payables	2,225	—	—	2,225	2,225
Total financial liabilities	**5,258**	**—**	**—**	**5,258**	**5,258**

In thousands of euros	Book value on the statement of financial position	Fair value through profit and loss[1]	Loans and receivables[2]	At amortized cost[3]	Fair Value
As of December 31, 2018					
Financial assets					
Non-current financial assets	331	—	—	331	331
Current financial assets	247	247	—	—	247
Accounts receivable and related receivables	2	—	2	—	2
Cash and cash equivalents	26,241	—	—	26,241	26,241
Total financial assets	**26,821**	**247**	**2**	**26,572**	**26,821**
Financial liabilities					
Conditional advances (non-current portion)	3,441	—	—	3,441	3,441
Accounts payable and related payables	7,593	—	—	7,593	7,593
Total financial liabilities	**11,034**	**—**	**—**	**11,034**	**11,034**

(1) The fair value of financial assets classified as fair value through profit and loss corresponds to the market value of the assets.
(2) The fair value of loans and receivables corresponds to the value reported in the statement of financial position meaning the value at the transaction date and then tested for impairment on each reporting date.
(3) The book amount of financial liabilities measured at amortized cost was deemed to be a reasonable estimation of fair value.

Note 14: Other income

Other income is detailed in the table below:

	As of December 31,	
In thousands of euros	2017	2018
Research tax credit (see Note 7)	3,692	4,322
Subsidies	10	24
Total	**3,702**	**4,346**

Note 15: Operating expenses

15.1 Research and development expenses

The table below shows the breakdown of general and administrative expenses by cost nature for the periods presented:

	As of December 31,	
In thousands of euros	2017	2018
Personnel expenses[(1)]	4,734	4,691
Sub-contracting, collaboration and consultants	11,672	21,288
Licensing and intellectual property	155	752
Offices cost	516	727
Travel and entertainment expenses	1,065	760
Depreciation and amortization expense	184	270
Other	348	543
Total R&D expenses	**18,675**	**29,031**

(1) Includes €1,543 K and €950 K related to share-based compensation expense as of December 31, 2017 and 2018 respectively.

15.2 General and administrative expenses

The table below shows the breakdown of research and development expenses by cost nature for the periods presented:

	As of December 31,	
In thousands of euros	2017	2018
Personnel expenses[(1)]	5,824	2,993
Professional Fees	756	2,062
Communication and travel expenses	897	1,051
Offices cost	288	255
Equipment rental	11	3
Office furniture and small equipment	68	146
Postal and telecommunication expenses	14	25
Depreciation and amortization expense	40	45
Attendance fees	136	150
Insurance	56	48
Others	86	232
Total G&A expenses	**8,173**	**7,010**

(1) Includes €3,245 K and 1,132 K related to share-based compensation expense as of December 31, 2017 and 2018 respectively.

15.3 Sales and Marketing expenses

The table below shows the breakdown of sales and marketing expenses by cost nature for the periods presented:

	As of December 31,	
In thousands of euros	2017	2018
Personnel expenses[(1)]	53	658
Professional Fees	627	493
Communication and travel expenses	129	39
Offices cost	26	108
Others	8	52
Total S&M expenses	**844**	**1,350**

(1) Includes €13 K and €340 K related to share-based compensation expense as of December 31, 2017 and 2018, respectively.

15.4 Personnel expenses

The Group was employing 33 people on permanent contract as of December 31, 2018 compared with 34 as of December 31, 2017.

The following table shows the nature of costs included in personnel expenses:

	As of December 31, 2017				As of December 31, 2018			
In thousands of euros	R&D	G&A	S&M	TOTAL	R&D	G&A	S&M	TOTAL
Wages and salaries	2,096	1,351	23	3,470	2,847	1,463	187	4,497
Social contributions	1,071	1,226	16	2,314	870	391	131	1,392
Service cost (employee benefit)	24	2	—	26	23	5	—	28
Share-based payments	1,543	3,245	13	4,800	950	1,132	340	2,422
Total	**4,734**	**5,824**	**53**	**10,611**	**4,690**	**2,991**	**658**	**8,339**

Note 16: Share-based payments

The Board of Directors has been authorized by the general meeting of the shareholders to grant to employees BCE, BSA, AGA and SO and to implement share options plans as follows:

- with the authorization of the General Meeting of Shareholders on February 5, 2013, the Board of Directors issued:
  - 892,000 employee warrants (BCE 2013-02) on July 8, 2013.
  - 328,000 non-employee warrants (BSA 2013-02) on July 8, 2013.
  - 193,800 employee warrants (BCE 2013-02) on April 9, 2014.
  - 33,000 non-employee warrants (BSA 2013-02) on April 9, 2014.
- with the authorization of the General Meeting of Shareholders on June 25, 2014, the Board of Directors issued 60,000 employee warrants (BCE 2014-06) on December 3, 2014.
- with the authorization of the General Meeting of Shareholders on June 29, 2015, the Board of Directors issued:
  - 121,000 non-employee warrants (BSA 2015-06) on July 7, 2015.
  - 733,298 employee warrants (BCE 2015-06) on July 7, 2015.
- with the authorization of the General Meeting of Shareholders on May 19, 2016, the Board of Directors issued:
  - 205,000 non-employee warrants (BSA 2016) on July 26, 2016.
  - 766,000 free shares (AGA 2016) on July 26, 2016.
  - 593,500 free shares (AGA 2016) on July 27, 2017.
  - 72,500 free shares (AGA 2016) on December 19, 2017.
  - 165,000 non-employee warrants (BSA 2016) on July 27, 2017.
  - 220,000 stock options (SO 2017) on July 27, 2017.
  - 300,000 stock options (SO 2017) on December 19, 2017.
  - 175,000 stock options (SO 2017) on March 14, 2018.
- with the authorization of the General Meeting of Shareholders on April 12, 2018, the Board of Directors issued:
  - 380,000 free shares (AGA 2018) on September 18, 2018.
  - 20,000 non-employee warrants (BSA 2018) on September 18, 2018.
  - 30,000 stock options (SO 2018) on September 18, 2018.
  - 135,000 free shares (AGA 2018) on December 19, 2018.

16.1 Employee warrants (BCE)

Vesting schedule

All BCE granted may be exercised by the beneficiary on the basis of the following vesting schedule:

- up to 1/4 on the first anniversary of the date of grant;
- the remaining 75% becoming exercisable up to 1/36 per month from the first anniversary of the date of grant; and
- at the latest within 10 years from the date of grant.

Details and main characteristics of the BCE granted to date

	BCE 2013-02	BCE 2013-02	BCE 2014-06	BCE 2015-06
Date of grant	July 8, 2013	April 9, 2014	December 3, 2014	July 8, 2015
Plan expiration date	July 7, 2023	April 8, 2024	December 2, 2024	July 7, 2025
Number of warrants initially granted	892,000	193,800	60,000	733,298
Share entitlement per warrant	1	1	1	1
Exercise price	€0.025	€0.025	€0.025	€3.275
Valuation method		Black & Scholes		
Expected volatility	42.50%	42.50%	75.21%	76.49%
Expected dividend	0.00%	0.00%	0.00%	0.00%
Fair value per warrant	€0.44	€0.44	€2.15	€5.56

Changes in the balances of BCE

	BCE 2013-02	BCE 2014-06	BCE 2015-06	Total
Balance outstanding at January 1, 2018	**123,720**	**60,000**	**519,583**	**703,303**
Granted during the period	–	–	–	–
Exercised during the period	–	–	–	–
Forfeited during the period	–	–	(28,667)	(28,667)
Balance outstanding at December 31, 2018	**123,720**	**60,000**	**490,916**	**674,636**
Of which exercisable	123,720	60,000	426,604	610,324

16.2 Non-employee warrants (BSA)

Vesting schedule

BSA 2013-02 and BSA 2015-06 granted may be exercised by the beneficiary on the basis of the following vesting schedule:

- up to 1/4 on the first anniversary of the date of grant;
- the remaining 75% becoming exercisable up to 1/36 per month from the first anniversary of the date of grant; and
- at the latest within 10 years from the date of grant.

BSA 2016 granted may be exercised by the beneficiary on the basis of the following vesting schedule:

- up to 100% on the first anniversary of the date of grant; and
- at the latest within 10 years from the date of grant.

BSA 2017 granted may be exercised by the beneficiary on the basis of the following vesting schedule:

- up to 1/4 on the date of grant;
- the remaining 75% becoming exercisable up to 1/36 per month from the date of grant; and
- at the latest within 7 years from the date of grant.

BSA 2018 granted may be exercised by the beneficiary on the basis of the following vesting schedule:

- up to 1/4 on the date of grant;
- the remaining 75% becoming exercisable up to 1/36 per month from the date of grant; and
- at the latest within 7 years from the date of grant.

	BSA 2013-02	BSA 2013-02	BSA 2015-06	BSA 2016	BSA 2017	BSA 2018
Date of grant	July 8, 2013	April 9, 2014	July 8, 2015	July 26, 2016	July 27, 2017	September 18, 2018
Plan expiration date	July 7, 2023	April 8, 2024	July 7, 2025	July 25, 2023	July 27, 2024	September 18, 2025
Number of warrants initially granted	328,000	33,000	121,000	205,000	165,000	20,000
Exercise price	€0.025	€0.025	€3.275	€8.08	€5.04	€ 2.22
Share entitlement per warrant	1	1	1	1	1	1
Valuation method			Black & Scholes			
Expected volatility	42.50%	42.50%	76.49%	62.46%	49.37%	58.02%
Expected dividend	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Subscription price per warrant	€0.08	€0.08	€0.25	€0.65	€0.40	€ 0.18
Fair value per warrant (subscription price deducted)	€0.36	€0.36	€5.31	€2.94	€1.64	€ 2.02

Changes in the balances of BSA

	BSA 2013-02	BSA 2015-06	BSA 2016	BSA 2017	BSA 2018	Total
Balance outstanding at January 1, 2018	**293,040**	**121,000**	**158,000**	**165,000**	**–**	**737,040**
Granted during the period	–	–	–	–	20,000	20,000
Exercised during the period	–	–	–	–	–	–
Forfeited during the period	–	–	–	–	–	–
Balance outstanding at December 31, 2018	**293,040**	**121,000**	**158,000**	**165,000**	**20,000**	**757,040**
Of which exercisable	293,040	103,354	158,000	99,688	6,250	630,082

16.3 Free shares (AGA)

Vesting schedule

In July 2016, the Company's Board of Directors granted an aggregate of 766,000 free shares (AGA 2016) as follows:

- 546,000 AGA 2016 (710,000 initially granted, of which 128,000 were canceled in 2017 and 36,000 in 2018) were fully acquired by key managers, including Mr. Bernard Gilly, the Chief Executive Officer of the Company, subject to the achievement of the following performance criteria no later than July 2018:
  - 291,000 of these free shares were acquired at the completion of enrollment in RESCUE and REVERSE clinical trials in July 2017; and
  - 255,000 free shares were acquired at the enrollment of the first patient in a Phase I/II clinical trial of GS030 in RP in July 2018.
- 56,000 AGA 2016 were fully acquired in July 2017 (one year after their grant date).

In July 2017 and in December 2017, the Company's Board of Directors granted an aggregate of 666,000 additional AGA 2016 as follows:

- 622,500 AGA 2016 (of which 70,000 were cancelled in 2018), which may be fully acquired by key managers, including Mr. Bernard Gilly, subject to (i) a one year acquisition period from the date of grant and (ii) achievement of the performance criteria described below no later than July 2019:
  - 281,250 of these free shares were acquired upon receipt of the definitive results of the GS010 REVERSE clinical trial; and
  - the remaining 271,250 free shares will be acquired upon completion of the enrollment of 50% of the patients of a Phase I/II clinical trial of GS030 in RP.
- 32,500 AGA 2016 (43,500 initially granted, of which 11,000 were cancelled in 2018) were fully acquired on July 2018 (one year after their grant date).

The AGA 2016 will be issued at their nominal value and will be subject to a lock-up period of one year after their acquisition date.

In September 2018 and December 2018, the Company's Board of Directors granted an aggregate of 515,000 additional AGA 2018 as follows:

- 460,000 AGA 2018 (of which 15,000 were cancelled in 2018), which may be fully acquired by key managers, including Mr. Bernard Gilly, subject to (i) a one year acquisition period from the date of grant and (ii) achievement of the performance criteria described below no later than September 2020:
  - 222,500 of these free shares will be acquired upon completion of the enrollment of the patients of a Phase I/II clinical trial of GS030 in RP; and
  - the remaining 222,500 free shares will be acquired upon of the production of the first PPQ Batch of GS010.
- 55,000 AGA 2018 (of which 7,500 were cancelled in 2018) will be fully acquired on September 2019 (one year after their grant date).

The AGA 2018 will be issued at their nominal value and will be subject to a lock-up period of one year after their acquisition date.

Details and main characteristics of the AGA granted to date

	AGA 2016	AGA 2016	AGA 2016	AGA 2018	AGA 2018
Date of grant	July 26, 2016	July 27, 2017	December 19, 2017	September 18, 2018	December 19, 2018
Number of Share Awards initially granted	766,000	593,500	72,500	380,000	135,000
Vesting period (in Years)	1	1	1	1	1
Grant date Fair-value	€8.08	€5.12	€5.55	€ 2.10	€ 4.04
Performance conditions (1)	Yes	Yes	Yes	Yes	Yes

(1) Performance conditions concern only grants to key managers, other employees are only subject to a service condition.

Changes in the balances of AGA

	AGA 2016	AGA 2018	Total
Balance outstanding at January 1, 2018	**957,000**	**—**	**957,000**
Granted during the period	—	515,000	515,000
Vested during the period	(568,750)	—	(568,750)
Forfeited during the period	(117,000)	(22,500)	(139,500)
Balance outstanding at December 31, 2018	**271,250**	**492,500**	**763,750**

16.4 Stock options (SO)

Vesting schedule

The SO 2017 granted on December 19, 2017, may be exercised by the beneficiary on the basis of the following vesting schedule:

- up to ¼ on the date of the grant;
- the remaining 75% becoming exercisable up to 1/36 per month from the date of grant; and
- at the latest within seven years from the date of grant.

The SO 2017 granted on March 14, 2018, may be exercised by the beneficiary on the basis of the following vesting schedule:

- 25 % of the Options shall vest on the first anniversary of the Vesting Commencement Date;
- the remaining 75% becoming exercisable up to 1/36 per month from the date of grant; and
- at the latest within seven years from the date of grant.

The SO 2018 granted on September 18, 2018, may be exercised by the beneficiary on the basis of the following vesting schedule:

- 25 % of the Options shall vest on the first anniversary of the Vesting Commencement Date;
- the remaining 75% becoming exercisable up to 1/36 per month from the date of grant; and
- at the latest within seven years from the date of grant.

Details and main characteristics of the SO granted to date

	SO 2017	SO 2017	SO 2017	SO 2018
Date of grant	July 27, 2017	December 19, 2017	March 14, 2018	September 18, 2018
Plan expiration date	July 26, 2024	December 18, 2024	March 13, 2025	September 17, 2025
Number of warrants initially granted	220,000	300,000	175,000	30,000
Exercise price	€5.04	€5.55	€ 6.98	€ 2.19
Share entitlement per warrant	1	1	1	1
Valuation method		Black & Scholes		
Expected volatility	51.09%	50.36%	48.75%	58.02%
Expected dividend	0.00%	0.00%	0.00%	0.00%
Fair value per option	€2.09	€2.20	€ 2.63	€ 0.91

Changes in the balances of SO

	SO 2017	SO 2018	Total
Balance outstanding at January 1, 2018	**364,166**	**–**	**364,166**
Granted during the period	175,000	30,000	205,000
Exercised during the period	–	–	–
Forfeited during the period	(64,166)	–	(64,166)
Balance outstanding at December 31, 2018	**475,000**	**30,000**	**505,000**
Of which exercisable	150,000	–	150,000

16.5 Reconciliation with P&L share-based expenses

	As of December 31, 2017				As of December 31, 2018			
In thousands of euros	R&D	G&A	S&M	TOTAL	R&D	G&A	S&M	TOTAL
Non-Employee Warrants (BSA)	381	189	–	570	70	98	–	168
Employee Warrants (BCE)	(91)	286	–	195	5	141	–	146
Performance Shares (AGA)	931	2,769	13	3,714	335	887	340	1,561
Stock Options (SO)	322	–	–	322	540	6	–	547
Share-based payments expense	**1,543**	**3,245**	**13**	**4,800**	**950**	**1,132**	**340**	**2,422**

Note 17: Financial income and expenses

The financial income and expenses are broken down as follows:

	As of December 31,	
In thousands of euros	2017	2018
Income from cash equivalents	—	—
Foreign exchange gains	34	40
Other	—	4
Financial income	**34**	**44**
Foreign exchange losses	(77)	(43)
Accrued interests	(76)	(408)
Finance cost on employee benefits	(1)	(1)
Other	(1)	—
Financial expenses	**(156)**	**(452)**
Total	**(122)**	**(408)**

Foreign exchange gains and losses primarily arise from the purchase of services labeled in U.S. dollars.

As mentioned in Note 10.1, the accrued interests have been calculated on the basis of a rate of 5.56%.

The accrued interests correspond to the interest expenses on the conditional advances received from Bpifrance Financement.

Note 18 : Income tax expense

As mentioned in Note 3.11 – Accounting Principles – Research Tax Credit, subsidies and conditional advances, the French Research Tax Credit is not included in the line item income taxes but included in the line item other income.

As the Group is generating tax losses, no income tax expense has been recognized. Moreover, in accordance with the principles described in Note 3.15, and with respect to the stage of development of the Company, no deferred tax assets have been recognized in the Financial Statements.

As of December 31, 2018, accumulated tax loss carryforwards since inception amounted to €110,475 K. This tax loss can be carried forward indefinitely and charged against future profits, in accordance with current French tax laws (CGI art. 209, I-al. 3 et BIC-XIV-2000s).

18.1 Reconciliation between the effective and nominal income tax expense

The following table shows the reconciliation between the effective and nominal tax expense at the statutory French rate of 28.00% as of December 31, 2018 (same as of December 31, 2017), excluding additional contributions:

	As of December 31,	
In thousands of euros	2017	2018
Income before taxes	**(24,112)**	**(33,453)**
Statutory tax rate	28.00%	28.00%
Nominal tax expense	6,751	9,367
Increase/decrease in tax expense arising from:	—	—
Research tax credit	1,034	1,210
Share-based compensation	(1,344)	(678)
Non-recognition of deferred tax assets related to tax losses and temporary differences	(6,441)	(9,899)
Other differences	—	—
Income tax expense	—	—
Effective tax rate	0%	0%

Note 19: Commitments

The following table discloses aggregate information about material contractual obligations and the periods in which payments are due as of December 31, 2018.

