OSE Immunotherapeutics
Limited Company (société anonyme) with a Board of Directors with a capital of €3,029,504.80
Registered office: 22 Boulevard Benoni Goullin 44200 Nantes
479 457 715 Nantes Trade and Companies Register

2019 UNIVERSAL REGISTRATION DOCUMENT INCLUDING THE ANNUAL FINANCIAL REPORT

AUTORITÉ DES MARCHÉS FINANCIERS

This Universal Registration Document has been filed on April 15, 2020 with the AMF, as the competent authority and without its prior approval, in accordance with Article 9 of (EU) Regulation 2017/1129. The Universal Registration Document may be used for the purposes of a public offer of securities or the admission of securities to trading on a regulated market if it is supplemented by a securities note and, where applicable, a summary and its supplement(s). The whole is approved by the AMF in accordance with EU Regulation 2017/1129.

Pursuant to Article 19 of Regulation (EU) No 2017/1129 of the European Parliament and of the Council, the following information is incorporated by reference in this registration document:

· the consolidated financial statements and the corresponding audit reports appearing on pages 178-237 of the universal registration document for fiscal year 2018 filed with the AMF on April 26, 2019, under No. D19-0424 (https://www.ose-immuno/financial-statements)

· the consolidated financial statements and the corresponding audit reports appearing on pages 172-237 of the Universal Registration Document for fiscal year 2017 filed with the AMF on April 26, 2018 under No. D18-0418 (https://www.ose-immuno/financial-statements)

Parts not included in such document(s) are either irrelevant to the investor or covered elsewhere in the registration document or universal registration document.

Copies of this Universal Registration Document are available, **on request and** free of charge, **during normal business hours, at the registered office** of OSE Immunotherapeutics, 22 Boulevard Benoni Goullin, 44200 Nantes, **and on its website (www.ose-immuno.com), as well as on the AMF website (www.amf-france.org).**

The information incorporated by reference should be read in accordance with the cross-reference table at the end of this universal registration document. Any information not indicated in this cross-reference table but forming part of the documents incorporated by reference is provided for information purposes only.

WARNING

This Universal Registration Document and the documents incorporated herein by reference, contain information about the Company's objectives and development areas. This information is sometimes identified by the use of the future or conditional tense and by forward-looking terms such as "consider", "envisage", "think", "aim", "expect", "intend", "should", "aspire", "estimate", "believe", "wish", "may", or, where applicable, the negative form of these same terms, or any other variant or similar terminology.

The reader's attention is drawn to the fact that these objectives and development areas depend on circumstances or events whose occurrence or outcome is uncertain.

These objectives and development areas are not historical data and should not be interpreted as guarantees that the facts and data referenced will occur, that assumptions will be correct or that objectives will be achieved. By their very nature, these objectives may not be achieved and the statements or information appearing in this Universal Registration Document may prove to be erroneous, without the Company in any way being obliged to update them, subject to applicable regulations and, in particular, the French Financial Markets Authority's General Regulation.

Investors are advised to give careful consideration to the risk factors described in section 4 of this Universal Registration Document, "Risk factors", before making any investment decisions. The occurrence of some, or all, of these risks is likely to have a negative impact on the Company's business, financial position, net financial income or its objectives. In addition, other risks that the Company has not yet identified or considers immaterial may have the same negative impact and investors may lose all, or part, of their investment.

This Universal Registration Document also contains information about the Company's business as well as the market and industry in which it operates. This information is primarily taken from studies carried out by internal and external sources (analysts' reports, expert studies, industry publications and any other information published by market research companies, public corporations and bodies). The Company believes that this information gives a true and fair picture of the market and the industry in which it operates and faithfully reflects its competitive position. Although this information is considered to be reliable, it has not been independently verified by the Company and the Company cannot guarantee that a third party using different methods to gather, analyze or calculate this market data would obtain the same results. The Company, the Company's direct or indirect shareholders and investment services providers cannot give any assurances or guarantees as to the accuracy of this information.

The global epidemic of the COVID-19 coronavirus continues to evolve rapidly. The extent to which the COVID-19 coronavirus is likely to affect the Company's business and clinical trials will depend on future developments, which cannot be predicted with certainty, such as the ultimate geographic distribution of the disease, its duration, travel restrictions and social distancing measures in the European Union, the United States and other countries, business closures or disruptions and the effectiveness of measures taken in these countries to contain and treat the disease. In addition, the extent of the adverse impact of this epidemic on the financial markets and on the Company's share price is unknown at this time. As of the date of the Universal Registration Document, the global economy is heavily impacted by the epidemic.

* * *

SUMMARY

1 Responsible persons, third-party information, experts' reports and approval from the competent authority

1.1 Person responsible for the Universal Registration Document

Alexis Peyroles

Chief Executive Officer

OSE Immunotherapeutics registered office: 22 Boulevard Benoni Goullin, 44200 Nantes, France

Telephone: +33 (0)2 28 29 10 10

Email: alexis.peyroles@ose-immuno.com

Paris office: 100 avenue de Suffren, 75015 Paris, France

1.2 Statement by the Person Responsible for the Universal Registration Document

"After having taken all reasonable measures to ensure that this is the case, I hereby certify that the information contained in this Universal Registration Document is, as far as I am aware, accurate and does not omit any material facts.

I hereby certify that, as far as I am aware, the financial statements have been prepared in accordance with applicable accounting standards and give a true and fair picture of the assets and liabilities, financial position and net income of the Company and of all the companies included in its scope of consolidation, and that the management report appearing on page 294 faithfully reflects the business developments, net income and financial position of the Company and of all the companies included in its scope of consolidation and that it describes the main risks and uncertainties faced.

I have obtained a letter from the auditors stating that they have completed their assignment which included checking information on the financial position and the financial statements presented in this document, as well as reading the document in its entirety."

Nantes, April 15, 2020

Alexis Peyroles

Chief Executive Officer

1.3 Statement by a person acting as an expert in respect of this document

None.

1.4 Third-party information

On the date of this document, the Company does not have any information sourced from third parties, nor has it received, or been notified of, any expert statements or declarations of interest.

1.5 Approval of the Universal Registration Document

As the Company has had a Registration Document approved by the AMF for at least two consecutive fiscal years and subsequently filed such documents on an annual basis, this Universal Registration Document has been filed without prior approval from the AMF, in accordance with Article 9.3 of EU Regulation 2017/1129 of the European Parliament and of the Council of June 14, 2017. It may, however, be reviewed at a later date by the French Financial Markets Authority, the competent authority, where the latter deems this necessary.

2 Auditors

2.1 Statutory Auditors

Joint Statutory Auditor

Ernst & Young et Autres

Represented by Mr. Cédric Garcia

Tour First - 1-2 place des Saisons,

92037 Paris La Défense Cedex, France

Start date of first term: appointed by decision of the sole shareholder on April 27, 2012

Duration of current term: six fiscal years from the date of appointment (decision taken by the Combined General Shareholders' Meeting of June 13, 2018)

End date of current term: at the end of the General Shareholders' Meeting called to approve the financial statements for the fiscal year ending on December 31, 2023

Joint Statutory Auditor

SA RBB business advisors

Represented by Mr. Jean-Baptiste Bonnefoux

133 bis rue de l'Université, 75007 Paris, France

Start date of first term: appointed by the General Shareholders' Meeting of September 17, 2014

Duration of current term: six fiscal years from the date of appointment (General Shareholders' Meeting of September 17, 2014)

End date of current term: at the end of the General Shareholders' Meeting called to approve the financial statements for the fiscal year ended on December 31, 2019

Alternate Statutory Auditors

RBB Group

Represented by Mr. Philippe Rouer

133 bis rue de l'Université, 75007 Paris, France

Start date of first term: appointed by the General Shareholders' Meeting of September 17, 2014

Duration of current term: six fiscal years from the date of appointment (General Shareholders' Meeting of September 17, 2014)

End date of current term: at the end of the General Shareholders' Meeting called to approve the financial statements for the fiscal year ended on December 31, 2019

2.2 Information on auditors that have resigned, been removed or not been reappointed

Since its reappointment at the Combined General Shareholders' Meeting of June 13, 2018, Ernst & Young et Autres has been represented by Cédric Garcia, who replaced Franck Sebag.

3 Risk factors

Investors are advised to consider all the information contained in this Universal Registration Document, including the risk factors described in this chapter, before deciding to acquire or subscribe for shares of the Company.

The risk factors set out in this Universal Registration Document are limited to only those risks that the Company considers, at the date of this document, to be specific to it and/or its securities and that are important for making an informed investment decision, as corroborated by the content of this Universal Registration Document and as may be corroborated by those indicated in a future securities note.

In preparing this document, the Company has assessed the importance of risk factors based on the likelihood of their occurrence and the estimated magnitude of their adverse impact. It has thus categorized the various risks according to its scientific and economic model, namely:

Risks related to the development of its drug candidates: the Company is working on drug candidates at the pre-clinical and clinical stages, which implies certain specific risks related to experimental and theoretical research, or to the early phases of verification of the properties of a potential future drug;

Risks linked to the partnership strategy: the Company currently has two products in partnership (with Boehringer Ingelheim and Servier), which implies various risks inherent in the relationships with its partners and the development phases to be carried out;

Risks related to marketing drugs: the Company is working towards the future marketing of drug candidates, either within the framework of its partnerships or for products that it could market itself in certain geographic areas; in all cases, this implies obtaining the regulatory approvals necessary for such marketing;

Risks linked to intellectual property rights: being in a research field, the Company is highly exposed to risks related to the protection of its intellectual property, mainly patents but also other intellectual property.

Risks linked to capital requirements: to date, the Company has not needed to obtain financing in the markets and has therefore been able to limit shareholder dilution; nevertheless, research programs are very capital-intensive and without new money, the Company would not be able to pursue all of its programs and projects.

The Audit Committee thus reviewed the risk mapping prepared by the Company's Management. This chapter, prepared in line with this mapping, was submitted to the Audit Committee at its meeting of March 23, 2020.

As of the date of this Universal Registration Document, the risks described below are those identified by the Company as being likely to materially impact its business, outlook, financial position, income or ability to achieve its objectives.

The table below summarizes the main risks organized according to the five categories described above. Within each category, the residual risks remaining after the implementation of management measures are classified according to the level of criticality (combination of probability of occurrence and estimated impact) assessed during risk mapping. Only risks assessed with a "significant" level of criticality are detailed in this chapter.

3.1	Risks linked to the development of our drug candidates	Probability of occurrence	Estimated impact
3.1.1	Risks linked to product development	High	High
3.1.2	Risks linked to the completion of the clinical and preclinical phases of its products in development	High	High
3.1.3	Risk of dependency or operational delay in relation to programs under development	High	Moderate
3.1.4	Risks of default of subcontractors (and in particular those linked to the outsourcing of clinical trials in the manufacture of products)	High	High
3.1.5	Risks linked to immunotherapeutic approaches used by the Company	Moderate	High
3.2	Risks linked to the partnership strategy		
3.2.1	Risks linked to research and dependency with respect to current and future partnerships	High	High
3.2.2	Risks linked to potential conflicts that may affect the Company's relationship with its licensees	Weak	Moderate
3.3	Risks linked to marketing		
3.3.1	Risks linked to obtaining a Marketing Authorization (MA)	High	Moderate
3.3.2	Risks linked to the lack of commercial success of the products.	High	Moderate
3.3.3	Risks linked to changes in drug reimbursement policies	High	Moderate
3.4	Risks linked to intellectual property rights		
3.4.1	Risks linked to uncertain protection of patents and other intellectual property rights	Moderate	High
3.4.2	Risks linked to patents and intellectual property rights held by third parties	Weak	High
3.4.3	Risks associated with the introduction of liability, in particular product liability risks	Moderate	High
3.5	Risks linked to capital requirements		
3.5.1	Risks linked to the financing requirement of the business	High	Critical
3.5.2	Risks linked to access to public grants and to the research tax credit	Moderate	Moderate
3.5.3	Valuation of intangible assets and impairment tests	Moderate	Moderate

3.1 Risks linked to the development of our drug candidates

OSE Immunotherapeutics is active in the biotechnology sector and in particular in the field of immunotherapy. The Company develops neoepitopes that specifically stimulate T lymphocytes (small peptides of interest derived from tumor antigens - Tedopi®) and biotherapies that are agonists or antagonists of immunological targets that block or activate immune responses.

It thus combines research and development expertise in the fields of immunoregulation and immune-activation, with complementary teams developing projects at the start-up and later clinical stages.

3.1.1 Risks linked to product development

The Company's ability to make judicious strategic and scientific choices, such as the choice of an indication for a given drug, the choice of a partner or the choice of a drug at the various stages of development, is essential to ensure the Company's continued operations. The organization of the various management bodies, as well as the use of external expertise, is designed to limit risk and thus optimize decision-making.

The Company has preclinical and clinical programs leading to the eventual marketing of therapeutic options in immuno-oncology and autoimmune diseases. Product development is a long and costly process that takes place in several phases with uncertain outcomes. The objective is to demonstrate the therapeutic benefit provided by the product with good tolerance for one or more given indications, compared to existing products or products in development.

Each human clinical trial is subject to prior approval and/or post-approval and all development data is evaluated by the competent regulatory authorities, according to its development plan (in particular the EMA - European Medicines Agency, and the FDA - Food & Drug Administration).

These regulatory authorities could prevent the Company from undertaking clinical trials or pursuing clinical development if it is found that the data submitted have not been produced in compliance with applicable regulations or if they consider that the relationship between the expected benefits of the product and its potential risks is insufficient to justify the trial. In addition, the Company may elect, or the regulatory authorities may require the Company, to suspend or terminate clinical trials if patients are exposed to unexpected and serious risks. Deaths and other adverse events, whether or not related to the treatment under trial, could occur and require the Company to delay or stop the trial and thus prevent the Company from continuing the development of its product in the targeted indication or in other indications.

In addition, the conduct of clinical trials and the ability to recruit patients into these trials depends on many factors such as:

- The nature of the targeted indication;
- The number of patients affected by the targeted pathology and eligible for treatment;
- The evolution of the pathology of the patients included in the trials;
- The existence of other clinical trials involving the same population;
- The ability to convince clinical investigators to recruit patients into trials;
- The ability to recruit and treat patients at a given clinical investigation center; and
- Availability of sufficient quantities of the product under study.

The number of patients who can and want to participate in a clinical trial is limited and recruitment can be difficult and slow, leading to excessive delays in conducting clinical trials. In order to overcome this difficulty, the Company may have to increase the number of clinical centers or service providers, which increases the complexity of the follow-up and the cost of the trial.

In addition, the COVID-19 strain of coronavirus, which is spreading in many countries, including France, or an equivalent crisis, could lead to an extension of the duration of ongoing clinical trials or, more generally, to disruptions that could have a material adverse effect on the Company's business and its clinical trials, in particular:

- Delays or difficulties in recruiting patients for its clinical trials;
- Delays or difficulties in launching clinical sites, including difficulties in recruiting investigators and clinical site staff;
- Diversion of health care resources from the conduct of clinical trials, including the diversion of hospitals used as sites for the Company's clinical trials and of hospital personnel supporting the conduct of such clinical trials;
- The interruption of key clinical trial-related activities, such as the monitoring of clinical trial sites, due to travel restrictions imposed or recommended by federal or state authorities, employers or others; and
- Limitations of human resources that would normally be focused on the conduct of the Company's clinical trials, in particular due to diseased employees or members of their families or the desire of employees to avoid all contact with significant groups of persons.

In addition to the risks listed above, and in the context of clinical trials conducted by the Company in countries that are experiencing an increased impact from the COVID-19 coronavirus, the Company could also experience the following adverse impacts:

- Delays in obtaining authorizations from the administrative authorities necessary to launch the clinical trials planned by the Company;
- Delays in the receipt by clinical sites of supplies and equipment required to conduct the Company's clinical trials;
- The interruption of global maritime trade that could impact the transportation of clinical trial materials, such as investigational drugs and drugs used as the basis for comparison in the Company's clinical trials;
- Changes in local regulations as a result of the COVID-19 coronavirus outbreak, which could require the Company to modify the terms of its clinical trials, which could result in unforeseen costs or even the interruption of such trials;
- Delays in necessary interactions with local authorities, ethics committees or other key agencies and third-party contractors due to human resource limitations or forced leaves of absence of government employees; and
- The refusal of regulatory authorities to accept data from clinical trials conducted in these affected geographic areas.

These same disruptions could materialize in the event of an outbreak of another contagious disease or another strain of a virus.

For trials for which all or part of the execution is entrusted to service providers, the Company depends on their ability to perform their services under the agreed conditions and within the agreed deadlines. The remoteness or geographical distribution of clinical investigation centers may raise operational and logistical difficulties, which could result in costs and delays. The disruptions related to the COVID-19 health crisis described above or an equivalent crisis could similarly affect the Company's service providers (see also 3.1.4 below).

Clinical trials are expensive. If the results of these tests are not satisfactory or conclusive, the Company may have to choose between abandoning the program, resulting in the loss of the financial investment and the corresponding time, or continuing it, with no guarantee that the additional expenses incurred will be successful.

Many pharmaceutical companies have experienced significant setbacks in clinical trials, including at an advanced stage or during the regulatory approval process, even after promising results.

The Company's inability to conduct and successfully complete clinical trials could have a material adverse effect on its business, outlook, financial position, income and development. Although these risks are common to all players in the pharmaceutical industry, they are all the more significant for the Company given its limited financial and human resources capacities.

In addition, the communication of erroneous interim or final results of clinical studies could have a significant impact on the Company's reputation with key audiences such as the scientific and medical world, pharmaceutical companies or financial markets. The definition and implementation of a communication plan that includes a process for reviewing outgoing data limits this risk.

3.1.2 Risks linked to the completion of the clinical and preclinical phases of its products in development

The risks encountered are linked to the risks of research and development of innovative products - neoepitopes, agonist or antagonist monoclonal or bispecific antibodies, in immuno-oncology and in autoimmune diseases.

The development risks for these biotechnology products are linked to the development stages to be completed: humanization of the antibody and bioproduction - pharmaceutical development stages - pharmaco-toxicology stages - various clinical stages with a view to completing a registration dossier in a specific clinical indication.

IN CLINICAL PHASE

IN IMMUNO-ONCOLOGY

Tedopi®

Advanced non-small cell lung cancer

Tedopi® is a patented combination of 10 neoepitopes selected and optimized from five tumor antigens (Memopi® technology). These 10 neoepitopes generate a specific cytotoxic T cell response directed against tumor cells that express at

least one of these tumor antigens. The selected epitopes are chemically optimized and combined to avoid immune tolerance phenomena (known as "neoepitopes"). Tedopi® is a personalized treatment for HLA-A2+ patients, a key receptor for cytotoxic response.

Tedopi® has just validated the first step of its Phase 3 clinical trial in advanced non-small cell lung cancer (trial named Atalante 1), in invasive stage IIIB or metastatic stage IV in Europe, the United States and Israel. It aims to evaluate the benefits of the product in HLA-A2 positive patients in second- or third-line treatment after failure of checkpoint inhibitor therapy, a specific population for which no validated treatment is currently available and for which there is a strong medical need. The main assessment criterion is overall survival. The trial was planned in two steps: a first step including approximately 100 patients overall with a planned analysis of data on the percentage of patients achieving 12 months survival. At the end of this first step, and depending on the results obtained, the Company had to decide on the best development strategy for Tedopi® in lung cancer after failure of checkpoint inhibitor therapy.

On April 1, 2020, the Company announced the positive outcome of the step 1 protocol of the Tedopi® Phase 3 clinical trial. Analysis of the data showed that the primary endpoint for this step was achieved with a 12-month survival rate in patients treated with Tedopi® and a 10% absolute difference in this survival rate compared to chemotherapy.

These results confirm the value and therapeutic benefit of Tedopi® in a patient population for which there is no validated treatment to date, and which is awaiting new therapeutic options. The Company will initiate discussions with the regulatory authorities to analyze these positive clinical results and determine the best options to pursue the development of Tedopi® and maximize the positive benefit/risk ratio data obtained. At the same time, given the significant enhanced value of Tedopi® as a result of these positive Phase 1 results, the Company continues to explore potential partnership opportunities for its product.

Due to the global epidemic of COVID-19, the Company, in conjunction with the Independent Data Monitoring Committee (IDMC)* and the Trial Steering Committee, analyzed the potential impact of this epidemic on the Atalante 1 trial. The clinical trials data could be strongly impacted by the worldwide COVID-19 pandemic and by the increased risk posed to patients with advanced lung cancer, as COVID-19 is able to cause serious pulmonary complications in these particularly vulnerable patients. Moreover, for the patient safety, several scientific and medical societies currently recommend the voluntary suspension of new patient recruiting in clinical trials in oncology.

Consequently, on the recommendation of the IDMC and the Atalante 1 Steering Committee, OSE Immunotherapeutics has decided to voluntarily and definitively suspend screening and enrollment of new patients in the Step 2 initially scheduled in the trial that will therefore not be conducted. The Company will continue additional analyses of the Step 1 data and initiate discussions with the regulatory authorities to determine the best path to take for development of the product, in view of the high unmet therapeutic need of the population of patients suffering from advanced lung cancer following failure of treatment by checkpoint inhibitor.

As provided for in the Atalante 1 trial protocol, an Independent Data Monitoring Committee (IDMC) is in charge of regularly reviewing the data collected throughout the trial. This independent committee of scientific experts, customary in large multicenter randomized clinical trials, is responsible for assessing study progress, tolerability data and key efficacy criteria in the interest of patients.

Pancreatic cancer

Tedopi® is currently undergoing a Phase 2 clinical trial in pancreatic cancer (trial named TEDOPaM), in collaboration with the GERCOR cooperative group in digestive oncology, the trial sponsor, and with the support of Bristol-Myers Squibb, which provides Opdivo®.

The TEDOPaM clinical trial, with 3 treatment arms, aims to evaluate Tedopi® as maintenance therapy alone or in combination with the checkpoint inhibitor Opdivo® versus maintenance therapy with Folfiri in locally advanced or metastatic pancreatic cancer. It is conducted in HLA-A2 positive patients whose disease is stable after four months of standard chemotherapy with Folfirinox (chemotherapy combining folinic acid, fluorouracil, irinotecan and oxaliplatin).

The main risk associated with Tedopi® is more specifically related to the Phase 3 trial which would not demonstrate a sufficient benefit/risk ratio and could lead to additional requests from the drug agencies in Europe and in the United States.

Furthermore, in view of the COVID-19 situation, GERCOR indicated at the end of March 2020 the continuation of patient screening but the provisional suspension of recruitment of new patients in the TEDOPaM study.

BI 765063 (OSE-172)

BI 765063 (OSE-172) is a monoclonal antibody antagonistic to the SIRP-alpha target, a receptor highly expressed by myeloid cells and suppressor macrophage cells present in the tumor microenvironment and promoting tumor growth. This checkpoint inhibitor is part of the transformation of cells described as TAMs (Tumor-Associated Macrophages), and MDSCs (Myeloid-Derived Suppressor Cells) to block these cells predictive of poor prognosis and transform them into good-prognosis cells. BI 765063 is in Phase 1 clinical trial in advanced solid tumors, with the first patient having been included in June 2019.

As of the date of this Universal Registration Document, due to the COVID-19 crisis, the screening and inclusion of new patients in the study are temporarily suspended.

IN AUTOIMMUNE DISEASES

FR104

FR104 is an immunomodulator consisting of an optimized monoclonal antibody fragment targeting the CD28 receptor, a key component of the destruction function of effector T lymphocytes which are deleterious in autoimmune diseases and transplantation. The Phase 1 clinical study of the product showed positive clinical results in healthy volunteers.

FR104 was the subject of a license option agreement with the pharmaceutical group Janssen Biotech Inc. in 2013. The license option was exercised in July 2016, following positive Phase 1 results for the further pharmaceutical and clinical development of the product. The Company has regained the worldwide rights to FR104 from Janssen Biotech Inc. as of December 31, 2018, including FR104's intellectual property rights and exclusive access to all data, records and materials developed by Janssen Biotech on this program.

Janssen Biotech's decision to return the FR104 program to OSE Immunotherapeutics was motivated by an internal strategy review and prioritization of its own product portfolio. Since then, the Company has been evaluating the best options for the next steps of development of the product, ready to enter the planned Phase 2 clinical trial in autoimmune diseases or transplantation, including worldwide partnership opportunities.

If the Company, alone or in partnership with a potential licensee, plans a Phase 2 clinical trial for the FR104 product, such trial may not take place for scientific reasons, such as new data that cannot be predicted at this time, or non-scientific reasons related to a different strategic orientation of a potential partner's Company.

The risks associated with FR104 are related to its clinical development and the potential options for conducting this development, including worldwide partnership opportunities.

OSE-127 (ulcerative colitis)

OSE-127 is an immunomodulatory monoclonal antibody that targets the CD127 receptor, the alpha chain of the Interleukin 7 receptor.

OSE-127 is subject to a two-step licensing option granted to Servier for its development and marketing in autoimmune diseases. This licensing option will allow the product to be developed until the completion of a Phase 2 clinical trial. Following positive Phase 1 clinical results for OSE-127 and the exercise of Option 1 in February 2019, two independent Phase 2 clinical trials are scheduled to start in 2020: in Sjögren's syndrome, sponsored by Servier, and in ulcerative colitis, sponsored by OSE Immunotherapeutics. Option 2 is expected to be exercised upon completion of these two Phase 2 studies, with priority being given to the study in Sjögren's syndrome. Further development beyond Phase 2, if Phase 2 of this licensing option is validated, will be carried out by Servier.

The Phase 1 study results showed a good safety and tolerability profile for OSE-127. All pharmacokinetic and pharmacodynamic parameters were consistent and demonstrated dose-proportionality throughout the dose escalation to 10 mg/kg. Nevertheless, the efficacy of OSE-127 will have to be demonstrated in Phase 2 clinical trials in ulcerative colitis and

Sjogren's syndrome. In addition, if Servier decides not to exercise Option 2 at the end of Phase 2 clinical development, the continued development of the product could be compromised for scientific (such as new data that cannot be predicted at this time) or non-scientific reasons (such as related to a new strategic orientation for Servier).

The risks associated with OSE-127 are linked to the results of its clinical development and its continued development within the framework of a partnership.

In clinical terms, the start of the two Phase 2 studies planned for 2020 will depend on the evolution of the situation of COVID-19. These studies can only be set up once all stages of preparation have been completed and hospitals and healthcare professionals are in a position to ensure the safe conduct of a clinical trial and patient care.

IN PRECLINICAL PHASE

IN IMMUNO-ONCOLOGY

OSE-703 (solid tumors including non-small cell lung cancer)

OSE-703 is a humanized monoclonal antibody directed against the extracellular portion of the alpha chain of the Interleukin 7 receptor (CD127), and cytotoxic to human cells expressing CD127. It was the subject of a research collaboration with the Memorial Sloan Kettering Center in New York, the objective of which was to evaluate the product in solid tumors with a first model in non-small cell lung cancer (NSCLC).

Since OSE-703 is in the preclinical phase, there is a risk that the evaluation of this product may not allow its further clinical development.

BiCKI®, a new platform of bispecific inhibitors of control points targeting the PD-1 receptor and other innovative targets

The novel bispecific fusion protein platform is built around a key backbone component anti-PD-1 (OSE-279), a new standard cancer treatment, merged with innovative immunotherapy targets, as yet undisclosed, with the exception of the first product from this platform: targeting IL-7. The BiCKI® platform aims to inhibit key immune control point inhibitors while simultaneously delivering cytokines capable of modulating regulatory T cells, and/or increasing the responses of depleted T cells within the tumor. It can also incorporate other therapeutic modalities to modify the tumor microenvironment by delivering, for example, costimulation signals to restore the activity of antitumor T lymphocytes or restore the phagocytic and polarization functions of macrophages.

Based on an anti-PD-1 bifunctional antibody platform technology, BiCKI® is designed to expand the type of patients responding to immunotherapies. This is the second generation of PD-(L)1 inhibitors used to increase antitumor efficacy in hard to treat cancers by addressing untapped immune escape mechanisms.

RESEARCH & DEVELOPMENT

In R&D, the Company is developing other agonist or antagonist monoclonal or bifunctional antibodies targeting new receptors of interest in immuno-oncology, autoimmune and inflammatory diseases.

The risks associated with these products are the usual risks of research and development.

To identify and validate new therapeutic targets, the Company works in close collaboration with academic and university research centers.

The risks associated with this academic collaboration are the usual risks associated with research.

3.1.3 Risk of dependency or operational delay in relation to programs under development

OSE Immunotherapeutics is a biotechnology company focused on developing innovative immunotherapies acting on activator or suppressor cells to stimulate or inhibit the immune response for immuno-oncology and autoimmune diseases and

transplantation. It develops next generation products optimized to better target the key receptors of the immune response's activation or regulation, allowing the therapeutic effect to be sustained over time. The Company aims to become a leading international player in the field of immunotherapy with an innovative technology base and expertise in the selection and optimization of receptor targeting that will lead to significant therapeutic advances.

It masters the technologies of immunoregulation and immuno-activation of the immune system with complementary international teams and expertise involved in the research and optimization of drug candidates, pharmaceutical development, clinical development and registration.

The Company has a diversified portfolio of advanced immunotherapy products ranging from Phase 3 to Phase 1 clinical and preclinical development. These next generation products have independent development risks and could be attractive to different players in the pharmaceutical industry. They may be subject to early or late licensing for specific regions and/or with pharmaceutical partners interested in one of the clinical areas targeted by the Company (immuno-oncology, autoimmune diseases, transplantation).

Research and development programs aimed at identifying new candidate products require significant technical, financial and human resources. While research programs may initially show promise in identifying potential candidate products, there can be no assurance that such programs will be successful in generating products suitable for clinical development that could attract the interest of potential partners, in particular because of the following factors:

The research method used may not identify potential candidate products;

Or the candidate products could, as a result of new studies or clinical trials, be difficult to produce, ineffective, unstable, have dangerous side effects, undifferentiated properties, or other characteristics suggesting their likely ineffectiveness or potential harm.

If the Company were unable to develop these innovative products for the various immunological targets identified in its research and development programs, it would encounter difficulties in finding new partners, and its business, financial position, income, development and medium- and long-term outlook would be significantly impacted.

The development of a drug requires the involvement of highly qualified personnel. The departure of research and development experts could present a risk to the Company with a possible delay in development before the recruitment of key complementary skills.

The future success of the Company and its ability to generate long-term revenues will depend on the successful development as well as the commercial success of its activating or regulatory immunotherapy products developed against cancer or autoimmune diseases, and in particular on the occurrence of numerous factors, such as:

For Tedopi®: the validation with the health authorities of the first step of Phase 3, completed in March 2020, in lung cancer after failure of a checkpoint inhibitor; the success of the ongoing Phase 2 clinical trial of Tedopi® as monotherapy or in combination with Opdivo®, a checkpoint inhibitor, in pancreatic cancer (this Phase 2 trial being sponsored by GERCOR and supported by Bristol Myers Squibb);

For BI 765063 (OSE-172): this program, developed under an exclusive worldwide collaboration and licensing agreement with Boehringer Ingelheim Internal GmbH, is expected to successfully complete its ongoing Phase 1 clinical trial in advanced solid tumors and the subsequent steps of its clinical development in immuno-oncology;

For OSE-703: the continuation or not of preclinical development following collaboration in particular with the Memorial Sloan Kettering Cancer Center in solid tumors, and depending on the results obtained with models in non-small cell lung cancer and mesothelioma cancer;

For FR104: the Company has regained the worldwide rights to the product from Janssen Biotech as of December 31, 2018. Following positive Phase 1 clinical results, the Company is evaluating the best options, including worldwide partnership opportunities, to continue the clinical development of the product;

For OSE-127: this program, developed under the 2-step licensing option with Servier, after successfully completing its Phase 1 clinical trial to evaluate its potential in autoimmune inflammatory diseases, will have to successfully complete the Phase 2 clinical stage, with priority in Sjögren's syndrome (Phase 2a led by Servier), or in ulcerative colitis (Phase 2 led by OSE Immunotherapeutics), before this program can be supported by Servier;

For research and development programs on other products developed by the Company, the establishment of partnerships and/or licensing agreements;

Marketing authorization ("MA") granted or not by the regulatory authorities;

Production on an industrial scale and in sufficient quantities of pharmaceutical batches of constant and reproducible quality;

The acceptance or non-acceptance of the Company's products by the medical community, healthcare prescribers and third-party payers (such as social security systems), and their effective commercial success.

Thus the most common risks encountered are the following:

In general, as with any new drug development, there is a significant risk if the lack of efficacy of the product is proven, or if serious adverse events occur, which would have a negative impact on the outcome of the study. Similarly, the project may not succeed if the number of patients admitted to the clinical studies is insufficient to conclude efficacy. In addition, unforeseen risks of intolerance, or changes in applicable regulatory requirements could affect the timing and nature of clinical development activities, the relative costs and the timing of payments contingent upon completion of the various phases and the reimbursement of expenses.

If the Company's products were to prove ineffective or have unacceptable side effects, it would be impossible to market them, which could have a material adverse effect on the Company's business or outlook, financial position, income and development.

The risk linked to the failure to develop its products is highly related to the stage of maturity of the drug and is necessarily inherent to the Company's business. For the development of the drug in Phase 3 in lung cancer, the Company believes that there is a lower risk in Phase 3 (compared to Phase 2 projects) of not reaching the marketing authorization stage.

For Tedopi®, regulatory approvals may not be obtained, may be delayed pending new clinical trials, or may only be obtained under more restrictive conditions;

The current COVID-19 health crisis, the appearance of another contagious disease or another strain of a virus leading to quarantine, the total or partial paralysis of the economy and/or the hospital system in any form whatsoever, particularly in the countries in which the Company is conducting or planning to conduct clinical trials, could lead to a suspension or even a complete halt in recruitment, which could jeopardize the initial development strategy of the product; or delay the conduct of clinical trials as such or a delay in the regulatory review by the competent authorities;

Existing signed pharmaceutical partners may decide not to complete the development and marketing of candidate drugs due to internal priorities, or may not have adequate resources to complete them;

The exclusive property rights of third parties could prevent the Company and its partners from marketing the candidate drugs;

Authorized products may not find their place on the market and/or be limited in their selling price;

In such a case, the estimates made on the business outlook offered by the market could turn out to be too optimistic.

In the absence of successful development, marketing authorization or commercialization of its drugs, the Company would be unable to generate significant revenue. If development programs are delayed, the Company may be required to raise additional capital or to reduce or discontinue, in whole or in part, its operations, research projects or development programs.

3.1.4 Risks of sub-contractor default (in particular those linked to clinical study outsourcing and product manufacturing)

The Company uses sub-contracting in the conduct of activities and in particular in ongoing clinical trials: the monitoring of patients already included in Phase 3 trials with Tedopi® for lung cancer, whose Step 1 was positive and Step 2 was canceled due to COVID-19, the Phase 2 trial with Tedopi® in therapeutic combination for pancreatic cancer, the Phase 2 trial of OSE-127

for ulcerative colitis planned for 2020, the Phase 1 trial of BI 765063 (OSE-172) for advanced solid tumors, or for the production of clinical lots of these products currently in clinical development.

The Company utilizes sub-contractors to perform certain tasks including the manufacturing of clinical lots and development of complex procedures that must be highly monitored or for the management of these clinical trials. If these sub-contractors fail to carry out their tasks, deliver inadequate performance, or are slower than required or usual, the Company will not be able to successfully produce, develop, or market its products.

In addition, dependency on respect to third-party manufacturers presents additional risks that the Company would not face if it manufactured its own products, i.e.:

Non-compliance of these third parties with regulatory standards and quality control;

Breach of agreements by these third parties;

Termination or non-renewal of these agreements for reasons beyond its control;

Bankruptcy of sub-contractors, resulting in suspension of services, not allowing the Company the time to find an alternative solution.

If the products manufactured by third-party suppliers are non-compliant with regulatory standards, sanctions could be imposed on the Company. These sanctions could include fines, injunctions, civil penalties, refusal by regulatory organizations to grant marketing authorization for its products, delays, suspension or withdrawal of authorizations, license revocations, seizure or product recalls, operating restrictions and legal proceedings, all of which could have a considerable adverse impact on the Company's business.

Moreover, the agreements entered into with sub-contractors usually contain clauses that limit their liability, which means that the Company could possibly not obtain full compensation for any damages that it could suffer as a result of the violation of these commitments by the sub-contractors in question.

In the event that the Company changes manufacturers for its products, it would be required to undergo re-approval of the new manufacturer's processes and procedures in accordance with applicable Good Manufacturing Practices ("GMP") standards. This re-approval could be costly, time-consuming and require the attention of its most qualified staff. If re-approval is not successful, the Company could be forced to look for another supplier, which could delay the production, development, and marketing of its products and increase their manufacturing costs.

Such events could have a material adverse impact on the Company's business, prospects, financial position, results, and development. In order to limit these risks, the Company pays the greatest attention to the importance of its relationships and communications with its sub-contractors. Sub-contractors are evaluated and must undergo strict audits by regulatory agencies and by the Company.

In addition, the Company depends on third parties to supply it with certain biological products (including peptides/adjuvants) needed to manufacture its drugs.

Even if the Company's policy is to build long-term contractual relationships with its strategic suppliers, and rely on large suppliers in the pharmaceutical industry, its provisioning of certain biological products could be limited, interrupted, or restricted. In addition, in such a case, the Company might not be able to find acceptable quality laboratory products from other suppliers, in the necessary volumes or at an acceptable cost. If its key suppliers or manufacturers are unreliable or its supply of products or materials is reduced or interrupted, it might be unable to develop, produce, and then market its products in a timely and competitive manner.

If the Company encounters difficulties in the provisioning of its biological products or is unable to maintain its sub-contracting agreements, sign new agreements, or obtain the biological products necessary for the development and manufacturing of its products in the future, its business, prospects, financial position, results, and development could be materially impacted.

Finally, the current COVID-19 health crisis, the appearance of another contagious disease or strain of virus could also create disturbances among the Company's sub-contractors that could have a material adverse impact on the Company's business, and clinical trials, in particular:

- delays or difficulties in provisioning, manufacturing, or transport of biological products, supplies, or materials necessary to conduct the Company's clinical trials;

- diversion of resources to produce complex procedures;

- changes in regulatory and quality-control standards applicable to sub-contractors, making their services more time-consuming, costly or even impossible; and

- limitations of human resources that would normally be the Company's responsibility, in particular due to diseased employees or members of their families or the desire of employees to avoid all contact with significant groups of persons.

3.1.5 Risks linked to the immunotherapeutic approaches used by the Company

The Company develops agonist or antagonist immunotherapy products used to activate or regulate the immune system, fight against cancer and immune diseases linked to autoimmune diseases and transplantation.

In immuno-oncology

As of the date of this Universal Registration Document, there are several registered anti-cancer immunotherapy products on the market.

The first immunotherapy products against cancer are checkpoint inhibitors acting on T cells (Yervoy® BMS, Opdivo® BMS, Keytruda® Merck, Tecentriq® Roche, Imfinzi® Astra Zeneca, Pfizer/Merck Serono, Bavencio® Merck, and others registered or being registered), and a therapeutic vaccine, Provenge®.

Provenge®, the first immune activation product on the market in this area, is a cell therapy product to combat prostate cancer that was licensed in the United States in 2010 (Provenge® or sipuleucel-T, developed by the U.S. company, Dendreon, subsequently acquired by the pharmaceutical company, Valeant).

Checkpoint inhibitors acting on T lymphocytes

A new class of products called checkpoint inhibitors (non-specifically removing the blocking of cytotoxic T cells) has also entered the market. Checkpoint inhibitors were first registered for melanoma since 2011, then for lung cancer from 2014 to 2018 and for other indications.

Yervoy® (ipilimumab, BMS and ONO): this first entry is a monoclonal antibody (preventing the immunosuppressive inhibition of T lymphocytes called CTLA4). It has been registered worldwide for metastatic melanoma since 2011. A combination of Yervoy® and Opdivo® was authorized for a special type of melanoma (compared with BRAF); these two products were already registered for this indication. In 2018, the product was registered in combination with nivolumab (Opdivo®) in metastatic colorectal cancer and in first-line treatment of renal cancer.

Opdivo® (nivolumab, BMS and ONO): a monoclonal antibody/checkpoint inhibitor acting on as a brake on other T lymphocytes called PD-1. First marketing authorization: December 2014 (metastatic melanoma). Since then, Opdivo® has been registered in metastatic non-small cell lung cancer (NSCLC) (2015), renal cancer (2015), Hodgkin's lymphoma (2016), head and neck cancer (2016), bladder cancer or urothelial carcinoma (2017), metastatic colorectal cancer (MSH-H or dmmr) (2017), hepatocellular carcinoma (liver cancer 2017) and small cell lung cancer (2018). In 2018, the product was also registered in combination with ipilimumab (Yervoy®) in metastatic colorectal cancer and in first-line therapy in renal cancer.

Keytruda® (pembrolizumab, Merck & co): second monoclonal antibody targeting the same PD-1 inhibitor.

First marketing authorization: 2014 (metastatic melanoma). Since then, Keytruda® has been registered in non-small cell lung cancer (NSCLC) (2015), head and neck cancer (2016), Hodgkin's lymphoma (2017), bladder cancer or urothelial carcinoma (2017), gastric cancer or gastro esophageal junction cancer (2017), cervical cancer (2018), diffuse large B cell lymphoma (June 2018), hepatocellular carcinoma (liver cancer 2018), Merkel cell carcinoma (an aggressive skin tumor) (2018), renal cancer (2019), esophageal cancer (2019) and endometrial cancer (2019).

After registration in 2015 as a second-line therapy for patients suffering from metastatic non-small cell lung cancer (NSCLC) with a biomarker for PD-1 expression, in October 2016, Keytruda® was licensed as a first-line therapy in NSCLC for patients with strong PD-1 marker expression (proportion of PD-L1 factor expressed at over 50% for the tumor). In May 2017, Keytruda® obtained its conditional registration in first-line therapy (in combination with pemetrexed and carboplatin) in NSCLC,

whatever the PD-L1 expression. In August 2018, Keytruda® was registered in first-line therapy (in combination with pemetrexed and platinum-based chemotherapy) in metastatic non-epithelial NSCLC without tumor-genomic aberration of the EGFR or ALK gene. In October of the same year, is was registered in first-line therapy (in combination with carboplatin and paclitaxel) in NSCLC, whatever the PD-L1 expression. In April 2019, the product was registered in first-line monotherapy for stage III NSCLC (PD-L1 proportion expressed at over 1% at the tumor level).

Tecentriq® (atezolizumab, Genentech - Roche): designed to target the PD-L1 protein (a PD-1 ligand acting on the same pathway as T lymphocyte inhibitors), was approved in the United States for bladder cancer in May 2016, with a companion test to identify PD-L1 positive patients (Ventana PD-L1-SO 142 assay). In October 2016, this product was registered for the treatment of lung cancer as a second-line therapy for patients suffering from metastatic non-small cell lung cancer (NSCLC) whose disease has progressed during or after platinum-based chemotherapy, and during an appropriate targeted treatment in the presence of a tumor with EGFR or ALK gene mutation. In December 2018, Tecentriq® obtained its registration as a first-line therapy for metastatic non-epithelial NSCLC in combination with Avastin® and chemotherapy. In March 2019, the product was registered in metastatic triple negative breast cancer and in first-line therapy of small cell lung cancer.

Bavencio® (avelumab, Merck Darmstadt or EMD Serono in collaboration with Pfizer - Javelin program) is a monoclonal antibody targeting the anti-PD-L1 target. This antibody is an IgG1, a cytotoxic antibody. Bavencio® was registered in March 2017 for Merkel cell carcinoma (an aggressive skin tumor), and in May 2017 for bladder cancer or urothelial carcinoma.

Imfinzi® (durvalumab, Astra Zeneca) is a humanized monoclonal antibody targeting the PD-L1 ligand. It was registered for bladder cancer (May 2017) and for unresectable non-small cell lung cancer (February 2018) in patients whose cancer has not progressed after chemo and radiotherapy. Tremelemumab, an anti-CTLA-4 drug (Astra), was developed in combination with durvalumab, from the same company, for various indications.

Many monoclonal antibodies targeting PD-1 or its PD-L1 ligand are being developed in the United States, Europe and especially in China.

Third-line treatments for advanced lung cancer are offered but are essentially palliative. To date there is no approved treatment available for patients who are unresponsive to checkpoint inhibitors.

The Company is developing, in partnership with Boehringer Ingelheim International, a new generation checkpoint inhibitor called BI 765063 (OSE-172), that acts on suppressor myeloid cells and macrophages. The Company received licenses from French and Belgian health authorities in March 2019 for Phase 1 clinical trials of the product for different types of solid cancer but does not yet have any results. Presently, there is no certainty that appropriate clinical results will be obtained for the remainder of the development with competitive advantages that remain to be demonstrated clinically.

The products developed by the Company are immunotherapies for which preclinical and clinical data on their safety and efficacy are still limited. Many uncertainties therefore weigh on the prospects for the development and profitability of products resulting from these technologies as long as their safety, efficacy, and acceptance by patients, medical doctors and healthcare payers have not been established.

If the Company has success in the Phase 2 trial of Tedopi® for the treatment of lung cancer (positive results obtained on a limited number of patients), the results might not be confirmed in subsequent phases on a greater number of patients (Phase 3 trials include a greater number of patients than Phase 2 trials). The positive results in Step 1 of the Phase 3 clinical trial (N=99 patients), conducted for non-small cell lung cancer following failure of checkpoint inhibitor treatment, demonstrated that the main criterion of this step had been reached with a 12-month survival rate in patients treated with Tedopi® and a 10% absolute difference in the survival rate compared with chemotherapy. These results confirm the therapeutic interest of Tedopi®. The Company will continue additional analyses of the Step 1 data and initiate discussions with the regulatory authorities to determine the best path to take for development of the product, in view of the high therapeutic need of the population of patients suffering from advanced lung cancer following failure of treatment by checkpoint inhibitor.

Moreover, due to the worldwide COVID-19 epidemic, on the recommendation of the IDMC and the Steering Committee of the study, the Company decided to voluntarily and definitively suspend screening and recruitment of new patients in the Step 2 initially planned in the trial that will thus not be conducted.

The clinical trials data could be strongly impacted by the worldwide COVID-19 worldwide pandemic and by the increased risk posed to patients with advanced lung cancer, as COVID-19 is able to cause serious pulmonary complications in these particularly vulnerable patients. Moreover, for patient safety, several scientific and medical societies currently recommend the voluntary suspension of new patient recruiting in clinical trials in oncology.

Moreover, as more and more frequently in oncology, the Company's products must be administered in combination with other therapies. Many uncertainties therefore weigh on the prospects for the development and profitability of products resulting from these technologies as long as their safety, efficacy, and acceptance by patients, medical doctors and healthcare payers have not been established.

Autoimmune diseases

The immunological treatment of autoimmune diseases is based on three approaches:

Eliminate pathogenic autoantibodies (plasmapheresis method), modulate activation of lymphocytes and synthesis of cytokines (immunosuppressors such as corticosteroids, cyclosporin A, the molecules interfering with purine metabolism such as azathioprine (Imurel®) or mycophenolate mofetil (Cellcept®) and, in a more targeted fashion, modify the immune response to make it non-pathogenic (immunomodulation, for example, by inhibiting the cytotoxic action of TNFα by anti-TNFα antibodies by blocking B lymphocytes by anti-CD20s).

The key players in the autoimmune disease market are pharmaceutical groups Johnson & Johnson (J&J), AbbVie, Amgen, Genentech/Roche, Astellas, UCB, Eli Lilly, Sanofi, Astra- Zeneca, Novartis and Biogen.

The Company's products are developed on new immunotherapy targets:

FR104 Phase 1 study finalized with positive results, however it is possible that the first results might not be confirmed by the later clinical phases.

OSE-127 showed positive Phase 1 results (evaluated in healthy volunteers) with a good safety and tolerability profile and a dosing and administration schedule defined for the Phase 2 clinical trial which must demonstrate product efficacy in patients with Sjögen's Syndrome or ulcerative colitis; no certainty currently exists that appropriate clinical results will be obtained for the rest of their development with competitive advantages that remain to be clinically demonstrated.

In such cases, product development might not be continued, which would have a significant impact on the business, results, financial position, and development of the Company.

3.2 Risks linked to the partnership strategy

3.2.1 Risks linked to research and dependency on current and future partnerships

3.2.1.1 Licensing and license option agreements

To develop and market products, the Company seeks to enter into agreements for collaboration and licensing with pharmaceutical companies that can assist it in drug development and financing. As of the date of this Universal Registration Document, the Company has four licensing and license option agreements.

A first licensing and distribution agreement for Tedopi® in Israel was signed in May 2015 with Rafa Laboratories, a pharmaceutical company specializing in oncology and rare lung diseases, long established on this market promoting innovation.

According to the initial agreement signed in December 2016, OSE Immunotherapeutics granted Servier a two-step license option to acquire the exclusive world rights for development and marketing of OSE-127 until the finalization of a Phase 2 study planned for ulcerative colitis, an autoimmune bowel disease. This agreement, in a total amount that could reach €272 million including an upfront payment of €10.25 million (received in early 2017) and a payment of €30 million upon exercise of a two-step license option (including €10 million on Option 1 - exercised in February 2019 and paid in March 2019 - and €29 upon exercise of Option 2). A March 2020 amendment changes the procedures of the potential exercise of Step 2 of the license option. OSE Immunotherapeutics could receive a milestone payment of €5 million from Servier upon inclusion of the first patient in a Phase 2a clinical study (sponsored by Servier), scheduled to start in 2020 in Sjögren's Syndrome, a systemic

autoimmune disease characterized by an exocrine gland condition affecting the tear and salivary glands. An additional payment of €15 million is expected upon exercise of the option, at the end of the two Phase 2 studies planned, and in priority at the end of the trial focusing on Sjögren's Syndrome.

Subsequent payments will be linked to the clinical development steps, the registration for several indications, then to sales steps with double-digit royalties.

An exclusive worldwide collaboration and licensing agreement was entered into in April 2018 with Boehringer Ingelheim International for the joint development of BI 765063 (OSE-172) for the treatment of advanced solid tumors. Boehringer Ingelheim acquired worldwide rights for the development, registration, and marketing of BI 765063 (OSE-172). According to the terms of the agreement, OSE Immunotherapeutics received an upfront payment from Boehringer Ingelheim in the amount of €15 million, and a total of €15 million in milestone payments following regulatory approval to launch Phase 1 in March 2019 and on inclusion of the first patient in the study.

Overall, the agreement provides for a potential amount of more than €1.1 million according to predefined development steps, marketing authorization, and sales, plus royalties on net worldwide sales of the product.

Finally, a fourth licensing and distribution agreement for Tedopi® in Korea was signed in November 2019 with Chong Kun Dang Pharmaceutical Corporation (CKD), a pharmaceutical company long established in this market promoting innovation.

The Company however cannot guarantee that these agreements will lead to the registration of these products currently in clinical development phases.

Moreover, in the current COVID-19 health crisis, the appearance of another contagious disease or another strain of a virus leading to an equivalent situation (quarantine, total or partial paralysis of the economy and/or the hospital system in any form whatsoever) the Company cannot guarantee that the projections of key clinical steps will be effective, and consequently that the milestone payments will be paid according to the schedule planned by the Company. Likewise, such events could seriously disrupt the activity of current and future partners, and prevent them from using all or a major part of their essential infrastructures, jeopardize their desire to continue their agreements with the Company, suspend developments or co-developments, redirect or limit the resources assigned to conducting the clinical trials to other research programs or delay the progress of clinical trials that they must provide in order for the Company to receive the milestone payments and royalties.

Such events could seriously disrupt the activity of the Company and have a material adverse impact on its business including its ongoing clinical trials, its schedule for obtaining the marketing authorizations, its financial position, and its prospects. It should be noted that on December 31, 2018, OSE regained the worldwide rights for FR104 from Janssen Biotech as part of a worldwide licensing agreement entered into in 2013 followed by the exercise of a license option in July 2016. Janssen Biotech's decision to return the FR104 program to OSE Immunotherapeutics was motivated by an internal strategy review and prioritization of its own product portfolio. Since then, the Company has been evaluating the best options for the next steps of development of the product, ready to enter the planned Phase 2 clinical trial in autoimmune diseases or transplantation, including worldwide partnership opportunities.

When the Company conducts research products and markets its product as part of collaboration agreements, some key tasks or functions are under the responsibility of its partners. Consequently, the Company runs the risk that they will not perform as expected. In addition, the decisions may be under the control of its partners, or subject to their approval. The Company and its partners may also have diverging views on certain matters. Failures in the development process or disagreements in terms of priority could arise and harm the activities conducted under these collaboration agreements. The Company could also encounter conflicts or possible difficulties with its partners during the term of the agreements or when they are renewed or renegotiated. The relationships with its partners could also experience ups and downs.

In addition, if a current or future partner encounters difficulty obtaining its own laboratory products necessary to develop and manufacture its own products or difficulty obtaining the licenses required to this effect (for example for the BI 754091 checkpoint inhibitor from Boehringer Ingelheim for myeloid checkpoint inhibitor, or for Opdivo® from Bristol-Myers-Squibb for pancreatic cancer), there could be a delay, suspension, or re-orientation of the partnership that could significantly impact the business, the prospects, the financial position, the results and the growth of OSE Immunotherapeutics.

All these events could impact the development, the launch and/or the marketing of some of its products or its candidate products and could cause a decline in its revenue and adversely impact its operating income.

In addition, the Company faces standard commercial risks inherent in the biopharmaceutical industry, including, without limitation:

- Competition resulting from existing therapies and/or new drugs;
- Size of the market of the indications of the leading product;
- Pricing of the products and reimbursement policies;
- Interests of partners and potential investors;
- Development time for new clinical trials;
- Protection afforded by patents and the capacity to prevent counterfeits.