In thousands of euros	Total	Less than one year	One to three years	Four to five years	More than five years
Conditional advances	3,441	—	—	1,550	1,891
Pension and employee benefits	65	—	—	—	65
Rental agreements	5,833	820	1,792	1,858	1,363
Collaborations and licensing arrangements	—	—	—	—	—
Total	**9,339**	**820**	**1,792**	**3,408**	**3,319**

Commitments under operating lease agreements

19.1 Agreement with Passage de l'Innovation

On January 1, 2015, we entered into a lease agreement for our headquarters premises in Paris, France with *Passage de l'Innovation*, which was amended on October 1, 2015, January 1, 2016, May 1, 2017, January 8, 2018, July 1, 2018 and October 1, 2018. As the company pursued its development, additional spaces were included in the contract. The main space's lease

ends in December 2024, however, our engagement with smaller surfaces ends in 2027. The agreement includes expenses for rent, rental charges and other services provided by the lessor.

The amendment signed on October 1, 2018 consisted especially in a decreased rent as the Group is using less office space. The associated services (*e.g.*, reception, printers and information technology and access to meeting rooms) have also been revised accordingly.

In addition, as of the end of December 31, 2018, there is no car rental contract.

The table below shows the minimum contractual future payments relating to this operating lease agreement as of December 31, 2018:

In thousands of euros	As of December 31, 2018
2019	494
2020	494
2021	494
2022	494
2023	494
2024	494
2025	37
2026	36
2027	18
Total	**3,055**

19.2 U.S.- based subsidiary

The Group entered into a binding office lease agreement in New-York for its U.S.-based subsidiary on September 6, 2017. The lease commencement was based upon substantial completion of the landlord's work and delivery of possession of the premises and occurred on April 18, 2018.

The table below shows the minimum rent and tenant's operating payment relating to this contract as of December 31, 2018:

In thousands of euros	As of December 31, 2018
2019	326
2020	398
2021	406
2022	428
2023	442
2024	451
2025	327
Total	**2,778**

Commitments under service agreement – G&A operations

In addition, the Group entered into a services contract with *Passage de l'Innovation* in connection with human resources, legal and intellectual property services on May 1, 2017, which was amended on December 15, 2017, January 31, 2018 and December 18, 2018. According to the last amendment terms and conditions, the annual cost is fixed at €240 K and each party can terminate the contract after a six-month notice period.

Commitments related to R&D operations

The Company has signed various licensing and collaboration agreements:

- In October 2012, the Group entered into a license agreement with Inserm Transfert S.A. ("Inserm"), a French public scientific and technological institute. The Group paid a license fee of €40 K in 2013 upon the execution of the agreement, which has been recognized as research and development expenses in the statement of income. Upon completion of development milestones, the Group has to pay non-refundable fees up to €2,750 K in the aggregate. As of December 31, 2018, the residual commitments amount to €1,800 K. Upon commercialization of any product covered by the licensed patents, the Group will be obligated to pay a percentage of net sales as a royalty. The royalty rate varies depending on the amount of net sales.
- In December 2013, the Group entered into a license agreement for use of scientific data with the *Association Française contre les Myopathies*, ("AFM"), a non-profit association, the French Muscular Dystrophy Association, Genethon and Inserm Transfert, acting as a delegate of Inserm, a French public scientific and technological institute and the Université Pierre et Marie Curie, ("UPMC"), a French university. The Group paid a license fee of €10 K upon the execution of the agreement, which has been recognized as research and development expenses in the Consolidated Statement of Income. Upon completion of development milestones, the Group has to pay non-refundable fees up to €688 K. As of December 31, 2018, the residual commitments amounted to €450 K. Upon commercialization of any product covered by the license patents, the Group will be obligated to pay an annual royalty of 1% of net sales.
- In December 2013, the Group entered into a three-year research collaboration agreement with UPMC, a French university and the Institut de la Vision. The Group has the exclusive right to use the developed shared patents. In October 2014, November 2014 and June 2015, respectively, the Group entered into three specific agreements superseding the initial agreement. In relation to these specific agreements, the Group has to pay a total amount of €2,276 K, excluding tax, at its discretion, over a three-year period starting 2014 to 2018. As of December 31, 2018, the collaboration agreement has not been renewed and there are no remaining payment due under the agreement.
- In February 2013, the Group entered into a license agreement with Novartis. The Company issued 670,588 ordinary shares as consideration paid for the licenses. The amount of the intangible asset recognized was €275 K (see Note 4) and determined by reference to the fair value of the ordinary shares that were granted by the Company in exchange for the licenses. Upon commercialization of any product covered by the licenses, the Company will be obligated to pay a royalty of 5% of net sales.
- In February 2014, the Company entered into a non-exclusive license, development and commercialization agreement with Avalanche Technologies ("Avalanche" renamed "Adverum

Biotechnologies"), a biotechnology company. The annual license fee payable by the Group is $30 K, which was a €26 K payment each year from 2014 to 2018 recognized as research and development expenses in the statement of income. Upon completion of development milestones, the Group has to pay specified non-refundable fees of up to $5,900 K. As of December 31, 2018, the residual commitments amount to $5,750 K. Upon commercialization of any product covered by the license patents, the Group will be obligated to pay a percentage of net sales as a royalty. The royalty rate varies depending on the amount of net sales.

- In March 2014, the Company entered into a research collaboration agreement with Friedrich Miescher Institute, ("FMI"), a biomedical research institute under which the parties agreed to collaborate in research comprising the design, planning and carrying out of experiments on different animal models with the aim of testing new therapeutic approaches, including the development and testing of optogenetic tools. Under the terms of this research collaboration agreement, the Group agreed to pay €111 K to FMI in each of 2014, 2015 and 2016 as a contribution to the cost of the research work. The amount paid to FMI each year has been recognized as research and development expenses in the statement of income. An amendment to this research collaboration agreement was signed in April 2017 to extend the term of the contract in effect until May 31, 2018. The agreement has not been renewed.
- In January 2016, the Group entered into a license agreement with M.I.T., upon exercising an option right granted under the patent option agreement between M.I.T. and the Group, dated January 9, 2015. Under the terms of this license agreement, the Group recognized as a research and development expense and agreed to pay a license issue fee of $45 K, license maintenance fees up to $100 K per year and variable payments up to $7,300 K depending on the achievement of milestone events. As of December 31, 2018, the residual commitments amount to $7,100 K. The Group will also pay running mid-single-digit royalties on future net sales.

For each of these licensing and collaboration agreements, based on the significant uncertainties in the development of the product candidates as well as the Group having sole discretion to decide whether it would like to proceed with the research and development activities, the Group has concluded, based on the stage of development of its product candidates, that it is remote that a payment will be made by the Group to the parties under these licensing and collaboration agreements.

Note 20: Relationships with related parties

The Group did not conclude any new significant transactions with related parties during the period.

Key management personnel compensation

The compensation amounts presented below, which were awarded to key management personnel which are members of the Board of Directors of the Group, were recognized as expenses during the period presented:

	As of December 31,	
In thousands of euros	2017	2018
Short-term employee benefits	899	829
Share-based payments benefits	1,859	837
Total	**2,758**	**1,666**

The methods and assumptions used for the measurement of share-based payments are described in Note 16.

Liabilities to key management personnel as of December 31, 2017 and 2018 are set forth below:

	As of December 31,	
In thousands of euros	2017	2018
Variable compensation	128	128
Total	**128**	**128**

Transactions with related parties:

Mr. Bernard Gilly, CEO of GenSight Biologics, is a shareholder (27.1%) of *Passage de l'Innovation* as of December 31, 2018. In 2015, the Company entered into an agreement with *Passage de l'Innovation* for the rental of its new premises. As described above, several amendments were signed on January, July and October 2018, as well as an amendment related to the service agreement in connection with human resources, legal and intellectual property services. The related amounts presented below were recognized as expenses during the period presented:

	As of December 31,	
In thousands of euros	2017	2018
Rent and services	762	792
Total	**762**	**792**

No liabilities are due to related parties as of December 31, 2017 and December 31, 2018, respectively.

Note 21: Earnings per share

The basic earnings per share is calculated by dividing the net income for the period attributable to the shareholders of the Group by the weighted average number of ordinary shares outstanding during the period. Preferred shares had the same rights and dividends as ordinary shares for purposes of calculating earnings per share. All preferred shares were converted on a one-for-one basis into ordinary shares upon completion of the IPO on Euronext Paris in July 2016.

All outstanding ordinary shares have been taken into consideration for purposes of calculating basic earnings per share. The weighted average number of ordinary shares was 21,936,006 and 24,466,559 for the years ended December 31, 2017 and 2018, respectively.

The diluted earnings per share is calculated by dividing the net income for the period attributable to shareholders of the Group by the weighted average number of shares outstanding plus any potentially dilutive shares not yet issued from share-based compensation plans (see Note 16).

Dilution is defined as a reduction of earnings per share or an increase of loss per share. When the exercise of outstanding share options and warrants decreases loss per share, they are considered to be anti-dilutive and excluded from the calculation of loss per share. Thus, basic and diluted earnings (loss) per share are equal as all equity instruments issued, representing 2,700,426 potential additional ordinary shares, have been considered anti-dilutive.

In thousands of euros, except for earning (loss) per share	As of December 31, 2017	2018
Net income (loss) of the reporting period	(24,112)	(33,453)
Adjusted weighted average number of outstanding shares	21,936,006	24,466,559
Basic and diluted earnings (loss) per share	**€(1.10)**	**€(1.37)**

Note 22: Management of financial risks

The principal financial instruments held by the Group are cash and cash equivalents. The purpose of holding these instruments is to finance the ongoing business activities of the Group. It is not the Group's policy to invest in financial instruments for speculative purposes. The Group does not utilize derivatives.

The principal risks to which the Group is exposed are liquidity risk, foreign currency exchange risk, interest rate risk and credit risk.

Liquidity risk

The Group does not believe that it is exposed to short-term liquidity risk, considering the cash position that it had available as of December 31, 2018, amounting to €26,241 K which was only cash balances, the capital increase of €7.9 million it completed in February 2019 as well as the receipt of the 2018 Research Tax Credit amounting to €4,322 K expected during the second half year of 2019.

Management believes that the amount of cash, cash equivalents available as of the date of this report as well as the expected receipt of the 2018 Research Tax Credit are sufficient to fund the Group's planned operations through the next 12 months.

Foreign currency exchange risk

The Group is exposed to foreign exchange risk inherent in certain services provided in the United States, which have been invoiced in U.S. dollars. The Group does not currently have revenues in euros, dollars nor in any other currency. Due to the relatively low level of these expenditures, the exposure to foreign exchange risk is unlikely to have a material adverse impact on the results of operations or financial position of the Group. The Group's exposure to currencies other than the U.S. dollar is negligible. For the years ended December 31, 2017 and 2018, less than 23% and 20%, respectively, of its purchases and other external expenses were made in U.S. dollars, generating a foreign exchange loss of €77 K and €43 K, respectively. In light of these insignificant amounts, the Group has not adopted, at this stage, a hedging mechanism in order to protect its business activity against fluctuations in exchange rates. As the Group further increases its business, particularly in the United States, the Group expects to face greater exposure to exchange rate risk and would then consider adopting an appropriate policy for hedging against these risks.

Interest rate risk

As of December 31, 2018, the Group had neither money market funds nor time deposit accounts.

The Group has no credit facilities. The repayment of the conditional advances from Bpifrance Financement are not subject to interest rate risk.

Credit risk

The credit risk related to the Group's cash and cash equivalents is not significant in light of the quality of the co-contracting financial institutions.

Fair value

The fair value of financial instruments traded on an active market, such as the securities available for sale, is based on the market rate as of December 31, 2018. The market prices used for the financial assets owned by the Group are the bid prices in effect on the market as of the valuation date.

The nominal value, less the provisions for depreciation, of the accounts receivable and current debts, is presumed to approximate the fair value of those items.

Note 23: Auditor's fees

The auditors' fees paid by the Group in 2018 amounted to €799 K.

	2018			
	Becouze		Deloitte & Associés	
In thousands of euros	Amount	%	Amount	%
Audit certification	180	95%	609	100%
Social and Environnemental Responsibility Certification	5	3%	–	0%
Other report for French legal purposes	4	2%	1	0%
Total	**189**	**100%**	**610**	**100%**

Note 24: Subsequent events

On February 4, 2019, GenSight Biologics announced results from the first scheduled readout, at Week 48, of the RESCUE Phase III clinical trial evaluating the safety and efficacy of a single intravitreal injection of GS010 (rAAV2/2-ND4) in 39 subjects whose visual loss due to 11778-ND4 Leber Hereditary Optic Neuropathy (LHON) occurred up to 6 months prior to study treatment. These subjects received GS010 in one eye and a sham injection in the other eye, with drug treatment randomized between best- and worst-affected eyes.

On February 25, 2019, the Group announced the completion of a capital increase whose net proceeds amounted to €7.9 million , by the issuance of 3,921,568 new shares with a nominal value of €0.025 each (the "New Shares") for a subscription price of €2.04 each (including premium) (the "Capital Increase") subscribed entirely by Sofinnova Crossover I SLP ("Sofinnova"). The purpose of this capital increase is to pursue the final stages of clinical development of GS010, and file for marketing authorization in Europe.

On April 17, 2019, the Group announced results from the second scheduled readout, at Week 72, of the RESCUE Phase III clinical trial evaluating the safety and efficacy of a single intravitreal injection of GS010 (rAAV2/2-ND4) in 39 subjects whose visual loss due to 11778-ND4 Leber Hereditary Optic Neuropathy (LHON) occurred up to 6 months prior to study treatment. These subjects received GS010 in one eye and a sham injection in the other eye, with drug treatment randomized between best- and worst-affected eyes.

19.1.2 STATUTORY AUDITORS' REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2018

This is a translation into English of the Statutory Auditors' Report on the consolidated financial statements of the Company issued in French and it is provided solely for the convenience of English speaking users.
This Statutory Auditors' Report includes information specifically required by French law, such as information about the appointment of the Statutory Auditors or verification of the Management Report and other documents provided to Shareholders.
This Report should be read in conjunction with, and construed in accordance with French law and professional auditing standards applicable in France.

To the Shareholders' Meeting of Gensight Biologics,

OPINION

In compliance with the engagement entrusted to us by your bylaws and your Shareholders' Meeting, we have audited the accompanying consolidated financial statements of GENSIGHT BIOLOGICS for the year ended December 31, 2018.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group as of December 31, 2018 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our Report to the Audit Committee.

BASIS FOR OPINION

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the "Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements" section of our Report.

Independence

We conducted our audit in compliance with independence rules applicable to us, for the period from January 1, 2018 to the issue date of our Report and in particular we did not provide any prohibited non-audit services referred to in article 5(1) of Regulation (EU) No 537/2014 or in the French Code of ethics for Statutory Auditors.

Furthermore, the non-audit services that we provided to your Company during the fiscal year are the following:

- Procedures provided for in the French Commercial Code relating to transactions involving the share capital (capital increases, issue of marketable securities).

JUSTIFICATION OF ASSESSMENTS - KEY AUDIT MATTERS

In accordance with the requirements of articles L.823-9 and R.823-7 of the French Commercial Code *(Code de commerce)* relating to the justification of our assessments, we bring your attention to the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in the audit of the consolidated financial statements of the current period, as well as our responses to those risks.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon. We do not provide a separate opinion on specific elements, accounts or items of the financial statements.

Recording of research and development costs
(refer to note "3.18 Use of estimates" to the notes to consolidated financial statements as at December 31, 2018)

Identified risk

Research and development costs represent a significant component of the Group's consolidated financial statements, considering Company' activity and its current development phase, as they account for 77% of total operating expenses. These expenses mainly include external subcontracting costs (including preclinical and clinical studies in particular) or product manufacturing as well as personnel costs.

There may be discrepancies between the achievement of subcontracting or manufacturing services and their related invoicing. The need of estimating the amount of services already achieved but not invoiced, or at the opposite, services already invoiced but not realized, leads to a risk of misevaluation of the invoices to be received or prepaid expenses regarding these external costs at year end.

The estimate of the amount of services already performed to be recognized at year end thus requires significant judgments from the management.

We therefore considered that the accounting of research and development expenses is a key audit matter.

Audit procedures implemented to deal with identified risks

As part of our audit, we reviewed the internal control procedures related to the accounting of subcontracting and manufacturing expenses in order to identify control activities implemented by Management and evaluate their design.

Our work were supplemented by procedures, on a sampling basis, of account payable confirmation requests and an analysis of subcontracting invoices received before and after year end, in order to identify which exercise they related to and evaluate the correct linkage with fiscal year.

SPECIFIC VERIFICATION CONCERNING THE GROUP PRESENTED IN THE MANAGEMENT REPORT

As required by French law, we have also verified in accordance with professional standards applicable in France the information concerning the Group presented in the Board's Management Report.

We have no matters to report as its fair presentation and its consistency with the consolidated financial statements.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

Appointment of the Statutory Auditors

We were appointed Statutory Auditors of GENSIGHT BIOLOGICS by the bylaws of April 17, 2012 for DELOITTE & ASSOCIÉS and by the Shareholders' Meeting of May 19, 2016 for BECOUZE.

As of December 31, 2018, DELOITTE & ASSOCIÉS and BECOUZE were respectively in the 6th year and 3rd year of total uninterrupted engagement, including three years of joint work since securities of the Company were admitted to trading on a regulated market.

RESPONSIBILITIES OF MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the European Union, and for such internal control as Management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, Management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease its operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk Management systems and, where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The consolidated financial statements have been approved by the Board of Directors.

AUDITORS' RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Objective and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As specified in article L.823-10-1 of the French Commercial Code *(Code de commerce)*, our statutory audit does not include assurance on the viability of the Company or the quality of Management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditors exercise professional judgment throughout the audit and furthermore:

- They identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence considered to be sufficient and appropriate to provide a basis for their opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- They obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control.
- They evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management in the consolidated financial statements.
- They assess the appropriateness of Management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of their Audit Report. However, future events or conditions may cause the Company to cease to continue as a going concern. If they conclude that a material uncertainty exists, they draw attention in their Audit Report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or inadequate, they modify their opinion.
- They evaluate the overall presentation of the consolidated financial statements and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- They obtain sufficient appropriate audit evidence regarding the financial information of the entities included in the consolidation scope to express an opinion on the consolidated financial statements. They are responsible for the direction, supervision and performance of the audit of the consolidated financial statements. They remain solely responsible for their audit opinion.