More broadly, the Company could fail to adequately estimate the scientific and medical results of the development operations at the time it enters into a partnership agreement, and therefore the compensation linked to these partnerships, or not have the resources or access to all the necessary information to fully assess them, in particular concerning the potential of research and development portfolios, the difficulties linked to production, questions of compliance, and monitoring the outcome of ongoing disputes.

3.2.1.2 Consortium agreements

In order to obtain financial support and public-private scientific collaboration to develop its research programs, the Company seeks to take part in collaborative programs in consortium agreements. As of the date of this Universal Registration Document, several programs have been developed as part of French consortium agreements.

OSE-127 in the EFFIMab consortium, a preclinical and clinical program of €20 million aiming to establish the clinical proof of concept of the product in ulcerative colitis, an autoimmune disease of the colon. EFFIMab is financed in part by the public investment bank Bpifrance in the Industrial-Strategic-Innovation (ISI) program. The consortium is composed of several private and public partners. The failure of one of the partners without possible alternative in spite of the best efforts of the other partners could lead to the failure of the program overall.

BI 765063 (OSE-172) in the EFFI-CLIN consortium (July 2017), a program with funding of €9.2 million, whose aim is to study the tolerability and clinical efficacy of BI 765063 (OSE-172), a new immunotherapy for cancer that will be evaluated as a monotherapy or in combination in various indications where the presence of myeloid cells is a poor prognostic factor. This collaborative project is financed by the French General Investment Commission (CGI) and managed by Bpifrance. The consortium is composed of private and public partners.

OSE-703 obtained funding of €386,000 (December 2017) as part of a call for projects of the French Single Interministry Fund (FUI) - Regions, dedicated to financing projects from competitiveness centers, to identify new monoclonal antibodies and new therapeutic targets in a collaborative program to develop an innovative test enabling the exploration and measurement of the cytotoxicity of monoclonal antibodies. This research project, called HybridADCC, with a total cost of €2.4 million, is financed by the FUI at €1.2 million and was labeled by the Atlanpole Biotherapies center.

Immunomonitor (Treatment Response Monitoring for Cancer Immunotherapies Using Immune Repertoire Analysis), a research project with €435,000 in funding from Bpifrance (July 2018) as part of a European call for projects, Eurostars was conducted in a European consortium with five partners. The objective of this collaborative project is to clinically validate a platform for analysis of immune repertoire sequencing data (TCR, T receptor), of patients treated with Tedopi® immunotherapy.

As part of the consortium agreements, the failure of one of the partners without possible alternative in spite of the best efforts of the other partners could lead to the failure of the program overall.

The Company might not be able to find partners or not find good partners to develop its products. If it finds these partners, they could decide to withdraw from the agreements. The Company might also not be successful in entering into new agreements on its other drugs. In addition, its current and future collaboration and licensing agreements might not bear fruit.

If the Company is unable to maintain its existing collaboration and licensing agreements or enter into new agreements, it may need to study alternative development conditions, including the complete abandonment or sale of some programs, which could hinder, even limit its growth.

The Company might not be able to control either the amount or the schedule of the resources that its existing or future partners will dedicate to the development, manufacturing, and marketing of its products. These partners may not meet their

obligations as anticipated by the Company. This is why it could face significant delays or not be successful in introducing its products on certain markets.

Moreover, in the current COVID-19 health crisis, of the appearance of another contagious disease or another virus strain leading to an equivalent situation (quarantine, total or partial paralysis of the economy and/or hospital system in any form whatsoever), the business activity of the partners could be seriously disrupted, which would prevent them from using all or a large part of their essential infrastructures, jeopardize their desire to continue the agreements reached with the Company, suspend developments or co-developments, redirect or limit the resources allocated to clinical trials to other research programs or delay the progress of clinical trials that they must provide in order for the Company to receive the milestone payments and royalties.

Moreover, even though it seeks to include non-compete clauses in its collaboration and licensing agreements, these restrictions might not be able to offer adequate protection to the Company. Its partners could decide to pursue alternative competing technologies with others.

To successfully complete certain tasks in product development, the Company relies on a network of scientific experts intervening as outside consultants, including researchers attached to academic institutions. To build and maintain such a network in acceptable conditions, the Company faces intense competition. These external advisers can end their commitments at any time. The Company has only limited control over their activities. Most of these scientific advisers, however, are also shareholders of the Company, or benefit from equity incentives in the form of share subscription warrants (BSAs), founders' warrants (BSPCEs) or consulting agreements, thereby enhancing their interest in the success of the Company. On the other hand, the Company considers that its development programs in the cancer immunotherapy segment, its experience in transplantation, autoimmune diseases, its product optimization platforms, its experience, and the professional network of its management are the means of attracting and retaining high quality scientific partners.

The occurrence of one or more of these risks could have a material adverse impact on the business, prospects, financial position, results, and development of the Company. In order to limit the risks linked to current and future partnerships, partnership strategies, strategies for growth and acquisition of new candidates are maintained.

3.2.1.3 Initial partnerships

Risks linked to the off-balance sheet commitments generated by the acquisition of rights with Takeda for Memopi® and the INSERM for FR104 and MD707

As part pf the initial transaction for the acquisition of the Tedopi® (Memopi® technology) assets from the pharmaceutical company Takeda, the Company made a commitment to pay an earn-out at the time its product was registered, then no more than single-digit royalties on future sales (see Section 20 – Major Agreements).

In addition, OSE Immunotherapeutics researchers are working in close collaboration with INSERM researchers. Sometimes, the result of their work leads to patents jointly owned by Effimune/OSE and INSERM, subject to operating agreements.

Two operating agreements have been established with the INSERM for research conducted in collaboration with patents filed as co-property on behalf of Effimune and the INSERM. These agreements grant worldwide operating rights on the patent licenses for each of the agreements:

In October 2011, an operating agreement was signed with the INSERM for the monoclonal antibody project from the MD707 clone targeting the Interleukin-7 alpha receptor. These joint research projects resulted in the filing of a jointly owned patent. This 2011 patent and the antibodies resulting from the patent were studied in various autoimmune disease models, but in view of the results, were not retained for final development. This 2011 patent was thus not used as part of the EFFIMab consortium for development of the OSE-127 product in autoimmune diseases.

In March 2013, an operating agreement was signed with the INSERM for the FR104 antibody including the filing of a jointly owned patent. For the FR104 product, the exercise of the license by Janssen Biotech in July 2016 led to financial settlements with the INSERM.

Depending on the results and advances of different jointly owned products, diverging views and distributions could arise, leading to conflicts or possible difficulties with these entities during the term of its agreements or when they are renewed or renegotiated. The relationships with these entities could also experience ups and downs. More broadly, the Company could

fail to adequately estimate the scientific and medical results of the development operations at the time it enters into an operating agreement, and therefore the compensation linked to these agreements, or not have the resources or the access to all the necessary information to fully assess them, in particular concerning the potential of the research and development portfolios, the difficulties linked to production, questions of compliance, and monitoring the outcome of ongoing disputes.

3.2.2 Risks linked to potential conflicts could affect the Company's relationship with its licensees

The Company's strategy for some of its development products, in particular OSE-127 (2 step license option agreement with Servier) and BI 765063 (OSE-172) (collaboration and licensing agreement with Boehringer Ingelheim International) is to license these latter to pharmaceutical laboratories. The signing of licensing agreements and their outcomes is thus important for the Company.

Likewise, the FR104 program, licensed to Janssen Biotech and taken back in December 2018 could be placed under a worldwide partnership agreement to bring it into a Phase 2 clinical trial in autoimmune diseases or transplantation.

Conflicts could arise moreover between licensees during execution of agreements binding on the Company, that could affect their continuation and consequently the manufacturing or marketing of the products developed by the Company. These could be conflicts concerning the conditions of the signing of the agreements or their proper execution, by either of the parties, of their obligations pursuant to those agreements. For example, some agreements entered into with licensees typically contain clauses on which a party will pay costs and fees, and such clauses could be subject to interpretation or dispute, thereby endangering the profits that the Company could expect from that partnership. Such conflicts could materially impact the business, the financial position, the results, the development, and the prospects of the Company.

3.3 Risks linked to marketing

3.3.1 Risks linked to obtaining a Marketing Authorization (MA)

To obtain a marketing authorization for one or more of its products, the Company, or its partners, must demonstrate to the regulatory authorities their pharmaceutical quality, their safety of use, and their efficacy for the targeted indications.

The Company's ability to obtain a marketing authorization for its products depends on several factors, in particular:

The possibility of continuing development of its products (manufacturing of lots and tests), and firstly for the drug Tedopi®, that just validated the first step of its Phase 3 trial, the last clinical study phase before registration;

The fact that the Company or its partners are able to carry out clinical trials, in the designated time frames with the initially planned human, technical, and financial resources;

The fact that its products have already been approved or not for another indication that has already received a marketing authorization; and

The fact that its competitors have not announced clinical results likely to change the evaluation criteria used by the regulatory authorities.

If the Company does not obtain any marketing authorization, it will not be able to market its products. In addition, its products might not obtain marketing authorization for a given geographical region, which could significantly limit the marketing of the product in question.

The occurrence of one or more of these risks could have a material adverse impact on the business, prospects, financial position, results, and development of the Company.

3.3.2 Risks linked to the lack of commercial success of the products

3.3.2.1 Risks linked to market penetration difficulties

If the Company is able to obtain a marketing authorization or find developing commercial partners allowing it to market its products in the future, it would need time to obtain the support of the medical community, health care providers, and third-party payers. The degree of market acceptance depends on several factors, in particular:

- Healthcare providers' perception of the product's therapeutic benefit;
- Clinical developments made after the marketing authorization;
- Occurrence of unwanted impacts after obtaining marketing authorization;
- Existence of alternative therapeutic options;
- Ease of the product's use, especially the method of administration;
- Cost of treatment;
- Reimbursement policies of governments and other third parties;
- Effective implementation of a scientific publication strategy; and
- Support of recognized experts;

Poor market penetration resulting from one of these factors could have a material adverse effect on the business, prospects, financial position, results, and development of the Company.

This risk will only be present however when the Company's products are registered and marketed or are close to being marketed.

3.3.2.1 Risks linked to the competitive environment and technological changes

The pharmaceutical market is characterized by rapidly evolving technologies, the predominance of products protected by intellectual property rights, and intense competition. Numerous entities, including pharmaceutical laboratories, biotechnology companies, academic institutions and other research organizations, are actively engaged in the discovery, research, development, and marketing of drugs, including immunotherapy and other products to treat cancer and autoimmune diseases (see paragraph 6.2.2, Targeted pathologies and imuno-oncology treatments _bookmark48.) Should the Company obtain marketing authorization for one of its immunotherapy products, it would compete against a number of established therapies. This product could also compete with a certain number of innovative therapies being developed or recently introduced on the market, such as targeted therapies, monoclonal antibodies, cell therapy, gene therapy, and checkpoint inhibitors.

FR104, OSE-127 and BI 765063 (OSE-172) are first-in-class drugs, that currently do not have an equivalent on the market. Other companies, in particular, large pharmaceutical laboratories, are also developing first-in-class drugs, some of which target the immune system in a similar manner and thus have the potential to compete with the Company in the targeted markets.

Many of the Company's competitors that are actively developing anti-cancer therapies have much greater resources and experience in management, research, patient access in clinical trials, manufacturing, and marketing than those of the Company. In particular, the big pharmaceutical laboratories have significantly more experience than the Company in conducting clinical trials and obtaining regulatory authorizations. Smaller or early-stage companies, especially in immunotherapy, could also be significant competitors. These companies are also likely to compete with the Company to acquire rights to promising products and other complementary technologies.

The Tedopi® product, via neo-epitopes selected and optimized from five tumor antigens, targets other cancers expressing the same tumor antigens that can benefit from this T specific immunotherapy product. Tedopi® thus will not necessarily hinder other existing techniques or those in development by other players in the pharmaceutical industry (such as checkpoint inhibitors), but in some cases, could be used in relevant therapeutic combinations in this innovative domain of immunotherapy.

Finally, the Company cannot guarantee that its products will:

Obtain the necessary licenses or receive marketing authorization more rapidly than its competitors;

Remain competitive with other products developed by its competitors that could be safer, effective, or less costly;

Remain competitive faced with the products of its competitors who are more effective in their production and their marketing;

Be a commercial success; or

Not be rendered obsolete or unprofitable by technological progress or other therapies developed by competitors.

Such events could have a material adverse impact on the Company's business, prospects, financial position, results, and development.

The Company believes that the competition risk is relatively high for its business, in particular taking into account the size of some of its potential competitors. The competitive issue is integrated in the Company's development choices, and why it is closely monitoring the development of competing drugs. The fact for example that oncology treatments can be combined with others (checkpoint inhibitors, combinations of checkpoints inhibitors, chemotherapy, targeted therapies, immunotherapies acting on different targets or different cell types) helps limit the risk of competition because the development of one drug does not necessarily make another drug less interesting.

3.3.3 Risks linked to changes in drug reimbursement policies

Once marketed, market acceptance of the Company's products will depend, in part, on the reimbursement rates offered by the public health insurance funds and private insurance companies. The primary health insurance funds and other third-party payers will seek to limit the cost of care by restricting or refusing to cover reimbursement of costly products and treatment protocols. This risk is actually greater in Europe due to the budget crisis in certain countries and more generally due to weak economic growth.

The Company's ability to successfully market its products will depend in part on obtaining adequate reimbursement rates for its drugs and related therapies from the public authorities, private insurers and other organizations in Europe and United States. The third-party payers more and more frequently question the prices of therapeutic products and medical services. Cost control measures implemented by healthcare service providers and reimbursement organizations and the effect of any healthcare system reforms could adversely impact the Company's operating income. It might therefore not obtain satisfactory reimbursement rates for its products, which could harm their market acceptance, in which case the Company would be unable to receive an adequate return on its investments.

The occurrence of one or more of these risks could have a material adverse impact on the business, prospects, financial position, results, and development of the Company.

3.4 Risks linked to intellectual property rights

3.4.1 Risks linked to uncertain protection of patents and other intellectual property rights

OSE Immunotherapeutics holds, directly and indirectly through its wholly owned subsidiary OSE Pharma International, the worldwide rights on its anti-cancer T-specific immunotherapy technology.

The Company obtained orphan drug status for Tedopi® in the United States in 2013 for so called "non-small cell" lung cancer in patients positive for the HLA-A2 marker. This technology directed against five tumor antigens benefits from extended protection under United States orphan drug status that gives seven years of additional protection after the marketing authorization. As the tumor antigens that it covers are present in other cancers, the clinical applications of the Company's technology allow different developments in these types of cancer or according to different combinations with other products.

The Company directly holds intellectual property rights over five patent families concerning FR104, two patent families for OSE-127, five patent families for BI 765063 (OSE-172), and three patent families for OSE-703. These latter are presented in paragraph 5.5 of this Universal Registration Document.

The ability to protect oneself in a patent lawsuit represents a significant risk, in cases in which the intellectual property is not adequately protected or if the products harm the intellectual property rights of a competitor. The Company will therefore strive to file all patent applications necessary to best protect the products and technologies that it develops. In addition, it will ensure that it maintains very strict confidentiality standards and enforce application of confidentiality agreements among its employees and all collaborating parties to protect the secrets inherent in its business.

It is important for the success of the Company's business, that the Company and its licensees and licensors are able to obtain, maintain and enforce its patents and its intellectual property rights in Europe, United States and other countries. It cannot be ruled out that:

The patents granted or licensed to its partners or itself could be challenged, or held invalid, or be unenforceable by the Company;

The extent of any patent protection may be inadequate to protect the Company from its competitors; or

Third parties could claim rights on patents or other intellectual property rights owned by the Company.

The grant of a patent does not guarantee its validity or enforceability and third parties could challenge these two aspects. The grant and enforceability of a biotechnology patent are highly uncertain and raise complex legal and scientific issues. So far, no uniform worldwide policy has emerged in terms of the content of patents granted in the area of biotechnology and the scope of allowable claims. Litigation may be necessary to enforce the Company's intellectual property rights, protect its trade secrets or determine the validity and scope of its intellectual property rights. Any litigation could result in considerable expenses, reduce its profits and fail to offer it adequate protection. Its competitors could successfully dispute patents granted or licensed to the Company in court or other proceedings, which could ultimately reduce the scope of its patents. In addition, these patents could be successfully counterfeited or infringed due to innovations.

In addition, some countries could try to grant mandatory licenses to third parties on patents protecting the originator products, which would limit the value of the patent protection given to these products.

The occurrence of any of these events concerning one of its patents or intellectual property rights could have a material adverse effect on its business, prospects, financial position, results, and development. These risks are even greater for the Company in view of its limited financing and human resources capacities. In order to mitigate this risk, the process for managing patents and the Company's rights was created and organized.

3.4.2 Risks linked to patents and intellectual property rights held by third parties

The expansion of the biotechnology industry and the growing number of patents granted increase the risk that third parties could maintain that their own intellectual property rights are infringed by the Company's products or technologies. In general, patent applications are only published 18 months after the date of priority applications. In the United States, some patent applications are not published prior to the grant of the patent itself. Also in the United States, patents can be granted on the basis of their invention date, under the "first-to-invent, first-to-file" rule, which does not always result in a patent being granted to the party who first filed the application. Discoveries are sometimes published or patented months or even years later. The Company cannot be sure that third parties were not the first to invent products or file patent applications on inventions also covered by its pending patent applications or those of its partners. In such instances, the Company may need to obtain licenses from those third parties holding the patents (licenses which may not be obtained under reasonable terms, if at all), or cease production and sale of certain products or develop alternative technologies.

Any litigation or claim against the Company, regardless of its outcome, could result in substantial costs and could compromise its reputation. Some of its competitors with greater resources may be better able to bear the costs of complex legal proceedings. Any litigation of this type could severely impact the Company's ability to continue its activities. Specifically, intellectual property litigation could force the Company to:

Cease selling or using any of its products that are part of the disputed intellectual property, which would reduce its revenue;

Obtain a license from the holder of the intellectual property rights, which may not be obtainable in reasonable terms, if at all.

Active monitoring of intellectual property matters helps limit this risk.

3.4.3 Risks linked to legal liability, in particular product liability risks

The Company is exposed to potential liability, including product liability, intrinsic to conducting clinical trials, manufacturing and marketing therapeutic products in humans. It could also be held liable in connection with clinical trials, including the

preparation of therapeutic products tested and unexpected side effects resulting from the administration of these products. Claims or legal proceedings could be filed or brought against the Company by patients, regulatory agencies, pharmaceutical companies, or other third parties using or selling its products. These legal proceedings could include claims arising from the actions of its partners, licensees, and sub-contractors, over whom the Company exercises little or no control. The Company cannot ensure that its current insurance coverage is adequate to protect it against lawsuits that could arise or in response to an exceptional or unexpected situation. If the Company, its partners, licensees, and sub-contractors are found liable in a legal proceeding and are unable to obtain and maintain appropriate insurance coverage at an acceptable price, or to protect themselves by whatever means against product liability claims, it could seriously affect the marketing of its products and more generally harm its business, prospects, financial position, results, and development. The Company could also be subject to civil or criminal proceedings and its image would be harmed. To limit this risk, the Company has subscribed to the insurance policies detailed in the section and will obtain additional insurance coverage as necessary as its products are developed.

The Company's activity is subject to a more and more restrictive regulatory framework. This regulatory framework itself could be impacted due to measures taken with respect to the COVID-19 epidemic or any equivalent epidemic, that could require the Company to modify its clinical trial procedures, delay the necessary interactions with the local authorities, ethics committees, or other important agencies and third-party co-contractors or change the criteria used by health authorities to accept the data from clinical trials conducted in these affected geographical regions.

The pharmaceutical industry worldwide faces constant changes in its legal and regulatory environment and increased monitoring by authorities and the public that require ever more guarantees on the safety and efficacy of drugs or the conduct of its business. In addition, incentives for research are reduced.

The health authorities and, in particular, the United States Food and Drug Administration (FDA), have imposed heavier and heavier requirements concerning the amount of data needed to demonstrate product efficacy and safety. These conditions have reduced the number of products authorized. The products marketed moreover are subject to regular re-evaluation of the benefit/risk ratio following their authorization. Late discovery of issues not identified at the research stage can lead to restrictions on marketing, product suspension, or withdrawal as well as the risk of legal proceedings.

To the extent that new regulations could lead to additional constraints on the conduct of business, and increase the cost of obtaining and maintaining the marketing authorizations of products or limit the economic value of new products for the inventors, the prospects for growth of the pharmaceutical and medical industry and of the Company could be reduced.

In addition, all clinical studies must receive prior approval by the health authorities and ethics committees in the countries in which the studies will be conducted; a negative opinion could hinder or stop the Company's clinical development program. Likewise, in conducting its studies, the Company monitors data and safety, and it could decide to end a study early, definitively or not, and discontinue the development of certain products.

In addition, health authorities could decide to suspend or terminate prematurely an ongoing clinical trial depending on the information that it receives during a study, in particular on the occurrence of serious adverse events.

The occurrence of one or more of these risks could have a material adverse impact on the business, prospects, financial position, results, and development of the Company.

3.5 Risks linked to capital requirements

3.5.1 Risks linked to uncertain additional funding

The Company has the cash available to continue its activities for 12 months following the release of its financial statements for the year ended at December 31, 2019, allowing it to finance the continuation of its clinical and preclinical programs (Tedopi®; FR104; OSE-127, whose development is partially covered until Phase 2 under the license option agreement with Servier and the EFFIMab consortium; BI 765063 (OSE-172, whose development is covered as part of the collaboration and licensing agreement with Boehringer Ingelheim (April 2018) and by the EFFI-CLIN consortium, responsible for several development steps and a clinical program scheduled up to Phase 2).

Beyond its products in preclinical or clinical phases, the Company considers that, in view of its activity, in the future it might need to obtain new sources of funding for its clinical trials and long-term growth, in particular through possible agreements

including milestone payments related to its development programs that could be licensed to partners, the signing of industrial and commercial partnerships and, any new capital increases.

As of the date of this Universal Registration Document, none of Company's products have been marketed and thus have not generated any sales revenue. The Company's ability to generate profit will come from its ability to quickly obtain international marketing authorizations, in order to successfully market its products alone or in partnerships.

The Company foresees the following revenue sources for the next four years:

- Exercise of options
- Revenue linked to achieving milestones
- Payments made by future partners under certain agreements
- Public grants and reimbursements of research tax credits

The Company cannot guarantee that it will generate revenue from the sale of products enabling it to become profitable in the near future. The interruption of one of these sources of revenue, or a worldwide health crisis, could have a material adverse impact on its business, prospects, financial position, results, and development. This would have a significant impact on the business, results, financial position, and development of the Company.

Faced with this, the Company could sign partnership agreements more upstream according to the development, results, and prospects of its various projects. These partnerships would allow the Company to generate additional revenue to finalize its preclinical and clinical trials or lead to redefining the allocation of its financing needs depending on the potential of the products in clinical development.

OSE Immunotherapeutics could also call on investors and the market according to its development needs and depending on favorable economic circumstances. It could also receive public aid as part of consortia for business innovation, for example the EFFIMab consortium for the OSE-127 program, the EFFI-CLIN consortium for the BI 765063 (OSE-172) program, or the HybridADCC financing program for the OSE-703 program.

Future capital needs will depend on many factors that are largely beyond the control of the Company, for example:

- Higher costs and slower progress than expected for its research and development programs
- Higher costs and longer delays than expected in obtaining regulatory approvals, including the time to prepare submissions to regulatory agencies
- Costs for preparing, filing, defending, and maintaining its patents and other intellectual property rights
- Costs for responding to technological and market developments, establishing and maintaining collaboration agreements, and ensuring the efficient manufacturing and marketing of its products
- Additional costs for marketing its own products, should the Company decide to undertake this marketing itself; and
- New opportunities for developing promising new products or opportunities to acquire technologies, products, or companies.

The Company cannot guarantee that additional funds will be available to it when it will need them and, as the case may be, that the funds will be available in acceptable conditions. If the necessary funds are not available, the Company could find it necessary to:

- Delay, reduce, or even eliminate development programs
- Obtain funding through partnership agreements that might require it to give up rights to technologies or products, that it would have continued holding under different circumstances
- Acquire licenses or enter into new collaboration agreements that could be less attractive to it than those it would have been able to obtain under different circumstances or
- Consider selling assets, or even merging with another company

The Company's ease in securing additional funding depends to great extent on its past, present and future financial position. In this regard, since its founding until 2017, the Company has mostly experienced operating losses.

As of December 31, 2019, the Company had operational losses of €1.5 million, and it anticipates potential operational losses in upcoming years, in connection with its development activities, and in particular due to its ongoing investments in drug development (manufacturing of lots and conducting clinical trials).

In addition, to the extent that the Company could raise capital by issuing new shares or other financial instruments that could later become convertible to capital of the Company, the investors' investment could be diluted. Debt financing, to the extent it is available, could also include restrictive conditions.

The occurrence of one or more of these risks could have a material adverse impact on the business, prospects, financial position, results, and development of the Company.

The Company includes financing risk in its management issues. The signing of partnerships that includes upfront payments, payments during product development, and royalties on sales, aims to decrease, with time, the financing risk and the need to use capital financing. The Company, however, considers that its exposure to the economic and market environment remains substantial.

The Company conducted a specific review of its liquidity risk and taking into account upfront and milestone payments received amounting to €20 million upon signing the agreement with Servier, €30 million upon signing the agreement with Boehringer Ingelheim, and new public aid received, OSE Immunotherapeutics considers that its available cash, as of the recording date of this Universal Registration Document, allows it to finance its current operating expenses in the upcoming 12 months.

Cash available as of March 31, 2020 is on the order of €21 million and takes into account the 2019 research tax credit (CIR) of €3.1 million received on March 31, 2020.

The Company moreover has estimated the impact of the COVID-19 crisis on its cash position. Even though certain milestones could be shifted by several months following the slowing of clinical trials, the expenses should also be delayed. In 2019, for example, 85% of research and development expenses were dedicated to products in clinical trials.

The Company thus considers that this should allow it to finance both the clinical trials currently in progress, in particular to continue clinical and preclinical development related to Tedopi®, OSE 127, BI 765063 (OSE-172), FR104 and the R&D in progress over the next 12 months as of the filing date of this Universal Registration Document.

The Company intends, moreover, to take advantage of existing public aid in the form of research tax credits or from the EffIMab and EFFI-CLIN consortia. Concerning the EFFI-CLIN program, the second key step was in 2019 and the report was submitted in the third quarter of 2019, which, subject to its approval, will trigger a payment of €846,000 by Bpifrance. Concerning the EffIMab program, the fifth key step took place in early 2020 and the report was submitted at the end of the first quarter, which, subject to its approval, will trigger a payment of €1,326,000 by Bpifrance.

Shareholders' equity constitutes the near totality of the Companies resources, as the use of bank debt is limited by the structurally loss-making position of the Company.

To date, the Company does not rely on bank loans to any substantial extent and it plans to finance itself mainly by issuing new shares until profitability conditions allow debt financing, unless forms of aid offered by the French government through banks are available and interesting in terms of cost.

In these conditions, the Company is currently not exposed to liquidity risks resulting from implementation of early repayment clauses on bank loans.

To cover the financing that the Company might need in order to accelerate the clinical development of its products or develop new products, the Combined General Shareholders' Meeting of June 13, 2019 delegated powers to the Board of Directors to carry out primary or secondary fundraising transactions.

The Company could call upon various sources of financing, either from investors in a transaction on financial markets, through public aid, or through new industrial agreements on the portfolio products. This additional source of financing would be used to finance the Company's growth, new projects, or new indications for its current products.

3.5.2 Risks linked to the availability of public grants and research tax credits

Since it was founded, the Company has received public funding for research expenses (see Note 5 to the 2019 financial statements), to finance its activities. OSE Pharma, that became OSE Immunotherapeutics, received a research tax credit of €675,000 for 2015, €2,645,000 for 2016, and €2,940,000 for 2017, €4,487,000 for 2018 and €3,059,000 for fiscal year 2019.

The research tax credit is one source of funding. The Company has no assurance that it will have access to this source of funding, or that the funding will be maintained in the future. This source of funding could in fact be threatened by regulatory changes or by an audit by tax authorities that could lead to a reduction in the amount received or to be received even if the Company meets the requirements for documentation and eligibility of expenses. Taking into account the advanced status of the Company's development programs, and the limited portion that this aid represents and will represent, compared with the overall budget of the Company, this risk is limited.

3.5.3 Valuation of intangible assets and impairment tests

The Company OSE Immunotherapeutics, following the merger of OSE Pharma with Effimune, recognized intangible assets in its statement of financial position. In the Company's upcoming accounting statements, adverse changes in its activities, business forecasts, and discounted cash flow assumptions could result in the recognition of impairment losses that could have significant impacts on the results of OSE Immunotherapeutics. These tests will be conducted when events or circumstances indicate that a reduction in value is likely to have occurred and at least once per year.

These tests were performed at the close of the 2019 fiscal year and did not result in any recognition of impairment.

3.6 Insurance and risk coverage

The Company believes that its internal procedures governing risk prevention and safeguarding, as well as the insurance policies it holds, are adequate to cover the main insurable risks that it has identified.

The Company has implemented a coverage policy for the principal insurable risks with coverage amounts that it considers compatible with its cash flow requirements. The total premiums paid for all insurance policies amounted to €57,000 during fiscal year 2019.

Taking into account the specificity of its activities - concentrated on development at this stage - and on the innovative character of its approach, the quantification of any risks in the absence of a direct damage rate, or damage indicators in its sector of activity, makes it difficult to determine a coverage amount, in particular for civil liability. The Company, however, believes that the insurance policies mentioned below adequately cover the risks inherent in its activities and its insurance policy is consistent with the practices in its sector of business. The Company does not foresee any particular difficulties in keeping adequate levels of insurance in the future limited by the conditions and capacities of the market. The insurance policies are held with insurance companies that have good financial ratings and were chosen for their ability to contribute to the growth of the Company. OSE Immunotherapeutics deems that its insurance coverage and the limitations of its coverage are reasonable and prudent taking into account its activities and the associated risks.

The Company has subscribed to several insurance policies, including the following:

- A "business and professional civil liability" insurance policy with CNA (€3,000 paid in 2019);
- A "managers' liability" policy with AIG that covers the civil liability of the legal and factual corporate executives of the Company and its subsidiary, when such liability is incurred in the execution of their duties (€10,000 paid in 2019);
- a "professional multi-risk" policy for its premises, with Generali (€2,000 paid in 2019);
- In view of its investments made in laboratory equipment during 2018 and 2019, the Company now has a specific insurance policy covering this equipment (€2,000 paid in 2019);
- Taking into account the progress of the development of its product Tedopi®, the Company has subscribed to specific insurance coverage for clinical trials with I4CT, to cover the liability of OSE Immunotherapeutics with respect to patients in the countries in question.

The Company has also subscribed to insurance policies for the Phase 1 trials of OSE-127 (€11,000 recognized for 2019) and BI 765063 (OSE-172) (€4,000 recognized for 2019) and €21,000 for the Phase 3 trial of TEDOPI.

The rates and coverage amounts depend on local regulations applicable to the clinical investigation centers concerned, such as in France, where the Public Health Code specifies an insurance obligation for clinical trial sponsors as well as the conditions of that insurance.

These agreements do not provide coverage against operating losses. The Company deems that the cost/benefit ratio of covering losses from operations in the event of an accident at its stage of development, particularly given the lack of revenue on sales of its products, does not justify subscribing to such coverage. The Company's liability in clinical trials will be covered

by specific agreements, whose rates and coverage amounts depend on local regulations applicable to the clinical investigation centers concerned, such as in France, where the Public Health Code sets out an insurance obligation for clinical trial sponsors as well as the conditions of that insurance. The overall amount of insurance premiums paid, and coverages held for clinical trials depends therefore on the number of trials, their location, and the predicted number of patients included in the trial.

The Company has also subscribed to an insurance policy for the civil liability of its executive corporate managers when such liability is incurred in the exercise of their duties.

The Company cannot guarantee that it will always be able to maintain or obtain similar insurance coverage at an acceptable price, which could lead it to accept more costly insurance policies and assume a higher level of risk. This will be important as the Company's business activity grows. Moreover, the occurrence of one or more major accidents, even if covered by insurance, could seriously impact the Company's business and financial position due to the interruption of its activities, the time for repayment by the insurance companies, should policy coverage limits be exceeded and, finally, due to premium increases resulting from such an accident.

The occurrence of one or more of these risks could have a material adverse impact on the business, prospects, financial position, results, and development of the Company.

Taking into account the Company's prospects and, in particular, as it initiates a greater number of clinical trials, the Company anticipates that its insurance premium expenses will continue to rise while remaining relatively low compared with the costs of its research and development, its annual losses, and the value of its assets.

3.7 Exceptional events and litigation

During the 2019 financial year and up to the registration date of this Universal Registration Document, the Company has not been involved in any administrative, criminal, legal, or arbitration procedure that could have a material adverse impact not reflected in the financial statements of the Company, on its activity, financial position, results, or development.

4 Information about the issuer

4.1 Company name

The name of the Company is “OSE Immunotherapeutics” and its trade name is “OSE Immunotherapeutics”.

4.2 Place of registration and registration number

The Company is listed in the Nantes Trade and Companies Register under ID number 479 457 715.

The Company’s activity code is 7211Z. This corresponds to biotechnology research and development.

The Company’s LEI is 969500HIUWVGY6NZSM05.

4.3 Date and term of incorporation

Initially formed as a limited liability company (*société à responsabilité limitée*) on November 17, 2004, it was converted into a public limited company (*société anonyme*) with a Board of Directors by decision of the General Shareholders’ Meeting of April 27, 2012.

The Company was formed for a period of 99 years from the date of its listing in the Trade and Companies Register, unless the term is extended or the Company is dissolved early.

The reporting date was set at December 31, every year from the Company’s date of incorporation.

4.4 Registered office, legal form and legislation

The Company’s registered office is at 22 boulevard Benoni Goullin, 44200 Nantes, France.

The Company is a public limited company (*société anonyme*) with a Board of Directors, governed by French law. It is governed by current and future legislation and regulations, in particular the French Commercial Code and amendments thereto, as well as by its bylaws.

Telephone: +33 (0)2 28 29 10 10

The Company website is: www.ose-immuno.com.

The reader’s attention is drawn to the fact that, unless otherwise stated in this Universal Registration Document, the information appearing on this website does not form part of this document.

5 Business Overview

OSE Immunotherapeutics is a clinical-stage biotechnology company. It develops innovative immunotherapies, directly or via partnerships, for immune activation and regulation in immuno-oncology and autoimmune diseases. The Company has a diversified first-in-class clinical portfolio consisting of several scientific and technological platforms including neoepitopes and agonist or antagonist monoclonal antibodies, all ideally positioned to fight cancer and autoimmune diseases.

The OSE Immunotherapeutics clinical portfolio has a diversified risk profile, with development programs ranging from research to Phase 3 clinical trials with independent risks. Four products are in the clinical phase.

PROGRAM	Indication	Pre-Clinical	Phase 1	Phase 2	Phase 3
IMMUNO-ONCOLOGY					
Tedopi® Neoepitopes	NSCLC				Positive Step-1 results Primary endpoint met
Tedopi®	Advanced pancreatic cancer			Combo with PD1 Opdivo® Ongoing	GERCOR Bristol-Myers Squibb
BI 765063 (OSE-172) SIRPα-CD-47	Various cancers		Ongoing	Boehringer Ingelheim	
BiCKI® Bispecific anti-PD-1 & Innovative Targets	Various cancers	2020			
AUTO-IMMUNE DISEASES					
FR104 CD28	Autoimmune diseases & Transplantation			Phase 2 planning ongoing	
OSE-127 IL-7R	Ulcerative Colitis Sjögren's syndrome		Positive Phase 1 Results Q4 2019	2020	SERVIER

5.1 Key activities

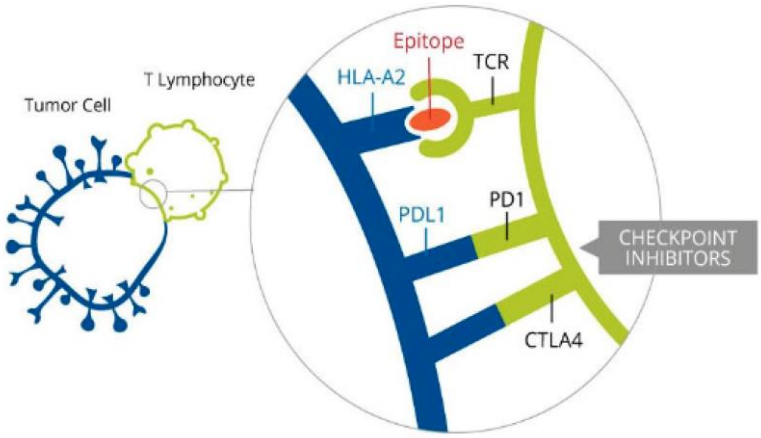
5.1.1 Immuno-oncology

5.1.1.1 Clinical development

- **Tedopi®** is a combination of 10 neoepitopes (small peptides) selected and optimized from five tumor antigens present in several cancers that generate a specific cytotoxic T cell response directed against tumor cells that express at least one of those tumor antigens and an associated T helper response.

These five tumor antigens (CEA, p53, HER-2/neu, MAGE-2 and MAGE-3) were selected because their presence represents a poor prognostic factor in several types of cancers. Ninety percent of invasive tumors express at least one of these five tumor antigens. The 10 selected epitopes trigger a synergistic increased T lymphocyte response with no immunodominance (i.e., no preferential response to one or two epitopes). These strong cytotoxic T cell-specific responses cause the immune system to destroy tumor cells that express HLA-A2 and one of the targeted tumor antigens.

This product has been granted orphan status in the United States for lung cancer patients who are HLA-A2 positive, representing 45% of that population (under 200,000 people). This special status allows accelerated product development.



Tedopi®: mechanism of action

Step 1 of Phase 3 clinical trial validated in non-small cell lung cancer: the most advanced clinical application

The international Phase 3 clinical trial of Tedopi®, Atalante 1, was designed to evaluate the benefits of the product in HLA-A2 positive patients in second- or third-line therapy versus second- or third-line chemotherapy (docetaxel or pemetrexed) in invasive stage IIIB or metastatic stage IV non-small cell lung cancer after failure of treatment with anti-PD-1 and anti-PD-L1 checkpoint inhibitors. The main assessment endpoint is overall survival.

The post checkpoint inhibitor patient population, to which the Atalante 1 study is addressed, is currently growing, since anti-PD-1 and anti-PD-(L)1 T checkpoint inhibitors are recognized as standard treatment as maintenance (at an earlier stage of stage III disease), as first-line therapy for invasive stage IIIB and metastatic stage IV (instead of or in combination with chemotherapy) and as second-line treatment (after failure of first-line platinum-based therapy).

In April 2019, the Company presented new Tedopi® clinical data* at the Annual Meeting of the American Association of Cancer Research (AACR). The oral presentation focused on the first signs of the product's efficacy after failure of anti-PD-1/anti-PD(L)1 checkpoint inhibitor treatment. Improvement in the results of clinical cases related to three patients after checkpoint inhibitors have shown a clinical benefit of Tedopi® in third-line therapy. A patient showed a partial response and two patients showed stable disease according to RECIST 1.1 criteria. The tolerability profile in the three patients was manageable and none of them had to stop treatment due to toxicity. These data represent the first signs of efficacy of Tedopi® administered as third-line therapy in patients suffering from advanced lung cancer for whom previous checkpoint inhibitor therapy has failed.

**Early signs of activity of Tedopi® (OSE2101), a multiple neoepitope vaccine, in a Phase 3 trial in advanced lung cancer patients after failure to previous immune checkpoint inhibitors (ATALANTE-1)*
https://www.abstractsonline.com/pp8/#!/6812/presentation/2375

The trial was planned in two steps: a first step including approximately 100 patients overall with a planned analysis of data on the percentage of patients achieving 12 months survival. At the end of this first step, and depending on the results obtained, the Company had to decide on the best development strategy for Tedopi® in lung cancer after failure of checkpoint inhibitor therapy.

On April 1, 2020, the Company announced the positive outcome of the predefined in the protocol Step 1 of the Tedopi® Phase 3 clinical trial. Analysis of the data showed that the primary endpoint of this step was met with a 12-month survival rate for patients treated with Tedopi®.

Considering the patient population treated in both arms of Atalante 1 that was randomized at least 12 months prior to the Step 1 analysis (N=99), the primary objective of the predefined Step 1 was met.
The statistically positive results of the Step 1 analysis of the Phase 3 study show survival of at least 12 months in 29 out of 63 patients in the Tedopi® arm, representing a 12-month survival rate of **46%** with a lower limit (33%) in the 95% confidence interval [33%-59%], above the predefined 25% futility limit.

The observed rate of **46%** is also above the 40% survival rate considered in the protocol to be the alternative efficacy scenario.

In the chemotherapy control arm, results showed survival of at least 12 months in 13 out of 36 patients, representing a 12-month survival rate of **36%**.

These results confirm the therapeutic benefit of Tedopi® in a patient group for which there is no confirmed treatment to date and which is awaiting new therapeutic options. The Company will initiate discussions with the regulatory authorities to analyze these positive clinical results and determine the best options to pursue the development of Tedopi® and maximize the positive benefit/risk ratio data obtained. At the same time, given the significant enhanced value of Tedopi® as a result of these positive Step 1 results, the Company continues to explore potential partnership opportunities for its product.

Due to the global epidemic of COVID-19, the Company, in conjunction with the Independent Data Monitoring Committee (IDMC) and the Trial Steering Committee, analyzed the potential impact of this epidemic on the Atalante 1 trial. The clinical trials data could be strongly impacted by the worldwide COVID-19 worldwide pandemic and by the increased risk posed to patients with advanced lung cancer, as COVID-19 is able to cause serious pulmonary complications in these particularly vulnerable patients. Moreover, for the patient safety, several scientific and medical societies currently recommend the voluntary suspension of new patient recruiting in clinical trials in oncology.

Consequently, on the recommendation of the IDMC and the Atalante 1 Steering Committee, OSE Immunotherapeutics has decided to voluntarily and definitively suspend screening and enrollment of new patients in the Step 2 initially scheduled in the trial that will therefore not be conducted. The Company will continue additional analyses of the Step 1 data and initiate discussions with the regulatory authorities to determine the best path to take for development of the product, in view of the high therapeutic need of the population of patients suffering from advanced lung cancer following failure of treatment by checkpoint inhibitor.

Phase 1/2 clinical trials

Two Phase 1/2 clinical trials were conducted in the United States in patients with mildly aggressive cancers expressing HLA-A2 positively. The objective was to measure the tolerability of the product administered via repeated subcutaneous injections (5mg/peptide/dose) with six injections spaced three weeks apart. The efficacy criterion for the treatment sought was to quantify and assess the specific cytotoxic T cell response induced with respect to natural epitopes and chemically modified optimized epitopes.

A positive cytotoxic T immune response was obtained in 93% of the patients in whom it was measured (16 patients who received six injections). Eight out of 15 patients responded to more than five epitopes, and on average, each patient induced a cytotoxic T cell response against four epitopes.

The effector activity of T lymphocytes from treated patients was also measured in their ability to destroy tumor cells presented to them if those tumor cells have the required receptors (ex vivo results). This T lymphocyte effector activity has been significantly established in human tumor cells that express HLA-A2 versus human tumors that do not express HLA-A2. The tumors studied also express one of the tumor antigens targeted by the epitopes (fresh human tumor lines and reference human colon or breast tumor lines).

The results of these Phase 1/2 trials showed that the product was generally well tolerated by patients. In addition, the regimen and doses were validated in these trials. This regimen was subsequently used in the Phase 2 trial with an initial induction period during the first six injections (three weeks apart) followed by a period of consolidation of the response through a subcutaneous injection every two to three months. This mode of administration was also the one used in the Phase 3 trial in non-small cell lung cancer.

Phase 2 clinical trial

A Phase 2 clinical trial of Tedopi® was conducted in the United States in Stage IIIB invasive or IV metastatic non-small cell lung cancer (NSCLC) in HLA-A2 positive patients after failure of at least one first line of therapy. The purpose of the study was to evaluate the tolerability, efficacy (tumor response and survival), and cytotoxic T immunogenicity of the product.

The results of this study showed the efficacy of the treatment, with an increase in survival associated with good tolerability. The median survival of patients treated with Tedopi® was 17.3 months compared to 12 months for the control group (composed of HLA-A2 negative patients).

135 patients entered this trial; 64 patients were HLA-A2 positive; 72 patients were HLA-A2 negative, and only one-year survival information was available for this observation group.

A large majority of patients were metastatic at inclusion (67% of patients). 31% of patients had received at least one prior first line of therapy; 28% received two prior lines, and 37.5% of patients received three or more therapeutic lines (up to six therapeutic lines). 92% had received prior platinum therapy and 34% had received prior targeted therapy (gefitinib or erlotinib).

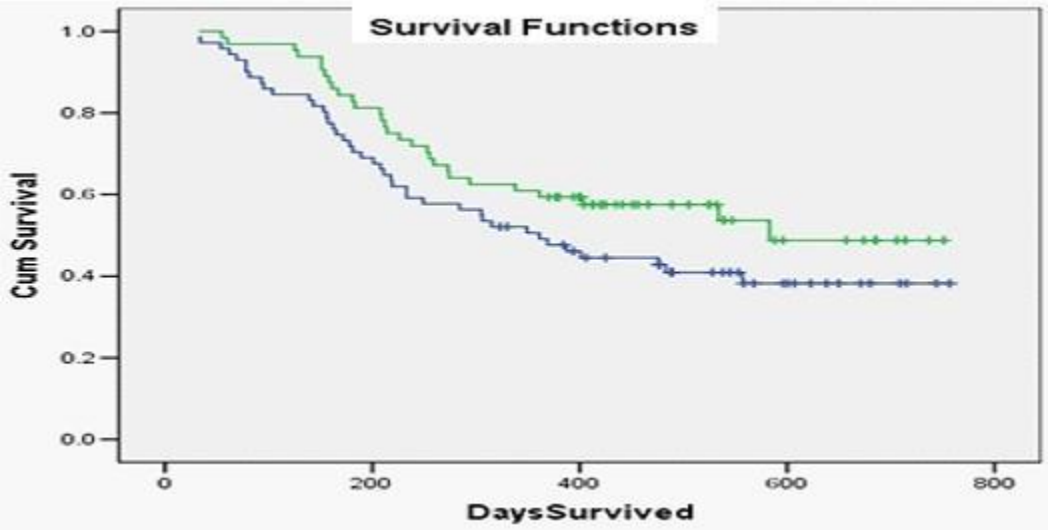
The group of 72 HLA-A2 negative patients was monitored only for one-year survival data, as the trial was designed to assess the one-year survival rate.

Survival Results

The median survival was 17.3 months in the Tedopi®-treated group and 12 months in the HLA-A2 negative group not treated with immunotherapy (observation group receiving standard therapy). This median survival of 17 months is especially important in this trial population, with 67% of patients metastatic. In addition, this population was previously heavily pre-treated with different therapeutic lines (65% of patients received more than two lines - patients receiving third-line therapy, and 92% received at least one platinum-based chemotherapy).

The one-year survival rate was 59% in the HLA-A2 positive group compared to 49% in the HLA-A2 negative group. This difference in efficacy in favor of the treatment under study, although not significant, is very interesting because the HLA-A2 negative control group has a better prognosis for survival (Nagata et al. 2009, Bulut et al. 2009). The two-year and three-year survival rates for the immunotherapy group were 39% and 27%, respectively. At four years, the long-term survival rate was maintained for 25% of patients (see curve).

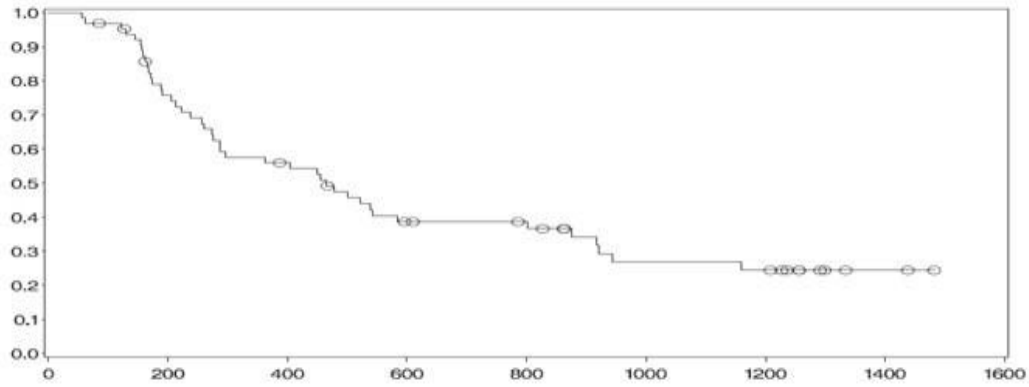
Figure 1: Survival curve



Green = HLA-A2+: Patients treated with Tedopi® (n= 64 - 29 deaths)
Blue = HLA-A2-: Control group (n = 71 - 42 deaths)
One-year survival rate: p = 0.063; 59% survival (HLA-A2+ treated group); 49% survival (HLA-A2- control group)
Median survival (days): p = 0.086: 17.3 months (HLA-A2+ treated group); 12 months (HLA-A2- control group)

Figure 2: Long-term survival curve

Long-term survival curve: 25% of patients present at four years



The long-term survival curve is all the more interesting since the majority of patients included were metastatic and heavily pre-treated previously.

Evaluation of progression-free time: at the same time, the median progression-free time for patients treated with Tedopi® was estimated at 9.4 months, with 47% of patients still progression-free at one year.

Evaluation of tumor response: stabilization of tumor response was observed in 89% of the population.

Cytotoxic T cell immune response correlated with observed survival

With Tedopi® a T cell immune response (measured in Elispot) for at least one epitope is observed in 91% of this population most often at a metastatic stage. The immune response is positive for three epitopes in 64% of the population.

The correlation between survival and the number of epitope responses was established to a significant degree (log Rank test). Longer survival was correlated to a significant degree with the number of positive responses to the various epitopes ($p<0.001$).

0 to 1 epitope: 406 ±58 days of survival
2 to 3 epitopes: 778 ±72 days of survival
4 to 5 epitopes: 875 ±67 days of survival

New exploratory data from a translational analysis were presented in a poster session entitled: *"Survival is improved by antigen-specific cytotoxic T lymphocytes (CTL) responses after treatment with the neoepitope-based vaccine Tedopi® in HLA-A2 positive advanced non-small cell lung cancer (NSCLC) patients"**, at the Society for Immunotherapy of Cancer (SITC) conference held in National Harbor, Maryland, USA, November 6-10, 2019. This poster session described the results of immunogenicity assays to explore the predictive effect of neo-epitopes on overall survival by type and number. The results presented demonstrated that in advanced non-small cell lung cancer (NSCLC) patients, survival was significantly prolonged in patients immunized with the combination of neoepitopes used in Tedopi®.

Outcomes for high-risk patients

Patients with brain metastases were eligible for the Phase 2 trial. The spontaneous prognosis of these patients is a few months and this type of metastasis is a proven severity criterion in lung cancer.

A survival analysis was performed in a subgroup of six patients with brain metastases (9% of the trial population) who were already heavily pre-treated with brain radiotherapy and 1-3 prior lines of chemotherapy. The Tedopi® survival study showed a median survival of 13.75 months with extremes ranging from 7 months to over 41 months, a particularly interesting result for this usually poor prognosis group. The immune response study showed that five out of six patients developed a cytotoxic T cell response to at least one epitope and up to five of the tested epitopes included in Tedopi®.

The long-term survival observed at four years is accompanied by a favorable tolerability profile.

(M. Barve et al JCO 2008 - J. Clin Oncol 26: 2008 (May 20 suppl; abst 8057) (Janus et al 2012)

(J. Nemunaitis et al, Denver IASLC 2015).

Phase 2 clinical trial in pancreatic cancer

The Phase 2 clinical trial, TEDOPaM, is designed to evaluate Tedopi® as a maintenance therapy alone or in combination with the checkpoint inhibitor Opdivo® (nivolumab) versus maintenance therapy with Folfiri (chemotherapy combining folinic acid, fluorouracil and irinotecan) in locally advanced or metastatic pancreatic cancer. It is conducted in HLA-A2 positive patients whose disease is stable after four months of standard chemotherapy with Folfirinox (chemotherapy combining folinic acid, fluorouracil, irinotecan and oxaliplatin). The main objective of the study is overall survival.

The study is sponsored by the GERCOR cooperative oncology group, and supported by Bristol-Myers Squibb, which is providing its checkpoint inhibitor Opdivo® and OSE Immunotherapeutics providing its Tedopi® immunotherapy and financial support.

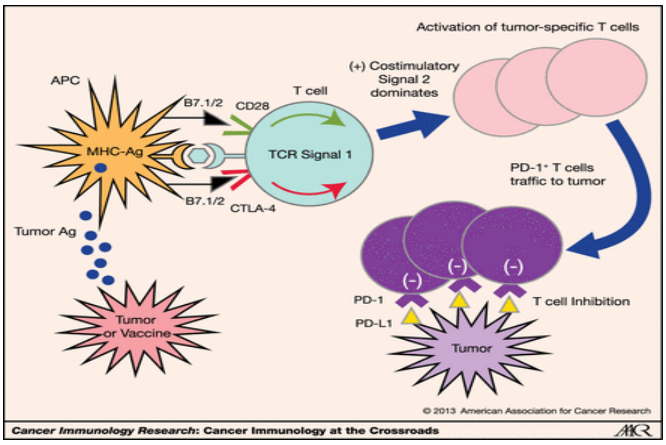
Due to COVID-19, GERCOR, the study's sponsor, indicated at the end of March 2020 that patient screening would continue, but recruitment of new patients in the study would be temporarily suspended.
As part of its partnership strategy, the Company is exploring partnership opportunities for Tedopi®, its most advanced product in its development stage.