Report to the Audit Committee

We submit a Report to the Audit Committee which includes in particular a description of the scope of the audit and the audit program implemented, as well as significant audit findings. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our Report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the consolidated financial statements of the current period and which are therefore the key audit matters. We describe these matters in this Report.

We also provide the Audit Committee with the declaration provided for in article 6 of Regulation (EU) N° 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by articles L.822-10 to L.822-14 of the French Commercial Code (*Code de commerce)* and in the French Code of Ethics *(Code de déontologie)* for Statutory Auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

ANGERS and PARIS LA DEFENSE, April 26, 2019

The Statutory Auditors

BECOUZE	DELOITTE & ASSOCIÉS
Fabien BROVEDANI	Stéphane LEMANISSIER
Partner	Partner

19.1.3 COMPANY'S ANNUAL FINANCIAL STATEMENTS (FRENCH-GAAP) FOR THE FISCAL YEAR ENDING DECEMBER 31, 2018

Our annual financial statements (French-GAAP) for the fiscal year ended December 31, 2018 can be found in Annex I of this Document.

19.1.4 STATUTORY AUDITORS' REPORTS ON THE COMPANY'S ANNUAL FINANCIAL STATEMENTS (FRENCH-GAAP) FOR THE FISCAL YEAR ENDING DECEMBER 31, 2018

The Statutory Auditors' report on our annual financial statements (French-GAAP) for the fiscal year ended December 31, 2018 can be found in Annex III of this Document.

19.1.5 DATE OF LATEST FINANCIAL INFORMATION

Our latest financial information is the annual financial statements (French-GAAP and IFRS) for the fiscal year ended December 31, 2018.

19.2 INTERIM AND OTHER FINANCIAL INFORMATION

None.

19.3 AUDITING OF HISTORICAL ANNUAL FINANCIAL INFORMATION

In accordance with provisions of Article 28 of the Commission Regulation (EC) No 809/2004 of April 29, 2004, as amended, (i) the selected financial information, (ii) the Company's annual financial statements (IFRS) for the fiscal years ended December 31, 2016 and 2017 and the statutory auditor's report on the Company's annual financial statements (IFRS) for the fiscal years ending December 31, 2016 and 2017 and (iii) the Company's annual financial statements (French-GAAP) for the fiscal years ended December 31, 2016 and 2017 and the statutory auditor's report on the Company's annual financial statements (French-GAAP) for the fiscal years ending December 31, 2016 and 2017 are incorporated by reference in this Document.

This information is included in the Document registered with the AMF on April 27, 2018 under number R.18-036.

This Documents may be consulted on the Company's website (www.gensight-biologics.com) and on the AMF's website (www.amf-france.org).

19.4 PRO FORMA FINANCIAL INFORMATION

Not applicable.

19.5 DIVIDEND POLICY

We have never declared or paid any cash dividends on our ordinary shares. We currently intend to retain all future earnings for use in the operation and expansion of our business and do not anticipate paying cash dividends in the foreseeable future.

Subject to the requirements of French law and our bylaws, dividends may only be distributed from our distributable profits, plus any amounts held in our available reserves, which are those reserves other than the legal and statutory reserves and the revaluation surplus. The declaration and payment of any dividends in the future will be determined by the Board of Directors, in our discretion, and will depend on a number of factors, including our earnings, capital requirements, overall financial condition, and contractual restrictions, including restrictions contained in any agreements governing any indebtedness the Company may incur.

19.6 LEGAL AND ARBITRATION PROCEEDINGS

From time to time, we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business.

Except as set forth below, as of the date of this Document, to our knowledge, there are no governmental, legal or arbitral proceedings (including any proceedings of which we are aware, that are pending or with which we are threatened), likely to have, or having had in the course of the last twelve months, a material adverse effect on our operations, financial position or results. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

On November 5, 2015, we were notified that our Community Trade Mark application for "GenSight" was the subject of an opposition from Assurex Health, Inc., a company based in the United States that provides medical testing services relating to genes. We have signed a settlement agreement with Assurex Health Inc. on January 3, 2019; consequently, Assurex has withdrawn its opposition.

No provisions or liabilities have been recorded in connection therewith in our financial statements.

19.7 SIGNIFICANT CHANGE IN FINANCIAL POSITION

To our knowledge, there has been no material change in our financial since December 31, 2018, other than those described in this Document.

ADDITIONAL INFORMATION

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20.1 SHARE CAPITAL

20.1.1 AMOUNT OF ISSUED CAPITAL

As of the date of this Document, our share capital is equal to €718,113.53, divided into 28,724,541 shares, with nominal value of €0.025 per share, fully authorized, subscribed and paid-up.

20.1.2 SECURITIES NOT REPRESENTING SHARE CAPITAL

As of the date of this Document, we have not issued any securities not representing the share capital.

20.1.3 SHARES CONTROLLED BY THE COMPANY, TREASURY SHARES AND PURCHASE BY THE COMPANY OF ITS OWN SHARES

Our Combined General Shareholders' Meeting of April 12, 2018 authorized our Board of Directors to implement a buyback program of our shares, according to the provisions of Article L.225-209 of the French Commercial Code.

The maximum number of shares that can be purchased is 5 % of the share capital of the Company (at any time whatsoever, such percentage applying to a capital, which shall be adjusted based on the transactions subsequently affecting it).

Objectives of the buybacks:

- to ensure the buoyancy of the secondary market or the liquidity of the Company shares through the intermediary of an investment service provider by way of a liquidity agreement in compliance with the code of ethics of the AMAFI (French Financial Markets' Association) admitted by the regulations, it being specified that in this context, the number of shares taken into account for the calculation of the limitation referred to hereabove corresponds to the number of shares purchased, following the deduction of the number of shares, which have been re-sold;
- to keep the purchased shares and to subsequently put them up for exchange or as payment in the context of any external growth transactions;
- to ensure the coverage of share purchase option schemes and/or share schemes allocated on a free of charge basis (or similar schemes) in favour of the salaried employees and/or the corporate officers of the group as well as any share allocations pursuant to a company or group savings scheme (or similar scheme) in respect of a company profit sharing scheme and/or any other forms of allocation of shares to the salaried employees and/or to the corporate officers of the group;
- to ensure the coverage of securities giving right to the allocation of shares of the company in the context of the regulations in force;
- to carry out the possible cancellation of the acquired shares, in accordance with the authorisation granted or to be granted by the Extraordinary General Meeting.

The maximum purchase price is €24 per share. In case of a transaction affecting the share capital, and notably of a share consolidation or split, or allocation of bonus shares to the shareholders, the above-mentioned price will be adjusted to the same proportion (a coefficient of the ratio between the number of shares comprising the share capital before the transaction and the number of shares after the transaction).

The maximum amount of the funds intended for the program of the repurchase of the shares shall amount to €28,795,704.

During the fiscal year ended December 31, 2018, this buyback program was used exclusively within the scope of a liquidity agreement with the objective of stimulating trading or liquidity of the Company's shares, stipulated with Oddo & Cie as investment services provider.

Number of shares purchased	670,310
Average purchase price	3.5557
Number of shares sold	628,937
Average selling price	3.6533
Total amount of negotiation costs	25,000
Number of shares used in 2018	—
Number of shares owned as of December 31, 2018	78,000
Value at average purchase price	259,740
Nominal value	1,950

20.1.4 FREE SHARES

(a) Free shares granted by the Company

We have granted free shares (*Attributions Gratuites d'Actions*, or AGA) since July 26, 2016.

As of the date of this Document, 915,250 of the granted shares have been definitively acquired, including 827,250 performance shares and 88,500 non-performance shares.

AGA 2016 granted on July 26, 2016

With the authorization of the general meeting of shareholders on May 19, 2016, the Board of Directors granted 766,000 free shares (AGA 2016) on July 26, 2016, as follows:

- 546,000 AGA 2016 were fully acquired by Key Managers, including Mr. Gilly, and were subject to the achievement of the following performance criteria:
  - 291,000 of these free shares were acquired at the completion of enrollment in RESCUE and REVERSE clinical trials; and
  - the remaining 255,000 free shares were acquired at the enrollment of the first patient in a Phase I/II clinical trial of GS030 in RP, on July 24, 2018.
- 56,000 AGA 2016 were fully acquired in July 26, 2017 (one year after their grant date).

The AGA 2016 were issued at their nominal value and will be subject to a lock-up period of one year after their actual acquisition date.

The Board of Directors held on July 27, 2017 acknowledged the definitive acquisition of 347,000 free shares and decided accordingly to increase the capital increase of €8,675.

The Board of Directors held on July 24, 2018 acknowledged the definitive acquisition of 255,000 free shares and decided accordingly to increase the capital increase of €6,375.

AGA 2016 granted on July 27, 2017

With the authorization of the general meeting of shareholders on May 19, 2016, the Board of Directors granted 593,500 free shares (AGA 2016) on July 27, 2017, including:

- 550,000 AGA 2016 (of which 75,000 were canceled) may be fully acquired by Key Managers, including Mr. Gilly, subject to (i) a one year acquisition period from the date of grant and (ii) achievement of the performance criteria described below no later than July 27, 2019:
  - 245,000 of these free shares were acquired upon receipt of the definitive results of the GS010 REVERSE clinical trial on July 27, 2018; and
  - the remaining 230,000 free shares will be acquired upon completion of the enrollment of 50% of the patients of a Phase I/II clinical trial of GS030 in RP.
- 32,500 AGA 2016 (of which 11,000 were cancelled) were fully acquired on July 27, 2018 (one year after their grant date).

The AGA 2016 will be issued at their nominal value and will be subject to a lock-up period of one year after their actual acquisition date.

The Board of Directors held on July 24, 2018 acknowledged the definitive acquisition of 245,000 free shares and decided accordingly to increase the capital increase of €6,125.

AGA 2016 granted on December 19, 2017

With the authorization of the general meeting of shareholders on May 19, 2016, the Board of Directors granted 72,500 free shares (AGA 2016) on December 19, 2017.

The AGA 2016 may be fully acquired by one Key Manager, subject to (i) a one year acquisition period from the date of grant and (ii) achievement of the performance criteria described below no later than July 27, 2019:

- 36,250 of these free shares were acquired after the one year acquisition period and upon receipt of the definitive results of the GS010 REVERSE clinical trial on December 19, 2018; and
- the remaining 36,250 free shares will be acquired upon completion of the enrollment of 50% of the patients of a Phase I/II clinical trial of GS030 in RP.

The AGA 2016 will be issued at their nominal value and will be subject to a lock-up period of one year after their actual acquisition date.

The Board of Directors held on December 19, 2018 acknowledged the definitive acquisition of 36,250 free shares and decided accordingly to increase the capital increase of €906.25.

AGA 2018 granted on September 18, 2018

With the authorization of the general meeting of shareholders on April 12, 2018, the Board of Directors granted 380,000 free shares (AGA 2018) on September 18, 2018, including:

- 325,000 AGA 2018 (of which 15,000 were canceled) may be fully acquired by Key Managers, including Mr. Gilly, subject to (i) a one year acquisition period from the date of grant and (ii) achievement of the performance criteria described below no later than September 18, 2020:
  - 155,000 of these free shares will be acquired upon completion of the enrollment of the patients of a Phase I/II clinical trial of GS030 in RP; and
  - the remaining 155,000 free shares will be acquired upon completion of the production of the first PPQ Batch of GS010.
- 55,000 AGA 2018 (of which 7,500 were canceled) will be fully acquired on September 18, 2019 (one year after their grant date).

The AGA 2018 will be issued at their nominal value and will be subject to a lock-up period of one year after their actual acquisition date.

AGA 2018 granted on December 19, 2018

With the authorization of the general meeting of shareholders on April 12, 2018, the Board of Directors granted 135,000 free shares (AGA 2018) on December 19, 2018.

The AGA 2018 may be fully acquired by one Key Manager, subject to (i) a one year acquisition period from the date of grant and (ii) achievement of the performance criteria described below no later than Septemberber 18, 2020:

- 67,500 of these free shares will be acquired upon completion of the enrollment of the patients of a Phase I/II clinical trial of GS030 in RP; and,
- the remaining 67,500 free shares will be acquired upon completion of the production of the first PPQ Batch of GS010.

The AGA 2018 will be issued at their nominal value and will be subject to a lock-up period of one year after their actual acquisition date.

(b) Conditions governing the free shares granted by the Company

Free shares are granted to employees only. The beneficiary will definitively acquire the shares for free after an "acquisition period," given that he/she is still within the Company at this time. Then a "retain period" is applied before shares can be disposed.

(c) Free shares holders

The table below sets forth the free shares granted by us to our executive officers and directors as of the date of the registration of this Document:

Name	Grant Date	Number of free shares	Performance condition
Bernard Gilly	07/26/2016	250,000	Yes
	07/27/2017	200,000	Yes
	09/18/2018	45,000	Yes
Thomas Gidoin	07/26/2016	150,000	Yes
	07/27/2017	90,000	Yes
	09/18/2018	45,000	Yes
Total		**780,000**	

20.1.5 OTHER SECURITIES GIVING ACCESS TO SHARE CAPITAL

As of the date of this Document, the total number of ordinary shares that can be issued by full exercise of all of the securities giving access to the capital and instruments issued to date amounts to 2,687,092, or a maximum dilution of 9.35% on the basis of the capital and voting rights existing to date and 8.55% on the basis of the capital and the fully diluted voting rights.

20.1.5.1 Warrants

(a) Warrants granted by the Company

We have granted share-based warrants in the form of share warrants for founders (*Bons de Souscription de Parts de Créateur d'Entreprise*, or BCE), share warrants (*Bons de Souscription d'Actions*, or BSA) and Stock Options (*Options de souscription et/ou d'achat d'actions*, or SO), since July 8, 2013.

As of the date of this Document, 666,302 share warrants for founder (BCE) will give right to 666,302 ordinary shares with nominal value of €0.025 at an average exercise price of €2.379 per share.

As of the date of this Document, 757,040 share warrants (BSA) will give right to 757,040 ordinary shares with nominal value of €0.025 at an exercise price of €3.377 per share.

BCE 2013-02 warrants and BSA 2013-02 warrants

With the authorization of the general meeting of shareholders on February 5, 2013, the Board of Directors issued 892,000 BCE 2013-02 warrants with an exercise price of €0.025 per share, and 328,000 BSA 2013-02 warrants with an exercise price of €0.025 per share on July 8, 2013.

With the authorization of the general meeting of shareholders on February 5, 2013, the Board of Directors issued 193,800 BCE 2013-02 warrants, with an exercise price of €0.025 per share and 33,000 BSA 2013-02 warrants, with an exercise price of €0.025 per share on April 9, 2014.

The BCE 2013-02 and BSA 2013-02 warrants are exercisable on the basis of the following vesting schedule:

- up to 1/4 of the BCE 2013-02 and BSA 2013-02 warrants on the first anniversary of the date of grant;
- the remaining 75% becoming exercisable up to 1/36 per month from the first anniversary of the date of grant; and
- at the latest within 10 years from the date of grant.

BCE 2014-06 warrants

With the authorization of the general meeting of shareholders on June 25, 2014, the Board of Directors issued 60,000 BCE 2014-06 warrants on December 3, 2014, with an exercise price of €0.025 per share.

The BCE 2014-06 warrants may be exercised by the beneficiary on the basis of the following vesting schedule:

- up to 1/4 of the BCE 2014-06 warrants on the first anniversary of the date of grant;
- the remaining 75% becoming exercisable up to 1/36 per month from the first anniversary of the date of grant; and
- at the latest within 10 years from the date of grant.

BCE 2015-06 warrants and BSA 2015-06 warrants

With the authorization of the General Meeting of Shareholders on June 29, 2015, the Board of Directors issued 733,298 BCE 2015-06 warrants, with an exercise price of €3.275 per share, and 121,000 BSA 2015-06 warrants, with an exercise price of €3.275 per share on July 8, 2015.

The BCE 2015-06 and BSA 2015-06 warrants may be exercised by the beneficiary on the basis of the following vesting schedule:

- up to 1/4 of the BCE 2015-06 and BSA 2015-06 warrants on the first anniversary of the date of grant;
- the remaining 75% becoming exercisable up to 1/36 per month from the first anniversary of the date of grant; and
- at the latest within 10 years from the date of grant.

BSA 2016 warrants

With the authorization of the General Meeting of Shareholders on May 19, 2016, the Board of Directors issued 205,000 BSA 2016 warrants, with an exercise price of €8.08 per share on July 26, 2016

The BSA 2016 warrants may be exercised by the beneficiary on the basis of the following vesting schedule:

- 100% of the BSA 2016 warrants on the first anniversary of the date of grant;
- at the latest within 7 years from the date of grant.

With the authorization of the General Meeting of Shareholders on May 19, 2016, the Board of Directors issued 165,000 BSA 2016 warrants, with an exercise price of €5.04 per share on July 27, 2017.

The BSA 2016 warrants may be exercised by the beneficiary on the basis of the following vesting schedule:

- up to 1/4 of the BSA 2016 warrants on the first anniversary of the date of grant;
- the remaining 75% becoming exercisable up to 1/36 per month from the first anniversary of the date of grant; and
- at the latest within 7 years from the date of grant.

BSA 2018 warrants

With the authorization of the General Meeting of Shareholders on April 12, 2018, the Board of Directors issued 25,000 BSA 2018 warrants, with an exercise price of €2.22 per share on September 18, 2018.

The BSA 2018 warrants may be exercised by the beneficiary on the basis of the following vesting schedule:

- up to 1/4 as from the date of the grant;
- the remaining 75% on the basis of 1/36th per month as from the Date of Grant (*i.e.* as from September 18, 2018), at the end of each month;
- at the latest within 7 years from the date of grant.

See also Section 14.4.1, "History of Share Warrants for Founders (BCE)", and Section 14.4.2, "History of Share Warrants (BSA)" of this Document.

(b) Conditions governing the warrants granted by the Company

Share warrants for founders (BCE)

Share warrants for founders entitle a holder to exercise the warrant for the underlying vested shares at an exercise price per share determined by our Board of Directors and at least equal to the fair market value of an ordinary share on the date of grant. Share warrants for founders may only be issued by companies meeting certain criteria, which we will not meet following the listing of our shares on Euronext Paris.