Other indications envisaged for Tedopi®, in particular in combination with a checkpoint inhibitor

Blocking checkpoint inhibitors is the most advanced approach in cancer immunotherapy to activate anti-tumor immunity, with two products registered, for example, in lung cancer (NSCLC) or melanoma (nivolumab and pembrolizumab). Even though this clinical activity is very promising, with an observed difference in survival compared to chemotherapy, other strategies are expected to increase the results in terms of survival, progression-free survival time, quality of life and control of observed autoimmune reactions. Effective tumor clearance requires coordinated immune mechanisms involving both the activation of immune effector cells and the blocking of suppressor mechanisms. Therefore, there is a strong rationale for combining "T specific therapeutic vaccines" with T lymphocyte-specific activation action, with non-specific checkpoint inhibitors that act as a brake on T lymphocytes.

To counter the immune system's attack, cancer cells use a wide variety of mechanisms, including low expression of histocompatibility molecules or MHC (MHC receptors are essential when they partner with peptides in the form of epitopes or neoepitopes to trigger a T lymphocyte response). Tumor cells also use the expression of T cell inhibitory molecules on which checkpoint inhibitors act, such as certain members of the family of molecules called B7, and where the PD-L1 ligand of PD-1 (also PD-L2, B7-H3, VISTA) is found.

Combinations of specific cancer therapies with non-specific checkpoint inhibitors have been successfully tested in certain tumors, as already explained in pancreatic cancer (Le D.T. et al., 2013), and in prostate cancer [Jochems C. et al, 2014] and melanoma [Hodi F.S. et al., 2010].



The distinct roles of control points such as CTLA-4 and PD-1 in the regulation of anti-tumor T response effector cells are described in the tumor microenvironment by J.R. Brahmer and D.M. Pardoll in the diagram above.

Interlocking mechanisms between specific and non-specific immunity:

MHC/ epitope/ TCR: this is the first signal for specific activation of T lymphocytes, it occurs via the epitope presented by the major histocompatibility complex (MHC) at the T lymphocyte receptor (TCR - signal 1). The interaction between the TCR and the peptide-MHC complex must be prolonged and of high intensity to be effective in the activation of the T lymphocyte. The affinity between the TCR receptor and the presented peptide in the groove of the MHC molecule plays a major role in the stability of this bond.

The tumor cell (or a "tumor" vaccine in the diagram) is the source of tumor antigens that must be processed and presented as epitopes by the MHC major histocompatibility complex to activate the T lymphocyte cells.

Tumor-specific T cell activation leads to T cell proliferation and effector function, but also to overexpression of PD-1. In the tumor microenvironment, PD-1-expressing T cells may encounter PD-L1 ligands, which may prevent them from expressing their cytotoxic killing function. The PD-1 (programmed cell death-1) molecule is expressed after CTLA-4 and is recognized by two ligands (PDL-1 and PDL-2).

Currently, the checkpoint inhibitors that are the most advanced or registered in multiple clinical indications target CTLA4, PD-1, PD-L1, all of which are expressed on T lymphocytes. The PD-1/ PD-L1 axis is the main target of the checkpoint inhibitors that act on lymphocyte brakes in the tumor microenvironment.

However, there is a significant initial immunological escape from these biotherapies (response rate limited to a small number of treatment-naïve patients expressing the PD-L1 marker). For those patients who did respond, secondary immunological escape (after an initial response to treatment) became an emerging problem. Combining treatments that act on multiple targets is one way to combat that escape and overcome immune resistance, but these combinations must ensure manageable safety and intolerability. The elements that favor this type of combination are many:

- High expression of HLA and CD8 at the tumor level is a good prognostic factor (SD Brown et al.; Genome Research 2014);
- The increase of IFN-γ in tumor cells linked to the effect of therapeutic vaccines or neoepitopes facilitates immune recognition with an increase in Major Histocompatibility Complex or MHC-I receptors. This is observed at the same time as the increased expression of PD-L1 (Grenga I et al; Journal for ImmunoTherapy of Cancer 2014);
- Tumor neoantigens with a high tumor level are associated with longer overall survival (N McGranahan et al, Science 2016 - Clonal neoantigens elicit T cell immunoreactivity and sensitivity to immune checkpoint blockade).

Other actors in the tumor microenvironment are also involved with the generation of an immunosuppressive tumor microenvironment that include regulatory T lymphocytes (called Treg, identified as CD4+ CD25+ foxp3+) and the differentiation of suppressive lines of myeloid origin (MDSC) that inhibit T effectors (via secretion of mediators such as TGF beta and IL-10). Tregs are T lymphocytes with suppressive activity against T immune responses. Tregs accumulate in the tumor, which also prevents killing functions. The interaction of CTLA-4, PD-1 and PDL-1 molecules with their ligand is necessary for the suppressive function of the Tregs while the activating signals that pass through CD28 inhibit this suppressive function. Checkpoint inhibitors therefore also promote inhibition of the suppressive activity of the Tregs.

Suppressive myeloid cells may also accumulate in tumors and disrupt the function of cytotoxic lymphocytes. There are currently no treatments to eliminate them.

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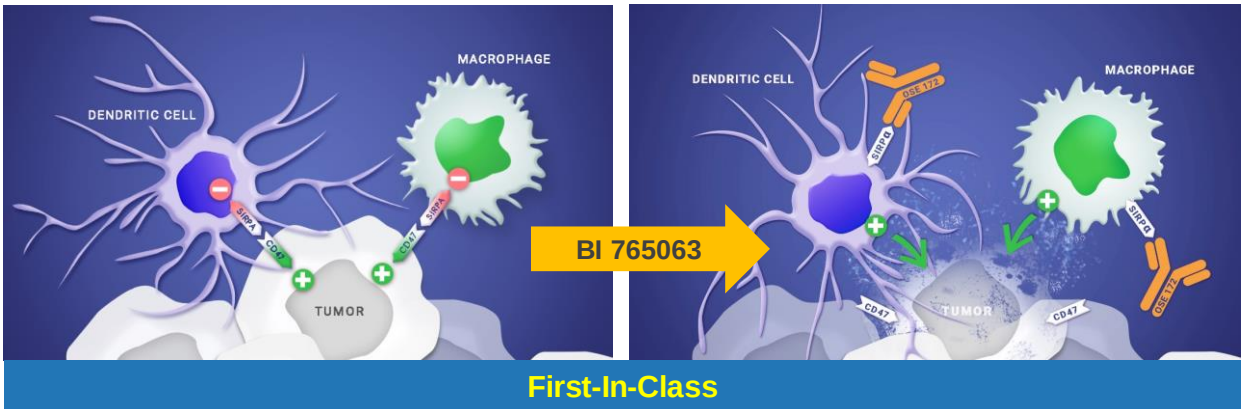
- **BI 765063 (OSE-172)** is a monoclonal antibody antagonist targeting SIRPα and CD 47 ligand myeloid checkpoint inhibitor. Preclinical studies have shown the ability of BI 765063 to inhibit pro-tumor cells within the tumor microenvironment while activating antitumor cells. The blockade of SIRPα that prevents T cell transmigration, the selective anti-SIRPα activity of BI 765063 and its ability to promote T cell infiltration of solid tumors are crucial for this product's potential success as a novel cancer therapy.



SIRPα is expressed by Myeloid-Derived Suppressor Cells (MDSCs) and Tumor Associated Macrophages (TAMs) and controls their differentiation.

Phase 1 clinical trials in advanced solid tumors

Following approvals from the Agence Nationale de Sécurité du Médicament (ANSM) in France and the Agence Fédérale des Médicaments et des Produits de Santé (AFMPS) in Belgium received in March 2019, BI 765063 is in Phase 1 clinical trials in advanced solid tumors and the first patient was included and treated in June 2019. This first-in-human Phase 1 trial is a dose finding study of BI 765063 administered as a single agent and in combination with Boehringer Ingelheim's monoclonal antibody PD-1 antagonist BI 754091, a T-lymphocyte checkpoint inhibitor. The trial aims to characterize safety, pharmacokinetics, pharmacodynamics and preliminary efficacy of the immunotherapy in patients with advanced solid tumors.

The study is being conducted by OSE Immunotherapeutics under its license and collaboration agreement with Boehringer Inghelheim, which acquired the exclusive rights to BI 765063 (0SE-172) in April 2018.

As of the date of this Universal Registration Document, due to the COVID-19 crisis, the screening and recruitment of new patients in the BI 765063 Phase 1 clinical study are temporarily suspended.

BI 765063 (OSE-172), myeloid checkpoint inhibitor designed for immuno-oncology

The generation of an immunosuppressive tumor microenvironment is regularly observed in cancer progression and involves several cell lines with suppressive functions. Regulatory T lymphocytes (called Tregs) exert suppressive activity, and the first generation of checkpoint inhibitors acts on these regulatory T cells or Tregs (via the ligands of the CTLA-4, PD-1 and PDL-1 molecules).

At the same time, differentiation of Myeloid-Derived Suppressor Cells that inhibit the functions of effector T lymphocytes (via secretion of mediators such as TGF beta and IL-10) can be seen. These MDSC myeloid cells can be widely observed in the tumor microenvironment. In parallel, tumor-associated macrophages (TAMs) also accumulate locally with suppressive functions that promote tumor growth.

There is currently no treatment to reduce or eliminate these myeloid suppressor cells or tumor-associated macrophages. A second generation of checkpoint inhibitors can be created by acting on these new suppressive immune cell targets.

Target

OSE Immunotherapeutics has identified the SIRP-alpha (SIgnal Regulatory Protein alpha) target as a major checkpoint for myeloid cells. The Company has developed a selective SIRP-alpha antagonist antibody, the checkpoint inhibitor BI 765063 (OSE-172), which transforms the tumor microenvironment by blocking suppressor cells and activating antitumor effector cells.

The optimization carried out on this product is the subject of three families of patents filed by the Company, the first of which was published on April 24, 2016.

Mechanism of action

BI 765063 (OSE-172) is a monoclonal antibody. A new-generation checkpoint inhibitor, it specifically blocks a function of tumor-associated myeloid/monocyte/macrophage suppressor cells (TAMs). These suppressor cells are very numerous in the tumor microenvironment and have a poor prognosis in aggressive cancers because they promote tumor growth (Chanmee T et al., Cancers 2014).

BI 765063 (OSE-172) blocks SIRP-alpha, a receptor that is highly expressed by myeloid cells and suppressor macrophage cells. BI 765063 (OSE-172) restores the effector functions of these suppressor cells, and this activity encourages the restoration of immunosurveillance (Hanna R.N. et al.; Science 2015). It is also used in combination with other immunological therapies, in particular checkpoint inhibitors that act on T lymphocytes, such as those targeting the PD-1/PD-L1 axis or products that stimulate the immune system.

This innovative product is part of the transformation of cells described as tumor-associated macrophages (TAMs) and suppressive myeloid suppressor cells (MDSCs) to block these poor-prognosis cells and transform them into good-prognosis effector cells.

Proofs of concept obtained in in vivo models

They have been obtained in aggressive cancer models such as primary liver cancer (HCC “Hepato Cell Carcinoma”), melanoma and breast cancer. These experiments have confirmed a therapeutic effect whenever BI 765063 (OSE-172) is used as monotherapy or in therapeutic combination with either another checkpoint inhibitor or an immune system stimulator, which may be long-lasting. The therapeutic effect is described as long-lasting because it was not possible to re-implant a tumor in animals treated with BI 765063 (OSE-172) that had developed anti-tumor immunization. Treatment with BI 765063 (OSE-172) as a monotherapy and in combination with other immunotherapy treatments induces a powerful and long-lasting anti-tumor action.

The main preclinical results of BI 765063 (OSE-172) have been presented at international conferences in the form of poster sessions and oral presentations (1-5) and have shown that this checkpoint inhibitor:

- Transforms the immunosuppressive tumor microenvironment in vivo and decreases tumor growth in a triple-negative breast cancer model;
- Slows the spread of metastases in a triple-negative breast cancer model;
- In combination with an anti-PD-1/PD-L1 antibody, synergy for survival in hepatocellular carcinoma (HCC), which strengthens the rationale for combination therapy;
- In combination with other immunotherapies, BI 765063 (OSE-172) induces a strong memory anti-tumor T immune response, which protects against tumor relapse.
- Modifies suppressive myeloid cells from ovarian cancer ascites to make them stimulative;
- BI 765063 (OSE-172) selectively binds to SIRP-alpha, not to SIRP-gamma, a costimulatory receptor necessary for human T cell response.

(1) Dual targeting of adaptive and innate checkpoints induces potent memory anti-tumor response, Gauttier V. et al., EACR poster 2016
2) Selective targeting of the SIRPα immune checkpoints, but not CD47, controls the polarization of macrophages, Gauttier V. et al., EACR poster 2016
(3) Control of immune tolerance by the SIRPα -CD47 pathway and Myeloid-Derived Suppressor Cells, Poirier N. et al., EACR poster ICI 2016

(4) Selective Targeting of the SIRP-α Immune Checkpoints to Dampen Suppression By Myeloïd-Derived Suppressor Cells And Control Polarization Of Human Macrophages, Vanhove B et al 2016.
(5) Selective targeting of SIRP alpha induces potent memory anti-tumor immune responses without presenting haematological toxicity, Gauttier V et al., AACR poster 2017

The diseases for which BI 765063 (OSE-172) could be developed concern all cancers in which TAM and MDSC cells are involved. These TAM (tumor-associated macrophages) cells or MDSCs (myeloid-derived suppressive cells) are key cells in the progression of inflammatory cancers. The cytokines secreted by these suppressor cells promote this climate (IL-10, IL-1β, TGFβ). Cancers related to chronic inflammation (primary liver cancer/colon cancer) could be, as an example, cancers of interest for such a strategy (Zamarron B.F. and 2011) (Mallmann MR et al. 2012).

5.1.1.2 Preclinical development

OSE-703 is a humanized monoclonal antibody directed against the extracellular portion of the alpha chain of the Interleukin-7 receptor (CD127), and cytotoxic to human cells expressing CD127.

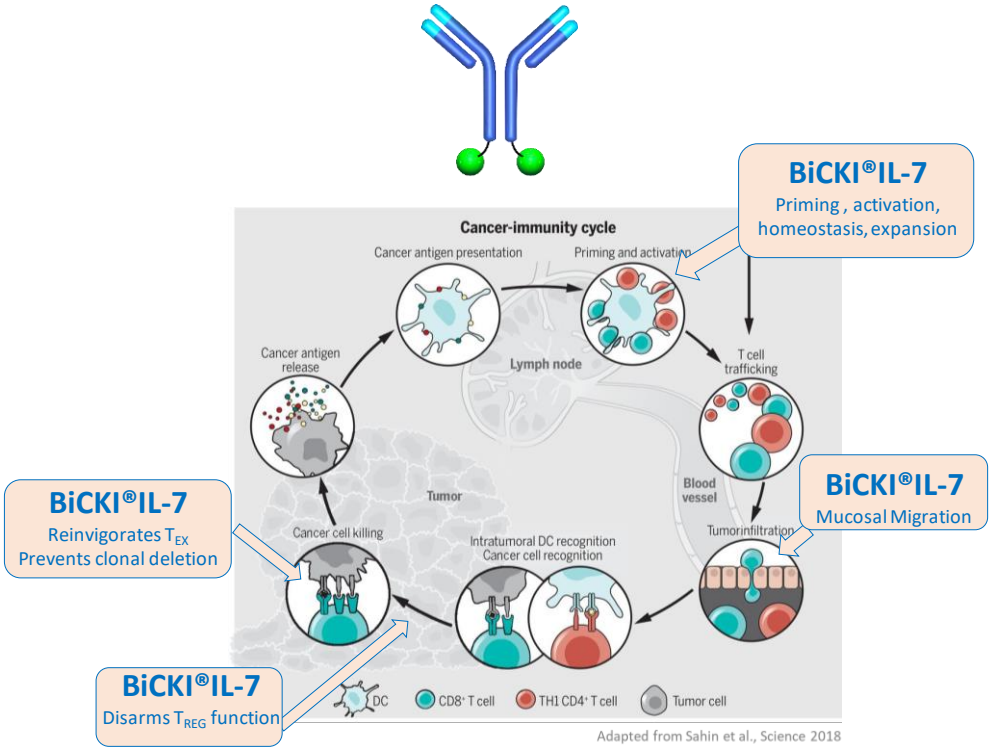
Interleukin-7 (IL-7) is an immune mediator long known for its key role in the hematopoietic growth of T and B lymphocytes. IL-7 is produced by different cell types such as keratinocytes, dendritic cells, hepatocytes, neurons and epithelial cells. Despite a theoretical anti-tumor effect, the aberrant expression of the IL-7 receptor (IL-7R) in various types of cancer has been associated with a poor prognosis (K. Suzuki, J Clin Oncol, 2013) and both IL-7 and the presence of an IL-7 receptor have been shown to have a pro-tumor effect in various types of cancer, decreasing the apoptosis of tumor cells or accelerating cell proliferation and lymphovascular formation (J. Lin et al., Anticancer Research, 2017).

A preclinical research collaboration with the Memorial Sloan Kettering Center in New York evaluated OSE-703 in solid tumors with a first model in non-small cell lung cancer (NSCLC) and mesothelioma.

BiCKI® platform

BiCKI® is a new platform of bispecific inhibitors of checkpoints targeting the PD-1 receptor and other innovative targets. A bispecific fusion protein platform, it is built around a key backbone component anti-PD-1 (OSE-279), chosen for its bioproduction ability, merged with innovative immunotherapy targets. The BiCKI® platform aims to inhibit key immune checkpoint inhibitors while simultaneously delivering cytokines capable of modulating regulatory T cells, and/or increasing the responses of exhausted T cells within the tumor. It can also incorporate other therapeutic methods to modify the tumor microenvironment by delivering, for example, costimulation signals to restore the activity of antitumor T lymphocytes or restore phagocytic functions and macrophage polarization.

Based on an anti-PD-1 bifunctional antibody platform technology, BiCKI® is designed to expand the type of patients responding to immunotherapies. This is the second generation of PD-(L)1 inhibitors used to increase antitumor efficacy in hard-to-treat cancers by addressing untapped immune escape mechanisms.



In September 2019, OSE Immunotherapeutics presented new preclinical data on the BiCKI® platform (at the International Cancer Immunotherapy Conference, Paris). The first cytokine selected to be paired with the anti-PD-1 in the bispecific antibody is Interleukin-7 (IL-7), which has been shown to improve immune functions and cancer immunotherapy efficacy. The poster session presented, entitled "A novel bifunctional anti-PD-1/IL-7 fusion protein potentiates effector function of exhausted T cell and disarms Treg suppressive activity," discussed the bifunctional anti-PD-1/IL-7, a bispecific therapy developed to address the mechanisms of primary and secondary resistance to checkpoint inhibitor therapy. The preclinical data presented showed that BiCKI®/IL-7 altered the immune balance in favor of effector T cells by stimulating the functions of those cells and disarming regulatory T-cells.

5.1.2 Autoimmune diseases

5.1.2.1 Clinical development

- **OSE-127** is an immunomodulatory monoclonal antibody that targets the Interleukin-7 receptor alpha chain (IL-7R-alpha or CD127 receptor). OSE-127 has an innovative mechanism of action that blocks Interleukin-7 and internalization of the receptor, thus inducing a powerful antagonist effect on pathogenic T lymphocytes involved in autoimmune diseases. This mechanism has been confirmed in in vivo models of autoimmune diseases that mimic human ulcerative colitis.

OSE-127, IL-7 receptor antagonist

Interleukin-7 (IL-7) is an interleukin involved in T cell survival, development and homeostasis. T lymphocyte proliferation requires the presence of Interleukin 7. IL-7 is the fuel for many autoimmune diseases. A major challenge in the treatment of

inflammatory diseases could be the presence of pathogenic memory T lymphocytes in the tissues, likely to be resistant to conventional immunomodulatory therapy.

OSE-127 inhibits and blocks the IL-7 pathway. This interleukin plays an important role in the pathophysiology of autoimmune diseases such as ulcerative colitis or hemorrhagic rectocolitis, an inflammatory bowel disease in which T lymphocytes have a deleterious role destroying the lining of the colon.

OSE-127 is being developed under a two-step license option agreement with Servier until the completion of two Phase 2 clinical trials, with a priority focus on the completion of the planned Phase 2a trial in Sjögren's disease, a systemic autoimmune disease characterized by damage to the exocrine glands, in particular lacrimal and salivary glands (Servier is the sponsor), and the other Phase 2 study is planned for ulcerative colitis, an autoimmune disease of the intestine (OSE Immunotherapeutics sponsored). These two studies are scheduled to start in 2020.

In February 2019, Servier validated the first step of this agreement with the exercise of the first option after the validation of a previously defined development stage. Furthermore, this clinical development is currently being conducted as part of the EFFIMab consortium funded by Bpifrance, of which OSE Immunotherapeutics is the leader and which includes public and private partners. Continued development after this Phase 2 will be fully ensured by Servier.

Phase 1 clinical trial in healthy volunteers

OSE-127 entered the clinical trial phase at the end of 2018, following the authorization granted by the Agence Fédérale des Médicaments et des Produits de Santé (AFMPS) and the Belgian Ethics Committee in November.

The purpose of the Phase 1 dose-escalation clinical study, the first administration to humans, was to evaluate the safety and tolerability of single- and multiple-doses of OSE-127 through intravenous and subcutaneous administration. This randomized, double-blind, placebo-controlled trial was conducted in 63 healthy volunteers. Secondary endpoints included measures of pharmacokinetics, pharmacodynamics and immunogenicity to help assess and understand how the drug is absorbed and metabolized. In addition, exploratory biomarkers were used to assess the product's potential to treat inflammatory autoimmune diseases.

This Phase 1 clinical study of OSE-127 showed positive results (announced on December 3, 2019), with a good safety and tolerability profile for the product. All pharmacokinetic and pharmacodynamic parameters were consistent and demonstrated dose-proportionality throughout the dose escalation to 10 mg/kg. These findings will help determine the dosing and administration schedule for the two planned Phase 2 clinical trials in ulcerative colitis (OSE sponsored) and Sjögren's Syndrome (Servier sponsored). Both trials are expected to start in 2020.

The start of the two Phase 2 clinical studies planned for 2020 will depend on the development of the COVID-19 situation. These studies can only be set up once all stages of preparation have been completed and hospitals and healthcare professionals are in a position to ensure the safe conduct of a clinical trial and patient care.

Target

The Interleukin-7 receptor is composed of two subunits, the alpha (or CD127) chain and the gamma (or CD132) chain, which is common to other interleukin receptors (IL-2, IL-4, IL-7, IL-9, IL-15 receptor). A mutation on the alpha chain of the Interleukin-7 receptor leads to immunodeficiency. The blocking of the Interleukin-7 receptor therefore represents a therapeutic target with multiple applications, particularly in autoimmune diseases. This cytokine is different from IL-2 and IL-15 because its presence is necessary and crucial for the generation and maintenance of memory T lymphocytes, as well as for IL-17 secreting cells (special helper T-cells). Consequently, IL-7 is considered the "fuel" for pathogenic T responses related to autoimmune and chronic inflammatory diseases (2) (Dooms, H. et al. 2013). Almost all T lymphocytes express IL-7R, with a major exception for regulatory T cells (Tregs) (3-5) (Michel, L. et al. 2008; Powell, N. et al. 2012), and this therapeutic approach provides an opportunity to selectively target effector T (eff T) while sparing regulatory T cells.

Mechanism of action

OSE-127 has an innovative mechanism of action that blocks Interleukin-7 and internalization of the receptor, thus inducing a powerful antagonist effect on pathogenic T lymphocytes involved in autoimmune diseases. This mechanism has been confirmed in in vivo models of autoimmune diseases that mimic human ulcerative colitis.

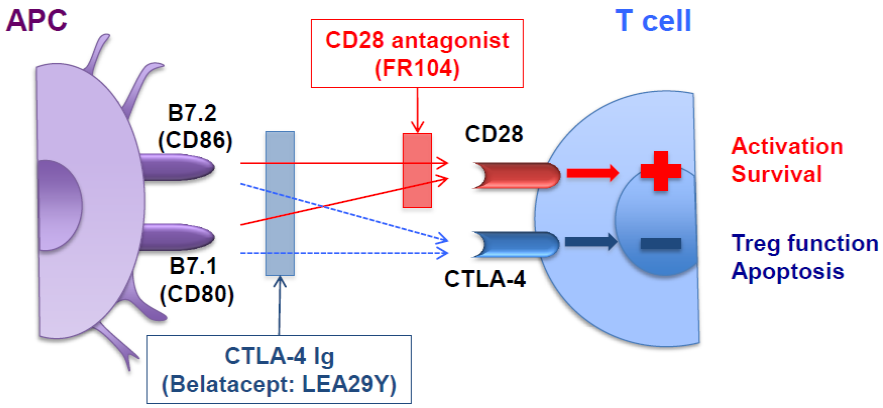
Proof of concept confirmed in relevant in vitro and in vivo models

OSE-127 has demonstrated its efficacy in preclinical inflammation models mediated by T cells, with both immediate and long-term effects, giving it a very novel mechanism of action.

This strategy, which differs from conventional or newer anti-inflammatory drugs used in the clinic, has demonstrated its efficacy in several preclinical models to restore altered immune balance in inflammatory bowel diseases (Powell, N. et al. 2012; Yamazaki, M. et al. 2003), type 1 diabetes, multiple sclerosis, and rheumatoid arthritis.

- **FR104** is a monoclonal antibody and a CD28 antagonist. This pegylated monovalent antibody selectively inhibits the CD28 receptor for potential clinical applications in autoimmune pathologies and transplantation.

The blocking of CD28 by FR104 makes it possible to control the effector T functions while maximizing the regulatory T cells. This novel control of immune synapses potentially offers new therapeutic options in many inflammatory and autoimmune diseases in which T cells are involved and where there is a significant medical need.



CD28 delivers stimulation signals to the CTLA-4 and PDL-1 T cells and deliver inhibition signals to T-cells

Normally, the immune system defends the body against external aggression and tolerates its own constituents. An autoimmune disease occurs when the self-tolerance mechanisms fail, allowing auto-reactive lymphocytes to attack the body's constituents. The immune system then becomes pathogenic and induces tissue or cell damage. These diseases evolve chronically throughout life, with relapse and remission phases. Costimulatory signals are necessary to continue the harmful activation of the T lymphocyte. Blocking these costimulation signals is a new therapeutic pathway in which FR104 is involved.

In transplants and grafts, the immune system seeks to eliminate what it regards as foreign. In bone marrow transplants, the immunocompetent cells in the graft are able to recognize alloantigens in the host as foreign and reject them. This is called Graft Versus Host Disease (GVHD). Alloreactivity (antigens from an individual of the same species but with a different genetic and tissue structure) remains a major obstacle to organ and tissue transplantation because immunological rejection leads to relatively rapid graft loss without immunosuppressive treatment. Alloreactive lymphocytes are at the heart of these rejections and develop high-intensity immune responses one seeks to block.

Janssen Biotech led the development of FR104 into Phase 1 clinical trials under an exclusive license agreement. As of December 31, 2018, the Company has taken over the worldwide rights to the product from Janssen Biotech, whose decision to return the program to OSE Immunotherapeutics was motivated by an internal review of its strategy and prioritization of its product portfolio.

Phase 1 clinical trial: positive results

An initial Phase 1 trial with FR104 showed positive clinical results. The clinical and biological tolerability profile of this new product was very satisfactory in 64 healthy volunteers who received increasing doses of the product in single or repeated administrations. In addition, initial clinical activity data from this trial, using a KLH test, clearly showed a dose-dependent inhibition of the antibody response to KLH.

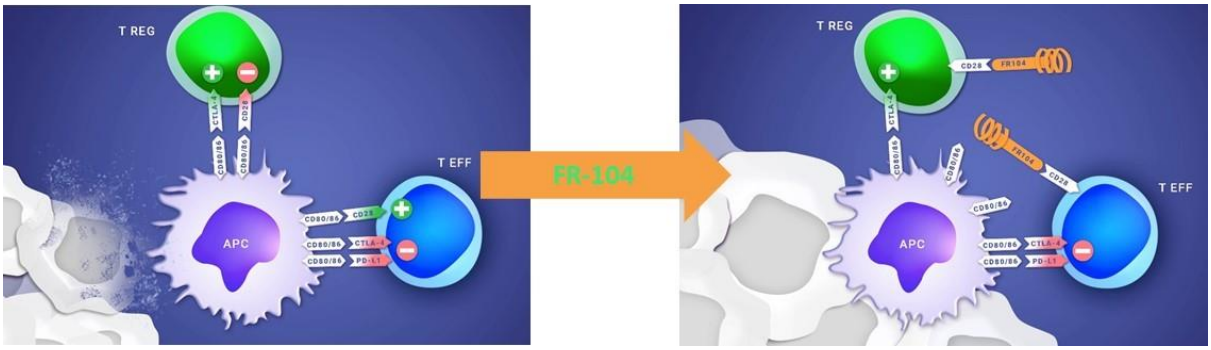
The positive results of Phase 1 clinical proof-of-concept study of FR104, combined with the preclinical tolerability profile and the efficacy data for a large number of preclinical models of inflammatory and autoimmune diseases support the continuation of the product's clinical development. The Company is assessing the best options for continuing to develop FR104 in the Phase 2 study in autoimmune diseases or transplantation, including global partnering opportunities.

Phase 2 clinical trial

The Company assesses the best options for continuing to develop FR104 in Phase 2 clinical trial in autoimmune diseases or transplantation, including global partnering opportunities.

Target

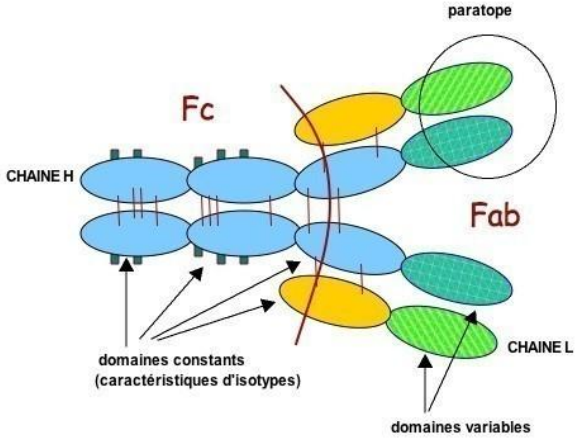
The binding of CD28, expressed on the surface of a lymphocyte, to B7-1 (also known as CD80) or B7-2 (also known as CD86) ligands, expressed on the surface of an antigen-presenting cell, provides the T lymphocyte with a costimulatory signal for it to become fully activated. Costimulatory signals regulate lymphocyte responses. The pharmacological effect on the costimulatory signal is a new therapeutic approach for modulating immune responses, in this present case to fight autoimmune reactions by reducing undesirable immune responses, and to prevent transplant rejection.



FR104 is an anti-CD28 monoclonal antibody, a pegylated humanized Fab' fragment in monovalent heterodimeric form.

It neutralizes CD28 interaction with its CD80/CD86 ligands (and also with CD275/ICOS-L). Based on positive data from Phase 1 clinical trial, FR104 is ready to enter Phase 2 in autoimmune diseases or transplantation. Due to its monovalent form, FR104 blocks CD28-CD80/86 interactions without activating T lymphocytes (see above Figure).

Unlike CD80/86 antagonists, FR104 does not prevent the powerful regulatory activity from CTLA4-CD80/86 interactions. These interactions are essential for the suppressive activity of regulatory T lymphocyte cells (Treg) [1]. FR104 thus reinforces the CTLA4-dependent suppressive activity while inhibiting effector T cells (Teff) [15]. FR104 is a bi-branched pegylated product; it is a chemical modification amplifying its pharmacokinetics to allow or an increased presence of the product at blood level. This addition is done on its C-terminal end (C-terminal cysteine 2). As a result of the chemical modification, the pegylated product leads to stable blood rate over time.



Overall dosing and administration schedule of an antibody with an Fc fragment and two Fab' fragments

In vitro mechanism of action

- FR104 selectively inhibits CD28-CD80/86 and CD28-CD275 interactions.
- It inhibits T-cell proliferation and cytokine synthesis (Interferon-gamma and Interleukin-2).
- It inhibits the responses of special effector T cells (memory effector T cells).
- It induces a response of CTLA-4-dependent regulatory T cells resulting in T-suppressive activity.
- It will not induce spontaneous activation of CD28-dependent T cells.

Proof-of concept confirmed in many relevant in vivo models.

In in vivo transplantation models (heart graft [3–5], liver graft [6] and kidney graft [1,7, 8]), CD28 antagonists act in synergy with other products, such as monoclonal antibodies and calcineurin inhibitors (CNIs). This class of CNI drugs is one of the reference treatments with cyclosporine as leading drug, often associated with corticosteroids. Alloreactivity or graft rejection is inhibited by FR104. Regulatory T cells are induced both in the periphery and in the graft, guaranteeing long-term conclusive graft outcomes. FR104, associated with calcineurin inhibitors (CNIs without added corticosteroids, or low-dose CNIs), is able to prevent graft rejection, inhibit the development of alloantibodies and extend graft survival [13] over the long term.

Other in vivo models of autoimmune pathologies have clearly proved the efficacy of FR104 (encephalomyelitis [14], rheumatoid arthritis (Vierboom et al., 2016), uveitis [10] and psoriasis [11]).

They have confirmed the significant therapeutic potential of this anti-CD28 monoclonal antibody.

The FP7-HEALTH-2011 European program supported the preclinical development of FR104 in T dependent autoimmune diseases (TRIAD program: Tolerance Restoration In Autoimmune Diseases).

The major assets of FR104, one of the first products of this class, are:

- It is an immunomodulator and CD28 antagonist
- The selection and patented optimization of this product candidate are key to ensure its efficacy and safety with the choice of developing a monovalent fragment (Fab')
- The related humanization and pegylation processes, which increase its pharmacokinetic properties, also contribute to greater efficacy and good tolerability
- It causes a decrease in effector T cells directly involved in the pathology of autoimmune diseases
- It acts in synergy with suppressive regulatory T cells
- It draws on a strong patent portfolio

5.1.3 Research and Development

The Company continues to identify new targets and optimize product candidates selected for immuno-oncology and autoimmune diseases. In particular, other checkpoint inhibitors and immunomodulators will be selected and optimized, based on proof-of-concept substantiated during research and development, to enter the development phase.

The Company intends to continue its development research programs from the preclinical to the clinical stage and to the registration phase, when only one indication is targeted, or an orphan status can be granted to the product. It intends to collaborate with relevant industry players to develop product candidates targeting several indications and a larger market.

5.2 Key markets

5.2.1 Immuno-oncology market

Immuno-oncology: assessment of the cancer immunotherapy market and assessment of the market for Tedopi® in lung cancer

In June 2017, "GBI Research" forecast a rise in the global oncology market from 118.6 billion dollars in 2016 to 241 billion dollars in 2023. In January 2020, the **"Immuno-Oncology Market - Global Forecast to 2022"** estimated that the global immuno-oncology market would be worth over 100 billion dollars by 2022.

The first cancer immunotherapy products registered were checkpoint inhibitors acting on T cells (Opdivo® BMS, Keytruda® Merck, Tecentriq® Roche, Yervoy® BMS, Bavencio® Merck Serono/Pfizer, Imfinzi® Astra Zeneca), and a therapeutic vaccine, Provenge®.

The first immune activation product, Provenge®, to have entered the market in this field is a cell therapy product to combat prostate cancer which was registered in the United States in 2010 (Provenge® or sipuleucel-T, developed by the US company, Dendreon, since acquired by the pharmaceutical company, Valeant).

Opdivo® (nivolumab, monoclonal antibody, anti-PD-1 checkpoint inhibitor from BMS)/First marketing authorization: December 2014 (metastatic melanoma). Since then, Opdivo® has been registered in metastatic non-small cell lung cancer (NSCLC) (2015), renal cancer (2015), Hodgkin's lymphoma (2016), head and neck cancer (2016), bladder cancer or urothelial carcinoma (2017), metastatic colorectal cancer (MSH-H or dmmr) (2017), hepatocellular carcinoma (liver cancer (2017) and small cell lung cancer (2018). In 2018, the product was also registered in combination with ipilimumab (Yervoy®) in metastatic colorectal cancer and in 1st-line therapy in renal cancer.

Revenue: 2016 = $3.8 billion; 2017 = $4.9 billion; 2018 = $6.7 billion; 2019 = $7.2 billion.

Keytruda® (pembrolizumab, monoclonal antibody, anti-PD-1 checkpoint inhibitor from Merck MSD)

First marketing authorization: in 2014 in metastatic melanoma. Since then, Keytruda® has been registered in non-small cell lung cancer (NSCLC) (2015), head and neck cancer (2016), Hodgkin's lymphoma (2017), bladder cancer or urothelial carcinoma (2017), gastric cancer or gastro esophageal junction cancer (2017), cervical cancer (2018), diffuse large B cell lymphoma (June 2018), hepatocellular carcinoma (liver cancer 2018), Merkel cell carcinoma (an aggressive skin tumor) (2018), renal cancer (2019), esophageal cancer (2019) and endometrial cancer (2019).

After registration in 2015 as a 2nd-line therapy for patients suffering from metastatic non-small cell lung cancer (NSCLC) with a PD-1 biomarker expression, in October 2016, Keytruda® was registered in 1st-line therapy in NSCLC for patients expressing the PD-1 marker (PD-L1 expression over 50% at tumor level). In May 2017, Keytruda® obtained its conditional registration in 1st-line therapy (in combination with pemetrexed and carboplatin) in NSCLC, whatever the PD-L1 expression. In August 2018, Keytruda® was registered in 1st-line therapy (in combination with pemetrexed and platinum-based chemotherapy) in metastatic non-epithelial NSCLC without tumor-genomic aberration of the EGFR or ALK gene. In October of the same year, it was registered in 1st-line therapy (in combination with carboplatin and paclitaxel) in NSCLC, whatever the PD-L1 expression. In April 2019, the product was registered in 1st-line monotherapy for stage III NSCLC (PD-L1 proportion expressed at over 1% at the tumor level).

Revenue: 2015 = $566 million; 2016 = $1.4 billion; 2017 = $3.8 billion; 2018 = $7.1 billion; 2019 = $11.1 billion.

Tecentriq® (atezolizumab, anti-PD-L1 checkpoint inhibitor from Roche)

First marketing authorization: in May 2016 in urothelial bladder cancer, with a companion test to identify PD-L1 positive patients (Ventana PD-L1-SO 142 assay). Then in October 2016, Tecentriq® was registered in the treatment of lung cancer as a 2nd-line therapy for patients suffering from metastatic non-small cell lung cancer (NSCLC) whose disease has progressed during, or after, platinum-based chemotherapy, and during an appropriate targeted treatment in the presence of a tumor with EGFR or ALK gene mutation. In December 2018, Tecentriq® obtained its registration in 1st-line therapy for non-epithelial

metastatic NSCLC in combination with Avastin® and chemotherapy. In March 2019, the product was registered in metastatic triple negative breast cancer and in 1st-line therapy of small cell lung cancer.

Revenue: 2016 = $168 million dollars; 2017 = $508 million dollars; 2018 = $765 million dollars; 2019 = $1.9 billion dollars.

Yervoy® (ipilimumab, monoclonal antibody targeting CTLA-4, from BMS)

First marketing authorization in 2011 in melanoma. In 2018, the product was registered in combination with nivolumab (Opdivo®) in metastatic colorectal cancer and in 1st-line treatment of renal cancer.

Revenue: 2018 = $1.3 billion dollars; 2019 = $1.5 billion dollars.

Bavencio® (avelumab, monoclonal antibody targeting anti-PD-L1, from Merck Darmstadt or EMD Serono in collaboration with Pfizer -Javelin program): this antibody is an IgG1, a cytotoxic antibody. Two registrations were obtained in 2017: in Merkel cell carcinoma (an aggressive skin tumor), and in bladder cancer or urothelial carcinoma.

Revenue: 2019 = €103 million.

Imfinzi® (durvalimab, humanized monoclonal antibody targeting the PD-L1 ligand, checkpoint inhibitor MEDI 4736d)

First marketing authorization in 2017 in bladder cancer or urothelial carcinoma. Then, in 2018, registration in inoperable non-small cell lung cancer (NSCLC) in patients who have not progressed after chemo or radiotherapy.

Revenue: 2019 = $1.5 billion dollars (AstraZeneca estimated that the market would peak at over $6 billion).

As an indicator, products generating significant revenue in the cancer market in 2019 included, amongst others (from data published by the companies) the following products and pharmaceutical companies:

Avastin® (bevacizumab, Roche): an anti-angiogenic indicated for a number of cancers (lung, breast, ovarian, colon and kidney cancer)

Revenue: 2019 = $7.4 billion.

Herceptin® (trastuzumab, Roche): an HER2-targeted therapy for breast cancer

Revenue: 2019 = $6.3 billion.

Alimta® (pemetrexed, Eli Lilly): chemotherapy for NSCLC

Revenue: 2019 = $2.1 billion.

List prices for these products are as follows:

In the United States, a year's treatment with Yervoy® costs $120,000.

Recently registered products targeting ALK mutations in lung cancer, such as Xalkori® (crizotinib - Pfizer) cost $138,000 a year; ceritinib or Zykadia® from Novartis (indicated following the failure of Xalkori®) costs $158,400 a year.

Checkpoint inhibitors registered for NSCLC: nivolumab (Opdivo ® - BMS), pembrolizumab (Keytruda®- Merck &Co), atezolizumab (Tecentriq® - Roche), durvalumab (Imfinzi® AstraZeneca) all cost $150,000 a year.

In Europe, the price of Opdivo® ranges between €5,000 and €6,000 a month (i.e. around €72,000 a year). The price of treatment for a 75kg male would be more than €7,000 per month for Keytruda®, the Merck & Co. product. This is the same price as Yervoy® in melanoma.

Assessment of the market for Tedopi® in lung cancer

Every year, more deaths are recorded from lung cancer than from colon, breast and prostate cancers put together.

Risk factors are cigarettes, air pollution and family history.

In 2018, 2.09 million new cases (incidence) were recorded worldwide (11.6% of the total number of new cancers) and 1.8 million deaths (mortality) (18.4% of the total). The global mortality-to-incidence ratio was 0.86. The number of new cases was estimated at 3.6 million in 2040, with a rise in the average annual incidence rate of 2.51% (source: Globocan 2018).

In the United States, in 2018, lung cancer incidence was 234,687 patients a year with 152,424 deaths (Globocan 2018). In Europe, in 2018, across 28 countries, there was an incidence of 470,039 patients with 387,913 deaths. In China the incidence was 653,000 patients with 587,000 deaths a year.

Non-small cell lung cancer (NSCLC) accounts for around 85 to 88% of lung cancers. The 5-year overall survival rate was 23% according to cancer.net 2019 (Doctor Approved Patient Information from ASCO®). For the vast majority of patients, this cancer is discovered at an advanced stage (Yang et al., 2005) (Govindan et al., 2006) (American Cancer Society, 2012). NSCLC is considered to be a major public health issue due to its poor prognosis.

The HLA-A2 population accounts for 45% of the population suffering from NSCLC (similar figures in Asia, the United States and the European Union). The presence of the HLA-A2 marker is considered an aggravating risk factor at an advanced stage and the majority of patients are already at an advanced stage when they are diagnosed (stage III invasive or stage IV metastatic) with high risk.

HLA-A2 positive NSCLC accounts for around 84,000 patients in the United States, 134,000 in Europe and 258,000 in China.

OSE Immunotherapeutics' internal assessment for Tedopi® is based on the epidemiology of HLA-A2 positive lung cancer with HLA-A2+ patients accounting for 45% of the non-small cell bronchial carcinoma population (88% of the lung cancer population).

The current estimate of potential sales of Tedopi® for lung cancer are based on an estimated market share of 15% at the 4-year peak and a price of around €50,000 (price estimated in the United States and Europe based on the price of comparable cancer research, personalized medicine, or "orphan" status products).

Estimated potential sales for lung cancer are around €2 billion worldwide.

The majority of patients are already at an advanced stage when they are diagnosed (Stage III invasive or Stage IV metastatic) and have a high risk of mortality. Despite the new treatments, 5-year survival rates are around 6% (American Cancer Society, 2019) for cancer patients.

Checkpoint inhibitors are becoming a standard treatment and are increasingly used in different lines of early through to late treatment. Tedopi's® positioning as a post-checkpoint inhibitor is not a restriction on its potential market. By focusing exclusively on patients whose treatment with PD-1/PD-L1 immune checkpoint inhibitors has failed, Tedopi® meets a very high therapeutic need since no product has, to date, been registered for this population in immune escape.

At this stage, no estimates have been made for any other clinical applications in other cancers or therapeutic combinations with other products.

Assessment of the market for Tedopi® in pancreatic cancer

The incidence of pancreatic ductal adenocarcinoma is steadily increasing in Western countries and is likely to become the 2nd greatest cause of death by cancer in 2020 (Rahib L et al: Projecting cancer incidence and deaths to 2030: the unexpected burden of thyroid, liver, and pancreas cancers in the United States. Cancer Res 2014). The prognosis for this disease is very poor with a 5-year survival rate of less than 5%. As to the prognosis, most patients have metastases (50%) or a locally advanced cancer (one third). If the disease is operable, surgical resection followed by adjunctive chemotherapy can be used to treat a minority of patients, with 80% of cases relapsing during the follow-up period.

Standard treatment for metastatic pancreatic adenocarcinoma is still gemcitabine monotherapy for up to 15 years. For more than 10 years, dozens of Phase 3 randomized clinical trials assessed combinations of cytotoxics, or cytotoxics with targeted therapies, without managing to demonstrate that these treatments were in any way superior to gemcitabine alone. Since 2011, treatments with folforinox (Conroy T et al: FOLFIRINOX versus gemcitabine for metastatic pancreatic cancer. N Engl J Med 2011) then with nab-paclitaxel + gemcitabine proved to be superior to gemcitabine alone in terms of response rate, progression-free survival rate and overall survival rate. Progression-free survival rates at 6, 12 and 18 months were 52.8%, 12.1% and 3.3%, respectively, in the folforinox group.

Preliminary results for therapeutic vaccines targeting tumor antigens directly (telomerase, KRAS proteins or mesothelin) and GVAX (granulocyte-macrophage colony-stimulating factor - secreting allogeneic pancreatic tumor cells) showed moderate clinical activity and a good tolerance profile [Middleton G et al. Gemcitabine and capecitabine with or without telomerase peptide vaccine GV1001 in patients with locally advanced or metastatic pancreatic cancer (TeloVac): An open-label,

randomized, phase 3 trial. Lancet Oncol 2014; Le DT et al. A live-attenuated Listeria vaccine (ANZ-100) and a live-attenuated vaccine expressing mesothelin (CRS-207) for advanced cancers: phase I studies of safety and immune induction. Clin Cancer Res 2012). Le DT et al. Safety and survival with GVAX pancreas prime and Listeria Monocytogenes-expressing mesothelin (CRS-207) boost vaccines for metastatic pancreatic cancer. J Clin Oncol 2015]

Pancreatic adenocarcinoma is associated with significant number of neoantigens which justify the use of immunotherapy. The somewhat moderate outcomes reported with the checkpoint inhibitors or therapeutic vaccines used in this type of cancer can be explained by the pivotal role played by the tumor microenvironment (the stroma) in the development and progression of this type of cancer. A dense, fibrous stroma combined with a pancreatic adenocarcinoma forms a physical and chemical double barrier, involved in immunosuppression. To reverse this immunosuppression, induction chemotherapy is an interesting option. Cytotoxics may reduce the tumor load and activate the immune system by destroying tumor cells. The activation of tumor neoantigens and pro-inflammatory cytokines is also a promising means of awakening the immune defences.

5.2.2 Autoimmune disease market

The autoimmune disease market is a key market that includes major pharmaceutical industry players

By way of example:

Ulcerative colitis: incidence (patients diagnosed with the disease per year) is between 1.2 and 20 cases per year for every 100,000 people in developed countries and the prevalence of this autoimmune disease is between 7 and 246 cases for every 100,000 people (Danese S et al, Ulcerative Colitis, New Eng J M 2011) ;

2.5 million people worldwide suffer from multiple sclerosis.

Revenue from leading autoimmune disease treatments is as follows (information supplied by pharmaceutical company websites):

Humira® (adalimumab, AbbVie): 19.1 billion dollars in 2019, in particular, for Crohn's disease and rheumatoid arthritis.

Remicade® (infliximab, Merck et Janssen biotech/J&J): 4.4 billion dollars in 2019 in autoimmune diseases.

Rituxan® Mabthera® (rituxumab, Roche): 6.8 billion dollars in 2019 in non-Hodgkin's lymphoma, rheumatoid arthritis, transplant rejection.

Enbrel® (etanercept, Pfizer, Amgen, Takeda): 6.9 billion dollars in 2019 in rheumatoid arthritis.

Copaxone® (copolymer 1, Sanofi- Teva): nearly 4 billion dollars in 2019 in multiple sclerosis.

Avonex® (interferon beta 1a, Biogen): $1.7 billion in 2019 in multiple sclerosis.

Rebif® (interferon beta 1a, Merck Serono/ Pfizer): $2.3 billion in multiple sclerosis.

More often than not, the original patents protecting these biotechnology products, such as Humira®, Enbrel®, Remicade®, Mabthera® and Copaxone®, have expired. Generic products are known as "biosimilar" products and must have documentation as comprehensive as the original product developed by pharmaceutical players such as, for example: Mylan (Glactect®, generic form of Copaxone®), Celltrion Healthcare (Remsima™, biosimilar form of Remicade®; Truxima™, biosimilar form of Rituxan®), Samsung Bioepis (Benepali™, biosimilar form of Enbrel®; Imraldi™, biosimilar form of Humira®).

The key players in the autoimmune disease market are Johnson & Johnson (J&J), AbbVie, Amgen, Genentech/Roche, Astellas, UCB, Eli Lilly, Sanofi, Astra- Zeneca, Novartis and Biogen.

5.3 Important events in the development of the Company's business

April 2012: Creation of OSE Pharma.

June 2014: Phase 3 pivotal trial protocol in lung cancer accepted by the two regulatory agencies: FDA in the United States and EMA in Europe.

July 2014: The Company increased its share capital by €3.2 million.

March 2015: IPO of the Company and capital increase of almost €21.1 million.

May 2015: First licensing and distribution agreement with Israel entered into with Rafa Laboratories, a pharmaceutical company specializing in oncology and rare lung diseases, with longstanding presence in the country and longstanding expertise in the industry.

January-February 2016: Start of Phase 3 registration clinical trial (Atalante 1 trial) of Tedopi® in Europe and the United States, in advanced non-small cell lung cancer in second-line treatment.

May 2016: Merger of OSE Pharma (Paris) with Effimune (Nantes, France). Change of name to OSE Immunotherapeutics and registered office located in Nantes.

July 2016: Exercise of option by Janssen Biotech Inc. (Johnson & Johnson group) as part of the worldwide licensing agreement between Janssen and OSE Immunotherapeutics (signed in October 2013), initiated following the positive results from FR104's Phase 1. According to the terms of this agreement, Janssen was responsible for all clinical development, registration and international marketing of FR104 in autoimmune diseases and transplantation.

December 2016: Signature of a two-step worldwide licensing option agreement with Servier, an international independent pharmaceutical company, to develop and market Interleukin-7 receptor antagonist OSE-127.

June 2017

- Research collaboration agreement with the Memorial Sloan Kettering Cancer Center in New York to evaluate the efficacy profile and development prospects of OSE-703 immunotherapy, a cytotoxic monoclonal antibody that targets the alpha chain of the Interleukin-7 receptor in solid tumors.
- Patient enrollment for Phase 3 Tedopi® trial (Atalante 1) in the treatment of non-small cell lung cancer (NSCLC) temporarily suspended, while treatment of patients already enrolled continues in order to evaluate, with greater perspective on the data, the potential benefit of Tedopi®, based on the profile of treated patients.

July 2017: Financing in the amount of €9.2 million received from Bpifrance as part of a collaborative project (EFFI-CLIN) to support the development of BI 765063 (OSE-172).

September 2017: Signature of a collaboration agreement with GERCOR, a cooperative group of digestive oncology experts, to assess Tedopi® in monotherapy or in combination with a PD-1 checkpoint inhibitor, versus Folfiri, in locally advanced or metastatic pancreatic cancer.

December 2017: Following its suspension in June 2017, patient enrollment resumed as part of the Atalante 1 trial after approval by the competent authorities, according to a protocol aimed specifically at a group of patients who failed to respond to treatment with PD-1/PD-L1 immune checkpoint inhibitors.

February and March 2018: Authorizations granted to resume patient enrollment in the Phase 3 international trial of Tedopi® in the United States and Europe, for patients suffering from non-small cell lung cancer (NSCLC) who failed to respond to treatment with PD-1/PD-L1 checkpoint inhibitors. Authorization granted in Israel to initiate this same trial.

April 2018: Signature of a worldwide licensing and collaboration agreement in immuno-oncology with Boehringer Ingelheim to develop the anti-SIRPa monoclonal antibody, BI 765063 (OSE-172), a new checkpoint inhibitor. OSE Immunotherapeutics could receive up to €1.1 billion if all planned milestones achieved.

April 2018: New organizational structure of the Board of Directors with the appointments of Dominique Costantini as Chairman of the Board of Directors (following the resignation of Gérard Tardy as director and Chairman of the Board of Directors) and of Alexis Peyroles as Chief Executive Officer.

July 2018: Financing in the amount of €435,000 received to support a translational research project on Tedopi®, as part of the Eurostars European program (led by Bpifrance), known as Immunomonitor (Treatment Response Monitoring for Cancer Immunotherapies Using Immune Repertoire Analysis).

November 2018:

- Worldwide rights for FR104 taken over from Janssen Biotech by OSE Immunotherapeutics, according to which the Company has exclusive access to all intellectual property, data, files and materials developed by Janssen Biotech as part of the FR104 program. Janssen Biotech's decision to return the FR104 program to OSE Immunotherapeutics was motivated by an internal strategy review and prioritization of its own product portfolio.
- Authorization from the ANSM (French National Agency for Medicines and Health Products Safety) and the CCP (French equivalent of the Institutional Review Board) to start a Phase 2 clinical trial to assess the use of Tedopi® alone or in combination with Opdivo® (nivolumab) versus maintenance standard-of-care treatment with Folfiri (chemotherapy combining folinic acid, fluorouracil and irinotecan), in advanced or metastatic pancreatic cancer (clinical trial sponsored and conducted by the oncology group GERCOR, with the support of Bristol-Myers Squibb which provided Opdivo®).
- Authorization from the Belgian Federal Agency for Medicines and Health Products (FAMHP) and the Belgian Ethics Committee to initiate a Phase 1 clinical trial of OSE-127, aiming to assess the safety and tolerability of intravenous and subcutaneous administered single and multiple doses of OSE-127. In December 2018, the Company announced the first administration of the product candidate in healthy volunteers included in the trial.

January 2019: Notice of allowance issued by the Japanese Patent Office for a new family of patents on Tedopi® for its use in the treatment of brain metastasis originating from cancers, including non-small cell lung cancer, in HLA-A2 positive patients. This patent protects the use of Tedopi® in the treatment of cerebral metastases until 2034.

February 2019: Exercise by Servier of the first option of the two-step worldwide licensing agreement for the continuation of the clinical development and potential marketing of OSE-127 in autoimmune diseases. Under the terms of the licensing agreement, exercise of this first option resulted in the payment, by Servier, of a milestone payment of €10 million (excluding tax) to the Company, after validation of a previously defined development stage.

March 2019:

- Presentation at the World Immunotherapy Congress in Boston of BiCKI®, the new bispecific fusion protein platform built on the key backbone component anti-PD-1 (OSE-279), a new standard cancer treatment, merged with innovative immunotherapy targets.
- Authorization from the National Agency for the Safety of Medicines and Health Products (ANSM) in France and the Federal Agency for Medicines and Health Products (FAMHP) in Belgium to launch a Phase 1 clinical study of BI 765063 (OSE-172), a checkpoint inhibitor, in advanced solid tumors used as a monotherapy or in combination with a monoclonal antibody and PD-1 antagonist, and Boehringer Ingelheim's BI 754091.
- Announcement of a research collaboration with the Léon-Bérard Cancer Center to identify innovative immuno-oncology targets by using artificial intelligence technologies.

April 2019:

- Milestone payment of €880,000 received as part of the EFFIMab program financed by Bpifrance.
- Patent granted by the Canadian Intellectual Property Office (CIPO) that covers FR104 and its therapeutic applications in T lymphocyte-mediated autoimmune diseases, chronic inflammatory diseases and graft applications; a notice of allowance was also issued by the United States Patent and Trademark Office (USPTO) providing additional protection covering use of the product in the treatment of T lymphocyte-mediated chronic inflammatory diseases. These new patents protect the therapeutic applications of FR104 in autoimmune diseases, chronic inflammatory diseases and graft applications in Canada and the United States up to 2031.
- Presentations at the American Association of Cancer Research (AACR) annual meeting held from March 29 until April 3, 2019 in Atlanta:
  - Oral presentation of Tedopi® on the initial signs of the product's efficacy after failure from treatment with anti-PD1/anti-PD(L)1 checkpoint inhibitors. Improvement in the results of clinical cases related to three patients after checkpoint inhibitors have shown that the clinical benefit of Tedopi® in third-line therapy. One patient showed a partial response and two patients had stable disease according to RECIST 1.1 criteria. The tolerability profile was manageable in these 3 patients and none of them had to stop the treatment because of toxicity.
  - Presentation on BI 765063 (OSE-172) showing preclinical and ex vivo results in humans. The research concluded that as blockade of SIRPα prevents T cell transmigration, the selective anti-SIRPα activity of BI 765063 and its

ability to promote T cell infiltration of solid tumors are crucial for this product's potential success as a novel cancer therapy.

May 2019: Notice of allowance issued by the United States Patent and Trademark Office (USPTO) strengthening the protection covering OSE-127 until 2035.

June 2019: First patient treated in the Phase 1 clinical trial to evaluate BI 765063, the selective antagonist targeting SIRPα, in patients with advanced solid tumors; milestone payments worth €15 million were made by Boehringer Ingelheim to OSE Immunotherapeutics upon clinical trial authorization and treatment of the first patient.

Tedopi® Phase 3 clinical trial (Atalante 1) in advanced lung cancer post checkpoint inhibitor treatment failure: after the review of clinical data, including safety data, the Independent Data Monitoring Committee (IDMC) recommended the continuation of the Atalante 1 study without implementing any changes.

July 2019: Financing in the amount of €800,000 received by the French National Agency of Research (ANR) validate new targets linked to myeloid cells that could be used to identify innovative immunotherapy targets. The Cancer Research Center of Lyon (CRCL) in France, part of the Léon Bérard Center, managed the project.

September 2019:

- The European Patent Office granted a new patent strengthening protection of OSE-703, a humanized monoclonal antibody against the extracellular portion of the alpha chain of the Interleukin-7 receptor (CD127), and cytotoxic to human cells expressing CD127, and its use in immuno-oncology treatments. This new patent protects OSE-703 at least up to 2037.
- Milestone payment of €5.4 million received from Bpifrance for developing SIRPα-antagonist monoclonal antibody, BI 765063, as part of the EFFI-CLIN collaborative project.
- Presentation of new preclinical data on the bispecific checkpoint inhibitor (BiCKI®) platform: target PD-1 receptor and cytokines to overcome tumor resistance to checkpoint inhibitor blockade (International Cancer Immunotherapy Conference, Paris, September 25-28).

November 2019

- Licensing agreement with Chong Kun Dang (CKD) Pharmaceuticals Corp. For the development of Tedopi® in Korea. As provided for in the agreement, OSE Immunotherapeutics will receive milestone payments amounting to €4.3 million, including €1.2 million on signature and a short-term milestone achievement, and royalties on product sales as well as a margin based on the transfer price, slightly lower than around 30%. The agreement covers the development and licensing of Tedopi® in the Korean market, which accounts for approximately 1% of the global oncology market.
- Presentation of new preclinical and clinical data on its immuno-oncology products, Tedopi®, BI 765063 (OSE-172) and the BiCKI® platform, at the SITC (Society for Immunotherapy of Cancer) annual meeting held at National Harbor, Maryland, United States, from November 6-10, 2019.
- Collaboration agreement with HalioDx, a specialist immuno-oncology diagnostic company based in Marseille, to conduct a translational study on immune biomarkers as part of the ongoing Phase 3 clinical trial of Tedopi® in patients with non-small cell lung cancer.

December 2019

- The Company announced positive results from the Phase 1 clinical trial of OSE-127. The results showed a good safety profile and tolerability of the product. All pharmacokinetic and pharmacodynamic parameters were consistent and demonstrated dose-proportionality throughout the dose escalation to 10 mg/kg. These findings will help determine the dosing and administration schedule for the two planned Phase 2 clinical trials in ulcerative colitis and Sjögren's Syndrome (Servier is conducting this second study simultaneously). Both trial initiations are expected in 2020.

January 2020

- The Japanese Patent Office granted a new family of patents related to Tedopi®, a combination of neoepitopes, protecting the product's method for inducing early T lymphocyte memory response for use in the treatment of cancer in HLA-A2 positive patients. The patent protects the product candidate until 2035.

March 2020

- A collaboration agreement was entered into with MAbSilico, an innovative company based in Tours (France) specializing in the use of artificial intelligence algorithms to discover and characterize therapeutic antibodies. The purpose of this three-year collaboration involving six antibody programs is to build on artificial intelligence to develop monoclonal antibodies, including innovative bispecific antibodies (BiCKI® platform).

- Signature of an amendment to the two-step worldwide licensing option agreement on the exclusive rights of OSE-127, Interleukin-7 receptor antagonist, signed with Servier in December 2016. This amendment modifies the arrangements for the potential exercise of the licensing option agreement's second step. OSE Immunotherapeutics will thus receive a milestone payment of €5 million from Servier on enrollment of the first patient in Phase 2a clinical study scheduled to start in Sjögren's Syndrome and an additional payment of €15 million on exercise of the option at the end of the two scheduled Phase 2 studies, with priority being given to the study in Sjögren's Syndrome. The initial agreement provided for a total payment of €20 million at the end of Phase 2 in ulcerative colitis.

- Due to the COVID-19 crisis, when the Company published its 2019 financial results and provided an update on its activities on March 26, 2020, it also announced its forecast of the potential impact of COVID-19 on its activities and clinical development:

  - The situation caused by the COVID-19 is a major public health issue that could have a significant impact on its clinical trials currently underway. In the last days of March, health agencies and expert groups clarified that the conduct of clinical trials in hospitals would be extremely disrupted because medical teams were needed elsewhere, because of confinement measures and the potential risks relating to the COVID-19 epidemic for vulnerable patients. The Company's short-term priority is to do its part to mobilize all the resources necessary to combat COVID-19 and reduce its demands on healthcare professionals, while ensuring the safety of patients in its clinical trials already underway.

  - Phase 3 clinical trial of Tedopi® in non-small cell lung cancer after failure of previous treatment with PD-1/PD-L1 checkpoint inhibitors (Atalante 1 trial): due to the COVID-19 epidemic and given the directives from regulatory agencies and taking into account the safety of patients participating in the trial, compliance with good clinical practice (GCP) and the risks of trial protocol deviation during the pandemic, OSE Immunotherapeutics is analyzing the potential impact of this epidemic on the Atalante 1 trial. The Company will announce the outcome of this review and the Step 1 results provided for in the protocol as soon as possible, in the coming weeks.

  - Phase 2 clinical trial of Tedopi® in combination with Opdivo® checkpoint inhibitor (nivolumab) in pancreatic cancer (TEDOPaM trial), sponsored by the oncology group GERCOR and with the support of Bristol-Myers Squibb: screening and enrollment of new patients in this study will be affected by the COVID-19 epidemic in the coming months.

  - Phase 1 clinical trial of BI 765063 (OSE-172) in advanced solid tumors, in partnership with Boehringer Ingelheim: during the second quarter of 2020, screening and enrollment of new patients in this study will be impacted by the COVID-19 crisis.

  - On OSE-127, developed in partnership with Servier: the start of the two Phase 2 clinical studies (in Sjögren's Syndrome, sponsored by Servier, and in ulcerative colitis, sponsored by OSE) expected in 2020 will depend on the developments of the COVID-19 situation. These studies can only be set up once all the preparatory steps have been completed and hospitals and healthcare professionals are able to conduct a clinical trial and ensure patient care in optimal safety conditions.

April 2020

- On April 1, 2020, the Company announced the successful completion of Step 1 of Tedopi® Phase 3 clinical trial, Atalante 1, in non-small cell lung cancer:

  - The primary endpoint of Step 1 was met: 12-month survival rate for patients treated with Tedopi®;

- Detailed analysis of the Step 1 results will help identify the best options for the further clinical development of Tedopi® and the strategy of potential partnerships.

Based on the positive results of Step 1 and in the context of the COVID-19 epidemic, the Company will discuss with the regulatory agencies the best options to continue development of Tedopi®, at the same time as the voluntary and definitive suspension of the recruitment of new patients in Step 2 planned for the clinical trial.

5.4 Strategy and objectives

The Company aims to become a leading international player in the field of immunotherapy and increase its portfolio and exposure in the field of cells involved in cancer or autoimmune disease inflammatory processes. The Company has an innovative technological foundation, expertise in selection and optimization of receptor targeting, enabling significant therapeutic advances.

It controls the technologies of immunoregulation and immunoactivation of the immune system with complementary international teams and expertise involved in the research and optimization of drug candidates, pharmaceutical development of biotherapies, clinical development and registration.

OSE Immunotherapeutics has a portfolio of four immunotherapy products in clinical trials from Phase 3 to Phase 1. The Company is also developing its technological platforms and selects the most innovative candidates to enter the preclinical and clinical development phases, on its own or as part of a partnership with a pharmaceutical group, for products targeting several indications and a larger market. It is developing immunological activation or regulation (suppression) products to identify and select the most relevant targets to produce agonists or antagonists in immuno-oncology or autoimmune diseases.

To achieve these objectives, the Company is pursuing a dynamic partnership strategy based on a portfolio of innovative products to generate non-dilutive revenues and finance its R&D programs. It seeks new collaboration or licensing agreements, that could be initiated at various stages of product development, with industry players involved in the field of activation and regulation immunology and in therapeutic combinations of high clinical interest.

5.4.1 A dynamic partnership strategy based on a portfolio of innovative products

Partnerships with international pharmaceutical groups enable OSE Immunotherapeutics to accelerate the clinical development of its products. The Company aims to find the “right” partners, as with Boehringer Ingelheim and Servier, who will include the product candidate in their portfolio as a valuable program and commit the resources required to co-develop the product and ultimately address patients’ needs.

Partnerships are also a key component of the Company’s business model, generating non-dilutive revenues to finance R&D programs on innovative therapeutic targets and entities.

Due to the potential of its most advanced programs, the Company signed worldwide strategic partnerships with leading international pharmaceutical companies to conduct the clinical development of key products:

- **OSE-127**

- Two-step optional licensing agreement for OSE-127 signed with Servier in December 2016: the Company will develop the product until the completion of Phase 2 clinical trials. After that, Servier will continue the development, as part of its licensing option.

  This agreement amounts to a total of €272 million, including a payment of €10.25 million on signature (received in early 2017) and a payment of €30 million on exercise of a two-step licensing option, including €10 million at option 1, exercised in February 2019 (following validation of a pre-defined step of development) and a payment in March 2019, and the initial agreement provided for a €20 million milestone payment on exercise of option 2. In March 2020, OSE Immunotherapeutics and Servier signed an amendment covering the terms of the potential exercise of the licensing option by modifying Step 2 of this option. OSE Immunotherapeutics will thus receive a €5 million milestone payment from Servier on enrollment of the first patient in Phase 2 of the clinical study scheduled in Sjögren’s Syndrome and an additional payment of €15 million on exercise of the option at the completion of the two planned Phase 2 studies, with priority being given to the study in Sjögren’s Syndrome, sponsored by Servier, the other study being planned for

ulcerative colitis, sponsored by OSE Immunotherapeutics (the initial agreement provided for a total payment of €20 million at completion of Phase 2).

After the positive results of the Phase 1 clinical study (published in December 2019), OSE-127 will be assessed in ulcerative colitis (sponsored by OSE) and in Sjögren's Syndrome (sponsored by Servier), in two Phase 2 clinical trials scheduled to start in 2020.

The start of the two Phase 2 clinical studies planned for 2020 will depend on the development of the COVID-19 situation. These studies can only be set up once all the preparatory steps have been completed and hospitals and healthcare professionals are able to conduct a clinical trial and ensure patient care in optimal safety conditions.

- **BI 765063 (OSE-172)**

Collaboration and exclusive licensing agreement (signed in April 2018) with Boehringer Ingelheim to jointly develop BI 765063 (OSE-172): Boehringer Ingelheim finances the product candidate's development in various types of cancer, its registration and international marketing.

According to the terms of this agreement, OSE Immunotherapeutics will receive from Boehringer Ingelheim a potential amount of more than €1.1 million according to predefined development steps, marketing authorization, and sales, plus royalties on net worldwide sales of the product. This amount includes a €15 million payment on signing the agreement (received in April 2018) and a total amount of €15 million in milestone payments (received in June 2019) after being granted the clinical trial authorization (in March 2019) and on administration of the product to the first patient of the study.

BI 765063 is in Phase 1 clinical trial in patients with advanced solid tumors. As of the date of this Universal Registration Document, due to the COVID-19 crisis, the screening and inclusion of new patients in the study are temporarily suspended.

- **TEDOPI®**

- Tedopi®, in Phase 2 in pancreatic cancer: a clinical trial was conducted and sponsored by GERCOR, a cooperative group in oncology. In view of the COVID-19 situation, GERCOR announced at the end of March 2020 that patient screening will continue but the inclusion of new patients in the study will be suspended temporarily.

- Tedopi®, for which the first step of Phase 3 in non-small cell lung cancer was validated (Atalante 1 study): the Company's product is at the most advanced stage of clinical development.
  The trial was planned in two steps: a first step including approximately 100 patients overall with a planned analysis of data on the percentage of patients achieving 12 months' survival. On April 1, 2020, the Company announced positive results for Step 1 of the study. Analysis of the data showed that the primary endpoint for this milestone was achieved with a 12-month survival rate in patients treated with Tedopi® and a 10% absolute difference in this survival rate compared to chemotherapy.

  These positive results confirm the therapeutic benefit of Tedopi® in a patient group for which there is no confirmed treatment to date and which is awaiting new therapeutic options. The Company will initiate discussions with the regulatory authorities to analyze these positive clinical results and determine the best options to pursue the development of Tedopi® and maximize the positive benefit/risk ratio data obtained. At the same time, given the significant enhanced value of Tedopi® as a result of these positive Step 1 results, the Company continues to explore potential partnership opportunities for our product.

  The clinical trials data could be strongly impacted by the worldwide COVID-19 worldwide pandemic and by the increased risk posed to patients with advanced lung cancer, as COVID-19 is able to cause serious pulmonary complications in these particularly vulnerable patients. Consequently, on the recommendation of the IDMC and the Atalante 1 Steering Committee, OSE Immunotherapeutics has decided to voluntarily and definitively suspend screening and enrollment of new patients in the Step 2 initially scheduled in the trial that will therefore not be conducted.

Licensing agreements have also been concluded in two countries to make Tedopi® available to the broadest audience globally and maximizing its potential:

- Licensing agreement (entered into in 2015) with RAFA Laboratories in Israel, which benefits from strong knowledge of and expertise in immunology.

- Licensing agreement (signed in November 2019) with Chong Kun Dang (CKD) Pharmaceuticals Corp. for the development of Tedopi® in Korea. As provided for in the agreement, OSE Immunotherapeutics will receive milestone payments amounting to €4.3 million, including €1.2 million on signature and a short-term milestone achievement, and royalties on product sales as well as a margin based on the transfer price, slightly lower than around 30%. The agreement covers the development and licensing of Tedopi® in the Korean market, which accounts for approximately 1% of the global oncology market.

- **FR104**

- The positive results of Phase 1 clinical proof-of-concept study of FR104, its preclinical tolerability profile and the efficacy data for multiple preclinical models of inflammatory and autoimmune diseases support the continuation of the product's clinical development. The Company is assessing the best options for continuing to develop FR104 in the Phase 2 study in autoimmune diseases or transplantation, including global partnering opportunities.

New collaboration or licensing agreements on other programs can also be established with industry players involved in the field of activation or regulation immunology and in therapeutic combinations of high clinical interest.

5.4.2 Research & Development: active pursuit of new innovative research programs

Research and development is the Group's core business. The Company uses in-house resources as well as partnerships with public research institutes and specialized subcontractors to carry out its preclinical, clinical and regulatory activities. The Company uses its own research laboratory at its Nantes (France) site where the teams carry out various optimization activities and preclinical studies.

The Company relies on internal and international immunotherapy expertise with, in particular, ad hoc models of autoimmune diseases, transplantation and tumor microenvironment to accelerate development. It also grows via its network of clinical experts in these immune-related pathologies.

OSE Immunotherapeutics has several scientific and technological platforms, such as neoepitopes and agonist or antagonist monoclonal antibodies, which are used on their own or in combination. The Company intends to actively continue new innovative programs in preclinical research and development in order to develop a balanced R&D portfolio that offers a diversified risk profile, with developed products whose mechanisms of action are independent of one another.

The Company will continue to develop innovative products in preclinical R&D development through research collaborations with centers of excellence or collaborative programs conducted in consortia financed as part of calls for proposals.

Thus, the Company singed a new research collaboration agreement in March 2019 with premier cancer research hospital, Léon Bérard Cancer Center in Lyon, France, to use artificial intelligence-based bioanalysis and bioinformatics to analyze gene expression in the human tumor microenvironment and the composition of tumor infiltrates. The findings from this collaboration will be used for the selection and validation of innovative targets for early development of new drug candidates from the platform of bispecific fusion proteins targeting PD-1 and innovative targets (BiCKI). More recently, in February 2020, the Company signed a collaboration agreement with the innovative company MAbSilico (Tours, France), specializing in the use of artificial intelligence algorithms to discover and characterize therapeutic antibodies. OSE Immunotherapeutics will include MAbSilico's artificial intelligence-based innovative methods in its development processes of new therapeutic antibodies. These solutions will be used in six of its new development programs, including a program on innovative bispecific antibodies from the BiCKI® platform.

OSE Immunotherapeutics will also participate in the "DC-Target" project, selected by the French National Research Agency (ANR) in July 2019 as part of the "AAPG 2019" call for proposals. This research program, coordinated by the Léon Bérard Cancer Center, aims to identify new targets of therapeutic interest expressed by myeloid cells (tumor associated macrophages, myeloid-derived suppressive cells and dendritic cells) through in depth characterization of the role of each cell

by single cell RNAseq (scRNAsed – Cellenion) and gene editing. Challenges related to the lack of recognition of the Company's intrinsic valuation.

5.4.3 Recognition of the Company's intrinsic value

Aware that stock price does not reflect its value and potential, the Company initiated an in-depth review on possible courses of action to better reflect its value. The strategy, as outlined above, has been ongoing since mid-2016 and is part of this initiative in view of the scientific developments and the recent clinical study results on Tedopi®.

At the same time, the Company is acting to ensure that investors understand and recognize the intrinsic value of the Company:

- Analyst coverage: increase in analyst coverage under way with seven analysts at present, three of them international (Edison very recently). That includes recent additional coverage with two investment firms specializing in Biotech (Bryan Garnier and Gilbert Dupont). Also, regular investor contact continues with international investors (Cross Over, US/UE funds)
- Financial communication centered on the valuation of products in the portfolio
- Meeting with shareholders
- Investor roadshows in Europe and the United States
- Participation in forums in France and Europe bringing together companies and investors
- Participation in Biotech Medtech investor meetings

5.5 Research and development, patents and licenses

5.5.1 Intellectual property

OSE Immunotherapeutics is assisted in its initiatives and actions to protect its intellectual property rights by specialist intellectual property firms.

5.5.1.1 Memopi® technology and the product, Tedopi® (OSE -2101)

The Company, together with OPI (its wholly owned subsidiary), owns the global rights to OSE-2101.

Tedopi® is specifically the subject of a patent family, the original patent family, and the protection is supplemented by other patent families.

Original patent family

Claims for patents granted for this family cover a composition comprising the combination of different types of peptides (CTL peptides optimized for greater interaction with the HLA-A2 receptor, CTL peptides optimized for greater interaction with cytotoxic T cells, HTL peptides) for Tedopi® as well as the therapeutic applications of this composition for the treatment of cancer, in particular, to delay remissions of cancer after surgery, chemotherapy or radiotherapy.

This family is based on an international application, WO 04/094454, filed on April 16, 2004, that claims the priority of an American order filed on April 18, 2003, under number 60/463,724.

It includes the following patents delivered:

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
AU2010214701	Australia	AU2010214701	AU2010214701	02/02/2012	April 2024
CA 2 522 812	Canada	CA2522812	CA2522812	8/21/2012	April 2024
EP04759962.6	Europe (Valid in all European Patent	EP 1 620 456	EP 1 620 456	2/26/2014	April 2024

	Convention Contracting States)				
US14081086	United States	US2010209493	US 8,007,810	8/30/2011	April 2024
	United States	US2014141064	US 9,394,350	7/19/2016	April 2024 + 64 days
	United States	US2017028041	US 9,913,884	3/13/2018	April 2024
JP5156882	Japan	JP2006526628	JP5156882	12/21/2012	April 2024

(*) The expiration date may be extended in some countries to at most five years (via additional protection certificates) if marketing authorizations are obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustments" in the U.S. – the additional duration is indicated when granted and known).

Complementary families

T-cell immune therapy and the treatment of cerebral metastases (HLA-A2 positive patients)

On November 6, 2014, the Company filed an international application for a specific T-cell immune therapy for use in the treatment of cerebral metastases in HLA-A2 positive patients. This patent application opens the way to new potential indications within the field of cerebral metastases, a metastatic localization complicating a number of cancers.

This family includes the following patents and patent applications:

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
PCT/EP2014/073975	International application	WO2016/070928			November 2034
AU2014410466	Australia	AU2014410466	AU2014410466	1/02/2020	November 2034
KR10-2017-7015327	South Korea	KR20170098811	KR102043725	11/6/2019	November 2034
US15/524,278	United States	US2017319672	US 10,434,157	10/8/2019	November 2034 + 157 days
IL250576	Israel	IL250576	IL250576	26/09/2019	November 2034
JP2017-518779	Japan	JP2017533898	JP6474893	8/02/2019	November 2034
TW104135282	Taiwan	TW201625287		Pending review	October 2035
CA 2,963,184	Canada			Pending review	October 2035
EP 14796049.6	Europe	EP 3215184		Pending review	October 2035
BR 11 2017 009358 8	Brazil			Pending review	October 2035
CN 201480082351.X	China	CN107073087A		Pending review	October 2035
EA 201790990	Eurasia			Pending review	October 2035
MX/a/2017/005807	Mexico			Pending review	October 2035
NZ 729514	New Zealand			Being delivered	October 2035

(*) The expiration date may be extended in some countries to at most five years (via additional protection certificates) if marketing authorizations are obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustments" in the U.S. – the additional duration is indicated when granted and known).

Immune therapy and an early memory T-cell response

On June 29, 2015, OSE Pharma filed an international patent application with a specific T-cell immune therapy capable of inducing an early memory T-cell response in HLA-A2 positive patients. This patent covers the product's method of administration.

This family includes the following patents and patent applications:

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
PCT/EP2015/06474	International application	WO2017/000983			June 2035
National/regional phases begun in Europe, the United States, Australia, Brazil, Canada, China, Eurasia, Israel, Japan, South Korea, South Africa and New Zealand					
ZA2018/00434	South Africa	ZA201800434		12/19/2018	June 2035
JP 2017-567729	Japan			Being delivered	June 2035
EP 15 733431.9	Europe	EP 3 313 431		Pending review	June 2035
US 15/578,721	United States	US-2018-0169200		Pending review	June 2035
AU2015400687	Australia			Pending review	June 2035
BR 11 2017 027653 4	Brazil			Pending review	June 2035
CA 2,990,299	Canada			Pending review	June 2035
EA 201890148	Eurasia			Pending review	June 2035
IL 255722	Israel			Pending review	June 2035
KR 10-2018-7002801	South Korea			Pending review	June 2035
NZ 737717	New Zealand			Pending review	June 2035

(*) The expiration date may be extended in some countries to at most five years (via additional protection certificates) if marketing authorizations are obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustments" in the U.S. – the additional duration is indicated when granted and known).

Method of preparing a stable emulsion

On January 24, 2018, OSE Immunotherapeutics filed an international patent application for an industrial-scale method of preparing a stable emulsion and for the ready-to-use product.

This family includes the following patents and patent applications:

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
PCT/EP2018/051647	International application	WO 2018/138110			January 2038
TW 107102651	Taiwan	TW 201840331		Pending review	January 2038
AR 20180100167	Argentina			Pending review	January 2038
EP 18 710760.2	Europe	EP 3 573 600		Pending review	January 2038

US 16/477,534	United States	US-2019-0345213		Pending review	January 2038
AU 2018213890	Australia			Pending review	January 2038
BR 11 2019 014917 1	Brazil			Pending review	January 2038
CA 3,047,492	Canada			Pending review	January 2038
CN 201880007527.3	China	CN110191703A		Pending review	January 2038
IL 267237	Israel			Pending review	January 2038
JP 2019-560481	Japan			Pending review	January 2038
KR 10-2019-7024340	South Korea			Pending review	January 2038
MX/a/2019/008878	Mexico			Pending review	January 2038
NZ 745571	New Zealand			Pending review	January 2038
ZA 2019/05487	South Africa			Pending review	January 2038

(*) The expiration date may be extended in some countries to at most five years (via additional protection certificates) if marketing authorizations are obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustments" in the U.S. – the additional duration is indicated when granted and known).

Treatment in combination with an immune checkpoint inhibitor

On November 27, 2017, OSE OSE Immunotherapeutics filed an international patent application for a cancer treatment method involving sequential administrations of Tedopi® and an immune checkpoint inhibitor.

Country	Patent	Publication no.	Status	Expiration
International application	PCT/EP2017/080543	WO 2019/101347	To be started in May/June 2020	December 2037

5.5.1.2. OSE-1101

This family concerns the application/use of the OSE-1101 product in the treatment of cystic fibrosis or its complications, such as inflammatory disorders or infection.

This family is based on international application WO2013/164204, filed on April 19, 2013, that claims priority of a European application filed on April 30, 2012, under number 12 305487.6.

This family includes the following patents and patent applications:

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
EP12 350487.6	EP	EP 2 844 253	EP 2 844 253	3/23/2016	April 2033
Valid in Germany, the United Kingdom, France, Switzerland, Spain, Italy, Portugal, the Netherlands, Belgium, Austria, Finland, Norway, Ireland, Monaco, Luxembourg, Slovakia, Denmark, Croatia, Greece, Poland, Romania, Serbia, Slovenia, Estonia, Sweden					
US14/397,743	United States	US2015/133487	US 9,301,955	4/5/2016	April 2033
IL235358	Israel	IL235358	IL235358	12/27/2019	April 2033
CA 2,871,815	Canada	CA 2,871,815		Being delivered	April 2033

(*) The expiration date may be extended in some countries to at most five years (via additional protection certificates) if marketing authorizations are obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustments" in the U.S. – the additional duration is indicated when granted and known).

5.5.1.3 FR104

FR104, a CD28 antagonist: in post-phase 1, the product was the subject of a licensing agreement with Janssen Biotech in July 2016 for the continuation of its clinical development in autoimmune diseases. On November 2, 2018, the Company took over the worldwide rights to FR104 from Janssen Biotech Inc., with effect from December 31, 2018. Janssen Biotech's decision to return the FR104 program to OSE was motivated by an internal strategy review and prioritization of its own product portfolio.

The portfolio relating to project FR104 on CD28 antagonist antibodies includes the following patent families.

Family 1

This family, in the name of INSERM, concerns the CD28.3 antibody and its derivatives.

This family is based on international application, WO 2002/051871, filed on December 26, 2001, that claims the priority of a French application filed on December 26, 2000, under number FR0017025.

This family includes the following patents:

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
EP01995797.6	Europe	EP1345969	EP1345969	8/11/2010	December 2021
Valid in Austria, Belgium, Switzerland, Germany, Denmark, Spain, Finland, France, the United Kingdom, Greece, Ireland, Italy, Luxembourg, Monaco; the Netherlands, Portugal, Sweden and Turkey					
US10/450,832	United States	US2008/0038273	US 7723482	1/18/2008	December 2021 + 1,419 days
JP2002552964	Japan	JP2004-516034	JP4066166	5/25/2010	December 2021

(*) The expiration date may be extended in some countries to at most five years (via additional protection certificates) if marketing authorizations are obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustments" in the U.S. – the additional duration is indicated when granted and known).

Family 2

This family, co-owned with INSERM, concerns a specific recombinant monovalent antibody structure, a derivative of the CD28.3 antibody.

This family is based on international application, WO2010/82136, filed on January 13, 2010, that claims the priority of a European application filed on January 14, 2009, under number EP09290029.9.

This family includes the following patents and patent applications:

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
CA2749627	Canada	CA2,479,627	CA2,479,627	5/14/2019	January 2030
US13/144,471	United States	US2011/0313135	US 9,587,023	3/7/2017	January 2030 + 949 days
JP2011-545812	Japan	JP2012-514997	JP 5755148	6/5/2015	January 2030
CA3037902	Canada	CA3037902		Pending review	January 2030

US15/416513	United States	US2017166643		Pending review	January 2030

(*) The expiration date may be extended in some countries two at most five years (via additional protection certificates) if marketing authorizations are obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustments" in the U.S. – the additional duration is indicated when granted and known). Patent applications are pending review in Canada and the United States.

Family 3

This family, co-owned with INSERM, concerns a monovalent ligand of the human CD28 receptor capable of binding to the epitope of the CD28.3 antibody.

This family is based on international application, WO2011/042891, filed on October 8, 2010, that claims the priority of a French application filed on October 9, 2009, under number FR0904866.

This family includes the following patents:

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
EP10785516.5	EP	EP2486059	EP2486059	11/11/2015	October 2030
Valid in Belgium, Switzerland, Germany, Spain, France, the United Kingdom, Ireland, Italy and the Netherlands.					
US13/501015	United States	US2013/058933	US 8785138	7/22/2014	October 2030

(*) The expiration date may be extended in some countries to at most five years (via additional protection certificates) if marketing authorizations are obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustments" in the U.S. – the additional duration is indicated when granted and known).

Family 4

This family, co-owned with INSERM, concerns humanized antibodies derived from the CD28.3 antibody and their use as a drug.

This family is based on international application, WO2011/101791, filed on February 16, 2011, that claims the priority of two European applications filed on February 18, 2010, and July 13, 2010, under number EP10290080.0 and EP 10290389.5, respectively.

This family includes the following patents and patent applications:

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
EP11707918.6	EP	EP2536764	EP2536764	7/4/2018	February 2031
Valid in all European Patent Convention Contracting States					
EP18177022.3	EP	EP3428192		Pending review	February 2031
CA 2,788,544	Canada	CA 2,788,544	CA 2,788,544	3/5/2019	February 2031
JP2012-553431	Japan	JP2013-519389	JP5992340	8/26/2016	February 2031
US13/577103	United States	US2013/0078236	US 8785604	7/22/2014	February 2031
US14/326119	United States	US20150071916	US 9,562,098	2/7/2017	February 2031 + 180 days
US15/386998	United States	US2017/114136	US10364287	7/30/2019	February 2031 + 149 days

(*) The expiration date may be extended in some countries to at most five years (via additional protection certificates) if marketing authorizations are obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustments" in the U.S. – the additional duration is indicated when granted and known).

Family 5

This family, in the name of OSE Immunotherapeutics, concerns a regime for the administration of humanized antibodies derived from the CD28.3 antibody.

This family is based on international application, WO2017/103003, filed on 12/15/2016 that claims the priority of two European patent applications, EP 15200281.2 and EP16306537.8.

This family includes the following patents and patent applications:

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
PCT/EP2016/081286	International application	WO2017/103003			December 2036
EP16822423.6	Europe	EP3390450		Pending review	December 2036
US16/662399	United States			Pending review	December 2036
JP2018-532040	Japan	JP2018538309		Pending review	December 2036
CN201680080258.4	China	CN108699148		Pending review	December 2036
KR10-2018-7020218	South Korea	KR20180087428		Pending review	December 2036
HK 19120836.2	Hong Kong	HK1260979		Pending review	December 2036

(*) The expiration date may be extended in some countries to at most five years (via additional protection certificates) if marketing authorizations are obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustments" in the U.S. – the additional duration is indicated when granted and known).

5.5.1.4 OSE-127

The portfolio of project OSE-127 bearing on anti-IL-7Rα antagonist antibodies includes two patent families.

Family 1

This family bears on anti-IL-7Rα antagonist antibodies of the IL7 receptor. It concerns in particular the antibody being developed.

This family is based on an international application WO2015189302 filed on June 10, 2015 that claims the priority of two applications, a provisional American application US 62/010117 filed on June 10, 2014 and a European application EP15305078.6 filed on January 23, 2015.

It includes applications pending review before 33 Patent Offices based on the PCT application, including Europe and the United States. It includes a patent delivered in Columbia.

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
US15/317355	United States	US2017/0129959	US 10,428,152	10.01.2019	June 2035
NC2016/0005101	Colombia		CO34155	08.13.2018	June 2035
EP15727989.4	Europe			Pending	June 2035

CA 2,950,823	Canada			Pending	June 2035
JP 2017-517406	Japan			Pending	June 2035
KR 10-2017-7000724	South Korea			Pending	June 2035
CN 201580043066.1	China			Pending	June 2035
IL 249449	Israel			Pending	June 2035
National/regional phases entered in: Europe, United States, South Africa, Algeria, Saudi Arabia, ARIPO (African Regional Intellectual Property Organization), Australia, Brazil, Canada, Chile, China, Colombia, Republic of Korea, Costa Rica, Egypt, United Arab Emirates, Eurasia, Hong Kong, India, Israel, Japan, Malaysia, Mexico, New Zealand, Peru, Philippines, Russia, El Salvador, Singapore, Thailand, Tunisia, Ukraine, OAPI (African Intellectual Property Organization), Vietnam.					

(*) The expiration date may be extended in some countries up to five years (via supplementary protection certificates) if marketing authorizations have been obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustment" in the U.S. – the additional duration is indicated when granted and known).

Family 2

This family concerns humanized antibodies directed against CD127, the alpha chain of the IL-7 receptor. It concerns in particular the antibody being developed.

This family is based on an international application WO 2018/104483 filed on December 7, 2017 that claims the priority of a European application filed on December 9, 2016 under number EP16306655.8.

Direct extensions were made in several countries including Argentina, Bolivia, Paraguay, Pakistan, Taiwan, Venezuela, Lebanon and Uruguay.

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
PCT/EP2017/081911	International application	WO 2018/104483			December 2037
National/regional phases entered in: Europe, United States, South Africa, Algeria, Saudi Arabia, ARIPO (African Regional Intellectual Property Organization), Australia, Brazil, Canada, Chile, China, Colombia, Republic of Korea, Costa Rica, Egypt, United Arab Emirates, Eurasia, Hong Kong, India, Israel, Japan, Malaysia, Mexico, New Zealand, Peru, Philippines, Russia, El Salvador, Singapore, Thailand, Ukraine, OAPI (African Intellectual Property Organization), Vietnam.					
11306	Lebanon	11306	11306	03/08/2018	December 2037
US16/467284	United States			Pending	December 2037
EP17835592.1	Europe	EP3551664		Pending	December 2037
CA3042582	Canada			Pending	December 2037
JP 2019-530803	Japan			Pending	December 2037
KR 10-2019-7019889	South Korea			Pending	December 2037
CN 201780076086.8	China	CN 110392695		Pending	December 2037
IL 266837	Israel			Pending	December 2037

(*) The expiration date may be extended in some countries up to five years (via supplementary protection certificates) if marketing authorizations have been obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustment" in the U.S. – the additional duration is indicated when granted and known).

5.5.1.5 MD-707 and OSE-703

Family 1

This family concerns antagonist anti-IL-7Rα antibodies of the IL7 receptor.

This family is based on international application WO2013056984 filed on October 4, 2012 that claims the priority of a European application filed on October 19, 2011 under number EP11306353.1.

This family includes the following patents and patent applications:

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
PCT/EP2012/069670	International application	WO2013056984			October 2032
US 14/352992	United States	US2014-0308281	US 9,447,182	09/20/2016	October 2032 + 20 days
JP2017106295	Japan	JP2017184753	JP6621778	12/18/2019	October 2032
EP17200006.9	Europe	EP3299392		Pending	October 2032

(*) The expiration date may be extended in some countries up to five years (via supplementary protection certificates) if marketing authorizations have been obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustment" in the U.S. – the additional duration is indicated when granted and known).

Family 2

This family designed for immuno-oncology concerns a non-antagonistic anti-IL-7Rα antibody of the IL7, presenting a cytotoxic activity.

This family is based on international application WO 2017/149394 filed on February 28, 2017 that claims the priority of a provisional American application filed on February 29, 2016 under number 62/301271.

This family includes the following patent applications:

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
EP 17716593.3	Europe	EP3423496	EP3423496	07/03/2019	February 2037
US16/080572	United States				February 2037
CN 201780014099.2	China	CN109195987		Pending	February 2037
KR 7028377	South Korea	KR20180118746		Pending	February 2037
JP 2018-545380	Japan	JP2019-515648		Pending	February 2037
IL 261330	Israel			Pending	February 2037
AU 2017225495	Australia	AU2017225495		Pending	February 2037
BR 1120180674796	Brazil	BR112018067479		Pending	February 2037
CA 3014313	Canada	CA3014313		Pending	February 2037

IN 17030581	India	IN201817030581		Pending	February 2037
HK19123912.8	Hong Kong			Pending	

(*) The expiration date may be extended in some countries up to five years (via supplementary protection certificates) if marketing authorizations have been obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustment" in the U.S. – the additional duration is indicated when granted and known).

Family 3

This family designated "reactive P703", concerns a method and preparation for sorting out T cells using anti-IL-7Rα antibodies, for use in cell therapy.

This family is co-owned with the AP-HP and the EFS.

This family is based on an international application WO2019/043065 filed on August 29, 2018 that claims the priority of a European application filed on August 29, 2017 under number EP17306109.4.

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
PCT/EP2018/073253	International application	WO2019/043065			August 2038

National/regional phases entered in: Europe, United States

5.5.1.6 BI 765063 (OSE-172)

Family 1

The first family concerns anti-SIRPα antibodies able to induce the differentiation of MDSC for the treatment of cancer and infectious diseases. This family also concerns more broadly the use of anti-SIRPα antibodies for some therapeutic indications.

This family includes an international application WO2016/063233 filed on October 21, 2015 that claims the priority of a European application filed on October 24, 2014 under number EP14190370.8

This family includes the following patent applications:

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
PCT/IB2015/058124	International application	WO2016/063233			October 2035
EP 15794641.9	Europe	EP3209691		Being delivered	October 2035
CA 2964203	Canada	CA 2964203		Pending	October 2035
JP 2017-520986	Japan	JP2017538669		Pending	October 2035
US 15/518803	United States	US 2017/0247464		Pending	October 2035

(*) The expiration date may be extended in some countries up to five years (via supplementary protection certificates) if marketing authorizations have been obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustment" in the U.S. – the additional duration is indicated when granted and known).

Family 2

The second patent family concerns the use of anti-SIRPα antibodies capable of inhibiting the polarization of M2-type anti-inflammatory macrophages and/or promoting M1-type pro-inflammatory macrophages for the treatment of cancer.

This family also concerns the use of anti-SIRPα antibodies in combination with check point inhibitor compounds for some therapeutic indications (solid cancers).

This family includes an international application WO 2017/1068164 filed on October 21, 2016 that claims the priority of a European application filed on October 21, 2015 under number EP15190918.1

This family includes the following patent applications:

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
PCT/EP2016/075466	International application	WO 2017/068164			October 2036
EP16785163.3	Europe	EP3365370		Pending	October 2036
US15/769,689	United States	US2018312600		Pending	October 2036
JP2018-521040	Japan	JP2018531274		Pending	October 2036

(*) The expiration date may be extended in some countries up to five years (via supplementary protection certificates) if marketing authorizations have been obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustment" in the U.S. – the additional duration is indicated when granted and known).

Family 3

The third patent family concerns a humanized anti-SIRPα antibody. This family includes an international application WO 2017/178653 filed on April 14, 2017 that claims the priority of a provisional American application US 62/322,707 and a European application EP 17305182.2.

This family includes the following patent applications:

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
PCT/EP/2017/059071	International application	WO 2017/178653			April 2037*
National/regional phases begun in addition to Eurasia, ARIPO (African Regional Intellectual Property Organization), United Arab Emirates, Australia, Brazil, Chile, Colombia, Egypt, Hong Kong, India, Indonesia, Malaysia, Mexico, New Zealand, Nigeria, Peru, Philippines, Thailand, Saudi Arabia, Singapore, Ukraine, Vietnam, South Africa: patent applications pending.					
EP 17718881.0	Europe	EP3443010		Pending	April 2037*
US 16/093062	United States	US 2019-0127477		Pending	April 2037*
CN 201780023581.2	China	CN109071664A		Pending	April 2037*
JP 2018-550322	Japan			Pending	April 2037*
KR 10-2018-7032968	South Korea			Pending	April 2037*
CA 3020373	Canada	CA 3020373		Pending	April 2037*
IL 262251	Israel			Pending	April 2037*

(*) The expiration date may be extended in some countries up to five years (via supplementary protection certificates) if marketing authorizations have been obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustment" in the U.S. – the additional duration is indicated when granted and known).

Family 4

The fourth patent family concerns the use of anti-SIRPα antibodies (including BI 765063) in particular for targeting patients designated V1 (one of the main categories of SIRP); and capable of increasing the "cross-presentation" of antigens to T cells.

This family is based on an international application WO2019/175218 filed on March 13, 2019 that claims the priority of a European application EP 18 305 271.1. The national/regional phases will be entered in September 2020. The theoretical expiration date of this family is March 2039.

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
PCT/EP2019/056250	International application	WO2019/175218			March 2039

(*) The expiration date may be extended in some countries up to five years (via supplementary protection certificates) if marketing authorizations have been obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustment" in the U.S. – the additional duration is indicated when granted and known).

Family 5

A fifth patent family concerns a bifunctional compound including on the one hand an anti-SIRPα antibody (including BI 765063), and, on the other hand, coupled with this antibody, an immune agent such as PD-1.

This family is based on an international application WO2019/073080 filed on October 15, 2018 that claims the priority of a European application EP 17 306 396.7. The national/regional phases will be entered in April 2020. The theoretical expiration date of this family is October 2038.

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
PCT/EP2018/078082	International application	WO 2019/073080			October 2038

(*) The expiration date may be extended in some countries up to five years (via supplementary protection certificates) if marketing authorizations have been obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustment" in the U.S. – the additional duration is indicated when granted and known).

5.5.1.7 BiCKI®, a new platform of bispecific inhibitors of checkpoints targeting the PD-1 receptor and other innovative targets

The new platform of bispecific fusion proteins is built around a key backbone component anti-PD-1 (OSE-279) merged with new immunotherapy targets that have not yet been all disclosed.

A portfolio relating to this platform is being developed. Priority applications and international applications have been filed.

5.5.1.8 New antibodies targeting Chem R23, intended for anti-inflammatory diseases

These antibodies target the mechanism of inflammation resolution, with action on the CMKLR1 (ChemR23) receptor of myeloid cells.

A first patent family covers anti-ChemR23 antibodies.

This family is based on an international application WO2019/193029 filed on April 3, 2019 that claims the priority of a European application filed on April 3, 2018 under number EP 18 305 395.8. The national/regional phases will be entered in October 2020. The theoretical expiration date of this family is April 2030.

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
PCT/EP2019/058358	International application	WO 2019/193029			04/03/2039

(*) The expiration date may be extended in some countries up to five years (via supplementary protection certificates) if marketing authorizations have been obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustment" in the U.S. – the additional duration is indicated when granted and known).

5.5.1.9 New antibodies targeting SIRP gamma

A first family concerns the use of antibodies directed against SIRP gamma for treatment of various diseases.

This family is based on an international application WO2018149938 filed on February 15, 2018 that claims the priority of a European application filed on February 17, 2017 under number EP 17305184.8

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
PCT/EP2018/053831	International application	WO 2018149938			February 2038
National/regional phases entered in Europe, United States, Australia, Brazil, Canada, China, Israel, Japan, South Korea, India, Hong Kong					

(*) The expiration date may be extended in some countries up to five years (via supplementary protection certificates) if marketing authorizations have been obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustment" in the U.S. – the additional duration is indicated when granted and known).

5.5.1.10 New antibodies targeting CLEC-1

These products target C-type lectin, designated CLEC-1 for treatment of various diseases.

A first family, co-held with the INSERM and the University of Nantes, covers the use of antibodies directed against CLEC-1 for the treatment of various diseases.

This family is based on an international application WO2018/073440 filed on October 20, 2017 that claims the priority of two European applications filed under numbers EP16306381.1 and EP17305988.2.

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
PCT/EP2017/076911	International application	WO2018/073440			October 2037
National/regional phases entered in Europe, United States, Australia, Brazil, Canada, China, Israel, Japan, South Korea, India, Hong Kong					

(*) The expiration date may be extended in some countries up to five years (via supplementary protection certificates) if marketing authorizations have been obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustment" in the U.S. – the additional duration is indicated when granted and known).

5.5.1.11 Biomarkers of anti-TNF alpha treatment

This family concerns biomarkers used to evaluate the response to therapeutic treatment with anti-TNF alpha agents.

This family is held as co-property with the Nantes CHU (University Hospital).

This family is based on an international application WO2019025624 filed on August 3, 2018 that claims the priority of a European application filed on August 3, 2017 under number EP17306039.

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
PCT/EP2018/071206	International application	WO2019025624			August 2038

National/regional phases entered in: Europe, the United States

5.5.1.12 T cell activation method

This family concerns a method for production of T cells, with activation of their cysteine metabolism for their use in immunotherapy.

This family is held as co-property with the Nantes CHU (University Hospital), the INSERM (French National Institute of Health and Medical Research) and the University of Nantes.

This family is based on an international order WO2019242900 filed on April 5, 2019 that claims the priority of two applications filed on June 19, 2018, a European application under number EP18305773.6 and an American application under number US16/011,958.

Filing no.	Country	Publication no.	Patent no.	Delivered on	Theoretical expiration date*
PCT/EP2019/058727	International application	WO2019242900			April 2039
National/regional phases to enter in December 2020					

(*) The expiration date may be extended in some countries up to five years (via supplementary protection certificates) if marketing authorizations have been obtained in the countries considered, or as part of certain procedures specific to these countries (such as "patent term extension/adjustment" in the U.S. – the additional duration is indicated when granted and known).

5.5.1.13 Comments

The Company has its own Research & Development and holds, alone or as co-property, all of the intellectual property rights related to its preclinical and clinical research programs.

The strategy followed by OSE Immunotherapeutics concerning patents is to ensure the existence and protect the intellectual property rights that are the foundation of its drug research programs, and, as necessary, to take legal recourse against any harm to its intellectual property rights.

5.5.2 Brands and domain names

At the date of this Universal Registration Document, the Company has protected the trademarks "OSE PHARMA", "OSE IMMUNOTHERAPEUTICS", "MEMOPI", "TEDOPI" as well as its corporate name by registering them in France, then they were registered in countries where it was considered useful, including in the European Union (European Union brand), the United States, China or South Korea.

The names "OSE-172" and "OSE-127" (formerly named "Effi-DEM", "Effidem" and "Effi-7") were chosen by OSE Immunotherapeutics to designate its technologies. In all countries, including the European Union and the United States, and initial approval of the commercial name of a pharmaceutical product by the supervisory authorities is mandatory, and these designations may therefore be modified.

The trademark "ATALANTE" designating the phase 3 clinical trial of Tedopi® was filed in January 2016 and registered in May 2016 in France.

The trademark "OSE IMMUNOTHERAPEUTICS" was filed in February 2016 and registered in June 2016 in France.

The Chinese trademark "OSE No.22180371" was published in January 2019.

The trademarks "BICKI", "B-Cool", "B-TIC" and "BiCKAN" were filed in May 2018 in France and the European Union and filed in September 2018 in the United States. The trademarks "BICKI", "B-TIC" and "BiCKAN" were registered in October 2018.

The trademark "B-COOL" was contested in France and the European Union. In France, this trademark was registered in February 2019 only for certain services. In the European Union, the opposition proceedings are underway.

Furthermore, the trademarks "BICKI", "B-Cool", "B-TIC" and "BiCKAN" were filed in the United States in September 2018.

The Company has reserved the following domain names: osepharma.com, osepharma.fr, effimune.com and ose-immuno.com.

The domain names oseimmunotherapeutics.com and oseimmunotherapeutics.fr were reserved in February 2016, the domain names oseimmuno.com and oseimmuno.fr in March 2016 and the domain names ose-immuno.com and ose-immuno.fr in May 2016.

5.6 Competitive position

5.6.1 Non-small cell lung cancer treatments

Despite the new treatments, five-year survival rates are around 6% for patients with a metastatic cancer (American Cancer Society, 2019).

For non-small cell lung cancer, a classification known as “TMN” is used which takes into consideration the appearance of the lung tumor, any presence of tumor cells in the Nodes and any Metastasis. Depending on the result of this classification, non-small cell lung cancers are referred to as “stage 0, Ia, Ib, IIa, IIb, IIIa, IIIb or IV”, in increasing order of severity.

Small cell lung cancers are classed as being “localized” Ia to IIIa and “diffuse” IIIb or “metastatic” IV.

Current treatments vary depending on the stage and the various treatment lines:

The treatment of NSCLC-type lung cancers varies according to their type and stage of development. Histological types are most often adenocarcinomas (40.8%), squamous cell carcinomas (21.4%), large-cell carcinomas (3%) and other forms of carcinomas (20.4%) (Howlader N et al., 2013):

- Stage I: surgery consisting of removing the part of the lung that is affected or the entire lung. If surgery is not possible, radiotherapy is given
- Stage Ib: surgery, possibly followed by chemotherapy. If surgery is not possible, radiotherapy is given
- Stage IIa and IIb: surgery followed by chemotherapy. If surgery is not possible, radiotherapy is given
- Stage IIIa: chemotherapy, possibly combined with surgery or radiotherapy
- Stage IIIb: chemotherapy combined with radiotherapy, surgery is highly unlikely
- Stage IV: chemotherapy which may be combined with other types of treatment (“targeted therapy” when a gene is expressed, for example EGFR, with a particular mutation, tyrosine kinase inhibitors act on the gene mutations observed)

Two-thirds of non-small cell bronchial cancers are diagnosed at the metastatic stage.

Three types of existing treatments are mainly used to treat bronchial cancers: surgery, radiotherapy and medical treatments (chemotherapy and targeted therapies). Immunotherapy is becoming a clinical reality with checkpoint inhibitors proving to be more effective than chemotherapy in some cancer subtypes and considered a revolutionary therapeutic breakthrough for the first time at ASCO 2015.

Generally speaking, lung cancer chemotherapy consists of intravenous infusion sessions (cures) every one to four weeks depending on the drugs used. The treatment lasts between three and four months, sometimes longer. The choice of drugs used depends on the tumor’s characteristics. Chemotherapy is, therefore, the mainstay treatment for the majority of

patients. Other factors to be considered when selecting treatments are general health, age and medical history. The main products are cisplatin, carboplatin, paclitaxel (Taxol®), albumin bound paclitaxel (nab-paclitaxel, Abraxane®), docetaxel (Taxotere®), gemcitabine (Gemzar®), vinorelbine (Navelbine®), irinotecan (Camptosar®), etoposide (VP-16®), vinblastine and pemetrexed (Alimta®).