Share warrants for founders are not transferable and may not be sold, pledged, assigned, hypothecated, transferred or disposed of in any manner other than by will or by laws of descent or distribution and may be exercised, during the lifetime of the beneficiary, only by the beneficiary.

Share warrants (BSA)

Share warrants need to be subscribed for a price which is determined by the Board on the date of grant, in addition to any exercise price payable by a holder upon the exercise of any share warrant.

Share warrants may not be transferred to any person subject to certain exceptions detailed in our BSA plan.

(c) Warrants holders

The table below sets forth the warrants granted by us to our executive officers and directors as of the date of the registration of this Document:

Name	Grant Date	Type of Grant	Number of Ordinary Shares Underlying Awards (#)[1]	Exercise Price (€)	Expiration Date
Bernard Gilly	07/08/2013	BCE	300,000	0.025	07/07/2023
	07/08/2015	BCE	161,000	3.275	07/07/2025
José-Alain Sahel	07/08/2013	BSA	280,000	0.025	07/07/2023
	07/08/2015	BSA	48,000	3.275	07/07/2025
	07/26/2016	BSA	120,000	8.08	07/25/2023
	07/27/2017	BSA	80,000	5.04	07/26/2024
Peter Goodfellow	04/09/2014	BSA	33,000	0.025	04/08/2024
	07/08/2015	BSA	7,000	3.275	07/07/2025
	07/26/2016	BSA	7,000	8.08	07/25/2023
	07/27/2017	BSA	10,000	5.04	07/26/2024
Thomas Gidoin	07/08/2015	BCE	160,000	3.275	07/07/2025
Michael Wyzga	07/08/2015	BSA	40,000	3.275	07/07/2025
	07/26/2016	BSA	31,000	8.08	07/25/2023
	07/27/2017	BSA	15,000	5.04	07/26/2024
	09/18/2018	BSA	10,000	2.22	09/18/2025
Simone Seiter	07/27/2017	BSA	30,000	5.04	07/26/202
	09/18/2018	BSA	5,000	2.22	09/18/2025
Natalie Mount	07/27/2017	BSA	30,000	5.04	07/26/2024
	09/18/2018	BSA	5,000	2.22	09/18/2025
Total			**1,372,000**		

(1) Each BCE and BSA warrant entitles its holder to subscribe to one ordinary share, with a nominal value of €0.025 each, at an exercise price of €0.025, €3.275, €8.08, or €5.04 .

20.1.5.2 Stock Options

As of the date of this Document, 505,000 stock options for employees (SO) will give right to 505,000 ordinary shares. Among them, 300,000 ordinary shares have a nominal value of €0.025 and an exercise price of €5.55 per share, 175,000 have a nominal value of €0.025 and an exercice price of €6.98, and 30,000 have a nominal value of €0.025 and an exercise price of €2.19. With the authorization of the General Meeting of Shareholders on May 31, 2017, the Board of Directors issued 220,000 SO 2017, with an exercise price of €5.040 per share on July 27, 2017. These have been fully forfeited as of the date of this Document.

With the authorization of the General Meeting of Shareholders on May 31, 2017, the Board of Directors issued 300,000 SO 2017, with an exercise price of €5.55 per share on December 19, 2017.

The SO 2017 may be exercised by the beneficiary on the basis of the following vesting schedule:

- up to 1/4 of the SO 2017 on the first anniversary of the date of grant;
- the remaining 75% becoming exercisable up to 1/36 per month from the first anniversary of the date of grant; and
- at the latest within 7 years from the date of grant.

With the authorization of the General Meeting of Shareholders on May 31, 2017, the Board of Directors issued 175,000 SO 2017, with an exercise price of €6.98 per share on March 14, 2018.

The SO 2017 may be exercised by the beneficiary on the basis of the following vesting schedule:

- up to 1/4 of the SO 2017 on the first anniversary of the date of grant;

- the remaining 75% becoming exercisable up to 1/36 per month from the first anniversary of the date of grant; and
- at the latest within 7 years from the date of grant.

With the authorization of the General Meeting of Shareholders on April 12, 2018, the Board of Directors issued 30,000 SO 2018, with an exercise price of €2.19 per share on September 18, 2018.

The SO 2018 may be exercised by the beneficiary on the basis of the following vesting schedule:

- up to 1/4 of the SO 2017 on the first anniversary of the date of grant;
- the remaining 75% becoming exercisable up to 1/36 per month from the first anniversary of the date of grant; and
- at the latest within 7 years from the date of grant.

See also Section 14.4.3, "History of Stock Options (SO)" of this Document. Share warrants need to be subscribed for a price which is determined by the board on the date of grant the subscription price and/or the purchase price of the shares by the beneficiaries will be set on the day the options are consented by the Board of Directors, and will be at least equal to the average of the closing prices of the share in the 20 stock exchange sessions prior to the day of the allocation decision.

The beneficiaries would be the salaried employees or some of them, or certain categories of the personnel, of the Company and, as appropriate, companies or economic interest groups which are bound to it under the conditions of Article L.225-180 of the Commercial Code and the corporate officers that meet the conditions provided by Article L.225-185 of the Commercial Code.

20.1.6 TERMS GOVERNING ANY RIGHT OF ACQUISITION AND/OR ANY OBLIGATION ATTACHED TO SUBSCRIBED BUT NOT PAID-UP CAPITAL

The table below sets forth the resolutions regarding issuance of shares, and stock options of the mixed general shareholders' meeting held on April 12, 2018:

Purpose	Maximum amount	Period of validity	Global maximum amount in euros	Use of the delegations	Residual maximum amount in euros
Delegation of powers given to the Board of Directors in order to issue ordinary shares [(1)] giving right, as the case may be, to ordinary shares or the allocation of debt securities (of the company or a company of the group), and/or securities giving a right to ordinary shares (of the company or a company of the group) without preferential subscription rights by public offering in accordance with the provisions of articles L.225-129-2, L.225-136 and L.228-92 of the Commercial Code *(15th resolution)*.	Capital increase: Maximum **75% of the share capital** at the date of the 2018 Shareholder's Meeting *i.e.* **€454,391.69** Debt instruments giving access to equity securities: **€50,000,000**	26 months *i.e.* until June 12, 2020	Capital increase: **100% of the share capital** at the date of the 2018 Shareholder's Meeting *i.e.* **€605,855.58** Debt instruments giving access to equity securities: **€50,000,000**	–	Capital increase: **€491,191.38** Debt instruments giving access to equity securities: **€50,000,000**
Delegation of powers given to the Board of Directors in order to issue ordinary shares giving right, as the case may be, to ordinary shares or the allocation of debt securities (of the company or a company of the group), and/or securities giving a right to ordinary shares (of the company or a company of the group) without preferential subscription rights as remuneration for the securities contributed in the context of a public exchange offering in accordance with the provisions of articles L.225-129-2, L.225-135, L.225-148 and L.228-92 of the Commercial Code *(16th resolution)*.	Capital increase: Maximum **20% of the share capital** at the date of the Shareholder's Meeting *i.e.* **€121,171.12** Debt instruments giving access to equity securities: **€50,000,000**	26 months *i.e.* until June 12, 2020		–	

Purpose	Maximum amount	Period of validity	Global maximum amount in euros	Use of the delegations	Residual maximum amount in euros
Delegation of powers given to the Board of Directors in order to issue ordinary shares [1] giving right, as the case may be, to ordinary shares or the allocation of debt securities (of the company or a company of the group), and/or securities giving a right to ordinary shares (of the company or a company of the group) without preferential subscription rights by an offer referred to at section II of article L.411-2 of the Monetary and Financial Code in accordance with the provisions of articles L.225-129-2, L.225-135, L.225-136 and L.228-92 of the Commercial Code *(17th resolution)*.	Capital increase: Maximum **20% of the share capital** at the date of the Shareholder's Meeting *i.e.* **€121,171.12** and limited to 20% of the share capital per year Debt instruments giving access to equity securities: **€50,000,000**	26 months *i.e.* until June 12, 2020	Capital increase: **100% of the share capital** at the date of the 2018 Shareholder's Meeting *i.e.* **€605,855.58** Debt instruments giving access to equity securities: **€50,000,000**	–	Capital increase: **€491,191.38** Debt instruments giving access to equity securities: **€50,000,000**
Authorization given to the Board of Directors, for each of the issue of ordinary shares [2] or securities giving right to the capital decided pursuant to the application of the fifteenth and seventeenth resolutions set out hereabove, to derogate from the conditions for the determination of the price provided for by the fifteenth and seventeenth resolutions in accordance with the provisions of article L.225-136, 1° of the Commercial Code *(18th resolution)*.	Capital increase: Maximum **10 % of the share capital** of the company (such as it stands as at the date of the implementation of this authorisation hereof) per twelve-month period at the time of the issue.			–	
Delegation given to the Board of Directors in order to increase the capital through the issue of ordinary shares and/or securities giving right to the capital, subject to a limitation of 10 % of the capital in view of remunerating contributions in kind of shares or securities giving right to the capital in accordance with the provisions of articles L.225-129-2, L.225-147 and L.228-92 of the Commercial Code *(20th resolution)*.	Capital increase: **10% of the share capital** at the date of the Shareholder's Meeting *i.e.* **€60,585.56** Debt instruments giving access to equity securities: **€50,000,000**	26 months *i.e.* until June 12, 2020		–	
Delegation of powers given to the Board of Directors in order to issue ordinary shares [3] giving right, as the case may be, to ordinary shares or the allocation of debt securities (of the company or a company of the group), and/or securities giving a right to ordinary shares (of the company or a company of the group), without preferential subscription rights in favour of categories of persons satisfying determined characteristics [4] in accordance with the provisions of articles L.225-129-2, L.225-138 and L.228-92 of the Commercial Code *(21st resolution)*.	Capital increase: **85% of the share capital** at the date of the 2018 Shareholder's Meeting *i.e.* **€514,977.24** Debt instruments giving access to equity securities: **€50,000,000**	18 months *i.e.* until October 12, 2019		Date of use by the Board of Directors: February 25, 2019 Number of shares issued: **3,921,568** corresponding to a capital increase of **€98,039.2**	
Authorization given to the Board of Directors with a view to the granting of options for the subscription and/or purchase of shares to members of the salaried work force (and/or certain corporate officers) in accordance with the provisions of articles L.225-177 to L.225-185 of the Commercial Code *(22nd resolution)*.	**5% of the share capital** at the date of the 2018 Shareholder's Meeting *i.e.* **€30,292.78** **1,211,711** options	38 months *i.e.* until June 12, 2021		Date of use by the Board of Directors: September 18, 2018 Number of options issued: **30,000** corresponding to a potential capital increase of **€750**	

Purpose	Maximum amount	Period of validity	Global maximum amount in euros	Use of the delegations	Residual maximum amount in euros
Authorization given to the Board of Directors with a view to allocating free of charges shares to members of the salaried work force and/or certain corporate officers in accordance with the provisions of articles L.225-197-1 and L.225-197-2 of the Commercial Code *(23rd resolution)*.	**10% of the share capital** at the date of the 2018 Shareholder's Meeting *i.e.* **€60,585.56** **2,423,422** free shares	38 months *i.e.* until June 12, 2021	Capital increase: **100% of the share capital** at the date of the 2018 Shareholder's Meeting *i.e.* **€605,855.58** Debt instruments giving access to equity securities: **€50,000,000**	Date of use by the Board of Directors: September 18, 2018 Number of free shares issued: **480,000** corresponding to approximately 1.938% of the share capital as of the date of the decision of the Board of Directors and consisting of a potential capital increase of **€12,000** Date of use by the Board of Directors: December 19, 2018 Number of free shares issued: **135,000** corresponding to approximately 0.545% of the share capital as of the date of the decision of the Board of Directors and consisting to a potential capital increase of **€3,375**	Capital increase: **€491,191.38** Debt instruments giving access to equity securities: **€50,000,000**
Delegation to be given to the Board of Directors with a view to issuing share subscription warrants (*bons de souscription d'actions* (BSA)), subscription warrants and/or purchase warrants for new shares and/or existing shares (*bons de souscription et/ou d'acquisition d'actions nouvelles et/ou existantes* (BSAANE)) and/or subscription warrants and/or purchase warrants for new shares and/or existing redeemable shares (*bons de souscription et/ou d'acquisition d'actions nouvelles et/ou existantes remboursables* (BSAAR)) with preferential subscription rights waived in favor of categories of persons [5] [6] in accordance with the provisions of articles L.225-129-2, L.225-138 and L.228-91 of the Commercial Code *(24th resolution)*.	**5% of the share capital** at the date of the 2018 Shareholder's Meeting *i.e.* **€30,292.78** **1,211,711** share warrants	18 months *i.e.* until October 12, 2019		Date of use by the Board of Directors: September 18, 2018 Number of free shares issued: **20,000** corresponding to a potential capital increase of **€500**	

(1) The issue price should at least be equal to the minimum required by the legal and regulatory provisions applicable at the time when the Board of Directors shall implement the delegation (for reference, to date the weighted average of the listed prices of the share on the regulated Euronext Paris market for the three trading sessions preceding the determination of the subscription price for the increase in capital decreased by a maximum discount of 5 %).

(2) The issue price of the ordinary shares shall at least be equal, at the choice of the Board of Directors (i) either to the weighted average of the company share price on the Euronext Paris regulated market on the date preceding the determination of the issue price, which may be decreased by a maximum discount of 15 %, (ii) or the average of 5 consecutive listed prices of the company share on the Euronext Paris regulated market chosen amongst the thirty trading sessions preceding the determination of the issue price, which may be decreased by a maximum discount of 15 %.

(3) The issue price should at least be equal to the average weighted by the volumes (in the central order book and not including blocks and off market) of the price of the Company's shares on the Euronext Paris regulated market for the last 3 trading sessions preceding the determination of the issue price, such average subject to amendment as the case may be in order to take into account the differences in the entitlement to dividends date and may be decreased as the case may be by a maximum discount of 15%.

(4) The present delegation shall be made in favor of the following categories of persons:
- (i) individual or legal entities (including companies), investment companies, trusts, investment funds, or other investment vehicles of any form whatsoever, whether French or foreign generally investing in the pharmaceutical, bio-technological, ophthalmological, neurodegenerative diseases or medical technologies sectors; and/or
- (ii) companies, institutions or entities of any form whatsoever, whether French or foreign conducting a significant part of their business in those sectors; and/or
- (iii) financial service providers, being French or foreign with an equivalent status, capable of guaranteeing that an increase in capital will be successfully placed with the persons referred to in (i) and (ii) hereabove and, in this context, subscribing to the issued securities.

(5) The issue price of the warrant shall equal to at least 8% of the market value of an ordinary share on the date of attribution.

(6) The price for the subscription and/or purchase of the shares to which the warrants shall give right shall at least be equal to the weighted average of the closing prices of the Company's shares for the last 20 trading sessions preceding the date of the decision to issue warrants, deducted by any issue price of the warrant.

20.1.7 SHARE CAPITAL OF THE COMPANY THAT IS THE SUBJECT OF AN OPTION OR OF AN AGREEMENT TO PUT IT UNDER OPTION

To our knowledge, as of the date of this Document, our share capital is not the subject of any option or any agreement to put it under option.

20.1.8 HISTORY OF THE COMPANY'S SHARE CAPITAL SINCE ITS INCEPTION

All the figures (number of shares and amount in €) in the table below are adjusted in order to take into account the reverse stock split which took place on August 17, 2015. All share warrants attached to the Series A preferred shares indicated in the table below (ABSA n°1 and ABSA FBIMR) were canceled on July 7, 2015.

Date	Nature of Operation	Number of shares issued	Nominal value of the share (in €)	Issue price per share (in €)	Share premium (in €)	Issue price (in €)	Number of shares representing the share capital	Capital increase (in €)	Share capital (in €)
April 2012	Inception (issuance of ordinary shares)	1,520,000	0.025	0.025	–	38,000.00	1,520,000	38,000.00	38,000.00
February 5, 2013	Share capital increase (issuance of ordinary shares)(1)	268,235	0.025	0.025	–	6,705.88	1,788,235	6,705.88	44,705.88
February 5, 2013	Share capital increase (issuance of Series A preferred shares with warrants attached called ABSA n°1)	1,428,571	0.025	2.800	3,964,285.08	3,999,999.36	3,216,806	35,714.28	80,420.15
February 5, 2013	Share capital increase (issuance of Series A preferred shares)	14,630	0.025	2.800	40,598.25	40,964.00	3,231,436	365.75	80,785.90
March 20, 2013	Share capital increase (issuance of Series A preferred shares with warrants attached called ABSA n°1)	2,364,286	0.025	2.800	6,560,892.54	6,619,999.69	5,595,722	59,107.15	139,893.05
March 20, 2013	Share capital increase (issuance of Series A preferred shares with warrants attached called ABSA n°1)	2,635,714	0.025	2.800	7,314,107.46	7,380,000.31	8,231,436	65,892.85	205,785.90
March 20, 2013	Series A-related costs	–	–	–	(337,065.56)	–	8,231,436	–	205,785.90
July 8, 2013	Subscription of warrants (BSA2013-02)	–	–	–	656.00	656.00	8,231,436	–	205,785.90
December, 19, 2013	Share capital increase (issuance of Series A preferred shares with warrants attached called ABSA FBIMR)	523,253	0.025	3.225	1,674,408.96	1,687,490.29	8,754,689	13,081.33	218,867.23
April 9, 2014	Subscription of warrants (BSA2013-02)	–	–	–	66.00	66.00	8,754,689	–	218,867.23
December 31, 2014	Reversal of share premium to reserves	–	–	–	(174,161.35)	–	8,754,689	–	218,867.23