Chemotherapy-related treatments include anti-angiogenic-type therapies that act on the blood vessels. Vargatef® (nintedanib, Boehringer Ingelheim) combined with chemotherapy (docetaxel) is an anti-angiogenic therapy, i.e. blocking angiokinase receptors such as the VEGF, FGF or PDGF receptors, expressed on the vessels nourishing the tumor. This product was registered at the end of November 2014 in Europe in adenocarcinoma-type NSCLC cancer after first-line therapy (EPAR - EMA). Likewise, ramucirumab, another anti-angiogenic (Cyramza®, acting on a VEGF R2 receptor, from Eli Lilly) was registered in December 2014 in lung cancer (NSCLC) after first-line therapy failed. Median survival time was improved in the group combining ramucirumab with docetaxel versus docetaxel (10.5 months vs 9.1 months); hemorrhagic-type side-effects have been described.

An important deciding factor is the search for a particular molecular anomaly for non-squamous cell carcinomas: finding out if there is a molecular anomaly on the tumor cell enables patients presenting with this anomaly to receive targeted therapy. Currently, the existence of an EGFR gene mutation (approximately 10 to 15% of the population) impacts the treatment from the first-line therapy with the option to treat with EGFR tyrosine kinase inhibitors like erlotinib (Tarceva®), gefitinib (Iressa®), afatinib (Gilotrif®), osimertinib (Tagrisso®) or dacomitinib (Vizimpro®). They inhibit an enzyme, vital to many cell membrane receptors. In addition, there is necitumumab (Portrazza®) which targets EGFR in squamous cell cancers. They are prescribed in lung cancers where the EGFR gene is mutated (EGFR+); their adverse effects include diarrhea and skin disorders.

Another targeted therapy is indicated in the event of the molecular rearrangement of the ALK gene (approximately 4% of the population) which enables treatment with a product acting on ALK from second-line therapy onwards. As a result, crizotinib (Xalkori® Pfizer), ceritinib (Zykadia® Novartis), alectinib (Alecensa®), brigatinib (Alunbrig®) and lorlatinib (Lorbrena®) were registered. In addition, Zykadia® was approved for patients with an ALK gene mutation after treatment with Xalkori® has failed, in the United States and Europe, in May 2015. In practice, this targeted therapeutic approach only affects the minority of patients with identified mutations, often those with little exposure to smoking, and the treatment frequently fails.

At the diffuse or metastatic stage, platinum-based first line therapies are administered: this is called platinum-based combination chemotherapy. Those who respond or who have a stable disease may receive a first-line maintenance therapy such as, for example, pemetrexed for particular non-squamous cell histological-type cancers and docetaxel for other patients.

Keytruda® was the first checkpoint inhibitor registered as a first-line therapy after its superiority over chemotherapy was established for patients strongly expressing the PD-L1 marker (with approximately 25% of NSCLC patients at the invasive or metastatic stage expressing the PD-L1 marker at > 50% at tumor level). It was also registered as a first-line therapy in combination with chemotherapy for all patient types, irrespective of their PD-L1 marker level.

Tecentriq® has now been registered as a first-line therapy, in combination with Avastin® and chemotherapy.

A second-line therapy will be offered in the event of intolerance or progression of the disease (if no EGFR or ALK-type mutation or molecular anomaly can be accessed by a targeted therapy).

5.6.2 Existing second-line therapies for advanced lung cancer and choice of comparator for phase 3

Treatments registered as second-line therapies (after a first-line treatment fails) are checkpoint inhibitors of the pembrolizumab and nivolumab type, docetaxel and pemetrexed, two chemotherapies (erlotinib, a targeted therapy for patients with a particular mutation). The median survival rate is between five and eight months for chemotherapy and the one-year survival rate is 33% (Hanna N 2004; Shepherd FA 2005; Ciuleanu T 2012; Garassino MC 2013). Docetaxel and pemetrexed are considered to be benchmark second-line therapies and are used as third-line treatments if checkpoint inhibitors have failed. They were the comparators used in the phase 3 trial of Tedopi®.

Four checkpoint inhibitor-type treatments producing a non-specific activation of cytotoxic T lymphocytes by releasing the brakes of immunity are now registered as second-line therapies: nivolumab (Opdivo® BMS) registered in squamous cell cancers and non-squamous cell cancers in progression as a second-line therapy, pembrolizumab (Keytruda® Merck) registered as a second-line therapy in patients expressing the PD-1 ligand known as PD-L1 (approximately 20% of patients expressing

the PD-L1 marker) whatever the histology, atezolizumab (Tecentriq®) registered in squamous cell and non-squamous cell cancers in patients expressing PD-L1 and durvalumab (Imfinzi®) registered as a second-line therapy in inoperable tumors in patients whose cancer has progressed after chemotherapy and radiotherapy, targeting the PD-1/PD-L1 signaling pathway. The survival rate for these new checkpoint inhibitor therapies acting on the PD-1/PD-L1 axis is three to four months longer than with chemotherapy and this survival rate is observed as a median between nine and thirteen months for the four checkpoint inhibitor therapies.

More recently, checkpoint inhibitors were compared with chemotherapy. Opdivo® (nivolumab, registered in 2015 as a second-line therapy for squamous cell NSCLC cancers), obtained a median survival rate of nine months (versus a median rate of six months for docetaxel in this sub-group of patients with a particular histology). In 2019, an analysis, presented to the AACR (American Association for Cancer Research) conference, on pooled data from four trials showed that 14% of patients treated with Opdivo® were still alive after four years. Data from two phase 3 clinical trials showed an overall survival rate of 14% in patients treated with Opdivo® versus 5% in patients treated with docetaxel (abstract CT195: Long-term survival outcomes with nivolumab (NIVO) in patients with previously treated advanced non-small cell lung cancer (NSCLC): Impact of early disease control and response, Julie Brahmer et al., DOI: 10.1158/1538-7445.AM2019-CT195, Published July 2019).

Other checkpoint inhibitors registered since 2015 also published median survival rates of around 9 to 13 months in patients with squamous cell or non-squamous cell cancer as a second-line therapy (Nivolumab: Brahmer J. et al., NEJM 2015; Paz-Ares L. et al., J Clin Oncol 33, 2015; Atezolumab: Spira A et al., J Clin Oncol 33, 2015 - abs 801.0; Keytruda®, Pembrolizumab: Garon et al., NEJM 2016 in PD-L1 positive patients in second line NSCLC). Tecentriq® (atezolizumab), within the context of the annual European Society of Medical Oncology conference (ESMO 2016) showed that median survival of patients under atezolizumab was 13.8 months, i.e. 4.2 months longer than patients receiving chemotherapy with docetaxel (overall survival rate of 13.8 months versus 9.6 months) irrespective of their PD-L1 marker expression rates.

(A Rittmeyer et al., the Lancet 2016, Atezolizumab versus docetaxel in patients with previously treated non-small-cell lung cancer (OAK): a phase 3, open-label, multicenter randomized controlled trial).

Third-line treatments are offered but are essentially palliative.

In short, there is still a great need for active and well-tolerated treatments for advanced-stage NSCLC cancers, in particular, after checkpoint inhibitors have failed.

Competition and immuno-oncology products

In the field of antigen-specific immunotherapy targeting tumor antigens, therapy targeting a single tumor antigen through a mainly humoral response did not prove efficacy in phase 3. This relates to a MAGE-A3 long peptide (developed by GSK). Previously, in phase 2, the humoral (antibody) response observed for this recombinant peptide (called Antigen-Specific Cancer Immunotherapeutic: ASCI) had a majority and did not correlate with the clinical outcome sought in terms of the recurrence of the cancer (Vansteenkiste J et al., 2013). This MAGE-A3 long peptide was administered immediately after a tumor resection (surgery) in early stage cancer (in patients with a high level of MAGE-A3 proteins). The product did not prove to have any preventive effect on relapse or recurrence of this cancer (phase 3 trial-MAGRIT).

Since 2014, there has been a great deal of renewed interest in the field of immunotherapy with a number of products proving to have compelling results in lung and other cancers:

These include belagenpumatucel-L (Lucanix® developed by the biotechnology company NovaRx) which is a product made from modified tumor cells prompting a cytotoxic T-cell response. The main survival rate measurement criterion in a phase 3 trial was not, however, met in 532 stage III and IV NSCLC patients. In a predefined group of 305 patients (enrolled in the trial within 12 weeks of first-line chemotherapy) a survival rate of 20.7 months was observed versus 13.4 months in the control group (p = 0.08) (G Giaccone, ESMO 2013).

Tecemotide (developed by the biotech company Oncothyreon in conjunction with Merck KGaA) is a 25-amino acid peptide from a single tumor antigen called MUC-1 in a liposomal formulation to stimulate a T-cell response against MUC. In stage III NSCLC patients, there proved to be no survival benefit in the overall population (25.6 months versus 22.3 months). In a predefined group (65% or 806 patients) receiving combined chemotherapy and radiotherapy at the same time, the median survival rate was greatly improved with 30.8 months versus 20.6 months for the control group (p=0.016) (Butts CA et al. ASCO 2013). Merck KGaA stopped developing the product in September 2014.

The first immune activation product, Provenge®, to have entered the market in this field is a cell therapy product to combat prostate cancer which was licensed in the United States in 2010 (Provenge® or sipuleucel-T, developed by the US company Dendreon, since acquired by the pharmaceutical company Valeant).

The first cancer immunotherapy products registered were checkpoint inhibitors acting on T cells (Opdivo® BMS, Keytruda® Merck, Tecentriq® Roche, Yervoy® BMS, Bavencio® Merck Serono/Pfizer, Imfinzi® AstraZeneca), and a therapeutic vaccine, Provenge®.

Checkpoint inhibitors, producing non-specific cytotoxic T lymphocytes by effectively releasing the brakes of immunity, demonstrated clinical activity in lung cancer.

Opdivo® (nivolumab, monoclonal antibody, anti-PD-1 checkpoint inhibitor from BMS)/First marketing authorization: December 2014 (metastatic melanoma). Since then, Opdivo® has been registered in metastatic non-small cell lung cancer (NSCLC) (2015), renal cancer (2015), Hodgkin's lymphoma (2016), head and neck cancer (2016), bladder cancer or urothelial carcinoma (2017), metastatic colorectal cancer (MSH-H or dMMR) (2017), liver cancer or hepatocellular carcinoma (2017) and small cell lung cancer (2018). In 2018, the product was registered in combination with ipilimumab (Yervoy®) in metastatic colorectal cancer and in first-line therapy in renal cancer.

Keytruda® (pembrolizumab, monoclonal antibody, anti-PD-1 checkpoint inhibitor from Merck MSD)/First marketing authorization: in 2014 in metastatic melanoma. Since then, Keytruda® has been registered in non-small cell lung cancer (NSCLC) (2015), head and neck cancer (2016), Hodgkin's lymphoma (2017), bladder cancer or urothelial carcinoma (2017), gastric cancer or gastro esophageal junction cancer (2017), cervical cancer (2018), diffuse large B cell lymphoma (June 2018), hepatocellular carcinoma or liver cancer (2018), Merkel cell carcinoma (an aggressive skin tumor) (2018), renal cancer (2019), esophageal cancer (2019) and endometrial cancer (2019).

After registration in 2015 as a second-line therapy for patients suffering from metastatic non-small cell lung cancer (NSCLC) with a PD-1 biomarker expression, in October 2016, Keytruda® was licensed in first-line therapy in NSCLC for patients expressing the PD-1 marker (PD-L1 expression over 50% at tumor level). In May 2017, Keytruda® obtained its conditional registration in first-line therapy (in combination with pemetrexed and carboplatin) in NSCLC, whatever the PD-L1 expression. In August 2018, Keytruda® was registered in first-line therapy (in combination with pemetrexed and platinum-based chemotherapy) in metastatic non-epithelial NSCLC without tumor-genomic aberration of the EGFR or ALK gene. In October of the same year, is was registered in first-line therapy (in combination with carboplatin and paclitaxel) in NSCLC, whatever the PD-L1 expression. In April 2019, the product was registered in first-line monotherapy for stage III NSCLC (PD-L1 proportion expressed at over 1% at the tumor level).

Tecentriq® (atezolumab, anti-PD-L1 checkpoint inhibitor from Roche)/First marketing authorization: in May 2016 in urothelial bladder cancer, with a companion test to identify PD-L1 positive patients (Ventana PD-L1-SO 142 trial). Then in October 2016, Tecentriq® was registered in the treatment of lung cancer as a second-line therapy for patients suffering from metastatic non-small cell lung cancer (NSCLC) whose disease has progressed during, or after, platinum-based chemotherapy and during an appropriate targeted treatment in the presence of a tumor with EGFR or ALK gene mutation. In December 2018, Tecentriq® obtained its registration in first-line therapy for non-epithelial metastatic NSCLC in combination with Avastin® and chemotherapy. In March 2019, the product was registered in metastatic triple negative breast cancer and in first-line therapy of small cell lung cancer.

Yervoy® (ipilimumab, monoclonal antibody targeting CTLA-4, from BMS)/First marketing authorization in 2011 in melanoma. In 2018, the product was registered in combination with nivolumab (Opdivo®) in metastatic colorectal cancer and in first-line treatment of renal cancer.

Bavencio® (avelumab, monoclonal antibody targeting anti-PD-L1, from Merck Darmstadt or EMD Serono in collaboration with Pfizer-Javelin program): this antibody is an IgG1, a cytotoxic antibody. Two registrations were obtained in 2017: in Merkel cell carcinoma (an aggressive skin tumor) and in bladder cancer or urothelial carcinoma.

Imfinzi® (durvalumab, humanized monoclonal antibody targeting the PD-L1 ligand, checkpoint inhibitor MEDI 4736d)/First marketing authorization in 2017 in bladder cancer or urothelial carcinoma. Then, in 2018, registration in inoperable non-small cell lung cancer (NSCLC) in patients who have not progressed after chemo or radiotherapy.

Drug	Target	Indication	Registration
Opdivo® (nivolumab, BMS)	PD-1	Advanced melanoma	2014
		Metastatic squamous cell and non-squamous cell non-small cell lung cancer (NSCLC) (with particular histology representing around 25% of NSCLCs).	2015
		Metastatic renal cancer after anti-angiogenic treatment failure	2015
		Recurrence of Hodgkin's lymphoma after a bone marrow transplant	2016
		Relapsing or metastatic head or neck cancer	2016
		Metastatic or locally advanced bladder cancer	2017
		Metastatic colorectal cancer (MSI-H or dMMR) in progression after treatment with fluoropyrimidine, oxaliplatin and irinotecan	2017
		Hepatocellular carcinoma (liver cancer) following treatment with sorafenib	2017
		Non-small cell lung cancer Metastatic colorectal cancer and renal cancer first-line therapy (in combination with ipilimumab)	2018
Keytruda® (pembrolizumab, Merck	PD-1	Advanced or inoperable melanoma	2014
		Advanced non-small cell lung cancer (NSCLC)	2015
		Relapsing or metastatic squamous cell head and neck cancer	2016
		Non-small cell lung cancer (NSCLC) in first-line therapy in patients expressing a high level of the PD-1 marker (PD-1 expression over 50% at tumor level)	
		Hodgkin lymphoma	2017
		Metastatic non-small cell lung cancer (NSCLC) in first-line therapy, in combination with pemetrexed and carboplatin, whatever the PD-L1 expression – conditional registration	2017
		Metastatic or locally advanced bladder cancer (urothelial carcinoma)	2017
		Metastatic or relapsing gastro esophageal junction cancer/stomach cancer	2017
		Metastatic, non-epithelial non-small cell lung cancer (NSCLC)	2018
		Metastatic non-small cell lung cancer (NSCLC) in first-line therapy, in combination with pemetrexed and carboplatin, whatever the PD-L1 expression	2018
		Relapsing or metastatic cervical cancer	2018
		Diffuse large B-cell lymphoma	2018
		Hepatocellular carcinoma (liver cancer) after failed treatment with sorafenib	2018
		Merkel cell carcinoma (an aggressive skin tumor)	2018

		Advanced renal cancer in combination with axitinib, in first-line therapy	
		Non-small cell lung cancer (NSCLC) in Stage III monotherapy (PD-L1 proportion expressed at over 1% at the tumor level)	2019
		Metastatic or locally advanced epithelial esophageal cancer	2019
		Endometrial cancer, in combination with lenvatinib	2019
Tecentriq® (atezolizumab, Roche)	PD-L1	Bladder cancer (urothelial carcinoma)	2016
		Metastatic non-small cell lung cancer (NSCLC) following progression during, or after, platinum-based chemotherapy and during an appropriate targeted treatment in the event of a tumor with EGFR or ALK gene mutation	2017
		Metastatic, non-epithelial non-small cell lung cancer (NSCLC), in combination with Avastin® and chemotherapy	2018
		Metastatic triple negative breast cancer	2019
		Small cell lung cancer, in first-line therapy	2019
Imfinzi® (durvalumab,	PD-L1	Metastatic bladder cancer	2017
		Unresectable non-small cell lung cancer (in patients whose cancer has not progressed after chemo and radiotherapy)	2018
Bavencio® (avelumab, Merck KGA/EMD Serono)	PD-L1	Merkel cell carcinoma (an aggressive skin tumor) Bladder cancer (urothelial carcinoma)	2017
Yervoy® (ipilimumab, BMS)	CTLA4	Advanced stage melanoma	2011
		Metastatic colorectal cancer and renal cancer first-line therapy (in combination with nivolumab)	2018

Products that can help the immune system to develop a specific T response with an immunological memory may have a long-term effect on tumors. Tumor heterogeneity, the possible loss of expression of a tumor antigen and the variability of the human T-cell repertoire suggest greater efficacy based on a large induction of cytotoxic T specificities, which can be obtained with a cytotoxic T immunotherapy targeting several tumor antigens. Despite the heterogeneity of the antitumor vaccine trials in lung cancer, a meta-analysis conducted in 2016 concluded that there had been a positive effect on survival rate and length of time without progression (Dammeijer F et al., JCO 2016, Efficacy of Tumor Vaccines and Cellular Immunotherapies in Non-Small-Cell Lung Cancer: A Systematic Review and Meta-Analysis).

Tedopi® in NSCLC is positioned in specific cytotoxic T-cell immunotherapy, after progression of the tumor under checkpoint inhibitor PD-1 or PD-L1, in patients at inoperable invasive stage IIIb or at metastatic stage IV.

Tedopi®, in Phase 3 clinical trial in NSCLC, is positioned in specific cytotoxic T-cell immunotherapy, after progression of the tumor under PD-1 or PD-L1 checkpoint inhibitor, in patients at inoperable invasive stage IIIB or at metastatic stage IV.

Step 1 of Tedopi® Phase 3 study in NSCLC showed positive results and the primary endpoint was met: a 12-month survival rate in patients treated by Tedopi® and a 10% absolute difference in this survival rate in comparison with chemotherapy.

These positive results confirm Tedopi®'s value and therapeutic benefit in a patient group for which there is no validated treatment to date and which is awaiting new therapeutic options. The Company will initiate discussions with the regulatory authorities to analyze these positive clinical results and determine the best options to pursue the development of Tedopi® and maximize the positive benefit/risk ratio data obtained.

Therapeutic combinations with checkpoint inhibitors are currently the subject of wide-ranging studies.

Immuno-oncology products under development according to their mechanisms of action

Immune defenses against cancer

When the immune system recognizes tumor cells as foreign bodies, it triggers an immune response involving a series of cells (lymphocytes and antigen-presenting dendritic cells) and specialized proteins (antibodies, cytokines). The coordinated action of these different elements should end in the destruction of the tumor cells and this is what happens in cancer immunosurveillance.

This response is characterized by two levels of defense: the first level is non-specific; it is innate immunity; the second level is called specific or adaptive immunity. This defense system can be overridden. In fact, some tumor cells present few characteristics that betray their true nature; they are neither recognized, nor attacked by the immune system. They present tumor antigens, but these are also present on other healthy organs and the immune reaction will not be triggered against these "self"-antigens. They will not be recognized as being alien. Other tumor cells may also use strategies to escape detection, for example, by multiplying very rapidly and overwhelming the immune system's reaction capacity. Oncogenes (tumor genes) are expressed at the surface of the tumor by tumor antigens (macromolecules or proteins). They themselves can directly inhibit the normal functioning of the immune system by deregulating it, thereby blocking immunosurveillance.

Non-specific immunotherapy: non-specific T-cell action checkpoint inhibitors

Immune checkpoints regulate the breadth of the T-lymphocyte response and are key to avoiding auto-immunity. However, they also limit the robustness and duration of the anti-tumor immune responses. The molecules that play a role in regulating these checkpoints are currently in clinical development in many cancers. They include molecules regulating T-cell activity: CTLA- 4, PD- 1/ PD-L1, TIM 3 and LAG- 3. These molecules can be blocked by monoclonal antibodies (MAb) which are capable of releasing the brakes on these molecules from T lymphocytes, not only preventing them from attacking tumors, but also from attacking other self-cells. Since 2011, this non-specific approach has led to a number of checkpoint inhibitors being marketed (see "Competition and immuno-oncology products" table).

Therapeutic combinations with checkpoint inhibitors

The research has moved into a completely new phase with the search for better combinations for each patient that are more efficient and less toxic. The combination of a specific T-cell therapy and a non-specific therapy is logical and holds great therapeutic promise. These combinations are very interesting. (Pardoll D, Nature Reviews Drug Discovery, 12, 489-492, 2013).

Other treatments targeting cells in the tumor micro-environment or new, second-generation checkpoint inhibitors are expected in this field as a result of interesting tumor responses observed in 20% of patients on average in patients at the metastatic stage. Time without progression and survival rate are observed, but still over a limited period, when these products are used on their own. Auto-immune reactions are observed for around 10% of patients treated. Primary or secondary resistance was described for these products used alone. All these reasons encouraged researchers and clinicians to explore new therapeutic combinations.

Keytruda® (Merck & Co) a checkpoint inhibitor acting on PD-1, registered in melanoma, advanced lung cancer (second- and first-line therapy in combination with pemetrexed and carboplatin), metastatic lung cancer (in first-line therapy in combination with pemetrexed and carboplatin, whatever the PD-L1 expression), bladder cancer (urothelial carcinoma), squamous cell head and neck cancer, and gastroesophageal junction/stomach cancer, is combined in clinical development, by way of example, with numerous other therapies such as:

Ramucirumab, an Anti-VEGF-2 and monoclonal antibody (MAb) studied in multiple tumors (Eli Lilly); Necitumumab, Anti-EGFR mAb in NSCLC (Eli Lilly); Epacadostat IDO1 inhibitor, in solid NSCLC-type tumors (Incyte) with negative outcomes in 2018; MK-4166, Anti-GITR MAb in solid tumors (Merck); Ipilimumab, Anti-CTLA4 Mab in numerous cancers (BMS); PF-05082566, Anti-CD137 MAb in solid tumors (Pfizer).

Opdivo® (Bristol-Myers Squibb), a checkpoint inhibitor acting on PD-1, registered in melanoma, lung cancer (squamous cell-type cancer), metastatic renal cancer, relapsing or metastatic head and neck cancer, Hodgkin's lymphoma recurring after a bone marrow transplant, metastatic bladder cancer, metastatic colorectal cancer and hepatocellular carcinoma (liver cancer), and small cell lung cancer, is also combined in clinical development, for example, with numerous other therapies such as:

ALT-803 IL-15 superagonist/IL-15Rα-Fc, fusion protein in NSCLC (Altor BioScience); Urelumab Anti-CD137 MAb in solid tumors and B-cell hematologic cancers, B-cell Non-Hodgkin's lymphoma (Bristol-Myers Squibb); Ulocuplumab Anti-CXCR4 MAb in solid tumors (Bristol-Myers Squibb); Ipilimumab Anti-CTLA-4 MAb in numerous cancers (Bristol-Myers Squibb); Lirilumab Anti-KIR MAb in multiple myelomas, lymphoma and solid tumors (Bristol-Myers Squibb/Innate); Varlilumab Anti-CD27 MAb in solid tumors, diffuse large B-cell lymphoma; Epacadostat IDO1 inhibitor in multiple tumors (Incyte).

There are also numerous clinical combinations of checkpoints with therapeutic vaccines

Keytruda® – Merck & Co (PD-1 MAb) was studied in combination, notably:

with ADXS-PSA, a therapeutic vaccine against cancer targeting a prostate tumor antigen (PSA), in resistant prostate cancer (Advaxis); with G100, a therapeutic vaccine in non-Hodgkin's lymphoma (Immune Design); with BCG in bladder cancer (Merck); with a viral vaccine expressing p53, MVA, a vaccine virus expressing this target for solid tumors (NIH).

Opdivo® – Bristol-Myers Squibb (PD-1 MAb) was studied in combination, notably:

with Viagenpumatucel, a cell-based therapeutic vaccine (Heat Biologics); with ISA101, a therapeutic vaccine against the HPV virus in solid tumors (ISA Pharmaceuticals); with GVAX, a therapeutic vaccine against pancreatic cancer (Pancreatic cancer Sidney Kimmel Cancer Center).

Specific immunotherapy: cooperation between cells is necessary

The response may be humoral (antibodies) or cellular (cytotoxic T).

The adaptive immunity acquired is specific and endowed with memory. This specific characteristic is the result of an activation process, during which certain lymphocytes learn to recognize tumor antigens via their epitopes.

T lymphocytes ensure a specific cellular response. Cooperation between lymphocytes is necessary to trigger an immune response. A distinction is made between T8 lymphocytes (identified by a T-CD8 marker), activated into cytotoxic lymphocytes which will directly attack tumor cells, and T4 cells (T-CD4 marker); auxiliary T lymphocytes mainly function to stimulate/regulate the immune response. Initially naive (i.e. not informed), these cells are educated by antigen-presenting cells which teach them to specifically recognize tumor antigens.

Cancer immunotherapy aims, therefore, to trigger or stimulate the body's own immune system to fight the disease. This type of immunotherapy combines B-cell antigen stimulation or T-cell antigen stimulation approaches. They involve a single antigen or a group of particular antigens, designed to activate the patient's immune system so that it recognizes and kills cells carrying the same antigen. The immunocompetence of a lymphocyte is dependent on the synthesis of a membrane receptor specifically capable of recognizing an epitope: the BCR receptor for B cells (this receptor is a membrane-bound immunoglobulin molecule), with the TCR receptor acting as an epitope recognition site for T cells. Unlike the B-lymphocyte receptor, the T-lymphocyte receptor only recognizes protein antigens which have been divided into epitopes. Proteins must be divided into peptides or epitopes which are then combined with MHC or major histocompatibility complex molecules. Cytotoxic lymphocytes recognize the antigen presented by an MHC class I molecule. The antigens presented are endogenous antigens produced by the cell.

Recognition is the first activation signal. A second co-stimulation signal permits the expression of the lymphocyte's cytotoxic power.

The therapeutic action of a specific immunotherapy is not direct. The product does not kill the tumor cell directly but activates the patient's immune system to recognize and kill the target cell. Adjuvants combine to generate an inflammatory reaction at the injection point and activate antigen-presenting cells leading to recognition of targeted antigens. Then, co-stimulation signals on the surface of antigen-presenting cells will be necessary to activate T lymphocytes.

Immunotherapy targeting innate immunity in cancer

Anti-KIR antibodies (Lirilumab, IPH2102/BMS-986015, Innate pharma) block the interaction of NK-cell inhibitor receptors, thus activating these "Natural Killer" cells that are part of innate immunity. Anti-KIR lirilumab was tested in a phase 2 trial with checkpoint inhibitors from BMS, namely Yervoy® and Opdivo®. These two molecules are antibodies directed against checkpoints (activation brakes). They activate cytotoxic T cells in a non-specific way by releasing the brakes of their activation.

Antigen-specific cancer immunotherapies

ASCI – antigen specific cancer immunotherapies

These antigen immunotherapies most often target a single tumor antigen such as, for example, MUC 1 or MAGE-3 or TERT.

They use a natural or recombinant macromolecule. They induce a cytotoxic T-cell response or a humoral B-cell response, producing antibodies against the tumor antigen.

They require the tumor antigen to have a detection threshold with definable detection limits.

Targeted therapies

This therapeutic approach is very different from immunotherapy since these targeted therapies directly target tumor cells expressing a specific mutation.

Registered products are as follows:

Tyrosine Kinases inhibitors, TKIs, targeting a mutation on the cancerous cell like EGFR (EGFR+) accounting for around 10% of NSCLC patients. The products are erlotinib (Tarceva®) and gefitinib (Iressa®). More recently, afatinib (Giotrif®, Gilotrif®) was registered in Europe and in the United States for EGFR+ patients in first-line therapy.

In addition, ALK protein mutations corresponding to 3% to 5% of NSCLC patients have been targeted with crizotinib (Xalkori®). These EGFR or ALK mutations are mutually exclusive. Ceritinib (LDH 378 Zykadia® Novartis) acts on patients who have become resistant to crizotinib and was registered in 2014 for patients presenting with ALK mutations (Shaw, A.T. et al., Ceritinib in ALK-rearranged non-small cell lung cancer, NEJM, March 27, 2014) and was also registered in Europe in May 2015 for the same indication (patients whose treatment with ceritinib failed and presenting with an ALK mutation). These targeted therapies frequently encounter resistance or new mutations after a few months of treatment (six to seven months) resulting in the failure of the treatment.

The range of therapeutic combinations is also logical in light of the failures and acquired resistances and is being considerably expanded to include combinations of targeted therapies and immunotherapies, with clinicians seeking optimal therapeutic combinations.

Conclusion: Immunotherapy is currently center stage at US and European international oncology conferences and T-cell checkpoint inhibitors are now registered in several different cancers. Checkpoint inhibitor outcomes demonstrated a high level of effectiveness compared with chemotherapy in patients with advanced non-small cell lung cancer. Immunotherapies which are already indicated in lung cancer and melanoma seem to be just as effective in other types of cancer with cross-cutting action in different types of cancers. These treatments are not effective for all patients. The clinicians in question need to better identify patients likely to respond and better understand future combinations and the reasons for the failure of, or primary resistance to, these treatments.

5.6.3 Autoimmune diseases and transplantation

5.6.3.1 FR104, designed for autoimmune diseases and transplantation

Products being developed in the direct area of FR104

FR104 is a monovalent antagonist antibody in Fab format, directed against the CD28 co-stimulatory molecule, for an inhibitor effect on effector T-cell responses and inducing regulating T-cell responses (via CTLA-4) resulting in a T-suppressive activity.

Lulizumab pegol (BMS-931699) targets T cells and CD28. This product was evaluated by the company BMS as part of a Phase 2 study (NCT02265744 trial) evaluating the safety and efficacy of lulizumab versus placebo in the treatment of an autoimmune disease, systemic lupus erythematosus. The abstract presented to the 2018 ACR/ARHP conference ("An Anti-CD28 Domain Antibody, Lulizumab, in Systemic Lupus Erythematosus: Results of a Phase II Study", Joan T. Merrill et al.) did not show any significant difference between lulizumab and the placebo in terms of primary and secondary criteria but a profile of favorable tolerance.

TGN1412 (CD28 superagonist developed by TeGenero that became TAB08 theralizumab developed by TheraMAB) also targets CD28 but works differently. It is a humanized monoclonal antibody that binds to the CD28 receptor of the T cells of the immune system, but it has a "superagonist" activity with T-cell activation independent from the TCR and the massive release of pro-inflammatory cytokines. The Phase 1 clinical trials of TGN1412 were suspended in March 2006 after inducing severe inflammatory reactions in the first study in humans in London. The drug has been taken up and renamed TAB08 theralizumab by the Russian biotechnology company TheraMAB that carried out Phase 1 trials using a much weaker dose (0.1%) than those

used in the London study and continued Phase 2 development with a Phase 2 study in progress. (From TGN1412 to TAB08: the return of CD28 superagonist therapy to clinical development for the treatment of rheumatoid arthritis, Tyrsin D et al., Clinical and Experimental Rheumatology, 2016 Jul-Aug, 34(4 Suppl. 98):45-8, Epub. 2016 Jul 20)

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5.6.3.2 OSE-127, designed for autoimmune diseases, including ulcerative colitis (UC) and Sjögren's syndrome

Ulcerative colitis (UC), an inflammatory bowel disease, is a long-term inflammatory disease whose cause is unknown. It is characterized by persistent ulcers of the colon and the rectum. Digestive and non-digestive complications can also develop over time, including inflammation of the megacolon, eyes or joints and colon cancer. Due to its prevalence in Western countries (60-280/100,000), its human, social and economic impact and its uncertain origin, UC is a disease with high unmet therapeutic need.

Treatment of UC

To date, there is no cure for patients with UC. The main objective of medical treatment is to induce and maintain remission of the disease and prevent, in the long term, disability, colectomy and colorectal cancer. Patient care relies mainly on diet (still controversial) and on the administration of anti-inflammatories and/or immunomodulators, standard treatments for alleviating symptoms. In patients who do not respond to these treatments, biological drugs are used as second-line treatment (Harbord M. et al., J. Crohn's Colitis, 2017). Steroid-free endoscopic and clinical remission is currently the ultimate objective expected from maintenance treatment for UC (EMA 216, Guideline on the development of new medicinal products for the treatment of ulcerative colitis).

For patients with severe UC or during flareups, hospitalization may be necessary. When the disease cannot be controlled by drugs, surgery (including colectomy) is then the final option for patients with severe and unresponsive UC (approximately one third of patients), with potentially significant morbidity and often major consequences on the patient's quality of life.

Competition and products in UC

The world market for UC is dominated by immunomodulator drugs (such as thiopurines, aminosalicylates and steroids) and by biological drugs (mainly anti-TNF monoclonal antibodies: Remicade® [infliximab], Humira® [adalimumab], Simponi® [golimumab] and more recently, an anti-α4β7 antibody, Entyvio® [vedolizumab]). The clinical data on anti-TNF treatments collected during the last 10 years has shown that primary resistance develops in approximately 30% of the native UC patients, whereas secondary resistance develops in more than 50% of primary responders in less than five years. Anti-TNF treatment is therefore unable to control the disease in approximately two thirds of all patients not presenting full remission (Sandborn W.J. et al., N. Engl. J. Med., 2016) and most of them resort to surgical intervention as a last recourse. There is thus still an

unmet therapeutic need to induce and maintain control of the disease in primary patients unresponsive to standard treatments and maintain long-term remission and prevent consequences.

Products being developed in the direct area of OSE-127

OSE-127: a humanized monoclonal antibody (IgG4), directed against the IL7 receptor alpha (CD127). The main characteristic of this antibody is that it recognizes an identified and patented epitope of the receptor giving it the specific property of not inducing internalization of the receptor while blocking the binding of the IL7 to its receptor. This allows it to block the proliferation of effector T cells without impacting the regulatory T cells. This non-internalization characteristic of the receptor is a very differentiating point compared with other competitors, in particular with respect to the two other products available in the domain of the IL7 described below.

GSK2618960 is a monoclonal antibody (IgG1) targeting the IL7 receptor alpha and internalizing the receptor. Phase 1 clinical trials have been developed by the company GSK. A trial was carried out among healthy volunteers (NCT02293161) and the results, in December 2018, demonstrated good product tolerance and blockage of IL-7 receptor signaling, consistent with the objectives that had been set. Moreover, it was demonstrated that even without discernible impact on a subgroup of peripheral T cells in healthy subjects, GSK2618960 effectively modulates the auto-inflammatory activity of the pathogenic T cells in the diseased tissue (Joanne Ellis et al., Br. J. Clin. Pharmacol., 2019 Feb).

The trial on multiple sclerosis (NCT01808482) was interrupted in June 2013 (after fraud was discovered concerning the data linked to a research team located in Shanghai).

PF-06342674 is a monoclonal antibody (IgG1) targeting the IL7 receptor alpha and internalizing the PF-06342674 receptor. Pfizer conducted two Phase 1b trials with this product: one trial on diabetes (trial NCT02038764 terminated in September 2016) and a trial on multiple sclerosis (NCT02045732 terminated in April 2015). Following strategic company decisions, the company withdrew PF-06342674 from its product portfolio in July 2018.

In 2017, a Phase 2 trial (NCT03239600) conducted on primary Sjögren's syndrome was stopped.

Several candidate drugs are in clinical development in UC to evaluate different ways of working including blocking of integrin or interleukin 12 and/or 23, modulation of sphingosine-1-phosphate receptors, inhibition of Janus kinases or antisense oligonucleotides. None of these therapeutically target the IL-7R (Sandborn W.J. et al., N. Engl. J. Med., 2016).

In October 2019, the company Abivax announced that after 12 months of treatment by its candidate drug oral ABX464, 75% of patients included in the Phase 2a open-label maintenance study in moderate to severe ulcerative colitis (UC), unresponsive to immunomodulators, to anti-TNFα agents, to vedolizumab and/or to corticosteroids, had reached the stage of clinical remission.

Oral ABX464 is a highly differentiated therapeutic candidate with anti-inflammatory properties, with an innovative way of working based on the positive regulation of a unique microRNA (miRNA-124). In addition to the Phase 2b in progress for UC, ABX464 is also being evaluated for rheumatoid arthritis (Phase 2a in progress) and expected for Crohn's disease.

Sjögren's syndrome

Sjögren's syndrome occurs when a person's immune system attacks and destroys secretion-producing glands, in particular salivary and lacrimal glands. The lungs, intestines and other organs are less often affected by Sjögren's syndrome.

Sjögren's syndrome presents in two forms:

- primary Sjögren's syndrome (pSS): the disease itself, not associated with any other disease;
- secondary Sjögren's syndrome (sSS): a disease that develops in the presence of another autoimmune disease such as rheumatoid arthritis, systemic lupus erythematosus or vasculitis.

Sjögren's syndrome is a rare disease affecting somewhat fewer than 1 out of 10,000 adults. Women are ten times more affected than men.

Primary Sjögren's syndrome is characterized by lymphocytic infiltrates and progressive destruction of exocrine glands (saliva and tear glands) leading to xerostomy (dry mouth) and xerophthalmia (dryness and atrophy of the conjunctiva) associated with fatigue and pain. The inflammatory process may however affect any organ.

pSS is considered as a multifactor disease in which environmental factors trigger inflammation in genetically predisposed individuals. The pathological process implies both innate and adaptive immune systems. The precise physiopathological

mechanisms of the disease are not completely understood. A complex interaction of types of immune cells, such as T cells, B cells, dendritic cells, monocytes/macrophages and NK cells and their effector molecules, would be the origin of the disease, eventually leading to hyperactivity of B cells, the production and formation of autoantibodies of germinal center type structures in the salivary glands.

Competition and products

To date no systemic treatment has proved effective in altering the progress of pSS whose therapeutic need has not been met. Treatment of pSS relies mainly on symptomatic agents, in particular tear and saliva substitutes, saliva stimulating agents such as pilocarpine or cevimeline and analgesics. Severe symptoms affecting the organs are treated according to recommendations for treating systemic lupus erythematous and other conjunctive tissue disorders. These treatments include corticosteroids, hydroxychloroquine, immunosuppressants such as methotrexate, mycophenolate sodium, azathioprine and cyclosporin.

Many therapeutic trials are currently in progress to evaluate the efficacy and the tolerance of new biotherapies in the treatment of Sjögren's syndrome.

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5.6.3.3 Targeted pathologies and therapy in autoimmune diseases and transplantation

Autoimmune diseases

Autoimmune diseases are diseases in which the lesions observed are due to the activation of an immune response against part of the body.

Tolerance is a state of non-immune response to an antigen, specific to that antigen. It is an active phenomenon, caused by a prior contact with the antigen. Normally, an organism is tolerant of its own parts: it is self-tolerant or auto-tolerant. This latter involves T lymphocytes and, to a lesser degree, B lymphocytes.

Autoimmune diseases can be schematically divided into organ- or tissue-specific autoimmune diseases (such as autoimmune thyroiditis, myasthenia, pemphigus, etc.) and non-organ-specific autoimmune diseases also called systemic diseases (ASSIM - D. Bernard, Marseille, autoimmune pathologies). Autoimmune diseases are of multifactorial origin (genetic, endocrinal and environmental factors).

Sexual hormones have an important role in the appearance of autoimmune diseases. This has been demonstrated in animal and human experimental models. The number of women affected is significantly greater. Genetic factors associated with autoimmune diseases initially concerned certain markers of major histocompatibility complex (MHC). For example, the DR1 and DR4 alleles are risk factors for rheumatoid arthritis, but in view of the number of genes involved, these are polygenic diseases.

The frequency of autoimmune diseases, even if some are very rare, makes this group of diseases a public health problem, the same as cardiovascular or cancerous diseases since these are chronic pathologies affecting young people with long treatment. Better understanding of their physiopathology allows considerable therapeutic progress of the most serious of them.

Table 1 - Main Autoimmune Diseases

Non-organ-specific autoimmune diseases
- Systemic lupus erythematosus
- Scleroderma
- Dermatopolymyositis
- Polymyositis
- Gougerot-Sjögren's dry syndrome
- Rheumatoid arthritis
- Antiphospholipid syndrome
Organ-specific autoimmune diseases
Endocrine glands
- Thyroiditis: Hashimoto's disease and Basedow's disease
- Addison's disease
- Insulin-dependent diabetes
- Polyendocrinopathies
Gastrointestinal tract
- Biermer's disease
- Celiac disease
Kidney
- Goodpasture syndrome
Muscles and Nerves
- Myasthenia
- Polyneuropathies
- Guillain-Barré syndrome
- Multiple sclerosis
Eyes
- Uveitis
- Sympathetic ophthalmia
Skin
- Pemphigus, bullous pemphigoid, alopecia, vitiligo
Liver
- Autoimmune hepatitis
- Primary biliary cirrhosis

According to D. Bernard, Marseille, autoimmune pathologies

Epidemiology

The epidemiology of autoimmune diseases shows great variations in frequency: autoimmune thyroid diseases are extremely frequent.

The prevalence of autoimmune diseases is greater among women, who are affected five to ten times more often than men.

Rheumatoid arthritis, Gougerot-Sjögren's syndrome and autoimmune diabetes (type 1, insulin dependent) are frequent systemic diseases. Their respective prevalence is from 1,000 to 4,000 patients affected per 100,000 inhabitants, 100 to 500 cases per 100,000 inhabitants and 200 to 300 per 100,000 inhabitants. The prevalence of celiac disease would be from 100 to 200 per 100,000 inhabitants. Systemic lupus erythematosus, scleroderma and dermatopolymyositis are much rarer diseases with respective prevalence of 15 to 50 per 100,000 inhabitants, 20 per 100,000 inhabitants and 5 to 10 cases per 100,000 inhabitants. In total, better diagnostic effectiveness, an increase in the life span of populations and a reduction of mortality for the most severe autoimmune diseases through better therapy give this group of pathologies an overall prevalence of 5% to 10%.

Examples of autoimmune diseases:

Rheumatoid arthritis

Rheumatoid arthritis is a chronic inflammatory rheumatism, i.e. a disease of the joints manifested by persistent inflammation. The disease progresses by inflammatory flareups of variable duration and intensity and progressively spreads to new joints. It causes swelling and pain, in particular in the hands, wrists and knees. In the beginning, it is evidenced by nocturnal pain, especially in the second part of the night, and by morning stiffness. Fever and fatigue are also frequent symptoms. Then, in 20% to 30% of cases, the inflammation causes the progressive deterioration of the cartilage and bones of the joints affected and leads to their deformation. When untreated and in the most serious cases, the disease can be handicapping after about 10 years and prevents the patient from daily movements and professional activity.

Extra-articular manifestations can sometimes occur, such as rheumatoid nodules, a kind of "bump" often located at the elbows or next to the finger joints, or dryness of the eye and mouth (referred to as Gougerot-Sjögren's dry syndrome). In the most serious cases, the disease also affects other organs such as the eyes, heart, lungs, nerves or blood vessels.

Chronic inflammatory bowel disease (CIBD)

Chronic inflammatory bowel disease (or CIBD) includes Crohn's disease and ulcerative colitis (UC). These are both characterized by inflammation of the wall of a portion of the digestive tract. In Crohn's disease, it may be located in the entire digestive system, from the mouth to the anus (most often in the intestine) whereas with ulcerative colitis is located in the rectum and the colon. These diseases progress by inflammatory flareups of extremely variable duration and frequency depending on the patient, alternating with remission phases. CIBDs are usually diagnosed in young patients between 20 to 30 years of age but may occur at any age. 15% of cases are among children. Their frequency varies considerably from one country to another, but the most significant rates are found in the industrial countries and in particular in northwestern Europe and the United States. In France, approximately five new cases of Crohn's disease and as many cases of ulcerative colitis are diagnosed each year per 100,000 inhabitants.

During the flareups, the CIBDs are usually characterized by abdominal pain, frequent, sometimes bloody, diarrhea, or even attacks in the anal region (cracks, abscesses). The symptoms are often accompanied by fatigue, anorexia and fever, even non-intestinal manifestations, in the joints, skin, eyes and liver.

In approximately 20% of patients, the crises are severe. Their intensity may require hospitalization, suspension of food intake and infusion therapy for several days. Moreover, the progress of the disease may lead to narrowing of the affected intestinal segment and possibly occlusion or abscesses that could result in a fistula, which is a perforation and an abnormal path from the diseased intestine to another organ. These complications require surgical intervention. CIBDs are associated with increased risk of colorectal cancer, in particular when the lesions are present in the colon.

Celiac disease

This is a frequent disease with prevalence in Europe that can affect 1 out of 200 inhabitants (France, 120,000 to 600,000 individuals). It is especially observed in children between 6 and 12 months of age (following the introduction of gluten in the baby's usual food). It may, however, be diagnosed at any age. Hypersensitivity to an antigen contained in food gluten develops over time. Gluten is present in cereals (wheat, proteins rich in lysine and glutamine = gliadins), rye (proteins = secalins), oats and barley (proteins = hordeins).

In the digestive mucosa, gliadin forms a complex with an enzyme that deaminates certain glutamine residues and that increases the immunogenicity of the complex. Macrophages of the digestive mucosa then present the enzyme/gliadin complex to the CD4+ T lymphocytes. The T lymphocytes are activated and stimulate the production of anti-gliadin antibodies and anti-enzyme autoantibodies. The antibodies are found in the mucus membranes and in the serum. Cellular immunity is

strongly involved and there is a major expansion in the mucus membranes of the intraepithelial T lymphocytes able to secrete cytokines, in particular interferon -gamma. Cellular activation (macrophages, lymphocytes, plasmocytes) and local synthesis of cytokines are responsible for the histological lesions observed. Interleukin 15, involved in the regulation of many cells, is a strongly over-expressed interleukin in this pathology (Abadie V et al., 2014).

There is also a genetic likelihood of celiac disease and most patients are carriers of a special HLA phenotype (DQ2).

The classical form is chronic diarrhea of variable intensity associated with malabsorption, loss of weight and frequent abdominal pain and/or abdominal meteorism. This form generally corresponds to an extensive disorder of the small intestine.

Clinical presentation with discrete digestive systems is possible (arthritis, neurological disorder, elevated hepatic transaminases, dermatitis herpetiformis, iron- or folate-deficient anemia).

Signs of variable intensity malabsorption are frequent: hypocholesterolemia, hypocalcemia, hypokalemia and hypoalbuminemia.

Among the autoantibodies, it is important to identify anti-gliadin antibodies (G or A isotype), anti-smooth muscle antibodies and anti-tissue transglutaminase antibodies. The histological lesion analyzed in the biopsy shows intestinal villous atrophy and interepithelial lymphoplasmocytic infiltrate. Three criteria are recognized as a diagnosis of celiac disease: the presence of a characteristic histological lesion, malabsorption syndrome and clinical and histological improvement (regression of intestinal villous atrophy in approximately one year) under gluten-free diet, the recommended treatment.

Celiac disease can be complicated by non-Hodgkin's malignant lymphoma (most often located in the digestive system) and epithelial cancers (small intestine, pharynx and esophagus), especially in the case of a poorly maintained diet.

Other autoimmune pathologies may also be indications of interest depending on the targets involved.

Vasculitis with ANCA (antineutrophil cytoplasmic autoantibodies) is a subgroup of systemic inflammatory and necrotizing vasculitis that affects small diameter vessels (arteries, arterioles and capillaries). These primarily affect the kidney and the lungs. Three somewhat rare affections are concerned: Wegener's disease, microscopic polyangiitis (or micro-PAN) and Churg-Strauss syndrome.

Current treatments of autoimmune diseases

Treatment of autoimmune diseases has several objectives: to prevent disease flareups, to fight the progression of visceral attacks, to sustain employability and cure the disease while preventing the undesirable effects of treatments.

Immunological treatment of autoimmune diseases is based on three points: to eliminate pathogenic autoantibodies (plasmapheresis method), to modulate activation of lymphocytes and synthesis of cytokines (immunosuppressants such as corticosteroids, cyclosporin A, the molecules interfering with purine metabolism such as azathioprine (Imurel®) or mycophenolate mofetil (Cellcept®) and, in a more targeted fashion, to modify the immune response to make it non-pathogenic (principle of immunomodulation, for example by inhibiting the cytotoxic action of TNFα by anti-TNFα antibodies by blocking B lymphocytes by anti-CD20s).

The most commonly used therapies are the following:

Corticosteroids

They have anti-inflammatory and immunosuppressive properties in strong doses, acting on the T lymphocytes, antibody production and the gene transcription of many cytokines. These are prednisone (Cortancyl®), prednisolone (Solupred®) or methylprednisolone (Solumedrol®) for intravenous administration. The corticosteroids exert their effect through intracytoplasmic receptors (glucocorticoid receptors). They inhibit synthesis of many proteins and transcription factors involved in the production of many cytokines.

Immunosuppressants

Cyclosporin A (Neoral®) CNI or calcineurin inhibitor.

This substance, known as an antifungal, has shown excellent immunosuppressive properties. It works selectively and reversibly with respect to activated T lymphocytes, in particular CD4+ T lymphocytes. Cyclosporin A binds to intracytoplasmic receptors (cyclophilins, from the family of immunophilins) – the cyclosporin A/cyclophilin complex inhibits the activity of

calcineurin that is a phosphatase that activates a transcription factor called NFATc. This results in the blocking of the gene transcription of interleukin 2 genes and other cytokine genes.

This molecule is very often used in preventing allogeneic graft rejection. It may be used in inflammatory myositis in cases of failure of corticosteroids, immunoglobins and methotrexate.

Azathioprine (Imurel®), mycophenolate mofetil (Cellcept®) and methotrexate (Methotrexate®):

These are immunosuppressive drugs with cytotoxic action acting as inhibitors of purine metabolism.

They also inhibit proliferation of T and B cells by blocking the DNA synthesis of the dividing molecules, formation of antibodies and glycosylation of adhesion molecules. These molecules are also toxic on hematopoietic cells.

Azathioprine (Imurel®) is inactive in vivo but deteriorates into active metabolites. Imurel® is indicated as a disease-modifying treatment for systemic lupus, or in some cases of Gougerot-Sjögren's syndrome or in some systemic vasculitides. It may be prescribed as a bridge of cyclophosphamide, as maintenance treatment. Its effectiveness is often delayed (approximately four weeks).

Mycophenolic acid (active metabolite of mycophenolate, mofetil-Cellcept®) has a more powerful immunosuppressant effect than azathioprine in preventing transplant rejection. It is used in systemic lupus (lupus nephritis).

Methotrexate is a tetrahydrofolate reductase inhibitor that blocks thymidylate synthesis, de novo purine synthesis and cell division. Methotrexate is indicated as a disease-modifying treatment for rheumatoid arthritis and inflammatory myositis. It becomes effective in one to two months. The decrease of certain bloodlines (dose-dependent cytopenia observed under methotrexate) is prevented by the administration of folic acid.

Cyclophosphamide (Endoxan®) is an alkylating agent forming covalent bonds with DNA leading to the death of dividing cells. It acts mainly on B lymphocytes (suppression of antibody production) and CD8+ T lymphocytes. It is indicated for treatment of some serious forms of systemic lupus and some systemic vasculitides. It quickly becomes effective by the second week.

Leflunomide (Arava®) is an immunosuppressant that inhibits de novo synthesis of pyrimidines by inhibiting dihydro-orotate dehydrogenase. It is indicated as a disease-modifying treatment for rheumatoid arthritis.

Rituximab (MabThera®) is an anti-CD20 monoclonal antibody, a membrane molecule of B lymphocyte. Its binding leads to destruction and rapid and prolonged decrease of B lymphocytes as well as their production of immunoglobulin. Rituximab is used in autoimmune hemolytic anemias, autoimmune thrombocytopenic purpura, serious refractory lupus, cryoglobulinemia and in some vasculitides. It is indicated in resistant rheumatoid arthritis with methotrexate.

Immunomodulators:

Intravenous immunoglobulins

Following the demonstration of their efficacy in the treatment of autoimmune thrombocytopenic purpura, their beneficial effect extends to other autoimmune diseases. They are used in the management of myasthenia, polymyositis, dermatopolymyositis, lupus and anemia or autoimmune thrombocytopenia. This treatment works in multiple ways and is not always well understood.

Anti-TFNα

Adalimumab (Humira®) acts by inhibiting a protein that is over-produced during Crohn's disease, TNFα. TNFα is produced by the cells of the organism and promotes inflammation, taking part in the fight against certain infections. Adalimumab is a monoclonal antibody, i.e. a very targeted molecule, produced using biotechnology to specifically neutralize TNFα. It is used for the synthesis of isolated cells of human origin and this antibody is 100% humanized. Several other molecules are available on the market:

Infliximab (Remicade®) is also a monoclonal antibody that neutralizes the activity of TNFα.

Etanercept (Enbrel®) is a chimeric molecule made of an antibody fragment called human IgG Fc associated with the soluble TNFα receptor. Certolizumab pegol (Cimzia®) is a monovalent fragment of a monoclonal antibody, modified by pegylation.

These molecules block the effect of TNFα by neutralizing the soluble TNF alpha and/or by preventing it from binding to a receptor. Anti-TNFα drugs are used for rheumatoid arthritis, severe cases of Crohn's disease, ankylosing spondylitis, juvenile idiopathic arthritis or psoriatic arthritis.

Prescription of anti-TNFα drugs must be systematically paired with immunosuppressant treatment in order to prevent the appearance of anti-TNFα antibodies.

The therapeutic schema of this autoimmune disease includes purely symptomatic anti-inflammatory, immunosuppressant treatment and/or substitutive treatment.

The limits of these treatments are linked to intolerances of these chronic treatments and to frequent escape. The use of long-term anti-TNFα-type biotherapies showed that approximately 20% of patients do not respond to these treatments and that they do not function after one year, in one out of two patients.

Associated risks:

Long course immunosuppressant treatment of the autoimmune disease itself increases the risk of developing cancer or a cancerous hematological disease. Thus, for celiac disease (Franks A.L. et al., 2012) associations with different cancers (hematological cancers such as non-Hodgkin's lymphoma or other organ tumors) appear over time in the development of that autoimmune enteropathy with a chronic inflammatory response and T-cell activation. These associations of autoimmune diseases with chronic inflammation and different cancers are also observed with a more elevated risk over time, for other pathologies such as Crohn's disease, lupus and rheumatoid arthritis.

5.7 Investments

The following financial information is derived from the Company's consolidated financial statements for fiscal year ended December 31, 2019, set out in paragraph 18.1 of this Universal Registration Document.

5.7.1 Key investments made by the Company

The Company invested €945,000 in laboratory equipment and fit-outs during the 2018 and 2019 fiscal years, which were financed by equity and grants received by the Company.

At the start of 2020, the Company also acquired a cytometer for €300,000, financed by a lease from a long-standing banking partner, as well as some office equipment and fit out works for additional premises located at avenue de Suffren in Paris and the existing premises in Nantes (France).

5.7.2 Future key investments

Since the Company made significant investments in the last two fiscal years, it does not intend to reinvest heavily in additional non-current assets in the short term.

5.7.3 Information on joint ventures or companies in which the Company holds a capital share likely to have a significant impact on the valuation of its assets and liabilities, its financial position or results

The information on the Company's subsidiaries is set out in paragraph 6.2 below.

5.7.4 Environmental impacts of investments made by the Company

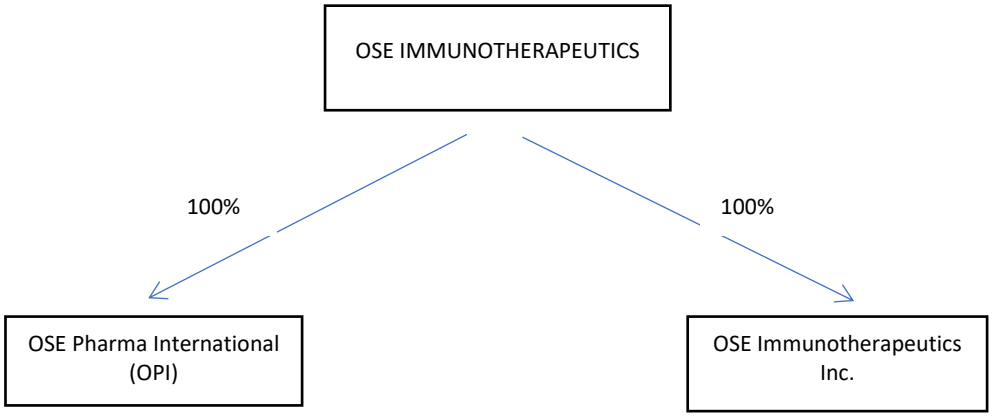
Since industrial production and distribution are not included in research and development activities, the Company only invested in laboratory equipment as part of its property, plant and equipment assets. In this respect, the Company uses little raw materials and its activities neither release significant emissions in the environment nor greenhouse gases.

Furthermore, all the waste resulting from the tests conducted by employees are treated in accordance with existing regulations.

6 Organizational structure

6.1 Overview of the Company

At the date of this Universal Registration Document, the legal organizational chart of the Group is as follows:



6.2 Subsidiaries and investments

- **OPI**

Since March 25, 2014, the Company holds all of the capital and voting rights of the Company OSE Pharma International, a public limited company whose registered office is located in Switzerland (called OPI SA).

OPI has share capital of 100,000 Swiss francs and was created in February 2012. Its corporate purpose is the acquisition, holding, operation, development and marketing of intellectual property rights in biotechnology; research and development of products and treatments resulting from such rights, the conduct of studies and clinical trials and the granting of licenses; the identification and the building of relationships involving partners and scientific, financial, manufacturing and governmental investors; investment in companies active in the same sector (in compliance with the Swiss Federal Law on Acquisition of Real Estate by Persons Resident Abroad – LFAIE).

Its main assets are world rights relating to the composition of peptides. It has no employees.

The existing agreements between OSE Immunotherapeutics and OPI are the European agreement for the OSE-2101 project signed in July 2012 and the agreement for the purchase of OPI by its shareholders on March 25, 2014.

The European license agreement is maintained since the intellectual property is owned by OPI. The Company expects, as part of its intragroup relations, to extend this licensing agreement to the other territories outside of Europe. The interest in maintaining the licensing agreement is to ensure the industrial property is financed through the OPI subsidiary and to finance, through these payments, the commitments made by OPI with respect to the pharmaceutical group Takeda. In fact, the Company made a commitment to pay an additional amount to Takeda when it registered its product in the United States and Europe, then royalties on future sales, limited to a single digit (see Section 22).

- **OSE Immunotherapeutics Inc.**

On March 28, 2017, the Board of Directors authorized the creation of a subsidiary in the United States wholly owned by the company, in order to serve as a point of support for international scientific collaboration. Having an American presence is also justified given the current and future developments of Tedopi® in the United States (recruitment, partnership, licensing, etc.).

This subsidiary, named OSE Immunotherapeutics Inc., was founded in the state of Delaware, and is managed by Alexis Peyroles as CEO.

7 Review of the financial position and results

Chapter 7 presents the Company's results and financial position for fiscal years ended December 31, 2018 and 2019. The Company's financial statements are prepared in accordance with existing IFRS accounting standards.

Readers are invited to read this chapter in conjunction with the Universal Registration Document as a whole. In particular they should read the description of the Company's activities presented in Chapter 5 of this Universal Registration Document.

The following presentation and analysis should be read in conjunction with the Universal Registration Document as a whole, especially the Company's annual consolidated financial statements for fiscal years ended December 31, 2019 and 2018 set out in paragraph 18.1 of this Universal Registration Document.

7.1 Financial position

ASSETS	Note	12/31/2019	12/31/2018
NON-CURRENT ASSETS			
R&D expenses acquired	1.1	52,600	52,600
Tangible assets	1.2	1,009	904
Rights of use *	1.3	1,692	-
Financial assets	1.4	287	103
Deferred tax assets	10.1	283	272
TOTAL NON-CURRENT ASSETS		***55,871***	***53,879***
CURRENT ASSETS			
Trade receivables	2.2	747	2,253
Other current assets	2.3	6,474	8,338
Current tax receivables	2.3	-	-
Current financial assets	2.1	-	2,861
Cash and cash equivalents	2.1	25,842	9,573
TOTAL CURRENT ASSETS		***33,062***	***23,024***
TOTAL ASSETS		**88,933**	**76,903**

EQUITY & LIABILITIES		12/31/2019	12/31/2018
SHAREHOLDERS' EQUITY			
Stated capital	4.1	3,001	2,963
Share premium	4.1	21,670	21,708
Merger premium	4.1	26,827	26,827
Treasury stock	4.4	(148)	(168)
Reserves and retained earnings		11,838	4,934
Consolidated result		(4,652)	5,490
TOTAL SHAREHOLDERS' EQUITY		***58,536***	***61,754***
NON-CURRENT DEBTS			
Non-current financial liabilities	3.5	9,211	3,832
Long-term lease liabilities *	3.5	1,413	
Deferred tax liabilities	10.2	5,066	2,010
Non-current provisions	7	377	233
TOTAL NON-CURRENT DEBTS		***16,067***	***6,074***
CURRENT DEBTS			
Current financial liabilities	3.5	548	628
Short-term lease liabilities *	3.5	309	
Trade payables	3.6.1	6,918	6,555
Current tax liabilities	3.6.2	20	86
Other payables	3.6.2	1,723	1,231
Other debts and accruals	3.6.3	4,812	575
TOTAL CURRENT DEBTS		***14,330***	***9,075***
TOTAL SHAREHOLDER'S EQUITY AND LIABILITIES		**88,933**	**76,903**

**** IFRS 16 was applied by following the modified retrospective approach and, as a result, the opening statement of financial position was not amended.***

7.2 Operating profit

7.2.1 Key factors affecting operating revenues

On April 3, 2018, the Company entered into a worldwide collaboration and exclusive licensing agreement with Boehringer Ingelheim International Gmbh, an independent international pharmaceutical laboratory, to develop OSE-172. According to the terms OF the agreement, OSE Immunotherapeutics granted Boehringer Ingelheim International GmbH the license for the worldwide exclusive rights for the development, registration and marketing of its OSE-172 product candidate. In return, OSE Immunotherapeutics will receive cash flows for a total amount up to €1.1 billion (exclusive of royalties), including an upfront payment of €15 million on signature of the agreement (the total amount was paid in 2018), a €15 million payment at the start of a Phase 1 trial (milestone reached in 2019), milestone payments throughout the various clinical development stages and milestone payments related to sales targets.

In view of the accounting rules used for revenue recognition, the Company was able to recognize €17.9 million in revenue for the 2019 fiscal year.

In December 2016, the Company signed a worldwide licensing option agreement with Servier, an international independent pharmaceutical company, to develop and market Interleukin-7 receptor antagonist, OSE-127. According to the terms of the agreement, OSE Immunotherapeutics granted Servier a licensing option on the worldwide exclusive rights for the development and marketing of the product candidate. The agreement covers an amount up to €272 million, including a €10.25 million payment on signature of this option and a payment of €30 million on exercise of a two-step licensing option. Since the first step was achieved with the start of Phase 1, the Company received €10 million in 2019. The following steps will be the development of OSE-127 until the completion of a clinical Phase 2a in Sjögren's Syndrome, conducted by Servier, and in ulcerative colitis, an autoimmune bowel disease. Subsequent payments will be linked to clinical development milestones, registration in multiple indications, then sales-related milestones with double-digit royalties.

In view of the accounting rules used for revenue recognition, the Company was able to recognize €7.3 million in revenue for the 2019 fiscal year.

Furthermore, in 2019, the Company continued the Phase 3 clinical trial, known as "Atalante 1" in Europe, the United States and Israel. This trial assesses Tedopi®, its leading product in non-small cell lung cancer in HLA-A2 positive patients post checkpoint inhibitor treatment failure. The Company signed a licensing agreement with Chong Kun Dang (CKD) Pharmaceutical Corporation for the potential registration and marketing of Tedopi® in Korea.

According to the terms of the agreement, the Company will receive milestone payments amounting to €4.3 million, including €1.2 million on signature and achievement of a short-term milestone, and royalties on product sales as well as a margin based on the transfer price, of just under 30%.

The development of OSE-127 and BI 765063 (OSE-172) products continued at the clinical stage, in particular with the production of GMP-compliant batches and completion of clinical Phases 1.

7.2.2 Explanation of material changes in revenue or net income Comparative annual financial statements

7.2.2.1 Comparative figures from the consolidated statements of operations at December 31, 2019 and 2018

Annual financial statements (in €K)	2019 12 months	2018 12 months
Operating income	**25,952**	**24,456**
of which Revenue	**25,952**	**24,456**

of which Other operating income	**0**	**0**

Research & Development expenses	**(21,655)**	**(15,057)**
Overhead expenses	**(3,898)**	**(3,448)**
Expenses related to share-based payments	**(1,868)**	**(977)**
Other operating income	**0**	**0**
Other operating expenses	**(2)**	**(127)**
Operating result	**(1,472)**	**4,847**
Financial income	**221**	**86**
Other financial expenses	**(213)**	**(226)**
Profit/(Loss) before tax	**(1,464)**	**4,707**
Income tax	**(3,188)**	**783**
Net result	**(4,652)**	**5,490**

Operating income

In 2019, the Group recognized €25,952,000 in revenue, corresponding to:

- €12,456,000 for the first part of milestone payments amounting to €15,000,000 under the agreement with Boehringer Ingelheim following the start of the Phase 1 clinical study. This milestone payment portion is a compensation for the transfer of a right to use the OSE technology related to OSE-172.
- €1,195,000 in co-development costs and €572,000 in PCA related to milestone payments received and deferred to include development services to be provided by OSE for BI.
- €4,253,000 of reinvoicing of expenses as provided in the agreement signed with Boehringer Ingelheim.
- €6,645,000 for the first portion of milestone payments amounting to €10,000,000 received upon exercise of the option by Servier.
- €626,000 for the sale of OSE-127 vials as provided in a supply contract signed with Servier and for the reinvoicing of a portion of intellectual property-related fees.
- €77,000 for the upfront payment of €100,000 as provided in the licensing and distribution agreement signed with the Israeli pharmaceutical company RAFA.
- €700,000 for the signing of a contract with CKD.

The Company's revenue is directly correlated with the signing of a licensing agreement and achieving a key milestone.

As a result, the partnership agreements signed with Servier and Boehringer Ingelheim mainly accounted for 2018 and 2019 revenue.

8 Cash and capital resources

8.1 Information on the Issuer's capital

Since 2012, the Company has been financed by capital increases, loans and repayable advances. The following table summarizes all various sources of financing.

Financing sources – in €K	
2012 capital increase (1)	527
2013 capital increase	0
2014 capital increase (2)	3,148
2015 capital increase (3)	19,304
2016 capital increase (4)	852
2017 capital increase (5)	17
2018 capital increase (6)	23
Subtotal capital raised*	**23,871**
P2RI Loan	1,500
Subtotal loans	**1,500**
OSEO repayable advances	330
Bpifrance repayable advance	100
Bpifrance EFFI-CLIN repayable advance	6,044
Bpifrance EFFiMab repayable advance	3,148
Subtotal repayable advances	**9,622**
Total Financing sources	34,993

* These amounts have been restated for capital increase costs.

(1) In 2012, the Company's sole shareholder decided to carry out two capital increases, the first by capitalization of reserves of €255,000, the second by means of a cash injection of €500,000. These capital increases have been carried out to finance the Company's activities and the entry of new shareholders into the Company.

(2) Two capital increases were carried out in July 2014, the first one with a nominal value of €71,189.40 (and 2,776,386.60 of share premium) by issuing 316,572 Class B shares and 39,375 ordinary shares, the second one with a nominal value of €7,500 (and €292,500 of share premium) by issuing 31,250 Class B shares and 6,250 ordinary shares issued on conversion of the remaining Class B shares.

With the capital raised in 2014, the Company was able to start manufacturing products based on its Memopi® technology, for a Phase 3 clinical trial in advanced non-small cell lung cancer (NSCLC) in the United States and Europe.

(3) In 2015, the Company's IPO resulted in a capital increase with a nominal value of €391,000 (and an issue premium of €20,723,000) by issuing, through a public offering, 1,955,000 ordinary shares, the subscription of which completed in cash or by offsetting against liquid and payable debts, and by converting all Class B shares for a like number of ordinary shares. This transaction provided the Company the resources needed to complete the Phase 3 clinical study for its Tedopi® product, conducted in Europe and the United States for a registration of the drug in the treatment of non-small cell lung cancer on 500 patients. The IPO also enabled the Company to develop Tedopi® in a new exploratory Phase 2 under a partnership, in new therapeutic combinations or for other types of cancer, such as breast, colon and ovarian cancer.

The Company also received requests for the exercise in June 2015 of 31,250 of the 2014-2 share subscription warrants, giving right to the same number of shares, by a cash subscription, and in September 2015 of 36,744 of the 2014-4 share subscription warrants, by offset of debt. Exercise of these share subscription warrants resulted in a capital increase with a nominal value of €13,598.80 (and an issue premium of €530,353.20). Readers are invited to refer to Sections 19.1.4 and 19.1.7 of this Universal Registration Document for more information on warrant exercises.

(4) In May 2016, the Company received a request for the exercise of 88,256 of the 2014-4 share subscription warrants, by offset of debt resulting in a share capital increase with a nominal value of €17,651.20 (and an issue premium of €697,222.40). In June 2016, the Company received a request for the exercise of 3,300 Effimune 2010 share subscription warrants in cash, which, as a result of the merger, resulted in 6,369 shares to be issued, and a share capital increase was carried out with a nominal value of €1,273.80 (and an issue premium of €17,866.20). In December 2016, the Company received several requests for the exercise of a total of 20,320 Effimune 2010 share subscription warrants, as result of the merger, giving right to the issue of 39,217 shares, and a share capital increase was carried out with a nominal value of €7,843.40 (and an issue premium of €110,012.60). Readers are invited to refer to Sections 19.1.4 and 19.1.7 of this Universal Registration Document for more information on these warrant exercises.

(5) In March 2017, the Company received a request for the exercise of 85,000 of the 2012 share subscription warrants, giving right to the same number of shares, and a share capital increase was carried out with a nominal value of €17,000. Readers are invited to refer to Sections 19.1.4 and 19.1.7 of this Universal Registration Document for more information on these warrant exercises.

(6) In 2018, the Company received a request for the exercise of 23,000 of the 2012 share subscription warrants, giving right to 115,000 shares, and a share capital increase was carried out with a nominal value of €23,000. Readers are invited to refer to Sections 19.1.4 and 19.1.7 of this Universal Registration Document for more information on these warrant exercises.

The data included in the above table are from the consolidated financial statements for fiscal years ended December 31, 2019 and 2018 under IFRS standards.

In €K	**12/31/2019**	**12/31/2018**
Consolidated equity	**58,536**	**61,754**
Loans and financial liabilities	9,759	4,460
Cash and cash equivalents	25,842	9,573
Net cash	**(16,083)**	**(5,113)**

Cash stands at €25,842,000 and an amount of €22,760,000 is held in term deposit accounts.

8.2 Cash flows

8.2.1 Statement of cash flows

	In €K	Note	2019	2018
	Consolidated net income *		**-4,652**	**5,490**
+/-	Net depreciation, amortization and provisions	1.2, 7	323	116
+/-	Amortization of rights of use	1.3	251	0
+/-	Calculated revenues and expenses linked to stock options	8.4	1,511	845
+/-	Other calculated revenues and expenses		0	0
	Cash flow after net borrowing cost and taxes		**-2,568**	**6,450**
+	Net borrowing cost	5	30	0
+/-	Income tax expense (including deferred taxes)	10.3	3,188	-783
	Cash flow from operations before net borrowing cost and taxes (A)		**650**	**5,668**
-	Taxes paid		-70	0
+/-	Change in W.C.R. **(2)**		8,555	-4,590
	NET CASH FLOW FROM OPERATING ACTIVITIES (D)		**9,135**	**1,077**
-	Purchases of property, plant & equipment and intangible assets	1.2	-336	-593
+/-	Change in UCITS classified as current financial assets	2.1	2,861	22
+	Proceeds from disposal of non-current financial assets (non-consolidated shares)	1.4	34	40
+/-	Changes in loans and advances	1.4	-184	-27
	NET CASH FLOWS FROM INVESTMENT ACTIVITIES (E)		**2,375**	**-558**
+	Capital increase (including issue premium)	4.1	0	23
+/-	Acquisition and disposal of Treasury shares	4.4	0	-67
+	Subscription of share subscription	4.3	0	7
+	Proceeds from new borrowings	5	5,628	0
-	Loan repayments	5	-455	-485
-	Lease liability repayments	5	-251	0
-	Net interest paid	5	-164	-71
+/-	Other cash flow items from financing activities		0	0
	NET CASH FLOWS FROM FINANCING ACTIVITIES (F)		**4,759**	**-592**
+/-	Impact of changes in foreign exchange rates (G)		0	0
	CHANGE IN NET CASH POSITION H = (D + E + F + G)		**16,269**	**-73**
	OPENING CASH BALANCE (I)	2.1	9,573	9,646
	CLOSING CASH BALANCE (J)	2.1	25,842	9,573
	DIFFERENCE: H-(J-I)		0	0

**** IFRS 16 was applied by following the modified retrospective approach and, as a result, the 2018 statement of cash flows was not amended.***

(1) €1,511,000 in valuation costs for free shares and founders' warrants awarded at December 31, 2019.

(2) The change in working capital requirement was primarily due to the following:
- *decrease in trade receivables amounting to €1,506,000*
- *decrease in other current assets amounting to €1,864,000*
- *increase in trade payables amounting to €363,000*
- *increase in tax and employee-related payables amounting to €493,000*
- *increase in other payables amounting to €4,237,000*

(3) This line relates to the application of IFRS 16 and corresponds to the repayment of lease liabilities amounting to €251,000.

8.3 Financing requirements and structure

8.3.1 Financing requirements

The Company updated its projections of working capital requirements as a result of the COVID-19 crisis.

Despite a strong cash position that will help the Company through the current crisis, it needs to anticipate any delay in product development that could delay expected cash inflows.

As a result, the Company is assessing various options for potentially strengthening its financing structure in the coming months.

8.3.2 Financing structure

In €K	12/31/2018	Increase	Decrease	Other transactions *	12/31/2019	Interest at 12/31/2019
OSEO advances						
BPI EFFIMAB advance	2,328	820			3,148	
BPI EFFICLIN Advance	1,236	4,808			6,044	
P2RI Loan	211		(375)	164	0	
BPI EFFIDEM Advance	57		(30)	(8)	19	
Non-current derivative instrument	0				0	
Non-current financial liabilities	**3,832**	**5,628**	**(405)**	**156**	**9211**	
Nantes Lot 1 Lease		436		(104)	332	
Nantes Lot 2 Lease		175		(26)	149	
Paris Suffren Lease		1,035		(103)	932	
Non-current lease liabilities		**1,646**		**(233)**	**1,413**	
OSEO Advances	28		(50)	22	0	(22)
BPI EFFIMAB Advance	49			42	92	(42)
BPI EFFICLIN Advance	29			66	95	(66)
P2RI Loan	486			(165)	321	(2)
BPI EFFIDEM Advance	31			8	39	0
Bank overdrafts	3	3	(3)		3	
Non-current derivative instrument	2			(2)		2
Current financial liabilities	**628**	**3**	**(52)**	**(29)**	**549**	**(130)**
Nantes Lot 1 Lease		101	(93)	104	112	(9)
Nantes Lot 2 Lease		34	(23)	26	37	(3)
Paris Suffren Lease		163	(106)	103	160	(21)
Current lease liabilities		**297**	**(221)**	**233**	**309**	**(33)**
Total financial liabilities	**4,460**	**7,574**	**(679)**	**127**	**11,482**	**(163)**

* This column includes the recurring and non-recurring breakdown as well as IFRS 9, IAS 20 and IFRS 16) restatements for the year.

8.3.2.1 Non-current financial liabilities

Non-current financial liabilities are:

A P2RI (regional industrial redeployment) loan of €1,500,000 and a derivative instrument transferred at the time of the merger.

In September 2013, the Company received loans from BNP Paribas, CIC, Crédit Mutuel and from Région des Pays de la Loire, each for €375,000, i.e. a total loan of €1.5 million. The purpose of this loan is to finance development and innovative projects.

This loan was recognized at amortized cost, calculated using the effective interest rate.

The loan from the banking pool amounts to €1.125 million. It has a term of seven years, including a three-year grace period for capital repayment. The interest rate is equal to the three-month Euribor rate plus a fixed margin of 300 basis points. This loan has been repaid quarterly since October 5, 2016. Interest is payable quarterly.

At December 31, 2019, the remaining balance stood at €211,000. This loan was subject to an interest rate cap, the hedging period having expired on April 15, 2019. Interest on payments after this date is not hedged.

The Company received the full amount of the loan from Région des Pays de la Loire, amounting to €375,000, in December 2013. The term of the loan is seven years, including a three-year grace period for repayment. The annual percentage rate of charge stands at 4.06% payable annually.

At December 31, 2019, the remaining balance stood at €94,000.

These balances exclude accrued interest not yet due and measurement effects according to IFRS 9 standard (for a total amount of €16,000).

Repayable advance of €100,000 from Bpifrance transferred at the time of the merger

In September 2014, Effimune also obtained an interest-free repayable advance from Bpifrance for a maximum of €100,000, as part of the OSE 172 (Formerly EFFI-DEM) project: Feasibility of immunomodulatory monoclonal antibodies in the treatment of cancer.

Bpifrance payments were staggered between the signing of the contract and the end of the project, i.e.:

An initial payment of €80,000 once the contract was signed (received on December 23, 2014),

A second payment of €20,000 received on December 2, 2015, settling the balance of payments to be received from this advance.

As a result of the success of this project, repayment of this support will commence as follows:

- €20,000 on September 30, 2018
- €40,000 on September 30, 2019
- €40,000 on September 30, 2020

The fair value of this advance was based on an annual market interest rate estimated at 0.867% for the first repayment of €80,000 and 0.786% for the second repayment of €20,000. The difference between the advance amount at historical cost and that of the advance discounted at market rate is recognized less R&D expenses, as costs are incurred for the relevant research programs.

At December 31, 2019, the remaining balance stood at €60,000.

Bpifrance repayable advance for EFFIMab project of €2,328,000 and €820,000

On June 19, 2017, the Company received from Bpifrance the first payment of a repayable advance of €2,328,000 as part of the EFFIMAB project.

This interest-bearing advance (discount rate of 1.66% according to the contract) was initially for an amount of up to €3,609,000 paid on achievement of three key milestones within a completion period of 72 months.

If all milestones were achieved, a notional repayment in annual installments was to be put in place from June 30, 2021, based on the notional amount of €3,609,000 at the applicable contractual discount rate of 1.66%, i.e. a fixed amount of €4,100,000, including interest of €490,595. Repayments, amounting to €4,100,000, were spread between June 30, 2021 and June 30, 2025.

Following the signature of amendment no. 2 on December 28, 2018, this interest-bearing advance now stands at a maximum amount of €3,991,000 to be paid on achievement of four key milestones within a completion period of 115 months.

If all milestones are achieved, the notional repayment in annual installments from December 31, 2024, based on a receivable notional amount of €3,991,000, now stands at a fixed amount of €4,590,000.

Repayments are spread between December 31, 2024 and December 31, 2028.

The Company received a portion of the advance on achievement of the third key milestone, i.e. €2,328,000 in accordance with the amendment to the initial contract.

The Company received the second payment of the repayable advance, i.e. €820,000, on achievement of the fourth key milestone on April 10, 2019.

Bpifrance repayable advance of €1,236,000 and €4,808,000

On December 18, 2017, the Company received from Bpifrance a first payment of €1,236,000 as part of a repayable advance for the EFFI-CLIN project. This interest-bearing advance (discount rate of 0.90% according to the contract) is for a maximum amount of €8,106,000 paid on achievement of four key milestones within a completion period of 60 months.

If all milestones are achieved, a notional repayment in annual installments from June 30, 2024, based on the notional amount of €8,106,000 at the applicable contractual discount rate of 0,90%, will be a fixed amount of €9,850,000, including interest of €1,744,000.

Repayments, amounting to €9.85 million, will be spread between June 30, 2024 and March 31, 2028.

The Company received a portion of the advance, i.e. an amount of €1,236,000 at the start of the study.

On September 18, 2019, the Company received the second payment of the repayable advance, i.e. €4,808,000 on achievement of the first key milestone.

If the Company's program is successful, repayment of the first payment will be spread between June 30, 2024 and March 31, 2028.

8.3.2.2 Lease liabilities and leases

OSE immunotherapeutics reviewed its operating leases to assess the potential impact of first-time adoption of IFRS 16 which resulted in a future lease payment liability and a right-of-use asset being recognized in the statement of financial position for operating leases.

A right-of-use asset was recognized in an amount identical to the liability for future lease payments adjusted, where applicable, for advance payments or amounts set aside for future lease payments.

OSE Immunotherapeutics identified ten leases (covered by the standard) with the following characteristics:

- Three tenancy agreements. All leases are for real estate in France. The incremental borrowing rate used was 2%
- One property lease signed on December 30, 2019, but effective from January 1, 2020. In accordance with IFRS 16, the right of use will be recognized on the effective date at €1.37 million
- Six leases involving low-value assets (office equipment and small equipment worth less than €5,000) that the Company decided not to recognize in the statement of financial position (lease payments will be recognized as expenses on a straight-line basis over the lease term)

The net value of the above-mentioned leases amounted to €1,692,000 at December 31, 2019.

8.4 Restrictions on the use of capital resources that have materially affected, or could materially affect, directly or indirectly, the issuer's operations

None.

8.5 Expected financing sources

The Company is primarily aiming for partnering and licensing agreements for some of its products and further public funding for its programs.

With €25.8 million in cash and cash equivalents at December 31, 2019 (excluding €3.1 million in 2019 research tax credits received on March 31, 2020), the Company believes it has the financing resources necessary to continue its clinical and preclinical programs at least for the next twelve months following its published financial statements for the year ended December 31, 2019.

The Company also has the funds necessary to finance investments planned in 2020 for an amount of approximately €400,000.

9 Regulatory environment

The description of the risks linked to the Company's regulatory environment is available in the paragraphs 3.1 "preclinical and clinical development of drug candidates") and 3.3 "drug marketing".

9.1 Introduction

The research and development work, preclinical studies, clinical studies, facilities, as well as the manufacturing and marketing of our drug candidates are and will be subject to complex legislative and regulatory requirements defined by various public authorities in France, Europe, the United States and other countries of the world.

The European Medicines Agency (EMEA), the US Food and Drug Administration (FDA), the French National Agency for the Safety of Medicines and Health Products (ANSM) and the equivalent regulatory agencies in the other countries impose significant restrictions concerning development (including clinical trials), manufacturing and sales of products such as those developed by the Company. Failure to comply with these regulations can lead to the imposition of fines, the seizure or withdrawal of the products from the market or even the partial or total suspension of their production by the regulatory authorities. They may also withdraw marketing authorizations granted previously or refuse applications for authorizations that the Company has filed or even pursue legal remedies. Regulatory constraints are important for assessing whether a main asset can eventually become a drug and evaluating the time and the investments necessary for such development.

Although there are differences from one country to another, the development of therapeutic products for human usage must comply with certain common regulatory prerequisites in all developed countries.

To obtain marketing authorization for a product, proof of its efficacy and safety, as well as detailed information on its composition and its process of manufacturing, must generally be provided. Laboratory tests, pharmaceutical development, preclinical studies and clinical trials are conducted in this framework.

The development of new drugs, from basic research to product marketing includes five stages:

- Research;
- Preclinical studies, pharmaceutical development, manufacturing;
- Clinical trials in humans;
- Marketing authorization (AMM);
- Sales.

Regulatory authorities require follow-up after marketing authorization is granted in order to continue monitoring the effects and the safety of the authorized products (pharmacovigilance). After obtaining marketing authorization, authorities may also ask for additional trials to evaluate tolerance and efficacy on special populations of patients or impose conditions that could limit the commercial development of some products.

9.2 Preclinical studies

Preclinical studies include laboratory evaluation of the purity and stability of the main pharmaceutical asset and the formulated product, as well as studies to evaluate tolerance (toxicological studies), in vitro and in vivo studies of the behavior of the drug candidate before being able to launch clinical trials in humans. The conduct of preclinical studies is subject to legislative and regulatory requirements, as well as Good Laboratory Practice (GLP). All results of preclinical trials are provided to the regulatory authorities jointly when applying to start medical trials.

9.3 Conduct and regulation of clinical trials

- **Phase 1**: the product is administered in order to determine its initial tolerance profile, identify the side effects and evaluate the tolerance to the doses administered, as well as its distribution in the organism and impact on metabolism. Sponsors sometimes designate their trials Phase 1a and Phase 1b. Phase 1b trials generally aim to confirm dosage, pharmacokinetics and tolerance in a greater number of patients than Phase 1a. In oncology, accelerated development is sometimes pursued, based on Phase 1 trials including cohort extensions leading to marketing authorization for the drug. This is for example the case of molecules developed for rare diseases.

- **Phase 2**: the product is studied in a limited population of patients in order to obtain signs of preliminary efficacy and determine the level of optimal administration as well as any side effects and risks linked to tolerance.

- **Phase 3**: Phase 3 trials are carried out on a large number of patients carrying the targeted disease to compare the study treatment to a reference treatment in order to produce the data demonstrating its relative efficacy and tolerance.

- **Phase 4**: trials, sometimes referred to as Phase 4 trials, may also be conducted following the initial marketing authorization. These trials aim to obtain more information on the treatment of patients in the targeted therapeutic indication. In some cases, the competent regulatory agency may require a Phase 4 clinical trial as a condition of approval.

Clinical trials may be carried out in Europe, the United States or the rest of the world when authorized by the regulatory authorities and the independent ethics committee of each country in question. In fact, regulatory authorities may oppose clinical trial protocols proposed by the companies that seek to test the products, suspend them or require major modifications.

The purpose of the clinical trials is to administer the drug candidate to human subjects under the supervision of qualified investigators, in compliance with good clinical practices defined by the International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH). These latter require that all research subjects give their informed consent in writing in order to participate in any clinical trial. Clinical trials are conducted according to protocols that describe in detail, among others, the objectives of the trials, the parameters used to control the safety of use and the criteria for evaluating efficacy.

In addition, EU Regulation 2016/679 of the European Parliament and of the Council of April 27, 2016 on the protection of physical persons with respect to the processing of personal data and the free circulation of data (GDPR), that became effective on May 25, 2018, significantly increases the rights of citizens, giving them more control over their personal data. French national law was brought into compliance with the GDPR through the updating of French Law no. 78–17 of January 6, 1978 on computer processing, data files and freedom (Law no. 2018-493 of June 20, 2018 and re-drafting Order no. 2018-1125 of December 12, 2018).

In compliance with the data protection law, personal data collected as part of clinical trials is subject to a declaration with the French data protection authority (CNIL). Patients have a right to access and correct this data. Finally, patients must be regularly informed of the conduct of clinical trials and the overall results of the research.

The conduct of clinical trials must therefore comply with complex regulations throughout the different phases of the process that rely on the principle of the informed consent of the patient to whom the product(s) will be administered. The information relating to the objective, the methodology and the duration of the research, as well as the expected benefits, the constraints and the foreseeable risks due to the administration of the products provided are summarized in a written document provided to the patients prior to their participation in the research.

9.3.1 Clinical trial authorization in the European Union

European Directive no. 2001/20/EC of April 4, 2001 concerning the application of good clinical practice in the conduct of clinical trials of drugs for human usage was transposed into national law by each member of the European Union.

In France, this is Law no. 2004-806 of August 9, 2004 relating to public health policy and Decree no. 2006-477 of April 26, 2006 amending the title of the Public Health Code dedicated to biomedical research, supplemented by several Ministerial Decrees of May 24, 2006. An interventional clinical trial bearing on a drug must first receive a favorable opinion from a French Institutional Review Board (IRB) and authorization from the ANSM. Generally speaking, the Agency evaluates the efficacy and the quality of the products used during the research, with the goal to guarantee the safety of the persons involved in biomedical research. The French Institutional Review Board (IRB) gives its opinion on the validity conditions of the research, in particular on the protection of the participants, their information and the methods of collecting their informed consent, as well as the general relevance of the project, whether the evaluation of benefits and risks is satisfactory, and the adequacy of the resources implemented for the objectives pursued. Since the application of the Jardé Law no. 2012-300 of March 5, 2012, relating to research involving humans, amended by Order no. 2016-800 of June 16, 2016, and by the publication of Decree no. 2016-1537 of November 16, 2016, the previous regional authority of the IRBs is now national. The time for approval of applications for authorization from the authorities cannot exceed 60 days starting from the receipt of the full dossier.

Current European regulations on clinical trials of drugs for human use is governed by EU Regulation no. 536/2014 of April 16, 2014. The major points of this regulation are the following:

- applications for single authorization must be filed through the portal associated with the European Union database, including a common portion evaluated jointly by all participating members of the European Union and a national portion covering the ethical and operational aspects of the trial evaluated by each member of the European Union independently. A single decision covering all aspects of the application is delivered by each of the Member States concerned;
- increased transparency on clinical trials authorized in the European Union: the European Union database is a source of public information, notwithstanding the protection of personal data, the protection of confidential commercial data and the protection of confidential communication between Member States and the supervision of trials between Member States. For drugs in development, the public information includes the authorization of the clinical trial, general information on the trial and the summary of the final results.

9.3.2 Authorization of clinical trials in the United States

In the United States, a clinical trial can only begin after it obtains authorization from the Food & Drug Administration (FDA) and from an ethics committee, the Institutional Review Board (IRB). An Investigational New Drug (IND) application must be filed with the FDA and must be approved before a clinical trial can be started in humans. This application includes the early scientific data of the product being studied, the manufacturing data, the preclinical and clinical data (including the clinical trial protocol). Unless the FDA objects, the application for an IND is approved 30 days after receipt. The FDA may, at any time, request that a clinical trial that is planned or in progress be interrupted. This temporary interruption is maintained as long as the FDA has not obtained the information that it requires. Moreover, each ethics committee (IRB) having authority over an investigating site, can delay, even temporarily or permanently interrupt, a clinical trial if it believes that the safety of patients is not ensured or in the case of noncompliance with regulatory requirements.

9.3.3 Publication of information on clinical trials

In the United States, sponsors of clinical drug trials regulated by the FDA must register and publish a certain amount of information related to the clinical trial and its results, available publicly on the website www.clinicaltrials.gov.

In Europe, the information on the clinical trial as well as the results at the end of study are made public for Phase 2 to 4 trials, as well as for any pediatric study on the website www.clinicaltrialsregister.eu.

9.4 Regulation of marketing authorizations

In order to be marketed, all drugs must obtain a marketing authorization (AMM) delivered by the competent European or national authorities (the ANSM in France, the EMA in Europe, the FDA in the US, etc.) and after filing an application for an AMM or NDA (New Drug Application). This application will be evaluated according to scientific criteria of quality, safety and efficacy.

The AMM application is drafted in the standardized CTD (Common Technical Document) format, used in Europe, the United States and Japan. This application includes detailed and precise information on the product, in particular its composition, the way it works, the associated quality elements, its toxicity, efficacy and safety. It also describes the manufacturing process of the active substance, the finished product manufacturing process and the preclinical and clinical studies.

In Europe, applications for marketing authorization (AMM) can be made via two types of procedures: Community procedures used when the drug is innovative or intended for several member states of the European Community and the national procedure for drugs that are not marketed in more than one Member State. According to the Community procedure used, the EMA or the company chooses, respectively, the reporting State or the referring State.

A drug may be withdrawn from the market, either directly by the company or at the request of health authorities, when a serious problem arises, in particular concerning safety or noncompliance with manufacturing rules.

9.4.1 Community procedures

Since 1965, lengthy work to harmonize pharmaceutical laws in the European Community Member States culminated in the development of new procedures for granting an AMM for registering drugs. Access to the Community market has been, since January 1, 1998, subject either to the centralized procedure (defined in Regulation no. 2309/93/EEC amended by Regulation no. 726/2004/EEC), or to the mutual recognition procedure (specified in Directive 2001/83/EC amended by Directive 2004/27/EC) and, since October 2005, to the decentralized procedure (specified in Directive 2004/27/EC).

- **The centralized procedure** (mandatory for products from biotechnology, new products developed in the field of cancer and drugs with orphan drug status): a single registration application file must be submitted to the EMA. The Committee for Medicinal Products for Human Use (CHMP) of the EMA (composed of one member appointed by each Member State of the European Union and country of the European Economic Area, and of five scientific experts) issues its recommendation with respect to the approval of the drug with the European Commission. The European Commission then makes the final decision to deliver the marketing authorization (AMM), valid throughout the European Union. The drug can then be marketed in all member states of the European Union.
- **Mutual recognition procedure and the decentralized procedure**: these enable harmonized national marketing authorizations to be more easily obtained in several Member States. These two procedures are founded on the recognition, by the competent national authorities, of the first evaluation made by the regulatory authorities of one of the Member States (Reference Member State).
- **National procedure**: this independent national procedure only applies to AMM applications limited to the national territory and is less often used.

Registration of an international drug (in more than one country of the European Union) must use one or the other of these procedures.

Products developed by the Company in immuno-oncology or in transplantation, all derived from biotechnology, are therefore subject to the centralized procedure for their application for marketing authorization.

9.4.2 Registration procedures outside the EU

Companies that wish to market their products outside of the European Union must again file applications to register the drugs with the national authorities of the countries concerned, for example with the FDA in United States, the Kosheisho (Pharmaceutical and Medical Device Agency, PMDA) for Japan.

In the United States, the application for drug approval must be submitted to the FDA that has regulatory powers over all pharmaceutical and biological products intended to be marketed in American territory.
Applications for marketing authorization must be submitted to the FDA, depending on whether it is a request for the approval of a new drug (NDA, New Drug Application) or a request for a biological product license (BLA, Biological License Application). The application must provide all information enabling the FDA to determine whether the drug is safe and effective for the targeted indication, whether the benefits are greater than its risks, whether the summary of the product characteristics is

adequate and whether its manufacturing process and the controls intended to ensure quality enable the identity, dosage, quality and purity to be guaranteed.

9.4.3 Exceptions to the usual registration procedures

Exceptions to the traditional procedure for granting a marketing authorization (AMM) as described above exist to enable quicker marketing of drugs.

In Europe, the following exists:

- **Conditional AMM**: this is valid for one year instead of five. It is only granted when the drug meets unmet medical needs and if the benefits for public health are greater than the risk linked to an uncertainty due to an incomplete evaluation of the drug. The delivery of a conditional marketing authorization is subject to the finalization of clinical trials and/or the completion of new trials, in order to confirm the benefit/risk of the drug.

- **Accelerated assessment**: the evaluation procedure is accelerated (150 days instead of 210 days) when a drug presents a major interest from a public health standpoint or represents a therapeutic innovation. The PRIME project (priority drugs), an EMA initiative launched in 2015, allows the early identification (from Phase 2/3) of drugs eligible for the accelerated procedure and enhanced assistance by scientific advice and dialogues throughout development.

- **AMM for exceptional circumstances**: an AMM may be authorized on an exceptional basis, and may be reevaluated each year, when the drug's evaluation file cannot initially be submitted completely, for example, when a therapeutic indication applies to too few patients, or the collection of necessary data would be unethical.

- **Temporary Authorization for Use (TAU)**: A Member State may use a drug that does not yet have marketing authorization in the country, in order to treat serious or rare diseases that do not have adequate treatment. In France, a Temporary Authorization for Use may be given by the ANSM for a particular patient (nominative TAU) or for a group of patients (cohort TAU).

In the United States, procedures allow more rapid development and market access for drugs for serious pathologies for which there is not yet any appropriate treatment or if there is a high medical need (cancer, AIDS, Alzheimer's disease, etc.):

- **Accelerated Approval**: this procedure is intended to allow marketing of promising products to treat serious pathologies on the basis of initial evidence prior to the formal demonstration of patient benefits. The FDA may in fact rely on an effect, an alternative result or any other result that has reasonable chances of being predictive of a clinical benefit and not on a well-defined clinical criterion. As such, a substitute result or marker (surrogate endpoint) is a result obtained in the laboratory or a physical sign that does not constitute, in itself, a direct measure of how the patients feel, their organ functions or their survival, but enables a therapeutic benefit to be expected. The AMM granted may be considered as a provisional approval with written commitment to complete the clinical studies that demonstrate true benefit for the patient. This procedure corresponds to the "Conditional AMM" procedure in Europe.

- **Priority Review**: this procedure is used for drugs treating serious diseases that present a major therapeutic advance or provide treatment for a disease for which there is no suitable therapy. This procedure means that the time for evaluation of the application by the FDA is reduced from ten months to six months. This procedure corresponds to the "Accelerated Assessment" in Europe.

- **Fast Track designation**: a program of interactions with the FDA to facilitate the development and accelerate the review of new drugs that are used in the treatment of serious or potentially fatal diseases that are likely to respond to an unmet therapeutic need. The advantage of this process is that the company may benefit from more frequent meetings with the FDA in order to discuss the product development plan and ensure the appropriate data are

collected for the AMM. Fast Track designation does not necessarily lead to the Priority Review procedure nor to Accelerated Approval.

- **Breakthrough Therapy designation**: this procedure, put in place in 2012, aims to accelerate the development and review of drugs for treating serious diseases or potentially fatal diseases, and for which the preliminary clinical proof demonstrates substantial improvement from the drug with respect to treatments available on a clinically significant criterion. A drug that is designated "Breakthrough Therapy" may receive the following:
  - all the special characteristics of the Fast Track designation;
  - starting at the Phase 1 clinical trial, intensive support in a development program for effective drugs;
  - an organizational commitment involving senior managers.

If additional research or experiments demonstrate that a product presents risks while being marketed, the FDA can require it to be withdrawn immediately. In addition, the FDA can withdraw a marketing authorization for other reasons, in particular if studies after authorization are not conducted with the necessary diligence.

9.4.4 Orphan drugs

There is a specific procedure for the authorization for orphan drugs.

Orphan drugs are drugs used for the diagnosis, prevention and treatment of fatal or very serious and rare diseases. To be qualified as rare or orphan within the European Union, a disease must affect fewer than 1 person out of 2,000, and in the United States the disease must affect fewer than 200,000 persons.

These drugs are called "orphan" because the pharmaceutical industry has little interest in the usual market conditions to develop and market products intended only for a limited number of patients (so-called orphan diseases). For the pharmaceutical companies, the cost of marketing a product recommended for a rare disease might not be covered by the expected sales in this market.

In Europe, legislation was adopted to promote treatments for rare diseases. By virtue of Regulation no. 847/2000/EC of December 16, 1999, as amended by Regulation no. 847/2000/EC of April 27, 2000, a drug is considered an orphan drug if its developer demonstrates, in an application filed with the EMA, that it is used for the treatment of a so-called orphan disease in the European Union, or when it is used for the treatment of a disabling or serious and chronic disease for which there is yet no treatment or satisfactory treatment, and that in the absence of incentive measures, the costs incurred in the development cannot be covered by the profits from sales.

In the United States, the 1983 American law on orphan drugs (Orphan Drug Act) combines several laws encouraging the development of treatments for rare diseases. The Orphan Drug Act also provides for the chance to obtain subsidies from the American Government to cover clinical trials, tax credits for covering research expenses, possible waiver of filing costs when applying for registration with the FDA and seven years of exclusivity of the active ingredient for the given indication in the case of a marketing authorization.

If the orphan drug status is obtained, the product then receives an exclusive marketing period of ten years, during which no similar product can be marketed for the same indication, as well as a waiver of regulatory fees and other advantages.

9.5 French Sunshine Act – Transparency of interests

Decrees no. 2013-414 of May 21, 2013 "on the transparency of benefits granted by companies manufacturing or marketing health and cosmetic products intended for human use" and no. 2016-1939 of December 28, 2016 on the public declaration of interests and transparency of benefits, specify the conditions of public "transparency" concerning relations (benefits procured or agreements made) between the companies that introduce or sell health and cosmetic products and some health care providers. As soon as the Company markets drugs, it must then make public:

- the information relating to agreements existing with healthcare professionals and other similar persons (except for agreements governed by Articles L.441-3 and L.441-7 of the French Commercial Code);
- all compensation, benefits in kind or cash given in an amount greater than or equal to €10;

- the information is centralized on a single website (www.transparence.sante.gouv.fr) under the responsibility of the Ministry of Health.

These requirements took effect on July 1, 2017. Similar resources exist in other countries, especially the United States (US Sunshine Act).

10 Information on trends

10.1 Main trends since the end of the last fiscal year

With four of its product candidates in clinical development, including two with leading pharmaceutical partners, the Company is entering the next stages of its growth, financially supported, in particular, by partnerships with international pharmaceutical groups and grants from Bpifrance:

- Tedopi® (combination of neoepitopes):
  - Phase 3 clinical trial in non-small cell lung cancer in Europe, the United States and Israel. The trial was conducted in HLA-A2 positive patients in second- or third-line therapies post checkpoint inhibitor treatment failure.
    The trial was planned in two steps: a first step including approximately 100 patients overall with a planned analysis of data on the percentage of patients achieving 12 months' survival.

    At the end of this first step, and depending on the results obtained, the Company had to decide on the best development strategy for Tedopi® in lung cancer after failure of checkpoint inhibitor therapy.

    On April 1, 2020, the Company announced positive results for Step 1 of the study. Analysis of the data showed that the primary endpoint for this milestone was achieved with a 12-month survival rate in patients treated with Tedopi® and a 10% absolute difference in this survival rate compared to chemotherapy.

    These results confirm the value and therapeutic benefit of Tedopi® in a patient population for which there is no validated treatment to date, and which is awaiting new therapeutic options. The Company will initiate discussions with the regulatory authorities to analyze these positive clinical results and determine the best options to pursue the development of Tedopi® and maximize the positive benefit/risk ratio data obtained. At the same time, given that the positive Step 1 results significantly strengthened the value of Tedopi®, the Company is continuing to explore any potential partnering opportunities for the product.

    Due to the global epidemic of COVID-19, the Company, in conjunction with the Independent Data Monitoring Committee (IDMC) and the Trial Steering Committee, analyzed the potential impact of this epidemic on the Atalante 1 trial. The clinical trials data could be strongly impacted by the worldwide COVID-19 worldwide pandemic and by the increased risk posed to patients with advanced lung cancer, as COVID-19 is able to cause serious pulmonary complications in these particularly vulnerable patients. Moreover, for patient safety, several scientific and medical societies currently recommend the voluntary suspension of new patient recruiting in clinical trials in oncology.

    Consequently, on the recommendation of the IDMC and the Atalante 1 Steering Committee, OSE Immunotherapeutics has decided to voluntarily and definitively suspend screening and enrollment of new patients in the Step 2 initially scheduled in the trial that will therefore not be conducted.

  - TEDOPaM currently in Phase 2 clinical trial The trial aims to assess the benefit of Tedopi® in locally advanced or metastatic pancreatic cancer in HLA-A2 positive patients with stable disease after four months of standard chemotherapy with Folfirinox (chemotherapy combining folinic acid, fluorouracil, irinotecan and oxaliplatin). The main objective of the study is overall survival.
    The study is conducted and sponsored by the GERCOR cooperative oncology group and supported by Bristol-Myers Squibb, providing its Opdivo® checkpoint inhibitor, and OSE Immunotherapeutics, providing its Tedopi® immunotherapy and financial support.

    Due to COVID-19, GERCOR, the study's sponsor, indicated at the end of March 2020 that patient screening would continue, but the inclusion of new patients in the study would be temporarily suspended.

- BI 765063 (OSE-172) (anti-SIRPa monoclonal antibody) – Licensing and collaboration agreement with Boehringer Ingelheim (April 2018) for the development, registration and marketing of the product in immuno-oncology. Following authorization from the French and Belgian regulatory authorities in March 2019, the product candidate is in a Phase 1 clinical trial in patients with advanced solid tumors.
  As of the date of this Universal Registration Document, due to the COVID-19 crisis, the screening and inclusion of new patients in the study are temporarily suspended.

- OSE-127 (Interleukin-7 receptor antagonist) – Licensing option agreement with Servier (December 2016) for the development and marketing of the product candidate in autoimmune diseases – Start of clinical Phase 1 in healthy volunteers completed end-2018. Exercise of option 1 of the collaboration and licensing agreement in February 2019. End of Phase 1 study in December 2019 and positive results showing in particular a good safety and tolerability profile for the product. Two Phase 2 clinical trials are expected to start in 2020: in ulcerative colitis, trial conducted by OSE Immunotherapeutics, and in Sjögren's Syndrome, trial conducted by Servier. Given the changing situation with regard to COVID-19, these studies can only be set up once all the preparatory steps have been completed and hospitals and healthcare professionals are able to conduct a clinical trial and ensure patient care in optimal safety conditions.

- FR104 (CD28 antagonist). Post-Phase 1 – Janssen Biotech led the development of FR104 until the Phase 1 clinical trial under an exclusive licensing agreement until December 31, 2018. On this date, Janssen Biotech transferred the global rights to the product back to the Company; the Company's decision to return the program to OSE Immunotherapeutics was motivated by an internal review of its strategy and prioritization of its product portfolio. The positive results of Phase 1 clinical proof-of-concept study of FR104, combined with the preclinical tolerability profile and the efficacy data for a large number of preclinical models of inflammatory and autoimmune diseases support the continuation of the product's clinical development. The Company is assessing the best options for continuing to develop FR104 in the Phase 2 study in autoimmune diseases or transplantation, including global partnering opportunities.
- The Company continues to seek new collaboration or license agreements that could be initiated at various stages of product development, with industry players involved in the field of activation and regulation immunology and in therapeutic combinations of high clinical interest.

Given the Company's current activities, it has not provided any specific comments on the trends that may affect its recurring revenues and general operating conditions from the date of the last fiscal year ended December 31, 2019 until the publication date of this Universal Registration Document.

With a cash position of €25.8 million at December 31, 2019 (excluding the 2019 research tax credit amounting to €3.1 million), the Company has the cash required to continue its operations over the next 12 months following the publication of its financial statements for year ended December 31, 2019. These capital resources will enable the Company to finance its 2020 development costs for the Phase 3 clinical study of Tedopi®, Phase 2 clinical study of Tedopi® in pancreatic cancer, the development of OSE-127 and BI 765063 (OSE-172) product candidates in their Phase 1 clinical stages, further studies on FR104, as well as research work on products at earlier stages. Furthermore, the Company received during the first quarter of 2020 a research tax credit of €3 million for 2019. Its agreements with Boehringer Ingelheim (OSE-172) and Servier (OSE-127) should support the completion of new stages of product development in 2020 or 2021.

Nevertheless, readers are invited to refer to paragraph 3.5 on the risk factors, which details the financing requirements for the Company's activities.

10.2 Trends, uncertainties, demands, commitments or events that are reasonably likely to have a material effect on the Company's prospects

None.

11 Profit/(loss) forecasts or estimates

The Company makes no profit/(loss) forecasts or estimates.