Date	Nature of Operation	Number of shares issued	Nominal value of the share (in €)	Issue price per share (in €)	Share premium (in €)	Issue price (in €)	Number of shares representing the share capital	Capital increase (in €)	Share capital (in €)
February 11, 2015	Share capital increase (issuance of ordinary share through exercise of BCE2013-02 and BSA 2013-02)	229,560	0.025	0.025	–	5,739.00	8,984,249	5,739.00	224,606.23
June 30, 2015	Share capital increase (issuance of Series B preferred shares)	4,624,871	0.025	6.950	32,027,233.06	32,142,854.84	13,609,120	115,621.78	340,228.00
July 7, 2015	Series B-related costs	–	–	–	(1,305,561.25)	–	13,609,120	–	340,228.00
July 8, 2015	Subscription of warrants (BSA2015-07)	–	–	–	30,250.00	30,250.00	13,609,120	–	340,228.00
July 31, 2015	Share capital increase (issuance of ordinary share through exercise of BCE2013-02)	2	0.025	0.025	–	0.05	13,609,122	0.05	340,228.05
July 13, 2016	Share capital increase (Euronext IPO)	5,000,000	0.025	8.000	39,875,000.00	40,000,000.00	18,609,122	125,000.00	465,228.05
July 13, 2016	Euronext IPO-related costs		–	–	(3,571,365.00)	–	18,609,122	–	465,228.05
August 10, 2016	Share capital increase (Euronext IPO – Overallotment option)	655,859	0.025	8.000	5,230,475.53	5,246,872.00	19,264,981	16,396.48	481,624.53
August 10, 2016	Euronext IPO overallotment option-related costs	–	–	–	(236,109.24)	–	19,264,981	–	481,624.53
September 3, 2016	Share capital increase (issuance of ordinary share through exercise of BCE2013-02)	112,000	0.025	0.025	–	2,800.00	19,376,981	2,800.00	484,424.53
October 6, 2016	Share capital increase (issuance of ordinary share through exercise of BCE2013-02)	31,720	0.025	0.025	–	793.00	19,408,701	793.00	485,217.53
October 6, 2016	Share capital increase (issuance of ordinary share through exercise of BCE2015-07)	1,000	0.025	3.275	3,250.00	3,275.00	19,409,701	25.00	485,242.53
October 31, 2016	Subscription of warrants (BSA2016-07)	–	0.025	–	133,250.00	133,250.00	19,409,701	–	485,242.53
January 11, 2017	Share capital increase (issuance of ordinary share through exercise of BCE2013-02)	117,320	0.025	0.025	–	2,933.00	19,527,021	2,933.00	488,175.53

Date	Nature of Operation	Number of shares issued	Nominal value of the share (in €)	Issue price per share (in €)	Share premium (in €)	Issue price (in €)	Number of shares representing the share capital	Capital increase (in €)	Share capital (in €)
January 11, 2017	Share capital increase (issuance of ordinary share through exercise of BCE2015-07)	13,432	0.025	3.275	43,654.00	43,989.80	19,540,453	335.80	488,511.33
May 5, 2017	Share capital increase (issuance of ordinary share through exercise of BCE2015-07)	50,000	0.025	3.275	162,500	163,750	19,590,453	1,250	489,761.33
May 31, 2017	Share capital increase (issuance of ordinary share through exercise of BCE2013-02)	193,800	0.025	0.025		4,845	19,784,253	4,845	494,606.33
June 27, 2017	Share capital increase (Euronext PIPE)	3,750,000	0.025	6.00	22,406,250	22,500,000	23,534,253	93,750	588,356.33
June 27, 2017	Euronext PIPE related costs				(1,776,056.15)		23,534,253		588,356.33
June 29, 2017	Share capital increase (issuance of ordinary share through exercise of BCE2015-06)	7,332	0.025	3.275	23,829	24,012.30	23,541,585	183.3	588,539.63
June 29, 2017	Share capital increase (issuance of ordinary share through exercise of BCE2013-02)	76,120	0.025	0.025		1,903	23,617,705	1,903	590,442.63
July 3, 2017	Share capital increase (issuance of ordinary share through exercise of BCE2013-02)	31,720	0.025	0.025		793.00	23,649,425	793	591,235.63
July 26, 2017	Share capital increase (issuance of ordinary share through acquisition of AGA (Performance Tranche 1) 2016)	291,000	0.025	0.025		7,275	23,940,425	7,275	598,510.63
July 26, 2017	Share capital increase (issuance of ordinary share through acquisition of AGA2016)	56,000	0.025	0.025		(1,400)	23,996,425	1,400	599,910.63
September 18, 2017	Share capital increase (issuance of ordinary share through exercise of BCE2013-02)	237,798	0.025	0.025		5,944.95	24,234,223	5,944.95	605,855.58

Date	Nature of Operation	Number of shares issued	Nominal value of the share (in €)	Issue price per share (in €)	Share premium (in €)	Issue price (in €)	Number of shares representing the share capital	Capital increase (in €)	Share capital (in €)
July 24, 2018	Share capital increase (issuance of ordinary share through acquisition of AGA2016)	255,000	0.025	0.025	(6,375)		24,489,223	6,375	612,230.58
July 27, 2018	Share capital increase (issuance of ordinary share through acquisition of AGA2016)	277,500	0.025	0.025	(6,937.5)		24,766,723	6,937.50	619,168.08
December 14, 2018	Subscription of warrants (BSA2018)	–	0.025	–	3,600	3,600	24,766,723	–	619,168.08
December 19, 2018	Share capital increase (issuance of ordinary share through acquisition of AGA2016)	36,250	0.025	0.025	(906.25)		24,802,973	906.25	620,074.33
February 25, 2019	Share capital increase	3,921,568	0.025		7,901,959.52	7,999,998.72	28,724,541	98,039.2	718,113.53
February 25, 2019	Capital increase related costs	–	–	–	(88,000)	–	28,724,541	–	718,113.53
TOTAL		**28,724,541**			**119,885,053.10**	**120,091,486.45**		**718,113.53**	

(1) The company issued 268,235 ordinary shares for the benefit of Novartis in payment for intellectual property rights (see 18.1.2, "License Agreement with Novartis Pharma AG"). In compliance with IFRS2, the acquired license was valued at the fair value of issued shares, as assessed by an independent expert, at €1.025 per share.

20.1.9 FACTORS LIKELY TO HAVE AN IMPACT IN THE EVENT OF A PUBLIC OFFERING

Pursuant to Article L.225-37-5, we call to your attention to the following points likely to have an impact in the event of a public offering:

The capital structure as well as the known direct or indirect holdings of the Company and all related matters are described in paragraph 17.1 of this Document.

There are no statutory restrictions on the exercise of double voting rights, apart from abstentions from voting that may be requested by one or more shareholders holding at least 2.5% of the share capital absent a declaration of a breach of the statutory thresholds (Article 12.2 of the Company's by-laws).

There is no statutory restriction on the transfer of shares.

There is no instrument containing special control rights.

There are no control mechanisms provided in a potential shareholding system for personnel with control rights not exercised by the said personnel.

The rules for nominating and removing members of the Board of Directors are the legal and statutory rules provided for in Article 16 of the Company's by-laws.

With regard to authority of the Board of Directors, current delegations are described in paragraph 20.1.3 of this Document (share purchase program) and in the table of delegations for capital increases appearing in Paragraph 20.1.6 of this same document.

The Company's by-laws are changed in accordance with the legal and regulatory provisions.

No significant agreement is entered into by the Company that is changed or that terminates in the event of a change of control.

There are no private agreements providing for severance payments in the event of cessation of duties of members of the Board of Directors or employees if they resign or are laid off without real and serious cause or if their employment is terminated due to a public offering. Details of the severance likely to be paid to the chief executive officer are provided above, as well as in Paragraphs 14.1 and 14.7 of this Document (Table 11).

20.2 CONSTITUTIVE DOCUMENTS AND BYLAWS

20.2.1 CORPORATE PURPOSE (ARTICLE 2 OF THE BYLAWS)

Our corporate purpose in France and abroad includes:

- the research and development in the treatment of ophthalmic pathologies and neurodegenerative diseases of any kind;
- the technical development, including by way of clinical trials, the production and marketing of any product and material enabling the treatment of ophthalmic pathologies and neurodegenerative diseases;
- any services and activities in relation thereto;
- the acquisition, operation or sale of any process, patent or other intellectual property rights in relation thereto;
- the participation, by any means, whether directly or indirectly, in any operation that could be connected to the activities described above by way of incorporation, contribution, subscription or acquisition of the shares, merger or creation, acquisition, leasing including any management leasing, of any business; and
- more generally, all commercial, industrial, real estate, civil and financial transactions, including any guarantee or security, loan, cash transaction in particular the transactions set out in article L.511-7 of the French Monetary and Financial Code, relating directly or indirectly to any of the aforementioned corporate purposes or any similar or related purpose.

20.2.2 ADMINISTRATIVE AND MANAGEMENT BODIES

20.2.2.1 Board of Directors (Articles 15, 16, 17, 18, 20 and 21 of the bylaws)

Composition of the Board of Directors, and of the directors

The Company is governed by a Board of Directors composed of at least three members and at most 18 members elected by the ordinary shareholders' meeting pursuant to and subject to the exceptions stated by law.

The Board of Directors should reflect a balanced representation of women and men.

During the term of the Company, directors are appointed, renewed or dismissed under the conditions provided for by applicable laws and regulations and by the Company's bylaws.

Directors are appointed for a three-year term, by way of exception and in order to exclusively allow for the implementation or the maintenance of the staggering of the mandates, the ordinary shareholders' meeting may appoint one or several members of the Board of Directors for a term of two years or one year. Directors are eligible for re-election. They can be dismissed at any time by the general shareholders' meeting.

No person who is more than 75 years old may be a director. The number of directors who are also party to employment contracts with us may not exceed one-third of the directors in office. Directors are subject to applicable laws and regulations regarding plurality of offices.

Directors may be individual or legal entities. At the time they are elected, legal entities must appoint a permanent representative who is subject to the same conditions and obligations, and who incurs the same civil and criminal responsibilities as he were a director in his own name, without prejudice to the joint liability with the legal entity he represents.

The office of permanent representative is given for the duration of the term of office of the legal entity he represents. If the legal entity revokes the appointment of its permanent representative, it must immediately notify the Company, by registered mail, of this dismissal and the name of its new permanent representative. This is also required in the event of the death or resignation of the permanent representative.

The shareholders' meeting can allocate to the directors, as directors' attendance fees (jetons de présence), a fixed annual amount. The distribution between the Directors is determined by the Board of Directors. In addition, the Board of Directors may grant exceptional compensation (rémunérations exceptionnelles) to individual directors on a case-by-case basis for special and temporary assignments. The Board of Directors may also authorize the reimbursement of reasonable travel and accommodation expenses, as well as other expenses incurred by directors in the corporate interest.

There are no directors' share ownership requirements.

Deliberations of the Board of Directors

The Board of Directors meets as often as necessary in the Company's interest. The Chairman convenes these meetings. If the Board of Directors has not met in more than two months, at least one-third of its members may request that the Chairman convene it to discuss a particular agenda. The Chief Executive Officer may also request that the Chairman convenes the Board of Directors to discuss a particular agenda. Decisions are taken by a majority of members present or represented. In the event of a tie, the vote of the meeting's Chairman does prevail.

The Board of Directors can only deliberate if at least half of the directors attend the meeting in the manners provided for in our bylaws. In compliance with legal and regulatory provisions, the internal regulations may provide that are considered present for the quorum and the majority, the directors participating to the board meeting by videoconference or telecommunication

means in compliance with technical specifications laid down by the legislative and regulatory provisions in force.

Any director may authorize another director to represent him at a meeting of the Board of Directors, each director may hold only one proxy per meeting.

The deliberations of the board are recorded in minutes signed by the Chairman of the meeting and by at least one director who participated in the meeting. In case the Chairman of the meeting is prevented from signing, at least two directors can sign it.

The Board of Directors sets up in its internal regulation its operating procedures in accordance with the law and the bylaws.

Powers of the Board of Directors

The Board of Directors determines the direction of the Company's business and ensures its implementation. Subject to the powers expressly granted to the shareholders' meeting, and within the limits of the Company's purpose, the Board of Directors decides any question concerning the proper functioning of the Company and, through its decisions, settles matters concerning it.

It may decide to create committees responsible for studying issues that it itself or its Chairman may submit to them for analysis. The composition and powers of each of these committees, which operate under its responsibility, are set by the Board of Directors by internal regulations.

Directors' voting powers on proposal, arrangement or contract in which any director is materially interested

Pursuant to Article L.225-38 of the French Commercial Code, any agreement entered into (directly or through an intermediary) between us and any director that is not entered into (1) in the ordinary course of our business and (2) upon standard market terms is subject to the prior authorization of the Board of Directors (it being specified that the interested director cannot vote on such decision). The same provision applies to agreements between us and another company, provided that the company is not one of our wholly owned subsidiaries, if one of our directors is the owner or a general partner, manager, director, general manager or member of the executive or supervisory board of the other company, as well as to agreements in which one of our directors has an indirect interest.

20.2.2.2 Chairman (Article 17 of the bylaws)

The Board of Directors elects a Chairman from among the members who are natural persons. No person who is more than 75 years old may be a Chairman.

The Chairman represents the Board of Directors. He organizes and manages its work, and reports on such work to the general shareholders' meeting. He oversees the proper functioning of the Company's governing bodies and ensures, in particular, that the directors are able to carry out their duties.

20.2.2.3 Chief Executive Officer (Article 19 of the bylaws)

At the option of the Board of Directors, the Company may be managed either by the Chairman or by another individual appointed by the Board of Directors (among its members or outside) and given the title of Chief Executive Officer. No person who is more than 75 years old may be a Chief Executive Officer.

The Chief Executive Officer is granted the broadest powers to act in all circumstances in the Company's name. He exercises these powers within the limits of the Company's purpose and subject to the powers that the law and the bylaws grant expressly to the shareholders' meeting or the Board of Directors. The Chief Executive Officer represents the Company in its relations with third-parties.

On the recommendation of the Chief Executive Officer, the Board of Directors may appoint, among its members or outside, one or more individuals in charge of assisting the Chief Executive Officer, who holds the title of Deputy Chief Executive Officer. No person who is more than 70 years old may be a Deputy Chief Executive Officer.

There may be no more than five Deputy Chief Executive Officer.

The term of office of the Deputy Chief Executive Officer or of the Deputy Chief Executive Officers is determined at the time they are appointed, but this term may not exceed the term of office on the Board, if applicable.

The Chief Executive Officer may be dismissed at any time by the Board of Directors. This is also true for the Deputy Chief Executive Officers, on the recommendation of the Chief Executive Officer. If dismissal is decided without grounds, it may result in damages, except when the Chief Executive Officer assumes the position of Chairman of the Board of Directors.

When the Chief Executive Officer ceases or is prevented from performing his duties, the Deputy Chief Executive Officers retain their duties and powers, unless decided otherwise by the Board, until the appointment of the new Chief Executive Officer.

The Board of Directors determines the compensation of the Chief Executive Officer and the Deputy Chief Executive Officers.

20.2.3 RIGHTS, PREFERENCES AND RESTRICTIONS ATTACHING TO ORDINARY SHARES

20.2.3.1 Form of Shares (Article 11 of the bylaws)

Fully paid-up shares are in registered or bearer form, at the shareholder's discretion, under the conditions defined by the regulations in force.

The Company may at any time verify the identity of the holders of bearer shares in accordance with applicable laws and regulations.

20.2.3.2 Rights and Obligations Attached to Shares (Articles 12 and 14 of the bylaws)

Each share gives a right to a share of the profits and corporate assets in proportion to the percentage of capital it represents. Moreover, it gives the right to vote and to representation at shareholders' meetings under the conditions set by law and the bylaws.

By derogation to Article L.225-123 paragraph 3 of the French Commercial Code, the bylaws do not grant double voting rights to the shares of the Company.

Shareholders are liable for losses only up to the amount of their contributions.

The rights and obligations attached to a share remain with the share when it is transferred.

Ownership of a share legally implies compliance with the bylaws and the resolutions of the shareholders' meeting.

Whenever it is necessary to hold several shares to exercise a right, individual shares or a number of shares less than the number required give no rights to their owners against the Company; in this case, it is the responsibility of the shareholders to combine the number of shares necessary.

20.2.3.3 Indivisibility of the Shares - Beneficial Ownership (Article 13 of the bylaws)

Shares are indivisible with respect to the Company

Co-owners of indivisible shares are represented at shareholders' meetings by one of the owners or by a single agent. If they disagree, the agent shall be designed by court at the request of one of the co-owners.

If there is a beneficial owner, the share registration must show the existence of the beneficial ownership. Except where otherwise stipulated in an agreement notified to the Company by registered mail with return receipt, the voting right belongs to the beneficial owner in ordinary shareholders' meetings and to the bare owner in extraordinary shareholders' meetings.

20.2.3.4 Transfer of Shares (Article 12 of the bylaws)

Shares are freely negotiable, except where otherwise stipulated by laws or regulations. They are registered in an account and are transferred, with respect to the Company, by a transfer between accounts, under the conditions defined by the laws and regulations in force.

20.2.4 MODIFICATION OF SHAREHOLDERS' RIGHTS

The rights of shareholders may be modified in accordance with applicable laws and regulations. The bylaws do not contain any particular provisions with respect to modification of the rights of shareholders that are more stringent than the law.

20.2.5 GENERAL SHAREHOLDERS' MEETINGS (ARTICLES 24 TO 31 OF THE BYLAWS)

Notice and place of meeting

Shareholders' meetings shall be called and shall deliberate on the terms provided by law.

Meetings shall be held either at the registered office or at another place stated in the notice of the call to a meeting.

Agenda

The meeting agenda is provided on the notices and letters of meeting; it is decided by the author of the notice.

The meeting may deliberate only on items indicated on the agenda; however, in all circumstances it may dismiss one or more directors and replace them.

One or more shareholders representing at least the percentage of capital required by law, and acting under the statutory conditions and within the statutory time periods, have the option to require the inclusion of proposed resolutions on the agenda.

Access to meetings

Any shareholder has the right to attend shareholders' meetings and participate in the deliberations personally or through an agent.

Any shareholder may participate at meetings in person or through his agent, under the conditions defined by the regulations in force, with proof of his identity and the ownership of his shares in the form of accounting registration under the conditions defined by the laws and regulations in force.

On the decision of the Board of Directors published in the notice of meeting to use such telecommunications methods, shareholders who attend the meeting *via* videoconference or other telecommunication or electronic transmission methods, including the Internet, which allow identification under the conditions required by the regulations in force, are deemed present for the calculation of quorum and majority.

On a decision by the Board of Directors, any shareholder may vote remotely or give his proxy pursuant to the regulations in force using a form prepared by the Company and sent to the Company under the conditions defined by the regulations in force, including electronic or broadcast transmission methods.

This form must be received by the company under the regulatory conditions to be counted.

Attendance sheet, officers (bureau), minutes

At each meeting, an attendance sheet containing the information required by law shall be kept.

Meetings are chaired by the Chairman of the Board of Directors or, in his absence, by a director specifically delegated for this purpose by the board. If not, the meeting shall elect a Chairman.