12 Administrative, management and supervisory bodies and executive management

12.1 Management and directors

12.1.1 Composition of the Board of Directors

As of the date of this Universal Registration Document, the Board of Directors is comprised of 9 members:

First name – Last name or corporate name of the member	Main position in the Company	Main position(s) outside the Company
Dominique Costantini	Director of Development Chairman of the Board of Directors Director	Director of Theranexus SAS Director of Smart Immune
Maryvonne Hiance	Vice Chairman of the Board of Directors Director	Vice Chairman of France Biotech Vice Chairman of the Atlanpole Biotherapies cluster Director of APAVE Chairman of the Strategic Advisory Board of Olmix, Bréhan Strategic Advisor for Goliver Therapeutics, Nantes
Sophie Brouard	Director	1st Class Director of Research, CNRS
Jean-Patrick Demonsang	Director	Chairman of Demonsang Consulting SAS Chairman of the Supervisory Board of G1J Ile-de-France
Brigitte Dréno	Director	None
Didier Hoch	Director	Chairman of the Supervisory Board of Pherecydes Pharma Director of the University of the Underground Charity Foundation Director of the Foundation for the Université Grenoble Alpes Member of the Strategic Board of Goliver Therapeutics
Nicolas Poirier	Director representing the employee shareholders	Member of the Scientific Board of MabDesign and MabSilico
Alexis Peyroles	Chief Executive Officer Director	Chairman of Aperana Consulting CEO of OSE Immunotherapeutics Inc.
Gérard Tobelem	Director	Director of Dendrogenix

Biographies of the members of the Board of Directors

The 9 members of the Board of Directors combine international expertise in drug development, marketing, industry and finance with experience working with Nasdaq- and Euronext-listed biotechnology companies.

Dominique Costantini – Chairman of the Board of Directors

Since co-founding OSE in 2012, Dominique Costantini has raised private equity funds in 2014, completed the Company's IPO in 2015, acquired Effimune in 2016 to lead the Company's development programs and contributed to the partnership agreements implemented in 2016 and 2018. She is the founder and former Chief Executive Officer of BioAlliance Pharma (1997–2011), which was renamed Oxneo in 2014 and is listed on Euronext Paris. Dominique has designed, developed and secured approval for innovative cancer therapies. She raised funds from 1999 to 2005 and completed an IPO for BioAlliance Pharma on Euronext in late 2005. Three successful stock market fundraisings were then based on product development benchmarks: two innovative products were approved in Europe and the United States. She has established international industrial partnerships, signing contracts worth more than €130 million. BioAlliance Pharma is the only French biotech company to have had two products registered with the FDA. Dominique gained more than 15 years of operational management experience in the pharmaceutical industry while working at HMR (now Sanofi). She led R&D and drug marketing activities from research to market in fields including immunology, endocrinology, inflammation, infection and oncology. Medical Doctor, Immunology – René Descartes University – Paris V.

Alexis Peyroles – Chief Executive Officer and Director

EDHEC and Executive MBA from Imperial College, London, Alexis joined OSE Pharma as Chief Financial Officer in September 2013. He was appointed Chief Executive Officer of OSE Immunotherapeutics on March 28, 2013. Alexis has more than 20 years of international management experience, mainly in healthcare, having worked for Sanofi in Japan and in eastern Europe, where he served as Financial Control Manager for the Baltic States and then Head of Activities for Business Development in Eastern Europe. He then joined Guerbet, where he served as Financial Control Manager and then Chief Executive Officer for Latin America based in Brazil, where he managed all the marketing and manufacturing operations.

Maryvonne Hiance – Vice Chairman of the Board of Directors, Director

Maryvonne, who was previously the Chairman and co-founder of Effimune, is an engineer who specializes in nuclear science. For 14 years she managed a neutron studies program at Framatome (Areva). Over the past 20 years, she has led several innovative biotechnology companies: SangStat Atlantic, whose parent company, SangStat Medical Corporation, was acquired by Genzyme in 2003 for its product portfolio in immunosuppression and transplantation; she also led innovative companies, DrugAbuse Sciences and TcLand. Maryvonne founded and managed Strategic Ventures, a consulting firm that works with technology companies. Maryvonne Hiance has been a member of the French Strategic Council for Innovation and has served as advisor to the French SMEs and Industry Ministry. She is Vice Chairman of France Biotech, the French Association of Life Sciences entrepreneurs.

Sophie Brouard – Director

Sophie is an immunologist and veterinarian who specializes in transplants. She completed postdoctoral studies at Harvard Medical School in Boston. She is a director of research at CNRS, co-director of an INSERM research unit specializing in immunotherapy of autoimmune diseases and grafts and leads an INSERM research unit in Nantes on transplantation and its mechanisms. This current research work focuses on understanding the rejection mechanism during a transplant in order to find biomarkers of the survival of the transplant. She also chairs the Executive Committee of the Centaure Foundation. Centaure is a world-renowned foundation and pioneer in pancreas transplants that performs around two-thirds of the simultaneous liver and pancreas transplants in France. This accomplishment is due to the strong commitment of the surgical and research teams. Centaure has also won worldwide recognition for its work on the immunological mechanisms of diabetes, in experimental models and its therapy trials in diabetic patients. Centaure combines three key centers of excellence — Nantes, Lyon and Paris—enabling them to collaborate on research in transplantation, in connection with an international committee of Europeans and Americans.

Jean-Patrick Demonsang – Director

Jean-Patrick joined the Board of Directors of OSE Pharma in 2014. During his tenure as Chairman and Chief Executive Officer of Seventure Partners until 2013, he supported the activities of more than 150 companies. Seventure is now a leading venture capital firm in France, managing more than €500 million with a team of 12 experts in two investment sectors: information technologies and life sciences, in France and Europe.

Jean-Patrick Demonsang is also an entrepreneur who has created and led several SMEs and he is currently leading an entrepreneurial project involving a theme park in the south of France. Jean-Patrick holds an MBA from HEC and a degree in physics.

Brigitte Dréno – Director

Professor Brigitte Dréno is Head of the Dermatology Department at the Nantes University Hospital Center, which develops research expertise and groundbreaking treatments in skin oncology. Brigitte Dréno is also the Director of the Biotherapy Clinical Investigation Center and Director of the Unit of Cell and Gene Therapy, and as such closely oversees all immuno-oncology advances. She is Vice-Dean of the Medical School. In collaboration with the academic leadership, she supports OSE Immunotherapeutics' R&D initiatives on the Nantes University campus.

Didier Hoch – Director

Didier Hoch is a medical doctor and Chairman of the Biovision Forum and of Big Booster, a start-up accelerator. He also serves as a director for listed companies, including Genticel and, previously, DBV Technologies. From 2000 to 2010, he was Chairman of Sanofi-Pasteur-MSD, a joint venture between Sanofi and Merck dedicated to vaccines. He also held a variety of managerial positions at Rhône-Poulenc Rorer and then Aventis, where he was Vice Chairman for Middle East & Africa.

He previously served as Chairman of the European Vaccine Manufacturers' Association and Chairman of the LEEM Biotechnology Committee.

Nicolas Poirier – Director representing the employee shareholders of OSE Immunotherapeutics

Nicolas Poirier earned a doctorate in immunology at CESTI, in Nantes, and has developed new therapeutic strategies on new targets and new pathways in immunology. He won the University Research Award from the *Le Monde* newspaper. He joined Effimune in 2009 as a project manager. He then became Director of Scientific Programs for the Company, working with his team to develop and carry out groundbreaking projects in immunoregulation responding to severe pathologies with high therapeutic need: transplantation, autoimmune diseases and immuno-oncology. Nicolas is listed as the first author on leading international publications on immunorestoration.

Gérard Tobelem – Director

Gérard Tobelem won the first Diderot Innovation prize in 2006. He has held industrial, medical and scientific positions, including as Executive Chairman of the French Blood Establishment. Gérard Tobelem has held strategic roles at the French Ministry of Higher Education and Research. He has advised a variety of international pharmaceutical companies on their R&D strategies. Until 2018, he was non-executive Chairman of the Board of Directors of Theradiag SA. Previously, he taught hematology at Paris 7 University and was Head of the Department of Blood Disorders at Lariboisière Hospital in Paris.

The directors' addresses are:

- Dominique Costantini – 286, boulevard Raspail – 75015 Paris
- Maryvonne Hiance – 35, rue Edison – 44000 Nantes
- Alexis Peyroles – 158, rue Diderot – 94300 Vincennes
- Sophie Brouard – Les Vaux – 44240 Sucé sur Erdre
- Jean-Patrick Demonsang – 149, rue Louis Rouquier – 92300 Levallois-Perret
- Brigitte Dréno – 10, rue Voltaire – 44000 Nantes
- Didier Hoch – 1508, route de Bellegarde – La Sauzée – 42210 Saint Cyr Les Vignes
- Nicolas Poirier – 1, chemin du Passe Temps – 44119 Treillières
- Gérard Tobelem – 113, rue Monge – 75005 Paris

Capital and voting rights held by members of the Board of Directors

After potential exercise of all the instruments carrying rights to shares of the Company, shares held in the Company by the directors at March 31, 2020 would be as follows:

- After the exercise of all dilutive instruments, Alexis Peyroles will hold (directly and through his company Aperana Consulting), 768,499 shares representing 4.91% of the capital and 5.34% of the voting rights
- Dominique Costantini will hold 2,004,563 shares representing 12.80% of the capital and 18.08% of the voting rights

- Maryvonne Hiance (directly and through her family holding company), will hold 424,084 shares representing 2.71% of the capital and 3.58% of the voting rights
- Sophie Brouard (directly and through her family holding company), will hold 212,904 shares representing 1.36% of the capital and 1.94% of the voting rightsJean-Patrick Demonsang will hold 40,000 shares representing 0.26% of the capital and 0.19% of the voting rights
- Brigitte Dréno will hold 10,000 shares representing 0.06% of the capital and 0.05% of the voting rights
- Didier Hoch will hold 17,334 shares representing 0.11% of the capital and 0.11% of the voting rights
- Nicolas Poirier will hold 92,802 shares representing 0.59% of the capital and 0.33% of the voting rights
- Gérard Tobelem will hold 84,100 shares representing 0.54% of the capital and 0.40% of the voting rights

List of corporate offices and positions held by the members of the Board of Directors in all companies in the last five years

First name – Last name or corporate name of the member	Other current corporate offices held in other companies	Other corporate offices and positions held In other companies in the last five years and not held as of the date of this Universal Registration Document
Dominique Costantini	- Director of Theranexus SAS - Director of Smart Immune	- Director of Abivax - Director of Theradiag - Director of Carthera SAS - Director of Sensorion
Maryvonne Hiance	- Vice Chairman of France Biotech - Vice Chairman of the Atlanpole Biotherapies cluster - Director of APAVE - Chairman of the Strategic Advisory Board of Olmix, Bréhan - Strategic Advisor for Goliver Therapeutics, Nantes	- Chairman of France Biotech
Sophie Brouard	- 1st Class Director of Research, CNRS	- Director of the Centaure Foundation - Director of the French Society of Immunology (SFI) - Vice Chairman of Life Sciences and Health for the Pays de la Loire region
Jean-Patrick Demonsang	- Chairman of Demonsang Consulting SAS - Chairman of the Supervisory Board of G1J Ile-de-France	- Chairman of Parexi SAS - Chief Executive Officer of Genode Partners SAS
Brigitte Dréno	- None	- None
Didier Hoch	- Chairman of the Supervisory Board of Pherecydes Pharma - Director of the University of the Underground Charity Foundation - Director of the Foundation for the Université Grenoble Alpes - Member of the Strategic Board of Goliver Therapeutics	- Independent Director of DBV Technologies, Genticel, Germitech - Member of the Strategic Board – Advisory Committee of Myastérix, Curavac
Nicolas Poirier	- Member of the Scientific Board of MabDesign and MabSilico	- None
Alexis Peyroles	- Chairman of Aperana Consulting - CEO of OSE Immunotherapeutics Inc.	- None
Gérard Tobelem	- Director of Dendrogenix	- Director of Sup'Biotech (end of term: July 2017) - Director of the Louis Dreyfus Foundation (end of term: 2018) - Chairman of Theradiag SA (end of term: October 2018)

12.1.2 Composition of the operational management team

Composition of the Executive Management

Dominique Costantini serves as Chairman of the Board of Directors. Dominique Costantini previously served as Chief Executive Officer of the Company until April 12, 2018.

Alexis Peyroles is the Company's Chief Executive Officer. He was previously the Chief Operating Officer until April 12, 2018, responsible for operations, finance and the Company's agreements and licenses.

Biographies of the members of the Executive Management

Please refer to paragraph 14.1.1 of the Universal Registration Document.

Alexis Peyroles – Chief Executive Officer

EDHEC and Executive MBA from Imperial College, London, Alexis joined OSE Pharma as Chief Operating Officer. He became Chief Executive Officer of OSE Immunotherapeutics on April 12, 2018. Alexis Peyroles has successfully established OSE's strategic collaborations and licensing agreements by bringing together all the components of the business lines needed to sign such partnerships. Through his 20-plus years of international management experience in the pharmaceutical industry (at Sanofi and Guerbet) and in biotechnology in Europe, Japan and South America, he has developed his skills in strategy, finance, pharmaceutical marketing and agreements and licenses. Since the inception of OSE, his strategic and operational skills have been pivotal to the growth of the Company, its initial public offering, acquisitions and the partnerships shaping the future of OSE with key value-creating steps.

Alexis Peyroles is supported by an operational management team that includes:

- **Dominique Costantini** (MD), Director of Development, brings to the OSE team her broad expertise in this field.

- **Maryvonne Hiance,** Director of Public Affairs, brings to the Company her networks and strong involvement with public authorities and, more broadly, with institutional players, as well as her personal experience.

- **Anne-Laure Autret-Cornet,** Chief Financial Officer

  Anne-Laure Autret-Cornet graduated from ESSCA Management school and has received the certificate "Corporate Finance" from HEC Paris in 2020. Specialized in Audit-Finance, Anne-Laure has acquired a seven-year experience within Deloitte before joining Effimune in 2013 as Administrative and Financial Manager. Upon the merger with OSE Pharma in 2016, Anne-Laure was appointed Chief Financial Officer of OSE Immunotherapeutics.

- **Jean-Pascal Conduzorgues** (PharmD), Qualified Person.

  With a doctorate in pharmacy, he has vast experience as a qualified person, a pharmaceutical qualification required for drugs in Europe. He organizes the subcontractors needed to coordinate the pharmaceutical cases. He was a founder, manager and qualified person of the Montpellier-based CRID Pharma, which became Amatsi and then recently Eurofins, which he headed for 20 years. This company is a pharmaceutical services company specializing in pharmaceutical development (formulation, analytical development, approval of manufacturing processes, ICH stability studies, quality control and pharmaceutical writing) and in drug management for clinical trials. In 2011 he merged CRID Pharma with Avogadro to form Amatsi, a 175-person group located in France and the United States offering all services related to drug development. Since 2013 Jean-Pascal Conduzorgues has had his own consulting firm, Ibero, where he assists with pharmaceutical planning and initiatives by biotechnology companies he chooses to support as a shareholder and consultant, as is the case for OSE Immunotherapeutics.

- **Frédérique Corallo** (MD), Chief Medical Officer, Autoimmune Diseases

Frédérique is a medical doctor who specializes in immunology and has more than 25 years of international experience in the pharmaceutical industry and biotechnology companies. Before joining OSE Immunotherapeutics in November 2016, she spent a decade as the Chief Medical Officer at Biogen, a global biotechnology leader. She previously held medical affairs management and clinical research management positions at Janssen-Cilag and Sanofi (Hoechst Marion Roussel). Throughout her career, Frédérique has overseen the strategic and operational management of clinical development and medico-marketing of immunology products. She manages the alliance with the Janssen and Servier laboratories.

- **Valérie Gabarre** (PharmD), Medico-Marketing Director

  Valérie holds a doctorate in pharmacy and a DESS (postgraduate degree) in health law. She has extensive experience developing and implementing medical and marketing strategies in oncology and immuno-oncology at several pharmaceutical companies. With more than 20 years of experience in the oncology life sciences sector, she has successfully launched several innovative products in this field. Valérie networks with experts and opinion leaders in France and abroad and is responsible for implementing the immunotherapy and immuno-oncology marketing policy, in line with the medical affairs activities.

- **Antoine Gravelle**, Chief Legal Officer,

  Antoine holds a Master II in business law applied to the healthcare industry and a certificate in intellectual property. Previously with Cellectis, he has legal experience related to immunotherapy development and to business development. He also has expertise in U.S. and U.K. law acquired at Sanofi where he supported international legal activities, particularly in clinical research, CMC and business development.

- **Nicolas Poirier** (PhD), Chief Scientific Officer

  Nicolas Poirier holds a PhD in immunology at CESTI, in Nantes, and has developed new therapeutic strategies on new targets and new pathways in immunology. He won the University Research Award from the *Le Monde* newspaper. He joined Effimune in 2009 as a project manager. He then became Director of Scientific Programs for the Company, working with his team to develop and carry out groundbreaking projects in immunoregulation responding to severe pathologies with high therapeutic need: transplantation, autoimmune diseases and immuno-oncology. Nicolas is listed as the first author on leading international publications on immunorestoration.

- **Emilienne Soma** (PharmD, PhD), Pharmaceutical Program Director

  Doctor of Pharmacy and Doctor of Science, Emilienne specializes in the development of pharmaceutical products in innovative forms in various therapeutic fields, particularly in oncology, infectious diseases and HIV. She has nearly two decades of experience in biotechnology companies, where she has led and coordinated the pharmaceutical development of biotherapy and nanomedicine products and new chemical entities. She has broad experience in R&D management and alliances in a number of biotechnology companies. She manages the alliance with Boehringer Ingelheim.

- **Bérangère Vasseur** (MD), Chief Medical Officer, Immuno-Oncology

  Bérangère is a medical doctor with nearly 20 years' experience working on clinical development, and particularly innovative molecules in oncology, at biotechnology and pharmaceutical companies. Before joining OSE Immunotherapeutics in January 2018, she spent 10 years at Roche, where she steered the clinical development of oncology products and supported the medico-marketing strategy for the launch of cancer treatments. She subsequently served as Clinical Development Director at biotechnology companies specialized in the treatment of orphan cancers.

- **Claudia Zuany-Amorim Fromond** (PhD), Preclinical and Translational Director

  Claudia holds a PhD in pharmacology and immunology. Having served as Director of Pharmacology - Immuno-Oncology & Immune-Inflammation Clusters at Ablynx-Sanofi before joining OSE Immunotherapeutics, she has a wealth of experience in managing research programs and she has led many preclinical development projects at pharmaceutical and biotechnology companies, particularly in the fields of cancer, inflammatory diseases and immunology.

12.1.3 Disclosures about the Management team and directors

In the last five years, none of the members of the Company's Board of Directors have been:

- convicted of fraud or subject to an incrimination or official public sanction by the statutory or regulatory authorities;
- involved in any bankruptcies, receiverships or liquidations as a manager or corporate officer;
- prevented from acting as a member of an administrative, management or supervisory body or from participating in the management or conduct of business of an issuer;
- subject to an incrimination and/or official public sanction by the statutory or regulatory authorities (including designated professional organizations).

In the last five years, neither Dominique Costantini nor Alexis Peyroles has been:

- convicted of fraud, or subject to an incrimination or official public sanction by the statutory or regulatory authorities;
- involved in any bankruptcies, receiverships or liquidations as a manager or corporate officer;
- prevented from acting as a member of an administrative, management or supervisory body or from participating in the management or conduct of business of an issuer;
- subject to any incrimination and/or official public sanction by the statutory or regulatory authorities (including designated professional organizations).

12.2 Potential conflicts of interest of the members of the Board of Directors and Executive Management

To the best of the Company's knowledge, no current or potential conflict of interest exists between the duties with regard to the Company and the personal interests and/or duties of the persons comprising the administrative or management bodies or the executive management as referred to above in paragraph 12.1 "Management and directors".

Dominique Costantini signed a part-time, open-ended employment contract on July 1, 2014. Her employment contract was amended in April 2015 to increase her hours to 133 working hours per month, for gross annual compensation of €180,000 excluding variable compensation. Dominique Costantini agreed an addendum to her employment contract on October 1, 2016, making it full-time with gross annual compensation of €205,314. Variable compensation equal to up to three months' salary is provided for based on the achievement of certain targets. The Company is continuing this contract due to Dominique Costantini's seniority and her unique technical roles and expertise in drug development.

Alexis Peyroles, Chief Executive Officer, signed an open-ended employment contract on July 1, 2014, which was amended through an addendum taking effect on July 1, 2018, as Chief Operating Officer for €250,000 in gross annual compensation. Variable compensation equal to up to 50% of the gross annual compensation is provided for based on the achievement of certain targets, with 50% of it in the form of free shares. The Company is continuing this contract due to Alexis Peyroles' seniority and his unique technical roles in operational management and international business collaborations.

Maryvonne Hiance, Vice-Chairman of OSE Immunotherapeutics, has an operational role as Strategic Advisor within the Executive Management under a contract dated May 31, 2016. At its meeting on June 26, 2019, the Board of Directors wished to amend the title and position in her employment contract to Director of Public Affairs; this change was made without a salary raise. Compensation under this employment contract is calculated on the basis of €120,000 in gross annual salary. The employment contract took effect on May 31, 2016, concurrently with the completion of the merger. Variable compensation equal to up to three months' salary is provided for based on the achievement of certain targets. The Company continues this contract due to Maryvonne Hiance's seniority, her unique technical roles in industrial strategy, her networks and strong involvement with public authorities and, more broadly, with institutional players.

13 Compensation and benefits

13.1 Total gross compensation for members of the Board of Directors and General Management

In accordance with the law of July 3, 2008, the disclosures presented herein are established by referring to the corporate governance code and additional recommendations regarding communication on the compensation of executive corporate officers of listed companies as defined by Middlenext. The Middlenext Code used as a reference by the Company can be consulted at the address http://www.middlenext.com/IMG/pdf/Code_de_gouvernance_site.pdf. Tables no. 1, no. 2, no. 3, no. 4, no. 8, no. 9, no. 10 and no. 11 of the "AMF Recommendation on corporate officers' compensation disclosures to be included in the registration documents" of December 22, 2008 are presented below.

For the 2019 fiscal year, the only executive corporate officers were Dominique Costantini and Alexis Peyroles. The only compensation paid to executive corporate officers during 2019 was attendance fees for their terms of office as directors.

Dominique Costantini has held an open-ended employment contract since July 1, 2014 for her position as Director of Development. She signed an addendum to her employment contract on October 1, 2016, bringing her monthly working hours to 151.67 hours, i.e. gross annual compensation of €205,314 euros, which was increased to €275,000 from July 1, 2019. Variable compensation of up to three months' salary is provided for based on the achievement of certain targets.

Alexis Peyroles, Chief Executive Officer, signed an open-ended employment contract on July 1, 2014, modified by an addendum effective on July 1, 2018 as Director of Operations with a gross annual salary of €250,000, then again modified by an addendum effective on July 1, 2019 for an annual gross salary of €350,000. Variable compensation equal to up to 50% of the gross annual compensation is provided for based on the achievement of certain targets, with 50% of it in the form of free shares.

A report setting out the principles and criteria for determining, distributing and allocating the fixed, variable and exceptional items making up the total compensation and benefits of any kind or members of the Board of Directors and Executive Management for the 2019 fiscal year is presented in Appendix C of this Universal Registration Document. This report will be submitted for approval to the Annual General Shareholders' Meeting scheduled for June 16, 2020 in resolutions 7 to 10. The reader is referred to that report.

Table 1: Summary table of compensation and share subscription warrants allocated to each executive corporate officer

	2019 fiscal year	**2018 fiscal year**
Dominique Costantini - Chairman of the Board of Directors since March 28, 2018		
Compensation due for the fiscal year (table 2)	€319,969 Gross Wages	€317,145 Gross Wages
Valuation of multi-annual variable compensation allocated during the year	N/A	N/A
Valuation of the share subscription warrants* and founders' share warrants allocated during the fiscal year (Table 4)	N/A	€42,476
Valuation of free shares allocated (table 6)	N/A	N/A
TOTAL	€319,969	€359,621

	2019 fiscal year	**2018 fiscal year**
Alexis Peyroles - Chief Executive Officer		
Compensation due for the fiscal year (table 2)	€387,500 Gross Wages	€291,718 Gross Wages

Valuation of multi-annual variable compensation allocated during the year	N/A	N/A
Valuation of the share subscription warrants and founders' share warrants allocated during the fiscal year (Table 4)	N/A	N/A
Valuation of free shares allocated (table 6)	€609,635 gross	€522,431
TOTAL	**€997,135**	**€814,149**

Table 2: Summary table of the remuneration of each executive corporate officer

EXECUTIVE OFFICER	**Compensation for the 2019 fiscal year (in euros)**		**Compensation for the 2018 fiscal year (in euros)**	
D. Costantini	€319,969 gross[1]		€317,145 gross[1]	
	Amounts due	Amounts paid	Amounts due	Amounts paid
Fixed compensation	€240,157	€240,157	€205,314	€205,314
Annual variable compensation	€68,750	68 750 €2	€56,491	€56,491
Multi-year variable compensation	N/A	N/A	N/A	N/A
Exceptional compensation	N/A	N/A	N/A	€51,328
Directors' fees	€11,062	€11,062	0	0
Benefits in kind	0	0	0	0
Total	**€319,969**	**€319,969**	**€261,805**	**313 133 €[2]**

[1] Dominique Costantini's employment contract was amended in October 2016 to bring her to full-time (151.67 working hours per month), for gross annual compensation of €205,314 excluding variable compensation, then amended again on July 1, 2019 to bring the gross annual compensation to €275,000 excluding variable compensation.

It should be noted that Dominique Costantini's bonus for the 2018 fiscal year was paid at the start of the 2019 fiscal year. Dominique Costantini, having achieved the targets for the 2019 fiscal year, was paid a bonus of three months' wages in January 2020, i.e. €68,750.

[2] Variable compensation was paid in January 2020

EXECUTIVE OFFICER	**Compensation for the 2019 fiscal year (in euros)**		**Compensation for the 2018 fiscal year (in euros)**	
A. Peyroles	€397,511 gross[1]		€290,080 gross[1]	
	Amounts due	Amounts paid	Amounts due	Amounts paid
Fixed compensation	€300,000	€300,000	€202,250	€202,250
Annual variable compensation	€87,500	€83,125[2]	€37,500	€37,500
Multi-year variable compensation	N/A	N/A	N/A	N/A
Exceptional compensation	N/A	N/A	€38,625	€38,625
Directors' fees	€10,011	€10,011	€11,705	€11,705

Benefits in kind	0	0	0	0
TOTAL	€397,511	€393,136	€290,080	€290,080

[1] Alexis Peyroles' contract provided for compensation of €150,000 gross per year. This compensation was increased to €250,000 as of June 13, 2018, then to €350,000 as of July 1, 2019. Variable compensation equal to up to 50% of the gross annual compensation is provided for based on the achievement of certain targets, with 50% of it in the form of free shares.

[2] Variable compensation was paid in January 2020

Table 3: Table on directors' fees and other compensation received by non-executive corporate officers

Last name First Name **Company** **Name**	**Position on the Board and Board Committees**	**Attendance fees (for the 2019 fiscal year)**	**Other compensation (for the 2019 fiscal year)**	**Directors' fees (for the 2018 fiscal year)**	**Other compensation (for the 2018 fiscal year)**
G. Tobelem	Director Compensation and Appointments Committee (Chairman)	€24,000		€21,429	
JP. Demonsang	Director Audit Committee (Chairman)	€24,000		€21,429	
W. Flamenbaum	Director	€8,706		€8,941	
D. Hoch	Director	€20,571		€18,571	
S. Brouard	Director	€15,429		€14,286	
M. Hiance	Director, Vice Chairman of the Board of Directors	€14,775		€14,574	
B. Dréno	Director	€12,000		€4,571	
N. Poirier	Director representing employee shareholders	€8,837		€0	

Table 4: Subscription or purchase stock options granted to each executive corporate officer by the Company or any group companies during the fiscal years ended December 31, 2018 and 2019

Executive corporate officer name	Plan date	Plan number	Valuation of share subscription warrants and founders' share warrants according to the method used in the consolidated financial statements	Number of share subscription warrants and founders' share warrants granted during the fiscal year	Exercise price	Exercise period
Dominique Costantini	Date: 03/28/2017 Date: 6/13/2018	2017 founders' share warrants 2018 founders' share warrants	€5,163 €42,476	4,098 founders' share warrants* 25,900 founders' share warrants	€6.59 €4.17	03/28/2018 6/13/2023
Gérard Tobelem	Date: 6/13/2018 Date: 6/26/2019	2018 share subscription warrants 2019 founders' share warrants	€0 €13,200	42,850 share subscription warrants 10,000 founders' share warrants	€4.17 €3.58	6/13/2023 6/26/2024
Jean-Patrick Demonsang	Date: 6/26/2019	2019 founders' share warrants	€13,200	10,000 founders' share warrants	€3.58	6/26/2024
Walter Flamenbaum	Date: 6/26/2019	2019 founders' share warrants	€13,200	10,000 founders' share warrants	€3.58	6/26/2024
Didier Hoch	Date: 6/26/2019	2019 founders' share warrants	€13,200	10,000 founders' share warrants	€3.58	6/26/2024
Sophie Brouard	Date: 6/26/2019	2019 founders' share warrants	€13,200	10,000 founders' share warrants	€3.58	6/26/2024
Brigitte Dréno	Date: 6/26/2019	2019 founders' share warrants	€13,200	10,000 founders' share warrants	€3.58	6/26/2024
TOTAL			**€126,839**	**132,848**		

Table 5: Stock subscription or purchase options exercised by each executive corporate officer during the fiscal years ended December 31, 2018 and 2019

None

Table 6: Free shares allocated to each executive corporate officer during the fiscal years ended December 31, 2018 and 2019

Executive corporate officer name	Plan number and date	Number of shares allocated during the 2018/2019 fiscal years	Valuation of shares according to the method used in the consolidated financial statements	Vesting date	Availability date	Performance conditions
Maryvonne Hiance	Date: 6/26/2019	25,000	€45,326	6/26/2020	6/26/2021	Attendance
Alexis Peyroles	Date 1: 6/13/2018	150,000	€613,500	6/13/2019	6/13/2020	Attendance
	Date 2: 12/5/2018	18,712	€61,750	12/05/2019	5/12/2020	Attendance
	Date 3: 6/26/2019	150,000	€271,956	6/26/2020	6/26/2021	Attendance
	Date 4: 12/10/2019	22,625	€4,673	12/10/2021	12/10/2022	Attendance
TOTAL		**366,337**	**€997,205**			

Table 7: Free shares that became available to each executive corporate officer during the fiscal years ended December 31, 2018 and 2019

Corporate officer name	Plan number and date	Number of shares that became available during the year	Vesting conditions
Alexis Peyroles	6/13/2018	150,000 (as of 6/13/2019)	Achievement of the 3 objectives giving rise to allocation of 150,000 free shares at the end of the one-year vesting period

Table 8: History of the allocation of subscription or purchase stock options granted to corporate officers

As of the date of this Universal Registration Document:

	2019 founders' share warrants	2018 founders' share warrants	2018 share subscription warrants	2017 share subscription warrants	Effimune share subscription warrants	2015 founders' share warrants	2015 share subscription warrants	2014 share subscription warrants
Date of General Shareholders' Meeting or Board of Directors having	Extraordinary General Shareholders' Meeting on 6/13/2018 Board of Directors	Extraordinary General Shareholders' Meeting on 6 /14/2017 Board of Directors	Extraordinary General Shareholders' Meeting on 6/14/2017 Board of Directors	Extraordinary General Shareholders' Meeting on 5/31/2016	Extraordinary General Shareholders' Meeting on 5/31/2016 Effimune's Board of Directors meeting on	Extraordinary General Shareholders' Meeting on 9/17/2014 Board of Directors on 3/27/15	Extraordinary General Shareholders' Meeting on 9/17/2014 Board of Directors on 3/27/15	Extraordinary General Shareholders' Meeting on 6/2/2014 Board of Directors meeting on

	2019 founders' share warrants	2018 founders' share warrants	2018 share subscription warrants	2017 share subscription warrants	Effimune share subscription warrants	2015 founders' share warrants	2015 share subscription warrants	2014 share subscription warrants
allocated the plan	meeting on 6/26/2019	meeting on 6/13/2018	meeting on 6/13/2018		6/27/2011, 8/12/2011, 7/1/2014 and 11/25/2014			7/1/2014, 7/29/2014, 3/27/2015 and 12/12015
Maximum number of warrants authorized by General Shareholders' Meetings	500,000 instruments	500,000 instruments	500,000 instruments	400,000 instruments	67,820 (Entitling the holder to 130,892 shares under the exchange parity defined during the merger with Effimune on 5/31/2016)	300,000 instruments	300,000 instruments	800,000, brought to 500,000 by the EGSM on 9/17/2014
Number of instruments issued	60,000	25,900	42,850	52,000	67,820 (Entitling the holder to 130,892 shares under the exchange parity defined during the merger with Effimune on 5/31/2016)	65,000	136 222	481,982
Dominique Costantini		25,900						11,250
Jean-Patrick Demonsang	10,000							13,000
Gérard Tobelem	10,000		42,850					13,417
Walter Flamenbaum	10,000							13,333
Maryvonne Hiance					5,000 (Entitling the holder to 9,650 shares under the exchange parity defined as part of the merger with Effimune on 5/31/2016)			
Didier Hoch	10,000				3,000 (Entitling the holder to 6,369 shares under the exchange parity defined as part of the merger with Effimune on 5/31/2016)			
Sophie Brouard	10,000				1,000 (Entitling the holder to 1,930 shares under the exchange parity defined as part of			

	2019 founders' share warrants	2018 founders' share warrants	2018 share subscription warrants	2017 share subscription warrants	Effimune share subscription warrants	2015 founders' share warrants	2015 share subscription warrants	2014 share subscription warrants
					the merger with Effimune on 5/31/2016)			
Brigitte Dréno	10,000							
Alexis Peyroles						65,000		85,000
Starting point for exercising warrants	**Allocation date**	**Allocation date**	**Allocation date**	**Allocation date**	**Allocation date**	**10/1/2017** **10/1/2018** **10/1/2019**	**Allocation date**	**Allocation date**
Expiration date	6/26/2024	6/13/2023	6/13/2023	7/17/2021	6/27/2016 (tranche 1) 12/08/2016 (tranche 2) 7/01/2019 (tranche 3) 11/25/2019 (tranche 4)	4/1/2019 4/1/2020 4/1/2021	3/30/2020	6/30/2019
Warrant subscription or purchase price	€0	€0	€0.70	€0.60	€0.60 (Tranches 1 and 2) €0.70 (Tranches 3 and 4)	€0	€1.08	€0.10
Number of instruments subscribed	0	0	0	42,000	23,620 (Entitling the holder to 45,586 shares under the exchange parity defined as part of the merger with Effimune on 5/31/2016)	0	136,222	400,982
Warrant exercise terms	**Subscribe common shares**	**Subscribe common shares**	**Subscribe common shares**	**Subscribe common shares**	**Subscribe common shares**	**Subscribe common shares**	**Subscribe common shares**	**Subscribe common shares**
Exercise price	€3.58	€4.17	€4.17	€4.65	€5 (Tranches 1 and 2) €7 (Tranches 3 and 4)	€10.80	€10.80	€8
Number of shares subscribed on the date of this Universal Registration Document	0	0	0	0	45,586	0	0	156,250
Cumulative number of canceled or lapsed share	0	0	0	10,000	10,000 (Entitling the holder to 19,300 shares under the	0	0	13,000

	2019 founders' share warrants	2018 founders' share warrants	2018 share subscription warrants	2017 share subscription warrants	Effimune share subscription warrants	2015 founders' share warrants	2015 share subscription warrants	2014 share subscription warrants
subscription or purchase warrants					exchange parity defined as part of the merger with Effimune on 5/31/2016)			
Remaining subscription warrants to be issued on the date of this Universal Registration Document	0	25,900	42,850	0	0	0 ***	0	0

Table 9: Stock subscription or purchase options granted to the first 10 employees who are not corporate officers and options exercised by them

Stock subscription or purchase options granted to the first ten employees who are not corporate officers and options exercised by them	**Total number of options allocated/shares subscribed or purchased**	**Weighted average price**	**41,155 free share allocation plan for 2017**	**150,000 free share allocation plan for 2018-2**	**150,000 free share allocation plan for 2019**
Options granted, during the fiscal year, by the issuer and any Company included in the options' allocation scope, to the ten employees of the issuer and of any Company included in this scope, whose number of options thus granted is the highest (aggregate information)	229,867	€4.65	40,151 vested on 07/18/18	141,800 vested on 12/03/2020	Unvested (vesting period until 6/26/2020)
Options held on the issuer and the Companies referred to above, exercised, during the year, by the ten employees of the issuer and these Companies, whose number of options thus purchased or subscribed is the highest (aggregate information)	0	0	N/A		

Table 10: History of free share allocations

As of the date of this Universal Registration Document:

The Board of Directors issued 98,000 free shares on May 31, 2016
The Board of Directors issued 13,851 free shares on September 8, 2016
The Board of Directors issued 150,000 free shares on December 13, 2016
The Board of Directors issued 25,040 free shares on March 28, 2017
On July 18, 2017, the Chief Executive Officer issued 41,155 free shares on the authority of the Board of Directors on June 14, 2017

An issuance of 150,000 free shares was carried out by the Board of Directors on June 13, 2018
The Board of Directors issued 38,712 free shares on December 5, 2018
An allocation of 150,000 free shares was decided by the Board of Directors on June 26, 2019 for the benefit of Alexis Peyroles
An allocation of 148,400 free shares was decided by the Board of Directors and allocated by the Chief Executive Officer on June 26, 2019 for the benefit of employees who are not corporate officers
The allocation of 22,625 free shares was decided by the Board of Directors on December 10, 2019 for the benefit of Alexis Peyroles as part of his variable compensation
The CEO and Board of Directors issued 141,800 free shares on March 12, 2020

HISTORY OF FREE SHARE ALLOCATIONS

	INFORMATION ON FREE SHARES ALLOCATED								
Meeting date	6/14/17	6/13/18	6/14/17	6/14/17	09/17/14	5/31/16	5/31/16	5/31/16	5/31/16
Date of the Board of Directors meeting	12/10/19	6/26/19	12/12/18	6/13/18	5/31/16	8/09/16	12/13/16	03/28/17	6/14/17 (delegation to the CEO on 6/18/17)
Total number of free shares **of which the following amount was allocated to:**	22,625	300,000	38,712	150,000	98,000	13,851	150,000	25,040	41,155
Maryvonne Hiance, Director					40,000	0	0	10 926	0
Alexis Peyroles, Deputy-CEO	22,625	150,000	18,712	150,000	0	12,162	150,000	0	0
Nicolas Poirier, director representing employee shareholders			20,000						
Share vesting date	12/10/20	6/26/20	12/12/19	6/13/19	6/1/18	9/09/17	12/13/17 (100,000 free share allocation) 6/13/2018 (50,000 free share allocation)	03/29/18	07/18/18
Lock-up period end date	12/10/21	6/26/21	5/12/20	6/13/20	6/1/20	9/09/18	12/13/18 (100,000 free share allocation) 6/13/19 (50,000 free share allocation)	03/29/19	07/18/19
Number of shares vested on 03/31/2020	0	0	38,712	150,000	98,000	13,851	150,000	25,040	40,151
Cumulative number of	0	0	0	0	0	0	0	0	0

canceled or lapsed shares									
Free shares remaining at the balance sheet date			-	-	-	-	-	-	-

Table 11: Details of the compensation conditions and other benefits granted to executive corporate officers

Executive corporate officers	**Date of 1st appointment**	**End of term**	**Service agreement**		**Employment contract**		**Supplementary pension plan**		**Compensation or benefits due or likely to be due as a result of a termination or change of position**		**Compensation relating to a non-compete clause**	
			Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Dominique Costantini Chairman of the Board Director	4/27/2012	GSM for the fiscal year ended 12/31/2020		X	X			X		X		X
Alexis Peyroles Chief Executive Officer Director	5/31/2016	GSM for the fiscal year ended 12/31/2021		X	X			X		X		X

No maintenance of employment contracts, or severance pay in the event of termination of the employment contract are provided for on the date of this Universal Registration Document.

13.2 Amounts provisioned or recognized by the Company for the purpose of paying pensions, retirement or other benefits

The Company has not provisioned any amounts to pay pensions, retirement and other benefits to corporate officers and/or executive corporate officers who do not otherwise benefit (or have benefited) from a departure or sign-on bonus within the Company.

The share subscription warrants and founders' share warrants granted to corporate officers or executive corporate officers are subject to a detailed breakdown in chapter 15.2 of this Universal Registration Document.

14 Operating procedures of the administrative and management bodies

14.1 Operating procedures and terms of office of the members of the Board of Directors and Executive Management

The directors' terms of office are as follows:

First name – Last name or corporate name of the member	Date of first appointment	End of term	Main position in the Company
Ms. Dominique Costantini	April 27, 2012	GSM called to approve the financial statements for the fiscal year ended December 31, 2020, i.e., three years	Chairman of the Board of Directors – Director
Mr. Alexis Peyroles	May 31, 2016	GSM called to approve the financial statements for the fiscal year ended December 31, 2021, i.e., three years	Chief Executive Officer of OSE Immunotherapeutics – Director
Ms. Maryvonne Hiance	May 31, 2016	GSM called to approve the financial statements for the fiscal year ended December 31, 2021, i.e., six years	Vice-Chairman of the Board of Directors
Ms. Sophie Brouard	May 31, 2016	GSM called to approve the financial statements for the fiscal year ended December 31, 2021, i.e., six years	Director
Mr. Jean-Patrick Demonsang	April 10, 2014	GSM called to approve the financial statements for the fiscal year ended December 31, 2019, i.e., three years	Director
Ms. Brigitte Dréno	June 14, 2017	GSM called to approve the financial statements for the fiscal year ended December 31, 2019, i.e., three years	Director
Mr. Didier Hoch	May 31, 2016	GSM called to approve the financial statements for the fiscal year ended December 31, 2021, i.e., six years	Director
Mr. Nicolas Poirier	June 26, 2019	GSM called to approve the financial statements for the fiscal year ended December 31, 2021, i.e., three years	Director representing the employee shareholders
Mr. Gérard Tobelem	April 10, 2014	GSM called to approve the financial statements for the fiscal year ended December 31, 2019, i.e., three years	Director

The operating rules for the administrative bodies are set out in the bylaws in force.

14.1.1 Board of Directors (Articles 19 to 22 of the bylaws)

Article 19 – Board of Directors (excerpt)

(i) Except as permitted by law, the Company is administered by a Board of Directors with a minimum of three and a maximum of eighteen members.

(ii) During the Company's life span, directors are appointed or reappointed by the Ordinary General Shareholders' Meeting. Notwithstanding, in the event of a merger, directors may be appointed by the Extraordinary General Shareholders' Meeting approving the transaction.

(iii) Directors may or may not be Company shareholders.

(iv) The directors' term of office is three years and ends at the conclusion of the Ordinary General Shareholders' Meeting called to approve the financial statements of the fiscal year ended and held during the year in which the term of the relevant director expires.

Directors may be reelected. They may be dismissed at any time by the Ordinary General Shareholders' Meeting.

No one may be appointed director if they are older than 70 and their appointment would mean that more than one-third of the members of the Board of Directors would be over 70. If this proportion is exceeded, the oldest director is deemed to have resigned automatically at the end of the Ordinary General Shareholders' Meeting called to approve the financial statements of the fiscal year during which this threshold was crossed.

Directors may be natural persons or legal entities. Upon their appointment, directors who are legal entities must appoint a permanent representative who is subject to the same conditions and obligations and who incurs the same liabilities as if he or she were a director in his or her own name, without affecting the joint liability of the legal entity he or she is representing.

When the legal entity director ends the term of office of its permanent representative, it must immediately notify the Company, via registered letter, of its decision and provide the name of its new permanent representative. The same applies in the event of the death or resignation of the permanent representative.

The permanent representative of a legal entity director is subject to the same age requirements as apply to natural person directors.

(v) In the event of a vacancy due to death or the resignation of one or more directors, the Board of Directors may make provisional appointments between two General Shareholders' Meetings in order to maintain the same number of directors.

Provisional appointments made in this way by the Board of Directors are subject to ratification by the next Ordinary General Shareholders' Meeting. Failing ratification, the decisions made and actions taken still remain valid.

When the number of directors falls below the legal minimum, the directors still in office must immediately convene the Ordinary General Shareholders' Meeting to fill the number of directors.

A director who is appointed to replace another director stays in office only for the predecessor's remaining term.

Natural person directors may not simultaneously serve on more than five boards of directors or supervisory boards of limited companies (*société anonyme*) headquartered in metropolitan France, except where permitted by law.

A Company employee may only be appointed as director if his or her contract corresponds to active employment. The employee does not lose the benefit of this employment contract. The number of directors with an employment contract with the Company may not exceed one-third of the directors in office.

Article 20 – Chairmanship of the Board of Directors

The Board of Directors elects a Chairman from among its natural person members and determines the Chairman's compensation. It sets the term of the Chairman's duties, which may not exceed the Chairman's term as a director. The Chairman may be reelected.

The Board of Directors may dismiss the Chairman at any time.

No one older than 70 may be appointed Chairman of the Board of Directors. If the Chairman of the Board of Directors turns 70 while in office, he or she will be deemed to have resigned and a new Chairman will be appointed in accordance with the terms and conditions stipulated in this article.

The Chairman represents the Board of Directors. The Chairman organizes and leads the work of the Board of Directors and reports on it to the General Shareholders' Meeting. The Chairman ensures that the Company bodies operate smoothly and, in particular, ensures that the directors are able to perform their duties.

In the event of a temporary impediment or the death of the Chairman, the Board of Directors may appoint a director to serve as Chairman.

In the event of a temporary impediment, this appointment is granted for a limited period and may be renewed.

In the event of death, it applies until the new Chairman is elected.

Article 21 – Meetings and proceedings of the Board of Directors

Board meetings

The Board of Directors meets as often as the corporate interest requires and is convened by the Chairman. If no meeting is held for more than two months, a group of directors comprising at least one-third of the members of the Board of Directors may convene the Board, providing a specific agenda.

Either the Chief Executive Officer, when he or she is not serving as Chairman of the Board of Directors, or the Chief Operating Officers may ask the Chairman to convene the Board of Directors to discuss an established agenda.

The meeting is held at the registered office or any other location.

Notices of meeting may be issued by any means, including verbally.

The Chairman of the Board of Directors chairs the meetings. In the event that the Chairman is unable to perform his or her duties, at each meeting the Board appoints one of its members in attendance to chair the meeting.

At each meeting, the Board may appoint a secretary who does not need to be a Board member.

A register signed by all the members present at the Board meeting is kept.

Directors and any other person called on to attend the meetings of the Board of Directors are bound to secrecy with regard to confidential information that is described as such by the Chairman.

Quorum and majority

The Board of Directors may validly deliberate only if at least half of the directors are present or deemed to be present, subject to the arrangements stipulated in the Rules of Procedure in the event that videoconferencing or another telecommunication medium is used.

Unless stipulated otherwise in these bylaws and subject to the arrangements stipulated in the Rules of Procedure in the event that videoconferencing or another telecommunication medium is used, Board resolutions are passed by a majority vote of the members present or deemed present.

In the event of a tie, the Chairman of the meeting has the casting vote.

For the purposes of calculating the quorum and majority, directors participating in the Board of Directors' meeting through videoconference or another telecommunication medium in accordance with the terms and conditions outlined in the Board's Rules of Procedure are deemed to be present. Nonetheless, actual presence or presence through a representative is required for any Board proceedings on the approval of the separate financial statements and the group's management report, and for any decisions relating to the dismissal of the Chairman of the Board of Directors, the Chief Executive Officer and the Chief Operating Officer.

Representation

Any director may give another director, in writing, may give a proxy to represent him or her at a Board meeting.

Each director may represent only one other director during a single Board meeting.

These provisions apply to the permanent representative of a legal entity.

Minutes of the proceedings

The Board of Directors proceedings are reported in minutes issued in a special register, listed and initialed, and kept at the registered office in accordance with the regulatory provisions.

The minutes are signed by the Chairman of the meeting and by a director.

Copies or extracts from the minutes of the Board of Directors proceedings are legally certified by the Chairman or the Chief Executive Officer.

Nonvoting members

During the Company's life span, the Ordinary General Shareholders' Meeting may appoint nonvoting members from among or outside the shareholders.

There may be no more than three nonvoting members.

Nonvoting members are appointed for a one-year term. Their duties end at the conclusion of the Ordinary General Shareholders' Meeting called to approve the financial statements for the fiscal year ended and held during the year in which their term of office expires.

Any outgoing nonvoting member may be reelected provided that they meet the criteria of this article.

Nonvoting members may be dismissed and replaced at any time by the Ordinary General Shareholders' Meeting without any compensation being due to them. The duties of the nonvoting members also end in the event of death or impediment for a nonvoting member who is a natural person, and in the event of a winding up or initiation of collective insolvency proceedings for a legal entity nonvoting member, or in the event of resignation.

Nonvoting members may be natural persons or legal entities. If the nonvoting member is a legal entity, upon its appointment, it must appoint a permanent representative who is subject to the same conditions and obligations and who incurs the same civil and criminal liabilities as if he or she were a nonvoting member in his or her own name, without affecting the joint liability of the legal entity he or she is representing.

The role of the nonvoting members is to ensure the strict enforcement of the bylaws and present their remarks during the Board of Directors' meetings.

Nonvoting members have an overall advisory and supervisory role in the Company. As part of their role, they may share remarks with the Board and ask to review corporate documents at the Company's registered office.

Nonvoting members must be invited to every Board of Directors' meeting in the same way as the directors.

Nonvoting members have only advisory authority on an individual or collective basis and do not have voting rights on the Board.

Failure to summon the nonvoting member or to send documents to the nonvoting member(s) prior to the meeting of the Board of Directors may in no way be a reason to invalidate the decisions made by the Board of Directors.

Article 22 – Powers of the Board of Directors

(i) The Board of Directors determines the Company's business strategies and ensures that they are implemented.

Subject to the powers expressly granted by law to shareholders' meetings and to the extent of the corporate purpose, it examines any issue affecting the proper functioning of the Company and through its proceedings resolves matters that concern it.

In relations with third parties, the Company is bound even for actions by the Board of Directors that do not fall within the corporate purpose unless it proves that the third party knew that the action in question exceeded this purpose or that it could not be unaware of this given the circumstances, it being stated that the mere publication of the bylaws is not sufficient to constitute this proof.

(ii) The Board of Directors may at any time perform the audits and verifications it deems appropriate.

All directors must receive the information required for completing their assignments and they may obtain all documents they consider necessary from the Executive Management.

(iii) The Board of Directors may give any agent of its choice any delegation of authority within the bounds of its powers under the law and these bylaws.

It may decide to create working committees tasked with studying the issues the Board or the Chairman of the Board submits to it.

The Board of Directors is not qualified to vote on or authorize a bonds issue; these bylaws reserve that power for the General Shareholders' Meeting.

14.1.2 Executive Management (Articles 23 to 26 of the bylaws)

Article 23 – Methods of Executive Management

The Company is responsible for its Executive Management, either through the Chairman of the Board of Directors or through another natural person appointed by the Board of Directors who assumes the title of Chief Executive Officer.

The Board of Directors chooses which of these executive management methods to implement. The Board decides on the method of the Executive Management through a majority vote of the directors who are present and deemed present, subject to the special provisions of Article 21 in the event that there are directors participating in the Board meeting via videoconference or another telecommunication medium.

The Board of Directors' choice is communicated to the shareholders and third parties in accordance with the regulations in force.

The option chosen by the Board of Directors may be reassessed only upon the reelection or replacement of the Chairman of the Board of Directors or when the Chief Executive Officer's term of office expires.

A change in the method of Executive Management does not require an amendment of the bylaws.

Article 24 – Executive Management

Based on the method selected by the Board of Directors, the Chairman or the Chief Executive Officer takes responsibility for the Company's Executive Management.

The Chief Executive Officer is appointed by the Board of Directors, which sets the length of his or her term of office, determines his or her compensation and, where necessary, the limitations of his or her powers.

The Chief Executive Officer may be dismissed by the Board of Directors at any time. If the Chief Executive Officer who is not the Chairman is dismissed, he or she may be due damages if the dismissal is decided without just cause.

Article 25 – Powers of the Chief Executive Officer

The Chief Executive Officer is vested with the broadest powers to act in any situation on behalf of the Company.

The Chief Executive Officer exercises his or her powers within the limits of the corporate purpose, and subject to the powers expressly granted by law to the General Shareholders' Meetings and the Board of Directors.

The Chief Executive Officer represents the Company in its dealings with third parties. The Company is bound even for actions by the Chief Executive Officer that do not fall within the corporate purpose unless it proves that the third party knew that the action in question exceeded this purpose or that it could not be unaware of this given the circumstances, it being stated that the mere publication of the bylaws is not sufficient to constitute this proof.

Article 26 – Chief Operating Officers

At the suggestion of the Chief Executive Officer, whether this position is held by the Chairman of the Board of Directors or another person, the Board of Directors may appoint one or more natural persons, selected or not from among the directors and shareholders, responsible for assisting the Chief Executive Officer and given the title Chief Operating Officer.

There may be a maximum of five Chief Operating Officers.

In agreement with the Chief Executive Officer, the Board of Directors determines the scope and duration of the powers granted to the Chief Operating Officers and sets their compensation.

With regard to third parties, the Chief Operating Officer or Chief Operating Officers have the same powers as the Chief Executive Officer.

In the event of a termination of, or inability to perform, the duties of the Chief Executive Officer, the Chief Operating Officers retain their duties and powers until a new Chief Executive Officer is appointed, unless decided otherwise by the Board of Directors.