The duties of tellers *(scrutateurs)* are performed by the two members of the meeting who are present and accept the duties and who have the largest number of votes.

The officers *(bureau)* name the secretary, who does not have to be a shareholder.

The mission of the officers *(bureau)* is to verify, certify and sign the attendance sheet, to ensure the proper conduct of discussion, to settle incidents at meetings, to count the votes cast, and to ensure the meeting is properly conducted and that minutes are prepared.

Minutes are prepared and copies or excerpts of the resolutions are issued and certified as required by law.

Ordinary shareholders' meeting

The ordinary shareholders' meeting is a meeting called to make all decisions that do not amend the bylaws. It meets at least once a year within six months after the closing of each fiscal year to approve the financial statements for the year and the financial statements unless an extension is granted under the conditions provided for by law.

On the first notice of meeting, it may legally deliberate only if the shareholders present or represented, or voting by mail and electronically, hold at least one-fifth of the voting shares. On the second notice of meeting, no quorum is required.

It rules by a majority of the votes held by the shareholders present, represented or who have voted by mail or means of distance communication.

Extraordinary shareholders' meeting

Only the extraordinary shareholders' meeting is authorized to amend all provisions of the bylaws. It may not, however, increase shareholders' commitments, subject to operations resulting from a legally performed consolidation of shares without the approval of each shareholder.

It legally deliberates only if the shareholders present, represented or who have voted by mail or electronically, hold at least one quarter of the voting shares on the first notice of meeting, and one-fifth of the voting shares on the second notice. If the second quorum is not reached, the second meeting may be moved to a date no more than two months from the date on which it was called.

The meeting rules by a two-thirds majority of the votes of the shareholders present, represented or voting by mail or means of distance communication.

However, under no circumstances may the extraordinary shareholders' meeting increase the commitments of the shareholders or damage the equality of their rights unless this is done by unanimous vote of the shareholders.

Decisions are made by a two-thirds majority of the votes held by the shareholders present, represented by proxy, or voting by mail. Abstentions will have the same effect as "no" vote.

20.2.6 STIPULATIONS THAT ALLOW DELAYING, DEFERRING OR PREVENTING A CHANGE IN CONTROL OF THE COMPANY

There are no provisions either in the Company's bylaws or in any internal charter or internal rules that could have the effect of delaying, postponing or preventing a change of control of the Company.

20.2.7 DECLARATION OF THRESHOLDS (ARTICLE 12 OF THE BYLAWS)

In addition to the thresholds provided for by applicable laws and regulations, any natural person or legal entity who comes to hold or ceases to hold, acting alone or in concert within the meaning of Article L.233-10 of the French Commercial Code, directly or indirectly, a number of shares representing at least 2.5% of the share capital or voting rights, including beyond the reporting thresholds provided for by laws and regulations, must inform the Company of the total number of shares and voting rights of the Company that such person holds, by registered letter with return receipt requested sent to the Company's registered office within four trading days after crossing such threshold(s). Such person shall also indicate the number of securities giving access to the capital and the voting right potentially attached thereto, as well as any other information provided for by law.

The notification shall be repeated in the conditions stated above each time an additional fraction of 2.5% of the share capital or voting rights is crossed upward or downward.

In the event of failure to comply with the notification requirements described above, shares exceeding the fraction that should have been notified will be deprived of voting rights at shareholders' meetings if, at such meetings, the notification failure has been recorded and if one or more shareholders jointly holding at least 2.5% of the share capital so request. Loss of voting rights shall be applicable in all shareholders' meetings that would be held up until two years following proper notification.

20.2.8 PARTICULAR STIPULATIONS GOVERNING MODIFICATIONS OF THE SHARE CAPITAL

As the bylaws do not provide any specific stipulations, the share capital may be increased, decreased or amortized by any methods or means authorized by law.

MATERIAL CONTRACTS

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As of the date of this Document, we are a party to the following material contracts:

21.1 COLLABORATION, PARTNERSHIP AND RELATED AGREEMENTS

Agreements Relating to GS010

- Partnership agreement relating to the research, development and commercialization of GS010 between Genethon and the Company dated February 1, 2013, as amended from time to time.

In February 2013, we entered into a partnership agreement with Genethon to research, develop and commercialize selected research and development projects for gene therapy products within specific ocular indications using technology licensed by the Company under a license agreement with Inserm Transfert dated October 12, 2012. For more details, see Section 6.13.4, "Collaboration, Partnership and Related Agreements" of this Document.

Agreements Relating to GS030

Sight Again Program

- Consortium agreement relating to the research and development of complimentary therapeutic remedies between Pixium Vision S.A., or Pixium Vision, *Fondation Voir et Entendre* and the Company dated July 11, 2014.

In July 2014, we entered into a consortium agreement with Pixium Vision and FVE. For more details, see Section 6.13.4, "Collaboration, Partnership and Related Agreements" of this Document.

- Master agreement relating to the Sight Again Program between Bpifrance Financement, Pixium Vision and the Company dated December 16, 2014.

In December 2014, we entered into a master agreement relating to the Program with Bpifrance Financement, Pixium Vision and FVE setting forth the characteristics of the Program, to fix the amount and conditions for awarding funding granted by Bpifrance Financement as well as to clarify the principles and arrangements for monitoring the implementation of the Program by Bpifrance Financement. Pursuant to an amendment dated November 26, 2015, the product candidate known as GS020 has been replaced by the product candidate GS030 for the purpose of the agreement. For more details, see Section 6.13.4, "Collaboration, Partnership and Related Agreements" of this Document.

- Financial aid agreement related to the Sight Again Program between Bpifrance Financement and the Company dated December 16, 2014.

In December 2014, we entered into a financial aid agreement relating to the Program with Bpifrance Financement setting forth the amounts and conditions upon which Bpifrance Financement shall grant financial aid to the Program. Pursuant to an amendment dated November 26, 2015, the product candidate known as GS020 has been replaced by the product candidate GS030 for the purpose of the agreement. For more details, see Section 6.13.4, "Collaboration, Partnership and Related Agreements" of this Document.

21.2 IN-LICENSE AGREEMENTS

Agreements Relating to GS010

- License agreement relating to patents used in connection with GS010 with Inserm Transfert S.A. and the Company dated October 12, 2012.

On October 12, 2012, we entered into a license agreement with Inserm Transfert S.A. (acting as delegate of Inserm). For more details, see Section 6.13.5, "Intellectual Property" of this Document.

- License agreement relating to scientific data used in connection with GS010 with *Association Française contre les Myopathies*, Inserm Transfert S.A. and the Company dated December 2, 2013.

On December 2, 2013, we entered into a license agreement for use of scientific data with the AFM, Genethon and Inserm Transfert, acting as a delegate of Inserm and on behalf of the UPMC. For more details, see Section 6.13.5, "Intellectual Property" of this Document.

Agreements Relating to GS030

- License agreement relating to patents used in connection with GS030 with Adverum Biotechnologies (formerly Avalanche Biotechnologies) and the Company dated February 23, 2014.

On February 23, 2014, we entered into a non-exclusive license agreement with Adverum. For more details, see Section 6.13.5, "Intellectual Property" of this Document.

Massachusetts Institute of Technology

- License agreement relating to patents used in connection with GS030.

On January 6, 2016, we entered into a license agreement with M.I.T., upon exercising an option right granted under the patent

option agreement between M.I.T. and us, dated January 9, 2015. This license agreement has been amended in April 2017, whereby the Company will provide the M.I.T. with a written research and development plan no later than July 1, 2018. For more details, see Section 6.13.5, "Intellectual Property" of this Document.

21.3 MANUFACTURING AGREEMENT

- Services agreement with Brammer Bio dated October 10, 2017.

In order to secure the commercial grade manufacturing when GenSight will be ready for submitting the marketing authorization application, GenSight has reconsidered its partnership with Novasep Henogen, and has decided to move on with Brammer Bio. Brammer Bio acquired in 2017 additional facilities dedicated to Phase III and commercial production for Gene Therapy. These facilities are currently under cGMP production, which would allow the manufacture of the consistency lots for our product candidate GS010 in 2019.

Hence, on October 10, 2017, we entered into a master services agreement with Brammer Bio for the manufacturing and control of our product candidate GS010. The performance of the services under the agreement is split into two work statements. The first work statement (WS1) has been contracted for the process transfer and establishment at Brammer Bio (part A) and the process characterization (part B), with completion timeframes ranging from 6 months to 10 months. The second work statement (WS2) was contracted in August 2018 for the process performance qualification (PPQ) which includes the manufacture of 3-PPQ batches (part C) eligible to market. Each work statement will terminate upon completion of the deliverables.

- Services agreement with Lonza dated February 10, 2014.

Gensight has conducted for its second lead product GS030 a process development program with Lonza (8066 El Rio St- Houston- TX 77054- USA) on a scale that will support non-clinical safety evaluation, clinical trials and potentially commercial needs with full GMP compliance. Lonza is an established supplier to the pharmaceutical industry with global manufacturing expertise in viral-based therapeutics. Lonza facility in Houston is FDA- inspected and the personnel has a broad experience in the manufacture and release of batches of Phase I through Phase III clinical trial materials for use in the US, Europe and Japan. In the frame of several Statement Of Work (SOWs) agreed between 2015 and 2017, Lonza has executed the development of the manufacturing process up to 100L batch-scale, as well as the manufacture and the control of the GS030- product required for preclinical and Phase I/II clinical studies.

By the end 2017, Lonza has completed the construction of a new Biotech facility in Pearland (Kirby Drive- Pearland- TX) dedicated to the production of clinical and commercial Cell and Gene Therapy products. The facility is designed to accommodate process development unit, quality control laboratories, USP/ DSP manufacturing suite and fully segregated fill-and-finish suite and is expected to double the company's current capacity for the production of vectors for virally modified therapeutics. Gensight is considering further partnership with Lonza in Pearland for process scale-up to 250L and manufacture of the GS030-product required for the Phase III clinical studies. Gensight and Lonza signed on January 29, 2019 and amendment to the Manufacturing Services Agreement to continue the term of their collaboration.

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THIRD PARTY INFORMATION AND STATEMENT BY EXPERTS AND DECLARATIONS OF ANY INTEREST

None.

DOCUMENTS ON DISPLAY

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Copies of this Document are available free of charge at our registered office. This document may also be consulted on our website (www.gensight-biologics.com) and on the AMF's website (www.amf-france.org).

While this Document is valid, the following documents (or copy of such documents) may be viewed :

- our bylaws;
- any report, correspondence or other historical financial information or document, assessment or statement prepared by an expert upon our request, of which a portion is included or referred to in this Document; and
- the historical financial information included in this Document.

All such legal and financial documents relating to us and made available to shareholders in accordance with applicable regulations may be viewed at our registered .

Once our shares have been admitted to trading on Euronext Paris, regulated information pursuant to the AMF General Regulations will be available on our website.

INFORMATION ON EQUITY INTERESTS

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As of the date of this Document we have no equity interest in any other companies.

GLOSSARY

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AAA	Adeno Associated Virus
AMD	Age-Related Macular Degeneration
ANSM	*Agence nationale de securité du médicament et des produits de santé*
ATIS	Asynchronous Time-Based Image Sensor
ATMP	Advanced Therapeutic Medicinal Product
ATP	Adenosine TriPhosphate
BCVA	Best corrected visual acuity
BLA	Biological License Application
BPCIA	Biologics Price Competition and Innovation Act
CBER	Center for Biological Evaluation & Research
CDER	Center for Drug Evaluation & Research
CAT	Committee for Advanced Therapies
CE	European Conformity
cGMP	Certified Good Manufacturing Practices
CHMP	Committee on Human Medicinal Products
CMC	Chemistry, Manufacturing and Controls
CMO	Contract Manufacturing Organization
CMS	Center for Medicare & Medicated Services
Cox10	Cytochrome c oxidase assembly homolog 10
CRO	Contract Research Organization
CTA	Clinical Trial Application
DNA	Deoxyribonucleic acid
DSMB	Data Safety Monitoring Board
EEA	European Economic Area
EMA	European Medicines Agency
ETDRS	Early Treatment Diabetic Retinopathy Study
FDA	Food and Drug Administration
FD&C	Federal Food, Drug, and Cosmetic Act
GA	Geographic Atrophy
GCP	Good Clinical Practices
GLP	Good Laboratory Practices
GMP	Good Manufacturing Practices
GTP	Good Tissue Practices
HCT/Ps	Human Cells, Tissues, and Cellular and Tissue-Based Products
HITECH	Health Information Technology for Economic and Clinical Health Act
HIPAA	Health Insurance Portability and Accountability Act
IBC	Institutional Biosafety Committee
ICH	International Conference on Harmonisation
IDE	Investigational Device Exemption
IND	Investigational New Drug
IOP	Intraocular pressure
IRB	Institutional Review Board
IVT	Intravitreal
LCA	Leber congenital amaurosis
LHON	Leber hereditary optic neuropathy
MAA	Marketing Access Authorization
MIT	Massachusetts Institute of Technology
MTS	Mitochondrial Targeting Sequence
mtDNA	Mitochondrial ribonucleic acid
mRNA	Messenger RNA
MTS	Mitochondrial Targeting Sequence
NDA	New Drug Application
ND4	NADH dehydrogenase 4
NIH	National Institutes of Health
NHP	Non-human primate
OCT	Optical coherence tomography
PDCO	Paediatric Committee
PDUFA	Prescription Drug User Fee Act
PHS	Public Health Service
PMA	PreMarket Approval
PPACA	Patient Protection and Affordable Care Act
RAC	Recombinant DNA Advisory Committee
rAAV	Recombinant adeno-associated Virus
REMS	Risk Evaluation and Mitigation Strategy
RGC	Retinal Ganglion Cells
RNA	Ribo Nucleic Acid
RP	Retinitis Pigmentosa
SOP	Standard operating procedure
SPC	Supplementary Protection Certificate
USPTO	United States Patent & Trademark Office
UTR	UnTranslated Region
VEP	Visual evoked potential
Wt	Wild type

ANNEXES

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ANNEX 1
COMPANY'S ANNUAL FINANCIAL STATEMENTS (FRENCH-GAAP) FOR THE FISCAL YEAR ENDING DECEMBER 31, 2018

1. BALANCE SHEET

ASSETS

		12/31/2018			12/31/2017
In thousands of euros	Note	Gross	Deprec. Prov.	Net	Net
Non-current assets					
Intangible assets					
Software	1	12	11	1	–
Tangible assets	2				
Property, plant and equipment		1,177	448	729	680
Other tangible assets		477	330	147	205
Assets under construction		–	–	–	1
Financial assets	3				
Other financial assets		601	21	580	642
Total non-current assets		**2,267**	**810**	**1,457**	**1,529**
Current assets					
Receivables	4				
Down payments		370	–	370	240
Accounts receivable		487	–	487	257
Other receivables		5,155	–	5,155	4,236
Loans and receivables		3,102	1,773	1,329	888
Cash	5				
Cash and cash equivalents		25,788	–	25,788	55,033
Prepaid expenses		3,037	–	3,037	478
Total current assets		**37,939**	**1,773**	**36,166**	**61,132**
Regularisation accounts					
Foreign exchange differences – assets		4	–	4	52
TOTAL ASSETS		**40,210**	**2,583**	**37,627**	**62,714**

The attached note forms an integral part of the financial statements.

LIABILITIES AND SHAREHOLDERS' EQUITY

In thousands of euros	Note	12/31/2018	12/31/2017
Shareholders' equity	**6**		
Share capital		620	606
Premiums related to the share capital		112,135	112,140
Legal reserve		—	—
Restricted reserves		174	174
Retained earnings		(57,581)	(38,537)
Net loss		(32,189)	(19,045)
Total Shareholders' equity		23,159	55,339
Provisions for liabilities and charges:			
Provisions for liabilities		4	52
Total provisions for liabilities and charges		4	52
Liabilities	7		
Refundable advances		3,441	3,033
Trade payables		9,237	2,440
Tax and social liabilities		1,749	1,838
Other liabilities		6	9
Total liabilities		14,433	7,320
Regularisation accounts			
Foreign exchange differences – liabilities		31	3
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		**37,627**	**62,714**

The attached note forms an integral part of the financial statements.

2. STATEMENTS OF INCOME (LOSS)

In thousands of euros	Note	12/31/2018	12/31/2017
Sales of services		—	—
Income		—	—
Operating revenues:			
Grants		24	9
Transferred expenses		54	4
Other revenues		250	246
Total operating revenues (I)		**328**	**259**
Operating expenses:			
Purchases of raw material		63	200
Other purchases and external expenses		28,736	16,643
Tax expenses		110	65
Payroll expenses		3,694	3,315
Social charges		1,145	2,231
Depreciation and amortization		243	206
Other expenses		660	178
Total operating expenses (II)		**34,651**	**22,837**
OPERATING LOSS (I-II)		**(34,323)**	**(22,578)**
Financial income			
Foreign exchange gains		—	32
Other financial income		81	7
Total financial income (III)		**81**	**39**
Financial expenses			
Foreign exchange losses		—	25
Depreciation and amortization		1,824	52
Interest expenses on borrowings and financial debt		408	76
Other financial expenses		36	43
Total Financial expenses (IV)		**2,268**	**197**
FINANCIAL INCOME (EXPENSES) (III-IV)	**11**	**(2,187)**	**(158)**
EARNING BEFORE TAX (I-II+III-IV)	**10**	**(36,510)**	**(22,736)**
EXTRAORDINARY INCOME (EXPENSES) (V-VI)		**(1)**	**—**
Income taxes	15	(4,322)	(3,692)
NET INCOME (LOSS)		**(32,189)**	**(19,045)**

The attached note forms an integral part of the financial statements.

3. NOTES TO THE FINANCIAL STATEMENTS

The annual financial statements for the year ended December 31, 2018 have been prepared in accordance with French accounting rules in compliance with the principle of prudence and independence of exercises, and assuming the going concern.

The available cash and cash equivalents as of December 31, 2018 in the amount of €25.8 million, the capital increase of €7.9 million completed in February 2019 as well as the reimbursement of the 2018 Research Tax Credit in the amount of €4.3 million expected during the second half year of 2019 should enable the Group to cover its cash requirements through the next 12 months.

The financial statements have been prepared in accordance with the France's accounting standard Authority (*Autorité des Normes Comptables* – ANC) Regulation n°2016-07 relating to the French general chart of accounts, defined by ministerial decree dated on December 26, 2016, in accordance with Articles L.123-12 and seq. of the French Commercial Code *(Code de Commerce)* and pursuant to the provisions of the accounting regulations revising the French general chart of accounts established by the France's accounting standards Authority.

MAIN EVENTS OF THE FISCAL YEAR

On April 3, 2018, the Company announced topline results from the REVERSE Phase III clinical trial evaluating the safety and efficacy of a single intravitreal injection of GS010 (rAAV2/2-ND4) in 37 subjects whose visual loss due to 11778-ND4 Leber Hereditary Optic Neuropathy (LHON) commenced between 6 and 12 months prior to study treatment.

On June 12, 2018, GenSight Biologics reported additional results from the REVERSE Phase III clinical trial evaluating the safety and efficacy of a single intravitreal injection of GS010 (rAAV2/2-ND4) in 37 subjects whose visual loss due to 11778-ND4 Leber Hereditary Optic Neuropathy (LHON) commenced between 6 and 12 months prior to study treatment.

On October 18, 2018, the Company reported additional results at Week 72 from the REVERSE Phase III clinical trial, which evaluates the safety and efficacy of a single intravitreal injection of GS010 (rAAV2/2-ND4) in 37 subjects whose visual loss due to 11778-ND4 Leber Hereditary Optic Neuropathy (LHON) commenced between 6 and 12 months prior to study treatment.

On October 26, 2018, GenSight Biologics announced that the first subject was treated in the first-in-man PIONEER Phase I/II clinical trial of GS030 at the Moorfields Eye Hospital in London, United Kingdom.

On December 12, 2018, the Company reported that Week 72 analyses of the data from its Phase III REVERSE clinical trial revealed a sustained improvement in composite scores and selected sub-scores of a questionnaire used to measure patient perceptions of vision-related quality of life and ability to carry out daily activities impacted by loss of visual acuity.

EVENTS AFTER THE CLOSE OF THE FISCAL YEAR

On February 4, 2019, GenSight Biologics announced results from the first scheduled readout, at Week 48, of the RESCUE Phase III clinical trial evaluating the safety and efficacy of a single intravitreal injection of GS010 (rAAV2/2-ND4) in 39 subjects whose visual loss due to 11778-ND4 Leber Hereditary Optic Neuropathy (LHON) occurred up to 6 months prior to study treatment. These subjects received GS010 in one eye and a sham injection in the other eye, with drug treatment randomized between best- and worst-affected eyes.

On February 25, 2019, the Group announced the completion of a capital increase whose net proceeds amounted to €7.9 million , by the issuance of 3,921,568 new shares with a nominal value of €0.025 each (the "New Shares") for a subscription price of €2.04 each (including premium) (the "Capital Increase") subscribed entirely by Sofinnova Crossover I SLP ("Sofinnova"). The purpose of this capital increase is to pursue the final stages of clinical development of GS010, and file for marketing authorization in Europe.

On April 17, 2019, the Group announced results from the second scheduled readout, at Week 72, of the RESCUE Phase III clinical trial evaluating the safety and efficacy of a single intravitreal injection of GS010 (rAAV2/2-ND4) in 39 subjects whose visual loss due to 11778-ND4 Leber Hereditary Optic Neuropathy (LHON) occurred up to 6 months prior to study treatment. These subjects received GS010 in one eye and a sham injection in the other eye, with drug treatment randomized between best- and worst-affected eyes.

ACCOUNTING PRINCIPLES

Non-current assets

Tangible and intangible assets are recorded at the contribution value or at their original purchase price.

Depreciation of tangible assets is calculated using the straight-line method to take into account the economic depreciation of fixed assets.

At the closing of the accounts, whenever events or market developments suggest the need for impairment of intangible and tangible assets, expected future revenues of the activity are compared to the net value of its assets. If applicable, the corresponding assets are written down to bring them to their fair value.

Intangible assets

Research costs are recorded in the financial statements as expenses.

Development costs are recognized in the financial statements as intangible assets only if all the following criteria are met:

- It is technically feasible to complete the development of the project;

- Intention of the Company to complete the project and to utilize it;
- Capacity to utilize the intangible asset;
- Proof of the probability of future economic benefits associated with the asset;
- Availability of the technical, financial and other resources for completing the project; and
- Reliable evaluation of the development expenses.

Because of the risks and uncertainties related to regulatory authorizations and to the research and development process, the Company considers that the six criteria would be deemed fulfilled as from the grant of market authorization.

Intangible assets consist of patents, costs related to the acquisition of software licenses. They are depreciated using the straight-line method over their expected period of use.

Items	Depreciation period
Patents	20 years
Software	3 years

Tangible assets

Tangible assets are recorded at their acquisition cost or, if applicable, at their production cost.

Tangible assets are depreciated using the straight-line method over the estimated useful period of the property. Rented fixtures are depreciated over the term of their lifetime or over the term of the rental agreement, whichever is shorter.

The depreciation periods used are the following:

Items	Depreciation period
Fixtures and improvement in structures	9 years
Research and development equipments	5 to 10 years
Computer equipment	3 years
Office equipment and furniture	5 years

Financial assets

Investments

These items are recognized in the balance sheet at purchase cost excluding incidental expenses.

Their value is assessed annually by reference to their value in use which is mainly based on the current and forecast profitability of the subsidiary concerned and the share of equity owned. If the value in use falls below the net book value, a depreciation is recognized.

Security deposit

They are recorded at their original value.

Short-term investments

Marketable securities are held in order to meet short-term cash commitments rather than an investment objective or for other purposes. They are immediately convertible into a known amount of cash and subject to insignificant risk of changes in value. Short-term investments are stated at acquisition cost and consist of immediately mobilized term investments without penalty.

Receivables and payables

Receivables and payables are measured at their nominal value and are depreciated as a provision in order to take into account potential losses due to recovery difficulties.

Receivables and payables in foreign currencies are converted into euros based on exchange rate at the closing of year-end, the gap being carried over in an adjustment account for the asset or a liability depending on whether a loss or profit potential. In the case of a potential loss, a provision for foreign exchange loss is recognized.

Provisions for risks and expenses

The Company establishes provisions for risks and expenses in accordance with the definition given in the notice CRC 00-06 on liabilities, namely:

- A provision for risk and expenses corresponds to the commitments whose due dates and amounts are uncertain;
- A provision is recognized in the financial statement when the Company has a legal or implicit obligation to a third party resulting from a past event, which is likely or certain to cause an outflow of resources to that third party, and provided that the future outflows of liquid assets can be estimated reliably.

Conditional advances

The Company has benefited from a financial assistance in the form of non-refundable subsidies and conditional advances.

Subsidies are recognized in the financial statements where there exists reasonable assurance that:

- The Company will comply with the conditions attached to the subsidies; and
- The subsidies will be received.

A public subsidy that is to be received either as a compensation for expenses or for losses already incurred or for immediate financial support of the company without associated future costs, is recognized in the financial statements as other income for the period in which the grant is classified as a receivable.

Funds received in the form of conditional advances are recognized as financial liabilities, including capitalized interests. The obligation to repay totally or partially the advance is based on the technical and commercial success of the funded program.

Details related to the conditional advances are provided in Note 7.

Use of estimates

The preparation of the Financial Statements requires management to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, income and expenses during the reporting period. The Group bases estimates and assumptions on historical experience when available and on various factors that it believes to be reasonable under the circumstances. The Company's actual results may differ from these estimates under different assumptions or conditions. There have been no significant changes from original estimates in any periods presented.

These estimates and judgments involve mainly:

- the estimate of the repayments of the conditional advances obtained by the Company from public institutions, such as Bpifrance Financement. The anticipated repayments of the conditional advances are analyzed at each reporting period (see Note 10), and the measurement of the conditional advances classified as financial liabilities based on the effective rate method; and
- research and development expenses include estimates of the amount recognized over the year for subcontracts. At year-end closing, an analysis of the services already performed but not invoiced and / or already invoiced but not performed is carried out by the project managers and validated by the company's management.

NOTE 1 — INTANGIBLE ASSETS

Other Intangible assets break down as follows:

In thousands of euros	01/01/2018	Increase	Decrease	12/31/2018
Gross	**10**	**2**	**—**	**12**
Software	10	2	—	12
Depreciation	**10**	**1**	**—**	**11**
Software	10	1	—	11
NET	**—**	**1**	**—**	**1**

NOTE 2 — TANGIBLE ASSETS

Tangibles assets break down as follows:

	01/01/2018	Increase	Decrease	12/31/2018
Gross	**1,422**	**232**	**—**	**1,654**
Technical equipment and installations	372	126	—	498
Leasehold improvement	604	75	—	679
Property, plant and equipment	***976***	***201***	**—**	***1,177***
Office and computer equipment	142	18	—	160
Furniture	303	14	—	317
Other tangible assets	***445***	***32***	**—**	***477***
Fixed assets in progress	1	—	(1)	—
Depreciation	**(536)**	**(243)**	**—**	**(779)**
Technical equipment and installations	(139)	(82)	—	(221)
Leasehold improvement	(157)	(70)	—	(227)
Property, plant and equipment	***(295)***	***(152)***	**—**	***(448)***
Office and computer equipment	(91)	(31)	—	(121)
Furniture	(149)	(60)	—	(209)
Other tangible assets	***(240)***	***(91)***	**—**	***(331)***
NET	**887**	**(11)**	**(1)**	**876**

Purchase of technical equipment and installations primarily consist of research equipment.

NOTE 3 — FINANCIAL ASSETS

Financial assets break down as follows:

In thousands of euros	01/01/2018	Increase	Decrease	12/31/2018
Gross	**642**	**88**	**(129)**	**601**
Investments	—	—	—	—
Security deposits	83	—	(9)	73
Long-term deposits	367	—	(120)	247
Own shares	193	88	—	281
Depreciation	**—**	**—**	**—**	**—**
Security deposits	—	—	—	—
Long-term deposits	—	—	—	—
Own shares	—	—	—	—
TOTAL	**642**	**88**	**(129)**	**601**

The list of subsidiaries and affiliates is presented at the end of the present notes.

In the context of its initial public offering, GenSight Biologics implemented a liquidity agreement. As of December 31, 2018,

- Long-term deposits consisted of free cash available within this liquidity agreement;
- Own shares amount to €281 K and are composed of 78,000 shares valued at the year-end rate (€3.33), adjusted by unrealized losses of €21 K. The number of shares purchased amounts to 670,312 at an average purchase price of €3.56 and the number of shares sold amounts to 628,937 at an average selling price of €3.65.

NOTE 4 — RECEIVABLES

Breakdown of receivables is summarized in the following table:

In thousands of euros	Less than one year	More than one year	Total gross
Downpayments	**370**	**—**	**370**
Accounts receivable	**487**	**—**	**487**
Other receivables	**5,155**	**—**	**5,155**
Research tax credit, "CICE"	*4,327*	*—*	*4,327*
VAT	*817*	*—*	*817*
Others	*11*	*—*	*11*
Loans and receivables	**1,329**	**—**	**1,329**
Prepaid expenses	**3,037**	**—**	**3,037**
NET	**10,378**	**—**	**10,378**

Prepayments are made of advances to suppliers.

As of December 31, 2018, the Company has receivables mainly resulting from the service agreement contracted with its US-based subsidiary, amounting to €485 K.

The Company has a research tax credit amounting to €4,322 K and a tax credit for competitiveness and employment of €6 K. In accordance with the legislation in force, the Company is eligible for immediate reimbursement of this tax claim.

In the context of the inception of its US-based subsidiary, the parent company granted cash advances of $600 K (€524 K) on a quarterly basis. The gross balance amounts to €3,102 K as of December 31, 2018. Due to the uncertainty of the recoverability of this loan, the Company has deemed reasonable to book a depreciation of €1,773 K, representing the net amount due by the GenSight Biologics Inc., taking into account the management fees and recharges between the two entities.

Prepaid expenses correspond mainly to advances on manufacturing contracts, rents, research contracts, insurance premiums and travel expenses.

NOTE 5 — CASH

As of December 31, 2018, the Cash and cash equivalent amount to €25,788 K (€55,033 K as of December 31, 2017).

NOTE 6 — SHAREHOLDERS' EQUITY

6.1 — Share capital

As of December 31, 2018, share capital amounts to €620 K and consists of 24,802,973 ordinary shares with a nominal value of €0.025.

Each ordinary share shall carry to holders a proportional part to the benefits and the net assets of the Company.

Share class and number of shares	01/01/2018	Capital Increase	12/31/2018	Share capital in KEuros
Ordinary shares	24,234,223	568,750	24,802,973	620
TOTAL	**24,234,223**	**568,750**	**24,802,973**	**620**

Capital increase resulting from the definitive acquisition of free shares (AGA)

On July 24, 2018:

- 255,000 free shares AGA 2016 with performance conditions granted to key managers have been acquired, due to the achievement of the second performance criteria.

On July 27, 2018:

- 32,500 free shares AGA 2016 have been fully acquired by holders;
- 245,000 free shares AGA 2016 with performance conditions granted to key managers have been acquired, due to the achievement of the first performance criteria.

On December 19, 2018:

- 36,250 free shares AGA 2016 with performance conditions granted to key managers have been acquired, due to the achievement of the first performance criteria.

6.2 — Non-employee share warrants (BSA)

The following table relates to warrants (BSA) to purchase ordinary shares as of December 31, 2018:

Type of warrants	BSA 2013-02	BSA 2013-02	BSA 2015-06	BSA 2016	BSA 2017	BSA 2018
Number of warrants issued	260,040	33,000	121,000	158,000	165,000	20,000
Subscription price per warrant (euros)	0.0008	0.0008	0.10	0.65	0.40	0.18
Number of shares to be issued	260,040	33,000	121,000	158,000	165,000	20,000
Exercise price per share (euros)	0.025	0.025	0.025	8.080	5.040	2.22
Expiration date	07/08/23	04/09/24	07/07/25	07/25/23	07/27/24	09/18/25

6.3 — Employee share warrants (BCE)

The following table relates to warrants (BCE) to purchase ordinary shares as of December 31, 2018:

Type of warrants	BCE 2013-02	BCE 2014-06	BCE 2015-06
Number of warrants issued	123,720	60,000	490,916
Subscription price per warrant (euros)	—	—	—
Number of shares to be issued	123,720	60,000	490,916
Exercise price per share (euros)	0.025	0.025	3.275
Expiration date	07/08/23	12/03/24	07/07/25

6.4 — Free shares (AGA)

The following table relates to free shares (AGA) as of December 31, 2018:

Free shares	2016 AGA	2016 AGA	2018 AGA	2018 AGA
Number of granted shares	235,000	36,250	357,500	135,000
Share value at grant (euros)	5.12	5.55	2.10	4.04
Acquisition date	07/27/18	12/19/18	09/18/19	12/19/19

6.5 – Stock options (SO)

The following table relates to stock options (SO) granted to U.S. beneficiaries as of December 31, 2018:

Stock options	SO 2017	SO 2018	SO 2018
Number of warrants issued	300,000	175,000	30,000
Exercise price per share (euros)	5.55	6.98	2.19
Number of shares to be issued	1	1	1
Expiration date	12/18/24	04/13/25	09/17/25

6.6— Statement of changes in shareholders' equity

In thousands of euros	Share capital	Premiums related to the share capital	Restricted reserves	Reserves	Net income (loss)	Total Shareholders' equity
As of 01/01/2018	606	112,140	174	(38,537)	(19,045)	55,339
Capital increase	14	(6)	—	—	—	9
Capital increase related costs	—	—	—	—	—	—
Allocation of prior period income (loss)	—	—	—	(19,045)	19,045	—
Issue od share warrants	—	—	—	—	—	—
Net income (loss)	—	—	—	—	(32,189)	(32,189)
As of 12/31/2018	**620**	**112,135**	**174**	**(57,581)**	**(32,189)**	**23,159**

NOTE 7 — LIABILITIES

The breakdown of liabilities is provided by the following table:

In thousands of euros	Less than one year	Between one and five years	More than five years	Total
Refundable advances	—	1,550	1,891	3,441
Trade payables	9,237	—	—	9,237
Tax and social liabilities	1,749	—	—	1,749
Due to employees	*852*	—	—	*852*
Social security and payroll contribution	*684*	—	—	*684*
VAT	*199*	—	—	*199*
Other taxes	*14*	—	—	*14*
Other debts	6	—	—	6
TOTAL	**10,992**	**1,550**	**1,891**	**14,433**

With respect to accounts payable and related payables, no discounting effect has been recognized to the extent that amounts did not represent payables on terms longer than one year at the end of each period presented.

In 2014, the Company received a grant from Bpifrance Financement of both subsidies and conditional advances in relation to the development of its technology platform. The program will be funded according to a specified schedule set forth in the contract,

subject to completion of milestones. As the program advances, the Company will provide Bpifrance Financement with interim progress reports and a final report when the funded project ends. Based on these reports, the Company is entitled to conditional advances from Bpifrance Financement. Each award of an advance is made to help fund a specific development milestone. The total intended amount of the conditional advances is €5,686 K. The Company has committed to reimburse a total amount of €6,490 K (included accrued interests; the annual rate amounts to 1.44%). If the total advances actually paid by Bpifrance Financement are less than €5,686 K, the reimbursements will be reduced in proportion to the advances actually paid.

As per the agreement, the advances would be paid according to the following schedule, subject to completion of milestones:

- €678 K received in December 2014;
- €2,279 K received in July 2016[(1)];
- €494 K initially expected to be received in the first half of 2018[(2)];
- €853 K initially expected to be received in November 2018; and
- €986 K initially expected to be received in November 2019.

After review and analysis of the stage of completion of the remaining milestones, level of expenses that have been incurred as of December 31, 2018, and given that the term of the initial agreement is set on November 30, 2019, the Group consider that it would not be able to complete the remaining key milestones on time and therefore should not receive any more conditional advance from Bpifrance Financement.

The advances already paid in 2017 and 2016 and the corresponding accrued interests are both recognized as non-current liabilities in the statement of financial position.

The updated repayment schedule for a total amount of €3,303 K (€2,957 K of cash received + €346 K of capitalized interests) of all of the conditional advances is as follows:

- €550 K on or before June 30, 2022;
- €1,000 K on or before June 30, 2023;
- €1,500 K on or before June 30, 2024; and
- €253 K on or before June 30, 2025.

Following the repayment of all of the conditional advances, the Company may be required to make additional payments over a period of two years of up to €1.4 million (€603 K the first year and €823 K the second year), depending on whether the Company reaches cumulative revenues, excluding taxes, of €80.0 million. These additional repayments should be done within 15 years following the first year of reimbursement, *i.e.* 2037. The obligation to repay these amounts is based on the technical and commercial success of the funded program, as determined by the revenues forecast or revenues deriving from direct or indirect exploitation of those products and results of its optogenetics technology platform. In the event Bpifrance Financement determines that the program is not successful, Bpifrance Financement will meet with the Company to assess the impact on the repayments and the repayment schedule.

The Company has decided to include the future cash flows resulting from the additional payments in the calculation of the EIR, based on the first sales projections of its second product.

NOTE 8 — RESEARCH AND DEVELOPMENT EXPENSES

As indicated in the accounting policies, R&D expenses are not capitalized but recorded as operating expenses. For fiscal year 2018, R&D expenses amounted to €27,850 K.

NOTE 9 — ACCRUED EXPENSES

The amount of accrued expenses is as follows:

In thousands of euros	Less than one year	More than one year	Total gross
Accounts payable, accrued expenses	7,639	—	7,639
Employees, accrued expenses	526	—	526
Employees, paid vacation	166	—	166
Social organizations, accrued expenses	209	—	209
Social organizations, paid vacation	66	—	66
Social organizations, other accrued expenses	409	—	409
Payable interests	6	—	6
TOTAL	**9,021**	**—**	**9,021**

(1) The estimated amount from the initial payment schedule was €2,675 K. The costs occurred by Company amounted to a lower amount than expected, therefore the amount of this milestone was reduced accordingly.
(2) The corresponding milestone was in November 2017.

NOTE 10 — FINANCIAL INCOME (LOSS)

In thousands of euros	12/31/2018	12/31/2017
Financial income	**81**	**39**
Foreign exchange gains	—	32
Othe financial income	81	7
Financial expenses	**(2,268)**	**(197)**
Foreign exchange losses	—	(25)
Financial depreciation and amortization	(1,824)	(52)
Interest expenses on borrowings and financial debt	(408)	(76)
Other financial expenses	(36)	(43)
Financial Income (loss)	**(2,187)**	**(158)**

The financial depreciation and amortization mainly correspond to the depreciation booked on the cash advances granted by the Company to its US-based subsidiary. Due to the uncertainty of the recoverability of this loan, the Company has deemed reasonable to book a depreciation of €1,773 K, representing the net amount due by the GenSight Biologics Inc., taking into account the management fees and recharges between the two entities.

NOTE 11 — EXTRAORDINARY INCOME (LOSS)

The extraordinary income is nil as of December 31, 2018.

NOTE 12 — HEADCOUNT

As of	12/31/2018	12/31/2017
Managers	28	33
NET	**28**	**33**

NOTE 13 — INCREASE AND REDUCTIONS NOT RECOGNIZED IN FUTURE TAX DEBT (IN BASE)

At the close of fiscal year 2018, the amount of deficit being indefinitely carried forward is as follows:

In thousands of euros	Basis	Potential corporate tax savings
Net Operating Losses	110,475	30,933

NOTE 14 — RESEARCH TAX CREDIT

The Company benefits from the provisions in Articles 244 *quater* B and 49 *septies* F of the French Tax Code related to the Research Tax Credit.

Changes in the Research Tax Credit over the last two periods are presented as follows:

- 2017: €3,692 K, reimbursed in 2018.
- 2018: €4,322 K.

NOTE 15 — COMPETITIVENESS AND EMPLOYMENT TAX CREDIT

Tax Credit for Competitiveness and Employment (hereafter CICE) is calculated at the end of the year on the basis of eligible pay.

Revenue is recognized as a reduction of personnel expenses in accordance with the recommendation of the Authority Accounting Standards.

Moreover, the terms and conditions of this credit tax, as specified in Article 244 quarter C of the General Tax Code *(Code général des impôts)*, have been applied. The CICE of the prior year has enabled to fund research and development expenses.

The Company recorded income in the amount of €6 K in tax credit.

NOTE 16 — TRANSACTIONS WITH RELATED PARTIES

The compensation granted to the Directors of the Company amounted to €829 K for fiscal year 2018.

Moreover, the CEO of GenSight Biologics was shareholder of the Company with which GenSight Biologics had a lease contract and a service agreement (in connection with Human Resources, legal and Intellectual Property services) in 2018. The related expenses during the period amounted to €792 K.

NOTE 17 — COMMITMENTS

17.1 — Commitments under operating leases

Commitments existing as of December 31, 2017 have not changed significantly at the end of the reporting period, with the exception of the following:

- On January, July and October 2018, the office lease contract the Group entered on January 2015 relating to its headquarters in Paris, France, has been amended. The last amendment consisted especially in a decreased rent as the Group is using less office space. The associated services (reception, printers and IT, access to meeting rooms…) have also been revised accordingly.

The table below shows the minimum contractual future payments relating to these contracts as of December 31, 2018:

In thousands of euros	As of December 31, 2018
2019	494
2020	494
2021	494
2022	494
2023	494
2024	494
2025	37
2026	36
2027	18
Total	**3,055**

17.2 – Commitments under service agreement – G&A operations

In addition, the Company also signed an addendum to the services contract in connection with human resources, legal and intellectual property services. According to the updated contrat terms and conditions, the annual cost is fixed at €240 K and each party can still terminate the contract after a six-month notice period.

17.3 — Commitments related to R&D operations

The Company has signed various licensing and collaboration agreements:

- In 2012, the Company entered into a license agreement with a French public scientific and technological institute. The Company paid a license fee of €40 K in 2013 upon the execution of the agreement. Upon completion of development milestones, the Company has to pay non-refundable fees up to €2,750 K in the aggregate. As of December 31, 2018, the residual commitments amount to €1,800 K. Upon commercialization of any product covered by the licensed patents, the Company will be obligated to pay a percentage of net sales as a royalty. The royalty rate varies depending on the amount of net sales.
- In 2013, the Company entered into a license agreement with a non-profit association. The Company paid a license fee of €10 K upon the execution of the agreement. Upon completion of development milestones, the Company has to pay non-refundable fees up to €688 K. As of December 31, 2018, the residual commitments amount to €450 K. Upon commercialization of any product covered by the license patents, the Company will be obligated to pay an annual royalty of 1% of net sales.
- In 2013, the Company entered into a research collaboration agreement with a French university. The Company has the exclusive right to use the developed shared patents and committed to pay a total amount of €2,276 K. As of December 31, 2018, there are no remaining payments due and the agreement has not been renewed.
- In 2013, the Company entered into a license agreement with Novartis. Upon commercialization of any product covered by the licenses, the Company will be obligated to pay a royalty of 5% of net sales.
- In 2014, the Company entered into a non-exclusive license, development and commercialization agreement with a biotechnology company. The annual license fee payable by the Company is U.S.$30 K. Upon completion of development milestones, the Company has to pay specified non-refundable fees of up to U.S.$5,900 K. As of December 31, 2018, the residual commitments amount to U.S.$5,750 K. Upon commercialization of any product covered by the license patents, the Company will be obligated to pay a percentage of net sales as a royalty. The royalty rate varies depending on the amount of net sales.
- In 2014, the Company entered into a research collaboration agreement with a biomedical research institute. This agreement ended on May 31, 2018.
- In 2016, the Company entered into a license agreement with a US academic research institute. Under the terms of this license agreement, the Company agreed to pay a license issue fee of $45 K, license maintenance fees up to $100 K per year and variable payments up to $7,300 K depending on the achievement of milestone events. As of December 31,2018, the residual commitments amount to $7,100 K. The Company will also pay running mid-single-digit royalties on future net sales.

17.4 — Retirement commitments

The employee retirement commitment is not recorded in the accounts in accordance with the option offered by the French accounting regulations. This commitment amounted to €65 K as of December 31, 2018.

As part of the estimate of the retirement commitments, the following assumptions were used for all categories of employees:

- Social security contribution: 45% in 2017 and 2018;
- Salary increase: 3% in 2017 and 2018;
- Discount rate: iBoxx Corporates AA 10+ index, 1.30% and 1.57% in 2017 and 2018, respectively;
- Retirement age: 67;
- Terms of retirement: voluntary retirement;
- Life table: TGHF 2005;
- Collective agreement: *Convention Collective Nationale des Ingénieurs et des Cadres de la Métallurgie* (National Collective Agreement for Engineers and Executives in the Metalworking Industry); and
- Personnel turn-over: 10% (20-49), 0% above 50.

NOTE 18 — TABLE OF SUBSIDIARIES AND HOLDINGS

On April 28, 2017, GenSight Biologics created its first subsidiary, GenSight Biologics Inc., registered and located in the United States of America (State of Delaware). The Company doesn't have any other investment in a subsidiary as of December 2018.

	Capital (in Euros)	Reserves and retained earnings brought forward	% interest	Book value of shares held (in euros)		Loans and advances granted not yet refunded (in thousands of euros)	Guarantees and security granted	Turnover excluding tax	Net income in last year (in thousands of euros)	Dividends booked during the year
				Gross	Net					
GenSight Biologics Inc.	0.44	(282)	100%	0.44	0.44	3,102	—	—	(653)	—

The capital reserves and retained earnings have been translated into thousands of euros on the basis of year-end exchanges rates, while profits and losses have been translated at average rate.

A provision of € 1,773 K has been booked on the loans and advances granted in GenSight Biologics SA's financial statements as of 2018.

GenSight Biologics S.A. draws up consolidated accounts in which its subsidiary GenSight Biologics Inc. is fully consolidated.

ANNEX 2
OTHER INFORMATION RELATING TO THE FINANCIAL STATEMENTS OF GENSIGHT BIOLOGICS S.A. PARENT COMPANY

1. AGED TRADE ACCOUNT PAYABLES

In accordance with the French law on the Modernization of the Economy of August 4, 2008 and the resulting Articles L.441-6-1 and D.441-4 of the French Commercial Code, the aging of the balance of trade accounts payable by GenSight Biologics SA parent company at year-end is as follows:

	Not yet due	0 to 30 days	31 to 60 days	61 to 90 days	> 90 days	Total overdues
Number of invoices						75
Amount of trade account payable (tax included)	487	394	120	(4)	601	1,598
Part of the total purchases (tax included) of the period %	1.78%	1.44%	0.44%	(0.01)%	2.20%	5.86%

2. FIVE YEARS FINANCIAL SUMMARY

	2018	2017	2016	2015	2014
A – CAPITAL AT YEAR-END					
1. Share capital (in Keuros)	620	606	485	340	225
2. Number of ordinary shares outstanding	24,802,973	24,234,223	19,409,701	2,017,798	5,044,488
3. Number of series A shares outstanding	–	–	–	6,966,454	17,416,135
4. Number of series B shares outstanding	–	–	–	4,624,870	–
B – OPERATIONS AND RESULTS OF THE YEAR (in KEuros)					
1. Net revenue	–	–	–	1	441
2. Earnings before tax, employee profit-sharing, depreciation, amortization and provisions	(36,218)	(22,478)	(20,138)	(14,82)	(7,018)
3. Income tax expense	(4,322)	(3,692)	(2,930)	(2,874)	(912)
4. Employee profit-sharing due for the year	–	–	–	–	–
5. Earnings after tax, employee profit-sharing, depreciation, amortization and provisions	(32,188)	(19,045)	(17,398)	(12,074)	(6,344)
6. Distributed earnings (during the year)	–	–	–	–	–
C – EARNINGS PER SHARE (in Euros)					
1. Earnings per share after tax, employee profit-sharing, but before depreciation, amortization and provisions	(1.29)	(0.78)	(0.89)	(1.07)	(0.28)
2. Earnings after tax, employee profit-sharing, depreciation, amortization and provisions	(1.30)	(0.79)	(0.90)	(1.07)	(0.28)
3. Net dividend per ordinary share	–	–	–	–	–
D – PERSONNEL					
1. Average number of employees in the year	32	33	27	23	13
2. Total payroll for the year (in Keuros)	3,630	3,315	3,084	2,629	1,924
3. Amounts paid with respect to employee benefits during the year (Social Security, staff benefits, etc.) (in KEuros)	1,209	2,231	1,117	916	602

ANNEX 3
STATUTORY AUDITORS' REPORT ON THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2018

This is a translation into English of the Statutory Auditors' Report on the financial statements of the Company issued in French and it is provided solely for the convenience of English speaking users.
This Statutory Auditors' Report includes information specifically required by French law, such as information about the appointment of the Statutory Auditors or verification of the Management Report and other documents provided to Shareholders.
This Report should be read in conjunction with, and construed in accordance with French law and professional auditing standards applicable in France.

To the Shareholders' Meeting of GENSIGHT BIOLOGICS,

OPINION

In compliance with the engagement entrusted to us by your bylaws and your Shareholders' Meeting, we have audited the accompanying financial statements of GENSIGHT BIOLOGICS for the year ended December 31, 2018.

In our opinion, the financial statements give a true and fair view of the assets and liabilities, and of the financial position of the Company as at December 31, 2018 and of the results of its operations for the year then ended in accordance with the accounting rules and principles applicable in France.

The audit opinion expressed above is consistent with our Report to the Audit Committee.

BASIS FOR OPINION

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the "Statutory Auditors' Responsibilities for the Audit of the Financial Statements" section of our Report.

Independence

We conducted our audit in compliance with independence rules applicable to us, for the period from January 1, 2018 to the issue date of our Report and in particular we did not provide any prohibited non-audit services referred to in Article 5(1) of Regulation (EU) No 537/2014 or in the French Code of ethics for Statutory Auditors.

Furthermore, the non-audit services that we provided to your Company during the fiscal year are the following:

- Procedures provided for in the French Commercial Code relating to transactions involving the share capital (capital increases, issue of marketable securities).

JUSTIFICATION OF ASSESSMENTS - KEY AUDIT MATTERS

In accordance with the requirements of articles L.823-9 and R.823-7 of the French Commercial Code *(Code de commerce)* relating to the justification of our assessments, we bring your attention to the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in the audit of the financial statements of the current period, as well as our responses to those risks.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon. We do not provide a separate opinion on specific elements, accounts or items of the financial statements.

Recording of research and development costs
(refer to note "Use of estimates" to the notes to financial statements as at December 31, 2018)

Identified risk

Research and development costs represent a significant component of the Company' financial statements, considering Company' activity and its current development phase, as they account for 80% of total operating expenses. These expenses mainly include external subcontracting costs (including preclinical and clinical studies in particular) or product manufacturing as well as personnel costs.

There may be discrepancies between the achievement of subcontracting or manufacturing services and their related invoicing. The need of estimating the amount of services already achieved but not invoiced, or at the opposite, services already invoiced but not realized, leads to a risk of misevaluation of the invoices to be received or prepaid expenses regarding these external costs at year end.

The estimate of the amount of services already performed to be recognized at year end thus requires significant judgments from the management.

We therefore considered that the accounting of research and development expenses is a key audit matter.

Audit procedures implemented to deal with identified risks

As part of our audit, we reviewed the internal control procedures related to the accounting of subcontracting and manufacturing expenses in order to identify control activities implemented by Management and evaluate their design.

Our work were supplemented by procedures, on a sampling basis, of account payable confirmation requests and an analysis of subcontracting invoices received before and after year end, in order to identify which exercise they related to and evaluate the correct linkage with fiscal year.

VERIFICATION OF THE MANAGEMENT REPORT AND OTHER DOCUMENTS PROVIDED TO SHAREHOLDERS

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by French law.

Information given in the Management Report and in the other documents provided to Shareholders with respect to the financial position and the financial statements

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the Management Report of the Board and in the other documents provided to Shareholders with respect to the financial position and the financial statements.

We attest the fairness and consistency with financial statements of the information provided related to payment terms required by article D.441-4 of the French Commercial Code *(Code de commerce)*.

Report on corporate governance

We attest that the Board's Report on corporate governance contains the information required by articles L.225-37-3 and L.225-37-4 of the French Commercial Code *(Code de commerce)*.

Concerning the information given in accordance with the requirements of article L.225-37-3 of the French Commercial Code *(Code de commerce)* relating to remunerations and benefits received by the Directors and any other commitments made in their favor, we have verified its consistency with the financial statements, or with the underlying information used to prepare these financial statements and, where applicable, with the information obtained by your Company from controlling and controlled companies. Based on this work, we attest the accuracy and fair presentation of this information.

Other information

In accordance with French law, we have verified that the required information concerning participating and controlling interests, the identity of Shareholders and the Holders of voting rights has been properly disclosed in the Management Report.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

Appointment of the Statutory Auditors

We were appointed Statutory Auditors of GENSIGHT BIOLOGICS by the bylawsof April 17, 2012 for DELOITTE & ASSOCIÉS and by the Shareholders' Meeting of May 19, 2016 for BECOUZE.

As of December 31, 2018, DELOITTE & ASSOCIÉS and BECOUZE were respectively in the 6th year and 3rd year of total uninterrupted engagement, including three years of joint work since securities of the Company were admitted to trading on a regulated market.

RESPONSIBILITIES OF MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE FINANCIAL STATEMENTS

Management is responsible for the preparation and fair presentation of the financial statements in accordance with French accounting principles, and for such internal control as Management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, Management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease its operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk Management systems and, where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The financial statements have been approved by the Board of Directors.

STATUTORY AUDITORS' RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

Objective and audit approach

Our role is to issue a Report on the financial statements. Our objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As specified in article L.823-10-1 of the French Commercial Code *(Code de commerce)*, our statutory audit does not include assurance on the viability of the Company or the quality of Management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditors exercise professional judgment throughout the audit and furthermore:

- They identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence considered to be sufficient and appropriate to provide a basis for their opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- They obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control.
- They evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management in the financial statements.
- They assess the appropriateness of Management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of their Audit Report. However, future events or conditions may cause the Company to cease to continue as a going concern. If they conclude that a material uncertainty exists, they draw attention in their Audit Report to the related disclosures in the financial statements or, if such disclosures are not provided or inadequate, they modify their opinion.
- They evaluate the overall presentation of the financial statements and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Report to the Audit Committee

We submit a Report to the Audit Committee which includes in particular a description of the scope of the audit and the audit program implemented, as well as significant audit findings. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our Report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the financial statements of the current period and which are therefore the key audit matters that we are required to describe in this Report. We describe these matters in this Report.

We also provide the Audit Committee with the declaration provided for in article 6 of Regulation (EU) N° 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by articles L.822-10 to L.822-14 of the French Commercial Code *(Code de commerce)* and in the French Code of Ethics *(Code de déontologie)* for Statutory Auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

ANGERS and PARIS LA DEFENSE, April 26, 2019

The Statutory Auditors

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