The Chief Operating Officers may be dismissed at any time on a proposal by the Chief Executive Officer. The dismissal of the Chief Operating Officers may give rise to damages if it is decided without just cause.

14.2 Information on the service contracts between the members of the Board of Directors and the Executive Management and the Company or one of its subsidiaries

14.2.1 Agreements between the Company, a director, the Chief Executive Officer or a Chief Operating Officer

Dominique Costantini, Chief Executive Officer, Chairman and Director of Development, signed an initial employment contract as Director of Development in 2014. Her contract was amended in October 2016 to bring her to full-time (151.67 working hours per month), for gross annual compensation of €205,314 excluding variable compensation. Dominique Costantini's bonus for fiscal year 2017 was paid at the beginning of fiscal year 2018. Variable compensation equal to up to three months' salary is provided for based on the achievement of certain targets.

Maryvonne Hiance, Vice Chairman, holds an operational role as Director of Public Affairs in the Executive Management in accordance with a contract updated following the merger dated May 31, 2016. The compensation under this employment contract is calculated on the basis of €120,000 in gross annual salary. The employment contract took effect on May 31, 2016, concurrently with the completion of the merger. Variable compensation equal to up to three months' salary is provided for based on the achievement of certain targets.

Alexis Peyroles, director and Chief Executive Officer, initially signed an open-ended employment contract on July 1, 2014, which was amended through an addendum dated October 1, 2016, as Chief Operating Officer for a gross annual salary of €150,000 (for 151.67 working hours per month), and then amended again on July 1, 2018, for gross annual compensation of €250,000. Variable compensation equal to up to 50% of the base gross annual compensation is provided for based on the achievement of certain targets.

14.3 Committees

In accordance with Articles 6 and 7 of the Rules of Procedure, the Board has appointed a Compensation and Appointments Committee and an Audit Committee made up of Board members.

The composition of these Committees provides for a term of two years. Committee members are paid €3,000 per year and their Chairman is paid €5,000 per year.

Travel and lodging costs incurred by each Committee participant for meetings held outside of Europe will be covered for an amount of €2,500 per meeting, while costs incurred for meetings in Europe will be covered for an amount of €500 per meeting.

14.3.1 Audit Committee

- Composition

The Audit Committee comprises Jean-Patrick Demonsang (Committee Chairman) and Didier Hoch, whose terms of office were renewed at the Board of Directors meeting on June 26, 2019, for a two-year period.

Jean-Patrick Demonsang and Didier Hoch are both independent members.

- Operating procedures

Duties

The Audit Committee is responsible for overseeing issues relating to the preparation and audit of accounting and financial information. It is responsible for continually assessing the existence and effectiveness of the Company's financial control and risk control procedures, and has as its duties:

Internal control

- Ensure that the internal control and risk management systems are effective;
- Verify the smooth operation with the participation of the Finance Department;
- Review the schedule of internal and external audits;
- Ensure that the Statutory Auditors conduct the statutory audit of the separate financial statements and, where applicable, the consolidated financial statements.

Statutory financial statements and financial information

After regularly reviewing the financial position, the cash position and the commitments appearing in the Company's separate financial statements:

- Review the accounting and financial documents, annual and interim financial statements;
- Oversee the process of issuing the statutory and consolidated/combined financial statements and the process of preparing the financial information;
- Review the internal control measures;
- Review the material risks for the Company, particularly off-balance sheet risks and commitments;
- Validate the relevance of accounting rules and choices;
- Verify the relevance of the financial information reported by the Company.

Risk management

- Review any item likely to have material, financial and accounting impacts;
- Review the status of major litigation;
- Review off-balance sheet risks and commitments;
- Review the relevance of the risk monitoring procedures;
- Review any related-party agreements.

Statutory Auditors

- Lead the selection of the Statutory Auditors, manage their compensation and ensure their independence;
- Ensure the proper implementation of their assignment;
- Monitor the statutory audit of the separate financial statements and, where applicable, the consolidated financial statements by the Statutory Auditors;
- Establish the rules for using the Statutory Auditors for tasks other than the audit of the financial statements and ensure the proper implementation of their assignment;
- Issue a recommendation on the proposals for the appointment and potential reappointment of the Statutory Auditors presented to the General Shareholders' Meeting, their fees and any issue related to their independence.

Rules of Procedure

The operating procedures of the Audit Committee are governed by Article 7 of the Rules of Procedure of the Board of Directors. These Rules of Procedure may be viewed at the Company's registered office upon prior written request.

Work in 2019

The Audit Committee met twice in 2019 to review and approve the statutory and consolidated financial statements for fiscal year 2018 (March 25, 2019) and to review and approve the consolidated financial statements for first-half 2019 (September 5, 2019).

14.3.2 Appointments and Compensation Committee

- Composition

The Appointments and Compensation Committee consists of Gérard Tobelem (Committee Chairman) and Maryvonne Hiance, whose terms of office were renewed at the Board of Directors meeting on June 26, 2019, for a two-year period.

The independent member is Gérard Tobelem.

- Operating procedures

Duties

The Appointments and Compensation Committee issues recommendations to the Board of Directors on the following topics:

- Advice and assistance regarding compensation, the pension and welfare benefit plan, supplementary pensions, benefits in kind, various cash entitlements of the executive corporate officers, allocations of free or performance shares, stock subscription or purchase options;
- The determination of the procedures for setting the variable portion of the compensation of the executive corporate officers and overseeing the enforcement of these procedures;
- The distribution of the directors' fees, where necessary, to the directors taking into account their attendance record and tasks accomplished on the Board of Directors;
- Any extraordinary compensation of the directors for specific assignments or duties given to them by the Board;
- Any changes to the composition of the Board of Directors or the Executive Management;
- Prevention of conflicts of interest on the Board of Directors;
- Oversight of the establishment of structures and procedures making it possible to apply proper governing practices within the Company;
- Ensure compliance with ethical principles within the Company and in its relations with third parties;
- Discussions on the classification of independent director for each director when the director is first appointed and every year before the publication of the Universal Registration Document, and presentation of the report of its recommendations to the Board of Directors.

In addition, the Executive Management proposes to it the various stock subscription or purchase option plans, equity warrant plans, founder warrant allocation plans or free share allocation plans.

Rules of Procedure

The operating procedures of the Appointments and Compensation Committee is governed by Article 6 of the Board of Directors' Rules of Procedure. These Rules of Procedure may be viewed at the Company's registered office upon prior written request.

Work in 2019

The Appointments and Compensation Committee met three times in 2019: on March 28 to appoint a candidate representing employee shareholders and renew a director's term of office; on June 26 to review the compensation of the management and award free shares to employees, equity warrants and founder subscription warrants; and on December 10 to award free shares and set the targets for the Chief Executive Officer.

14.3.3 Scientific Advisory Board

As an addition and without forming a committee, strictly speaking, on November 29, 2013, the Company created a Scientific Advisory Board. The role of this Scientific Advisory Board is to contribute the skills of prominent partners to the Company's business, based on the scientific topics to be addressed.

This Scientific Advisory Board is chaired by Wolf Hervé Fridman, director of the Cordeliers Research Center.

The Scientific Advisory Board integrates high-level expertise with the therapeutic indications on which OSE Immunotherapeutics positions itself. Its main role is to formulate and validate the scientific information published by OSE Immunotherapeutics and to contribute any scientific information that may help the development of the Company's projects. Therefore, this Scientific Advisory Board is not intended to meet regularly, but rather to be available to the management to provide active support for the innovations being developed. Practically speaking, the Company management calls on the Chairman of the Scientific Board, Wolf Hervé Fridman, who draws on the skills of outside consultants and experts in their fields to contribute high-level expertise based on the required topics.

14.4 Statement on corporate governance

The Company refers to the Corporate Governance Code for Small and Midcap Companies as published in December 2009 by MiddleNext and approved as a standard-setting code by the French Financial Markets Authority, insofar as the principles it contains will be compatible with the organization, size, resources and shareholding structure of the Company, particularly in the context of preparing the corporate governance report stipulated in the provisions of Article L. 225-37 of the French Commercial Code.

Recommendations of the MiddleNext Code:	Already adopted	To be adopted	Will not be adopted	Not applicable
I. Executive power				
R13: Definition and transparency of the compensation of executive corporate officers*	X			
R15: Combination of corporate officers and employment contracts**	X			
R16: Severance payments***				X
R17: Supplementary pension schemes****				X
R18: Stock options and free shares*****			X	
II. Supervisory power				
R1: Board of Directors' ethics policy	X			
R3: Composition of the Board, independent directors	X			
R4: Board member information	X			
R5: Board and committee meetings	X			
R6: Creation of committees	X			
R7: Implementation of Rules of Procedure	X			
R8: Choice of directors	X			
R9: Directors' terms of office	X			
R10: Directors' compensation	X			
R11: Implementation of an assessment of the Board's work******	X			

* Dominique Costantini has an open-ended employment contract as Director of Development. The Company is continuing this technical contract for Director of Early Development despite the appointment of Dominique Costantini as Chairman of

the Board of Directors due to her seniority and the unique technical duties she performs pertaining to drug development expertise.

** Alexis Peyroles combines his duties as Chief Executive Officer with an employment contract for Chief Operating Officer. Given the specific nature of his duties and the distinction with the position of Chief Executive Officer, the Board of Directors has decided to continue Alexis Peyroles' contract due to his seniority and the unique technical duties he performs pertaining to managing operations and international business collaborations.

*** The Company has not implemented a pension scheme as referred to in Article L. 137-11 of the French Social Security Code (defined benefit plan).

**** The Company does not currently plan to implement a supplementary retirement scheme.

***** The Company has no stock options. The 2012, 2014, 2015 and 2016 equity warrants, and 2015, 2016, 2017, 2018 and 2019 founder warrants were granted to management, consultants and employees. Thanks to their technical knowledge, resources or expertise, these people have provided or continue to provide the Company with tools and resources that have helped it grow both scientifically and as a business. These equity warrants and founder warrants do not correspond to a compensation instrument as no performance criterion would be relevant to express the Company's medium- or long-term interest.

The other financial instruments used by the Company (free shares) are meant to retain key Company employees to help the organization operate smoothly and grow.

The performance of the Board of Directors is assessed every three years in the form of a self-assessment carried out under the guidance of an outside consultant. This assessment addresses the Board's composition, organization and operating procedures. In addition, once a year, the Board puts a discussion of its operating procedures on the agenda of one of its meetings.

Furthermore, through a decision dated March 27, 2015, the Board of Directors wished to establish Rules of Procedure in order to specify, supplement and implement the rules for its organization and operation that apply to it under the law (and to its committees), the Company's regulations and bylaws, and the ethical rules that apply to all the directors and the corporate governance principles by which it refers (Corporate Governance Code for Small and Midcaps, MiddleNext, December 2009).

14.5 Changes to the corporate governance

None.

15 Employees

15.1 Human resources

15.1.1 Number of employees

At December 31, 2019 the workforce included 42 employees.

As of the date of this Universal Registration Document, the Company's workforce is 46 employees (excluding interns):

The clinical and regulatory Research & Development Division has 38 persons.
The Administrative Division has 8 persons.

15.2 Employee shareholding and stock options

Stock subscription warrants (BSA) and Company founder warrants (BSPCE)

As of the date of this Universal Registration Document, the various share subscription warrants and founders' share warrants plans allow for subscription of new common shares in exchange for one warrant.

Issuance of share subscription warrants 2014

On June 2, 2014, the General Shareholders' Meeting authorized the issue of an overall budget of 800,000 2014 share subscription warrants, then reduced to 500,000 2014 share subscription warrants at the General Shareholders' Meeting of September 17, 2014.

On July 1 and 29, 2014, 151,982 2014 share subscription warrants were allocated by the Board of Directors.

On March 27, 2015, the Board of Directors decided to issue 280,000 2014 share subscription warrants distributed as follows:

120,000 2014-3 share subscription warrants for the benefit of the members of the Board of Directors (other than Emile Loria and Dominique Costantini) and Aperana Consulting (Alexis Peyroles' Company), of which 10,000 2014-3 share subscription warrants have lapsed to date;

125,000 2014-4 share subscription warrants for the benefit of Simbec-Orion, the service provider in charge of the Tedopi® Phase 3 clinical trials;

25,000 2014-5 share subscription warrants for the benefit of Aperana Consulting;

10,000 2014-6 share subscription warrants for the benefit of Aperana Consulting (lapsed since October 1, 2017).

As of the date of this Universal Registration Document, the 125,000 2014-4 share subscription warrants for the benefit of Simbec-Orion Company have been exercised.

On December 1, 2015, the Board of Directors decided to issue 50,000 2014-7 share subscription warrants distributed as follows:

3,000 share subscription warrants (BSA-7) each to Jean Théron, Gérard Tobelem, Jean-Patrick Demonsang, David de Weese, Walter Flamenbaum, Guy Chatelain, Val Fourcats (Gilles Pélisson), including 3,000 2014-7 share subscription warrants lapsed to date;

5,000 share subscription warrants (BSA-7) each to Dominique Costantini and Aperana Consulting (Alexis Peyroles);

5,000 share subscription warrants (BSA-7) each to Alain Chatelin and Jean-Pascal Conduzorgues;

2,000 share subscription warrants (BSA-7) to Wolf-Hervé Friedman;

2,500 share subscription warrants (BSA-7) each to Emmanuel Phan and Sylvie Détry;

1,000 share subscription warrants (BSA-7) each to Jessica Kentsiko and Chantal Krezel;

The budget having expired on December 2, 2015, these 481,982 2014 share subscription warrants allocated constituted the entire allocation out of the 500,000 authorized.

The 2014 share subscription warrants (seven different tranches) could be exercised until June 30, 2019. To date 156,250 2014 share subscription warrants have been exercised (exercise price of €8 per share subscription warrant), and 332,461 2014 share subscription warrants have lapsed (neither subscribed nor exercised).

Issuance of 2015 share subscription warrants

On March 27, 2015, the Board of Directors decided to issue 136,222 2015 share subscription warrants distributed as follows:

5,876 share subscription warrants to David de Weese

11,753 share subscription warrants to Financières Tuileries Développement

118,593 share subscription warrants to Besançon Participations

These 136,222 share subscription warrants expired on the date of publication of this Universal Registration Document.

Issuance of 2015 founders' share warrants

On March 27, 2015 and then on March 28, 2017, the Board of Directors decided to issue 65,000 founders' share warrants to Alexis Peyroles under the following conditions:

15,000 could be subscribed as of October 1, 2017

25,000 could be subscribed as of October 1, 2018

25,000 could be subscribed as of October 1, 2019

As of December 31, 2019, no founders' share warrants had been subscribed, and 45,000 had lapsed.

Treatment of Effimune share subscription warrants

Pursuant to the Extraordinary General Shareholders' Meeting of March 25, 2014 and the Board of Directors meetings of July 1, 2014 and November 25, 2014, Effimune had issued 34,200 2014 share subscription warrants with a 5-year exercise period. As of December 31, 2019, no share subscription warrants had been exercised. All of the 2014 Effimune share subscription warrants have therefore lapsed.

Issuance of 2018 share subscription warrants

On June 13, 2018, the Board of Directors, making use of the delegation of the General Shareholders' Meeting on June 14, 2017, decided to issue 42,850 2018 share subscription warrants for the benefit of Gérard Tobelem, which can be subscribed until June 13, 2023. This issue canceled and replaced that of the 2016 share subscription warrants.

Issuance of 2017 share subscription warrants

On July 18, 2017, the Chief Executive Officer, by delegation of the Board of Directors on June 14, 2,017, himself making use of the delegation from the General Shareholders' Meeting of May 31, 2016, decided to issue 52,000 2017 share subscription warrants for the benefit of consultants (see section 19.1.4 “potential capital” below), which can be subscribed until July 17, 2018.

42,000 2017 share subscription warrants were subscribed, 10,000 having lapsed.

Issuance of 2018 founders' share warrants

On June 13, 2018, the Board of Directors, making use of the delegation from the General Shareholders' Meeting of June 14, 2017, decided to issue 25,900 2018 founders' share warrants for the benefit of Dominique Costantini. This issue served to offset the 2017 founders' share warrants which could not have been subscribed or exercised before the end of the exercise period on March 28, 2018 given the market price.

Issuance of 2019 founders' share warrants

On June 26, 2019, the Board of Directors, making use of the delegation from the General Shareholders' Meeting of June 13, 2018, decided to issue 60,000 2019 founders' share warrants, i.e. 10,000 founders' share warrants for the benefit of each non-salaried non-executive director in office on June 26, 2019.

Plan details

	2019 founders' share warrants	**2018 founders' share warrants**	**2018 share subscription warrants**	**2017 share subscription warrants**	**2015 founders' share warrants**	**2015 share subscription warrants**	**2014 share subscription warrants**
Date of General Shareholders' Meeting or Board of Directors having allocated the plan	Extraordinary General Shareholders' Meeting on 6/13/2018 Board of Directors meeting on 6/26/2019	Extraordinary General Shareholders' Meeting on 6/14/2017 Board of Directors meeting on 6/13/2018	Extraordinary General Shareholders' Meeting on 6/14/2017	Extraordinary General Shareholders' Meeting on 5/31/2016	Extraordinary General Shareholders' Meeting on 9/17/2014 Board of Directors meeting on 3/27/2015 and on 3/28/2017	Extraordinary General Shareholders' Meeting on 9/17/2014 Board of Directors meeting on 3/27/2015	Extraordinary General Shareholders' Meeting on 6/2/2014 Board of Directors meeting on 7/1/2014, 7/29/2014, 3/27/2015 and 12/12015
Maximum number of warrants authorized by General Shareholders' Meetings	60,000	500,000	500,000	400,000	300,000	300,000	800,000, increased to 500,000 by the EGSM on 9/17/2014
Number of warrants issued	60,000	25,900	42,850	52,000	65,000	136,222	481,982
Starting point for exercising warrants	Allocation date	Allocation date	Allocation date	Allocation date	See 15.2.1 above	Allocation date	Allocation date
Expiration date	6/26/2024	6/13/2023	6/13/2023	7/17/2021	See 15.2.1 above	3/30/2020	6/30/2019
Warrant subscription or purchase price	€0	€0	€0.70	€0.60	€0	€1.08	€0.10
Number of warrants subscribed	0	0	0	30,000	65,000	136,222	400,982
Warrant exercise terms	Subscribe common shares	Subscribe common shares	Subscribe common shares	Subscribe common shares	Subscribe common shares	Subscribe common shares	Subscribe common shares
Exercise price	€3.58	€4.17	€4.17	€4.65	€10.80	€10.80	€8

	2019 founders' share warrants	2018 founders' share warrants	2018 share subscription warrants	2017 share subscription warrants	2015 founders' share warrants	2015 share subscription warrants	2014 share subscription warrants
Number of shares subscribed on the date of this Universal Registration Document	0	0	0	0	0	0	156,250
Cumulative number of canceled or lapsed share subscription or purchase warrants	0	0	0	0	0	0	332,461
Remaining subscription warrants to be issued on the date of this Universal Registration Document	0	0	0	0	0	0	0

15.3 Free share allocations

See Tables 6, 7 and 10 in section 13.1 of this Universal Registration Document.

16 Main shareholders

16.1 Changes in shareholding

16.1.1 Changes in shareholding over 2 years

To the knowledge of the Board of Directors, the change in the shareholding structure is as follows:

Name	12/31/2017			12/31/2018			12/31/2019		
	Number of shares	% of capital	% of voting rights	Number of shares	% of capital	% of voting rights	Number of shares	% of capital	% of voting rights
Groupe Emile Loria	4,344,939	29.99%	29.99%	3,563,697	24.05%	17.69%	3,557,530	23.71%	17.21%
Guy Chatelain	275,000	1.90%	1.90%	230,490	1.56%	1.14%	212,490	1.42%	1.03%
Dominique Costantini	1,877,083	12.96%	12.96%	1,937,083	13.07%	18.64%	1,978,663	13.19%	18.65%
Alexis Peyroles (1)	377,172	2.60%	2.60%	429,576	2.90%	3.14%	595,874	3.97%	4.60%
Maryvonne Hiance (2)	345,158	2.38%	2.38%	399,084	2.69%	3.64%	399,084	2.66%	3.60%
Nicolas Poirier	3,377	0.02%	0.02%	22,802	0.15%	0.13%	42,802	0.29%	0.13%
Public	7,266,092	50.15%	50.15%	8,234,280	55.58%	55.62%	8,219,281	54.76%	54.78%
Total	**14,488,821**	**100%**	**100%**	**14,817,012**	**100%**	**100%**	**15,005,724**	**100%**	**100%**

(1) Directly and indirectly through the intermediary of his asset management company Aperana Consulting.

(2) Directly and indirectly through his asset management company HIANCE MD2A.

16.1.2 Distribution of capital on the registration date of this Universal Registration Document

To date, the share capital stands at 3,029,504.80 euros, divided into 15,147,524 shares, fully subscribed.

16.2 Double voting rights

In accordance with Article L. 225-123 of the French Commercial Code, and unless specified otherwise by the bylaws, shareholders who have owned registered shares for more than two years automatically receive double voting rights. Because no special provision has been stipulated in the bylaws, double voting rights have entered into force for shareholders who met the legal conditions within two years from the Company's first listing, i.e. March 30, 2017.

16.3 Control of the issuer

As of the date of this Universal Registration Document, the Company is not controlled by one shareholder or a group of shareholders.

Out of the nine members of the Board of Directors, five are independent, the duties of the Chairman and Chief Executive Officer are segregated within the Company, and at the Board of Directors meeting on March 27, 2015, the Company created two special committees, an Audit Committee and an Appointments and Compensation Committee, which are described

above in paragraph 14.3 of this document. The Company has not implemented any other measures to ensure that this control is not exercised improperly.

16.4 Agreements that may lead to a change in control

None.

17 Related-party transactions

17.1 Significant agreements with related parties

17.1.1 Agreement between Company subsidiaries and shareholders

OSE Pharma International (OPI)

OSE Pharma International, a limited company (société anonyme) with its registered office in Switzerland (known as OPI SA) has share capital of 100,000 Swiss francs and was created in February 2012. Its corporate purpose is the acquisition, holding, operation, development and marketing of intellectual property rights in biotechnology; research and development of products and treatments resulting from such rights, the conduct of studies and clinical trials, the granting of licenses; the identification and the building of relationships involving partners and scientific, financial, manufacturing and governmental investors; investment in companies active in the same sector (in compliance with the Swiss Federal Law on Acquisition of Real Estate by Persons Resident Abroad - LFAIE); all of which in the Americas. Its main asset is worldwide rights relating to the composition of peptides. It has no employees.

In July 2012, OPI (represented by Guy Chatelain) signed a licensing and marketing contract with OSE Pharma for the Tedopi® project (OSE-2101). This first contract gives OSE Pharma the commercial rights to market the product in Europe as well as responsibility for international development in Europe and the USA. OSE Pharma will set up an international development team and will seek to obtain the green light from the two Registration Agencies (EMA and FDA) in both Europe and the USA. The two companies, both controlled by Emile Loria since 2012, have always had the same common goal, i.e. the international clinical development of Tedopi®, for which OSE Pharma is responsible. Initial meetings between the two agencies verified that the international development strategy could be conducted as a Phase 3 trial with a common trial protocol.

The understanding between OSE Pharma and OPI has been identified as a crucial requirement for the continuation and success of the project, both in terms of funding and in terms of potential industrial partnerships across all territories and the expansion of the project to cover other cancers of interest. Since OSE Pharma is responsible for clinical development and has the required management team and expert know-how, this company acquired OPI in April 2014.

In April 2014, OSE Pharma acquired, via the acquisition of OPI, the assets, worldwide rights and know-how of OSE-2101 technology for all cancers of interest expressing HLA-A2. OPI SA in Geneva is now a subsidiary of OSE Pharma, and OPI shareholders are now OSE Pharma shareholders.

17.1.2 Related-party transactions

Dominique Costantini

Dominique Costantini, Chairman of the Board of Directors, has had an open-ended employment contract since July 1, 2014, amended on October 1, 2016, as Head of Development, receiving gross annual compensation of €275,000 (for 151.67 working hours per month) since July 1, 2019. Variable compensation of up to three months' salary is provided for based on the achievement of certain targets.

At December 31, 2019, Dominique Costantini received €304,380 gross for 2019, including a €51,329 bonus for 2018.

Alexis Peyroles

Alexis Peyroles, the Company's Chief Executive Officer, has had an open-ended employment contract since July 1, 2014, amended through an addendum on October 1, 2016, and July 1, 2018, as Chief Operating Officer, receiving gross annual compensation of €350,000 (for 151.67 working hours per month). Variable compensation amounting to 50% of the fixed compensation, half of which is payable in shares, is provided for based on the achievement of certain targets.

At December 31, 2019, Alexis Peyroles received €372,511 gross, including a €62,500 bonus for 2018.

Maryvonne Hiance

Maryvonne Hiance, Vice-Chairman of the Board of Directors, has had an open-ended employment contract since May 31, 2016, as Head of Public Relations, receiving gross annual compensation of €120,000 (for 151.67 working hours per month). Variable compensation of up to three months' salary is provided for based on the achievement of certain targets.

At December 31, 2019, Maryvonne Hiance received €164,841 gross, including a €30,000 bonus for 2018.

Dear shareholders

Members of the Board of Directors received a total of €100,400 net in directors' fees from the Company for 2019.

18 Financial information concerning the issuer's assets, liabilities, financial position and profit or loss

18.1 Historical financial information

Fiscal year 2017 historical financial information (combined financial statements and consolidated financial statements) as well as auditors' reports, appear in the Company's 2017 Registration Document, registered with the AMF on April 26, 2018, under number D. 18-0418 and incorporated for reference purposes.

Fiscal year 2018 historical financial information (combined financial statements and consolidated financial statements) as well as auditors' reports, appear in the Company's 2018 Registration Document, registered with the AMF on April 26, 2019, under number D. 19-0424 and incorporated for reference purposes.

18.1.1 Historical financial information

1*8.1.1.1 Statutory Auditors' report on the consolidated financial statements for the fiscal year ended on December 31, 2019*

RBB BUSINESS ADVISORS

ERNST & YOUNG et Autres

OSE Immunotherapeutics

Exercice clos le 31 décembre 2019

Rapport des commissaires aux comptes sur les comptes consolidés

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Membre de la compagnie
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Commissaire aux Comptes
Membre de la compagnie
régionale de Versailles

OSE Immunotherapeutics

Exercice clos le 31 décembre 2019

Rapport des commissaires aux comptes sur les comptes consolidés

A l'Assemblée Générale de la société OSE Immunotherapeutics,

Opinion

En exécution de la mission qui nous a été confiée par vos assemblées générales, nous avons effectué l'audit des comptes consolidés de la société OSE Immunotherapeutics relatifs à l'exercice clos le 31 décembre 2019, tels qu'ils sont joints au présent rapport. Ces comptes ont été arrêtés par le conseil d'administration le 26 mars 2020 sur la base des éléments disponibles à cette date dans un contexte évolutif de crise sanitaire liée au Covid-19.

Nous certifions que les comptes consolidés sont, au regard du référentiel IFRS tel qu'adopté dans l'Union européenne, réguliers et sincères et donnent une image fidèle du résultat des opérations de l'exercice écoulé ainsi que de la situation financière et du patrimoine, à la fin de l'exercice, de l'ensemble constitué par les personnes et entités comprises dans la consolidation.

L'opinion formulée ci-dessus est cohérente avec le contenu de notre rapport au comité d'audit.

Fondement de l'opinion

Référentiel d'audit

Nous avons effectué notre audit selon les normes d'exercice professionnel applicables en France. Nous estimons que les éléments que nous avons collectés sont suffisants et appropriés pour fonder notre opinion.

Les responsabilités qui nous incombent en vertu de ces normes sont indiquées dans la partie « Responsabilités des commissaires aux comptes relatives à l'audit des comptes consolidés » du présent rapport.

Indépendance

Nous avons réalisé notre mission d'audit dans le respect des règles d'indépendance qui nous sont applicables, sur la période du 1er janvier 2019 à la date d'émission de notre rapport, et notamment nous n'avons pas fourni de services interdits par l'article 5, paragraphe 1, du règlement (UE) n° 537/2014 ou par le Code de déontologie de la profession de commissaire aux comptes.

Observation

Sans remettre en cause l'opinion exprimée ci-dessus, nous attirons votre attention sur la note 3.3 « Normes et interprétations applicables à compter du 1er janvier 2019 » de l'annexe aux comptes consolidés, qui expose les modalités de mise en œuvre et les impacts relatifs à la première application de la norme IFRS 16 « Contrats de location ».

Justification des appréciations - Points clés de l'audit

En application des dispositions des articles L. 823-9 et R. 823-7 du Code de commerce relatives à la justification de nos appréciations, nous portons à votre connaissance les points clés de l'audit relatifs aux risques d'anomalies significatives qui, selon notre jugement professionnel, ont été les plus importants pour l'audit des comptes consolidés de l'exercice, ainsi que les réponses que nous avons apportées face à ces risques.

Les appréciations ainsi portées s'inscrivent dans le contexte de l'audit des comptes consolidés pris dans leur ensemble, arrêtés dans les conditions rappelées précédemment, et de la formation de notre opinion exprimée ci-avant. Nous n'exprimons pas d'opinion sur des éléments de ces comptes consolidés pris isolément.

Reconnaissance des produits d'exploitation issus des accords de licence et de distribution

Risque identifié	Notre réponse
Cf. notes 3.5., 3.16. et 4.8.1. de l'annexe aux comptes consolidés. Le chiffre d'affaires du groupe est principalement issu des accords de licence et de distribution mis en place avec des sociétés pharmaceutiques partenaires. Ces accords incluent diverses composantes, d'une part, les montants facturables à la signature, puis des montants facturables lors du franchissement de certains objectifs de développement prédéfinis ou bien encore d'objectifs commerciaux ou réglementaires. D'autre part, la société bénéficie de redevances qui correspondent à un pourcentage des ventes futures de produits nettes réalisées par les sociétés pharmaceutiques partenaires.	Nos travaux ont porté sur l'intégralité des contrats en cours. Nos contrôles ont plus particulièrement consisté à : ► analyser les clauses contractuelles et les traitements comptables applicables aux montants facturables à la signature et aux montants facturables à franchissement d'objectifs ainsi qu'aux redevances sur ventes ; ► examiner les hypothèses utilisées dans la reconnaissance du chiffre d'affaires, notamment les dates de finalisation des travaux de développement du groupe et le montant des frais de recherche restant à encourir postérieurement à la signature du contrat, par entretiens avec la direction financière et les équipes de R&D et par examen des échanges du groupe avec les sociétés partenaires.

Comptablement, les montants facturables au titre de la signature du contrat sont soit immédiatement enregistrés en chiffre d'affaires lorsque le groupe n'a pas d'engagements de développement futurs, ou bien, lorsque le groupe n'a pas transféré l'ensemble des droits, étalés sur la durée estimée de l'implication du groupe dans les développements futurs, laquelle fait l'objet de révisions périodiques. Les montants facturables à franchissement d'un objectif défini contractuellement sont comptabilisés en chiffre d'affaires à la date à laquelle la condition contractuelle est remplie.

La comptabilisation de ces contrats s'appuie donc sur des estimations et hypothèses de la direction concernant notamment :

- l'estimation des dates de finalisation des travaux de recherche et développement postérieurement à la signature du contrat ;
- le montant estimé des frais de recherche à engager après la signature ;
- l'estimation des ventes effectivement réalisées par la société pharmaceutique partenaire et la détermination des redevances afférentes à comptabiliser.

Dès lors, nous avons considéré que la reconnaissance du chiffre d'affaires issu des accords de licence et de distribution, représentant l'essentiel du chiffre d'affaires du groupe, est un point clé de l'audit.

Evaluation des actifs incorporels relatifs à la R&D (FR-104 et OSE-127)

Risque identifié	Notre réponse
Cf. notes 3.5., 3.7., 3.8. et 4.1.1. de l'annexe aux comptes consolidés. La valeur nette comptable des actifs incorporels relatifs à la recherche et au développement (R&D) s'élève au 31 décembre 2019 à M€ 52,6. Ces actifs immobilisés sont constitués de deux molécules, FR-104 et OSE-127 (ex. Effi-7), issues de l'acquisition de la société Effimune. Les notes de l'annexe aux comptes consolidés indiquées ci-dessus décrivent les modalités de réalisation des tests de dépréciation des actifs incorporels relatifs à la R&D.	Notre approche d'audit concernant les actifs incorporels relatifs à la R&D repose principalement sur des contrôles sur (i) le plan d'activité établi par la direction du groupe et incluant différentes hypothèses opérationnelles ainsi que les probabilités de réalisation de ces flux de trésorerie prévisionnels et (ii) le modèle financier contribuant à déterminer la valeur recouvrable de chacun des actifs utilisés par le groupe.

Les actifs incorporels ayant une durée de vie déterminée sont soumis à un test de dépréciation lorsque des circonstances indiquent que la recouvrabilité de leur valeur comptable est mise en doute ou a minima une fois par an à la clôture. Une perte de valeur est comptabilisée à concurrence de l'excédent de la valeur comptable sur la valeur recouvrable de l'actif.

Comme explicité dans la note 4.1.1., ces tests de dépréciation sur les molécules, FR-104 et OSE-127 ont été réalisés en utilisant la méthode de l'actualisation des flux futurs de trésorerie afin d'analyser la valeur d'utilité des actifs.

Ces flux de trésorerie prévisionnels prennent en considération plusieurs hypothèses clés : horizon temporel, probabilités de réussite, taux d'actualisation, taux d'imposition. Les conclusions de ces tests ont conduit à une absence de dépréciation.

Nous avons considéré que la détermination de la valeur recouvrable des actifs incorporels relatifs à la R&D est un point clé de l'audit en raison (i) de leur importance significative dans les comptes du groupe, (ii) des estimations nécessaires pour déterminer les flux futurs de trésorerie et (iii) des estimations et hypothèses, notamment en ce qui concerne les probabilités de réussite et le taux d'actualisation, utilisées pour déterminer leur valeur recouvrable.

Nous avons focalisé notre attention sur les éléments suivants :

- les principales hypothèses opérationnelles incluses dans le plan d'activité : nous avons examiné les estimations et hypothèses retenues et les avons rapprochées avec les informations prévisionnelles communiquées par les sociétés pharmaceutiques partenaires. Nous avons également analysé l'exactitude arithmétique du plan d'activité produit par la direction. Nous avons rapproché ce plan d'activité avec le budget approuvé par le conseil d'administration ;
- probabilité de réussite : nous avons examiné les différentes probabilités de succès retenues et comparé celles-ci aux pratiques observées dans le secteur des biotechnologies, notamment dans le domaine de l'oncologie ;
- taux d'actualisation retenu : nous avons apprécié le taux retenu, en incluant dans notre équipe d'audit des experts en évaluation financière. Des tests de sensibilité ont ainsi été réalisés par le groupe et examinés par nos soins ;
- taux d'imposition : nous avons apprécié le taux d'imposition retenu avec l'assistance de nos experts en fiscalité.

Exhaustivité des dépenses de recherche et développement sous-traitées (études cliniques)

Risque identifié	Notre réponse
Cf. notes 3.5. et 4.8.2. de l'annexe aux comptes consolidés. Le groupe poursuit des programmes de recherche précliniques et cliniques en collaboration avec des centres de recherche et d'essais cliniques sous contrat. Au 31 décembre 2019, les frais de sous-traitance de recherche et développement s'élèvent à M€ 21,7. Les dépenses de recherche et développement engagées à ce titre sont systématiquement reconnues en charges selon l'avancement des traitements. A la clôture, une estimation des coûts par patient non encore facturés est déterminée par la direction et enregistrée en charge de l'exercice.	Nos travaux ont notamment consisté à prendre connaissance des éléments justifiant les estimations clés utilisées par la direction pour déterminer le montant des charges à provisionner dans les comptes à la clôture de l'exercice. Dans ce cadre, nous avons : - pris connaissance du processus de contrôle interne de suivi de l'avancement des charges mis en place par la société afin d'identifier et d'estimer les coûts à provisionner à la clôture de l'exercice ; - étudié les contrats significatifs conclus avec les centres de recherche et d'essais cliniques, ainsi que les éléments établis par la direction justifiant des coûts des essais réalisés ;

Ces estimations de coûts sont établies à partir des informations transmises par les centres de recherche sous contrat et des analyses de coûts réalisées par la direction, les avancements étant déterminés prorata temporis de chacune des prestations de recherche.

Compte tenu de l'importance des dépenses de recherche et développement et de leur méthode d'estimation à la clôture de l'exercice, nous avons considéré leur exhaustivité comme étant un point clé de l'audit.

- étudié les débouclages des provisions de l'année précédente afin d'examiner la cohérence des estimations faites par la direction ;
- examiné la cohérence du stade d'avancement des traitements par patient et le calcul de la charge afférente, au regard des informations transmises par les centres de recherche et d'essais cliniques ou par l'analyse réalisée par la direction sur la base de calendriers de réalisation prévus aux contrats ;
- analysé, le cas échéant, les factures émises en période subséquente afin d'examiner l'absence de décalage avec les estimations réalisée.

Vérifications spécifiques

Nous avons également procédé, conformément aux normes d'exercice professionnel applicables en France, aux vérifications spécifiques prévues par les textes légaux et réglementaires des informations relatives au groupe, données dans le rapport de gestion du conseil d'administration arrêté le 26 mars 2020. S'agissant des événements survenus et des éléments connus postérieurement à la date d'arrêté des comptes relatifs aux effets de la crise liée au Covid-19, la direction nous a indiqué qu'ils feront l'objet d'une communication à l'assemblée générale appelée à statuer sur les comptes.

Nous n'avons pas d'observation à formuler sur leur sincérité et leur concordance avec les comptes consolidés.

Informations résultant d'autres obligations légales et réglementaires

Désignation des commissaires aux comptes

Nous avons été nommés commissaires aux comptes de la société OSE Immunotherapeutics par votre assemblée générale du 17 septembre 2014 pour le cabinet RBB BUSINESS ADVISORS et par décision de l'associé unique du 27 avril 2012 pour le cabinet ERNST & YOUNG et Autres.

Au 31 décembre 2019, le cabinet RBB BUSINESS ADVISORS était dans la sixième année de sa mission sans interruption et le cabinet ERNST & YOUNG et Autres dans la huitième année, dont cinq années depuis que les titres de la société ont été admis aux négociations sur un marché réglementé.

Responsabilités de la direction et des personnes constituant le gouvernement d'entreprise relatives aux comptes consolidés

Il appartient à la direction d'établir des comptes consolidés présentant une image fidèle conformément au référentiel IFRS tel qu'adopté dans l'Union européenne ainsi que de mettre en place le contrôle interne qu'elle estime nécessaire à l'établissement de comptes consolidés ne comportant pas d'anomalies significatives, que celles-ci proviennent de fraudes ou résultent d'erreurs.

Lors de l'établissement des comptes consolidés, il incombe à la direction d'évaluer la capacité de la société à poursuivre son exploitation, de présenter dans ces comptes, le cas échéant, les informations nécessaires relatives à la continuité d'exploitation et d'appliquer la convention comptable de continuité d'exploitation, sauf s'il est prévu de liquider la société ou de cesser son activité.

Il incombe au comité d'audit de suivre le processus d'élaboration de l'information financière et de suivre l'efficacité des systèmes de contrôle interne et de gestion des risques, ainsi que le cas échéant de l'audit interne, en ce qui concerne les procédures relatives à l'élaboration et au traitement de l'information comptable et financière.

Les comptes consolidés ont été arrêtés par le conseil d'administration.

Responsabilités des commissaires aux comptes relatives à l'audit des comptes consolidés

Objectif et démarche d'audit

Il nous appartient d'établir un rapport sur les comptes consolidés. Notre objectif est d'obtenir l'assurance raisonnable que les comptes consolidés pris dans leur ensemble ne comportent pas d'anomalies significatives. L'assurance raisonnable correspond à un niveau élevé d'assurance, sans toutefois garantir qu'un audit réalisé conformément aux normes d'exercice professionnel permet de systématiquement détecter toute anomalie significative. Les anomalies peuvent provenir de fraudes ou résulter d'erreurs et sont considérées comme significatives lorsque l'on peut raisonnablement s'attendre à ce qu'elles puissent, prises individuellement ou en cumulé, influencer les décisions économiques que les utilisateurs des comptes prennent en se fondant sur ceux-ci.

Comme précisé par l'article L. 823-10-1 du Code de commerce, notre mission de certification des comptes ne consiste pas à garantir la viabilité ou la qualité de la gestion de votre société.

Dans le cadre d'un audit réalisé conformément aux normes d'exercice professionnel applicables en France, le commissaire aux comptes exerce son jugement professionnel tout au long de cet audit. En outre :

- il identifie et évalue les risques que les comptes consolidés comportent des anomalies significatives, que celles-ci proviennent de fraudes ou résultent d'erreurs, définit et met en œuvre des procédures d'audit face à ces risques, et recueille des éléments qu'il estime suffisants et appropriés pour fonder son opinion. Le risque de non-détection d'une anomalie significative provenant d'une fraude est plus élevé que celui d'une anomalie significative résultant d'une erreur, car la fraude peut impliquer la collusion, la falsification, les omissions volontaires, les fausses déclarations ou le contournement du contrôle interne ;

- il prend connaissance du contrôle interne pertinent pour l'audit afin de définir des procédures d'audit appropriées en la circonstance, et non dans le but d'exprimer une opinion sur l'efficacité du contrôle interne ;

- il apprécie le caractère approprié des méthodes comptables retenues et le caractère raisonnable des estimations comptables faites par la direction, ainsi que les informations les concernant fournies dans les comptes consolidés ;

- il apprécie le caractère approprié de l'application par la direction de la convention comptable de continuité d'exploitation et, selon les éléments collectés, l'existence ou non d'une incertitude significative liée à des événements ou à des circonstances susceptibles de mettre en cause la capacité de la société à poursuivre son exploitation. Cette appréciation s'appuie sur les éléments collectés jusqu'à la date de son rapport, étant toutefois rappelé que des circonstances ou événements ultérieurs pourraient mettre en cause la continuité d'exploitation. S'il conclut à l'existence d'une incertitude significative, il attire l'attention des lecteurs de son rapport sur les informations fournies dans les comptes consolidés au sujet de cette incertitude ou, si ces informations ne sont pas fournies ou ne sont pas pertinentes, il formule une certification avec réserve ou un refus de certifier ;

- il apprécie la présentation d'ensemble des comptes consolidés et évalue si les comptes consolidés reflètent les opérations et événements sous-jacents de manière à en donner une image fidèle ;

- concernant l'information financière des personnes ou entités comprises dans le périmètre de consolidation, il collecte des éléments qu'il estime suffisants et appropriés pour exprimer une opinion sur les comptes consolidés. Il est responsable de la direction, de la supervision et de la réalisation de l'audit des comptes consolidés ainsi que de l'opinion exprimée sur ces comptes.

Rapport au comité d'audit

Nous remettons au comité d'audit un rapport qui présente notamment l'étendue des travaux d'audit et le programme de travail mis en œuvre, ainsi que les conclusions découlant de nos travaux. Nous portons également à sa connaissance, le cas échéant, les faiblesses significatives du contrôle interne que nous avons identifiées pour ce qui concerne les procédures relatives à l'élaboration et au traitement de l'information comptable et financière.

Parmi les éléments communiqués dans le rapport au comité d'audit figurent les risques d'anomalies significatives, que nous jugeons avoir été les plus importants pour l'audit des comptes consolidés de l'exercice et qui constituent de ce fait les points clés de l'audit, qu'il nous appartient de décrire dans le présent rapport.

Nous fournissons également au comité d'audit la déclaration prévue par l'article 6 du règlement (UE) n° 537-2014 confirmant notre indépendance, au sens des règles applicables en France telles qu'elles sont fixées notamment par les articles L. 822-10 à L. 822-14 du Code de commerce et dans le Code de déontologie de la profession de commissaire aux comptes. Le cas échéant, nous nous entretenons avec le comité d'audit des risques pesant sur notre indépendance et des mesures de sauvegarde appliquées.

Paris et Paris-La Défense, le 10 avril 2020

Les Commissaires aux Comptes

RBB BUSINESS ADVISORS	ERNST & YOUNG et Autres
Jean-Baptiste Bonnefoux	Cédric Garcia

18.1.1.2 Statutory Auditors' report on the separate financial statements for the fiscal year ended on December 31, 2019

RBB BUSINESS ADVISORS

ERNST & YOUNG et Autres

OSE Immunotherapeutics

Exercice clos le 31 décembre 2019

Rapport des commissaires aux comptes sur les comptes annuels

RBB BUSINESS ADVISORS
133 bis, rue de l'Université
75007 Paris
S.A. au capital de € 150 000
414 202 341 R.C.S. Paris

Commissaire aux Comptes
Membre de la compagnie
régionale de Paris

ERNST & YOUNG et Autres
Tour First
TSA 14444
92037 Paris-La Défense cedex
S.A.S. à capital variable
438 476 913 R.C.S. Nanterre

Commissaire aux Comptes
Membre de la compagnie
régionale de Versailles

OSE Immunotherapeutics

Exercice clos le 31 décembre 2019

Rapport des commissaires aux comptes sur les comptes annuels

A l'Assemblée Générale de la société OSE Immunotherapeutics,

Opinion

En exécution de la mission qui nous a été confiée par vos assemblées générales, nous avons effectué l'audit des comptes annuels de la société OSE Immunotherapeutics relatifs à l'exercice clos le 31 décembre 2019, tels qu'ils sont joints au présent rapport. Ces comptes ont été arrêtés par le conseil d'administration le 26 mars 2020 sur la base des éléments disponibles à cette date dans un contexte évolutif de crise sanitaire liée au Covid-19.

Nous certifions que les comptes annuels sont, au regard des règles et principes comptables français, réguliers et sincères et donnent une image fidèle du résultat des opérations de l'exercice écoulé ainsi que de la situation financière et du patrimoine de la société à la fin de cet exercice.

L'opinion formulée ci-dessus est cohérente avec le contenu de notre rapport au comité d'audit.

Fondement de l'opinion

Référentiel d'audit

Nous avons effectué notre audit selon les normes d'exercice professionnel applicables en France. Nous estimons que les éléments que nous avons collectés sont suffisants et appropriés pour fonder notre opinion.

Les responsabilités qui nous incombent en vertu de ces normes sont indiquées dans la partie « Responsabilités des commissaires aux comptes relatives à l'audit des comptes annuels » du présent rapport.

Indépendance

Nous avons réalisé notre mission d'audit dans le respect des règles d'indépendance qui nous sont applicables, sur la période du 1er janvier 2019 à la date d'émission de notre rapport, et notamment nous n'avons pas fourni de services interdits par l'article 5, paragraphe 1, du règlement (UE) n° 537/2014 ou par le Code de déontologie de la profession de commissaire aux comptes.

Justification des appréciations - Points clés de l'audit

En application des dispositions des articles L. 823-9 et R. 823-7 du Code de commerce relatives à la justification de nos appréciations, nous portons à votre connaissance les points clés de l'audit relatifs aux risques d'anomalies significatives qui, selon notre jugement professionnel, ont été les plus importants pour l'audit des comptes annuels de l'exercice, ainsi que les réponses que nous avons apportées face à ces risques.

Les appréciations ainsi portées s'inscrivent dans le contexte de l'audit des comptes annuels pris dans leur ensemble, arrêtés dans les conditions rappelées précédemment, et de la formation de notre opinion exprimée ci-avant. Nous n'exprimons pas d'opinion sur des éléments de ces comptes annuels pris isolément.

Reconnaissance des produits d'exploitation issus des accords de licence et de distribution

Risque identifié	Notre réponse
Cf. note « Produits d'exploitation » de l'annexe aux comptes annuels. Les produits d'exploitation de la société sont principalement issus des accords de licence et de distribution mis en place avec des sociétés pharmaceutiques partenaires. Ces accords incluent diverses composantes, d'une part les montants facturables à la signature, puis des montants facturables lors du franchissement de certains objectifs de développement prédéfinis ou bien encore d'objectifs commerciaux ou réglementaires. D'autre part, la société bénéficie de redevances qui correspondent à un pourcentage des ventes futures de produits nettes réalisées par les sociétés pharmaceutiques partenaires. Comptablement, les montants facturables au titre de la signature du contrat sont soit immédiatement enregistrés en produits lorsque la société n'a pas d'engagements de développement futurs, ou bien, lorsque la société n'a pas transféré l'ensemble des droits, étalés sur la durée estimée de l'implication du groupe dans les développements futurs, laquelle fait l'objet de révisions périodiques. Les montants facturables à franchissement d'un objectif défini contractuellement sont comptabilisés en produits à la date à laquelle la condition contractuelle est remplie.	Nos travaux ont porté sur l'intégralité des contrats en cours et clos au cours de la période. Nos contrôles ont ainsi consisté à : ► analyser les clauses contractuelles et les traitements comptables applicables aux montants facturables à la signature et aux montants facturables au franchissement d'objectifs ainsi qu'aux redevances sur ventes ; ► examiner les hypothèses utilisées dans la reconnaissance des produits d'exploitation, notamment les dates de finalisation des travaux de développement de la société et le montant des frais de recherche restant à encourir postérieurement à la signature du contrat, par entretiens avec la direction financière et les équipes de R&D et par examen des échanges de la société avec les sociétés pharmaceutiques partenaires.

Les redevances sur ventes sont comptabilisées en fonction des produits effectivement réalisés au cours de la période par les sociétés pharmaceutiques partenaires, en application des taux contractuels.

La comptabilisation de ces contrats s'appuie donc sur des estimations et des hypothèses de la direction concernant notamment :

- l'estimation des dates de finalisation des travaux de recherche et développement postérieurement à la signature du contrat ;
- le montant estimé des frais de recherche à engager après la signature ;
- l'estimation des ventes effectivement réalisées par le partenaire et la détermination des redevances afférentes à comptabiliser ;
- dès lors, nous avons considéré que la reconnaissance des produits d'exploitation issus de ces contrats de licence est un point clé de l'audit.

Evaluation du fonds commercial

Risque identifié	Notre réponse
Cf. note « Immobilisations incorporelles » de l'annexe aux comptes annuels. Comme mentionné dans les notes « Immobilisations incorporelles » des parties « Règles et méthodes comptables » et « Notes relatives à certains postes du bilan » de l'annexe, le fonds commercial est inscrit au bilan pour une valeur nette comptable de K€ 42 734. Il est comptabilisé au coût d'acquisition. Lorsque la valeur actuelle de cet actif est inférieure à la valeur comptable, une dépréciation est constituée du montant de la différence. La valeur d'utilité de cet actif, comme exposé dans la note « Immobilisations incorporelles », est établie sur la base d'éléments prévisionnels via la réalisation de flux de trésorerie futurs actualisés issus des plans d'activité établis par la direction à un horizon de 18 ans. Les flux de trésorerie pour tester le fonds commercial regroupent les projections de la direction pour l'ensemble des molécules exploitées par la société. Les perspectives de rentabilité et les incertitudes inhérentes à certaines hypothèses requièrent l'exercice du jugement de la direction afin de confirmer l'évaluation faite de la valeur nette comptable du fonds commercial.	Notre appréciation de la valeur du fonds commercial est fondée sur le processus mis en place par la société pour déterminer la valeur d'utilité de cet actif. Nos travaux ont notamment consisté à : ► examiner la méthodologie retenue par la direction pour évaluer la valeur d'utilité de cet actif ; ► analyser le plan d'activité élaboré par la direction, en rapprochant les éléments prévisionnels utilisés du budget approuvé par le conseil d'administration ; ► examiner les différentes probabilités de succès retenues et comparer celles-ci aux pratiques observées dans le secteur des biotechnologies, notamment dans le domaine de l'oncologie ; ► apprécier le taux d'actualisation retenu, en incluant des experts en évaluation financière dans notre équipe d'audit. Des tests de sensibilité ont ainsi été réalisés par la société et examinés par nos soins ; ► apprécier le taux d'imposition retenu avec l'assistance de nos experts en fiscalité ;

Compte tenu de l'importance du fonds commercial et de l'impact significatif qu'aurait une diminution des perspectives de rentabilité sur la valeur d'utilité, nous avons considéré l'évaluation du fonds commercial comme un point clé de l'audit.

- examiner les calculs réalisés par la direction de la société dans le plan d'activité et le modèle financier établi.

Evaluation des titres de participation

Risque identifié	Notre réponse
Cf. note « Immobilisations financières » de l'annexe aux comptes annuels. Comme mentionné dans les notes « Immobilisations financières » des parties « Règles et méthodes comptables » et « Notes relatives à certains postes du bilan » de l'annexe, les titres de participation sont inscrits au bilan pour une valeur nette comptable de K€ 50 000. Ils sont comptabilisés à la date d'entrée au coût d'acquisition ou à la valeur d'apport. Lorsque la valeur actuelle de ces actifs est inférieure à la valeur comptable, une dépréciation est constituée du montant de la différence. La valeur actuelle de ces actifs, comme exposé dans la note « Immobilisations financières », est établie sur la base d'éléments prévisionnels via la réalisation de flux futurs de trésorerie (DCF) issus des plans d'activité établis par la direction à un horizon de 18 ans. Les flux de trésorerie pour tester les titres de participation de l'entité OSE Pharma International (OPI) incluent les projections de la direction pour le produit Tedopi dont la société OPI détient les droits d'exploitation. Les perspectives de rentabilité et les incertitudes inhérentes à certaines hypothèses requièrent l'exercice du jugement de la direction afin de confirmer l'évaluation faite de la valeur nette comptable des titres de participation. Compte tenu de l'importance des titres de participation et de l'impact significatif qu'aurait une diminution des perspectives de rentabilité sur leur valeur actuelle, nous avons considéré l'évaluation des titres de participation comme un point clé de l'audit.	Notre appréciation de l'évaluation de la valeur des titres de participation est fondée sur le processus mis en place par la société pour déterminer la valeur d'utilité de ces actifs. Nos travaux ont notamment consisté à : - examiner la méthodologie retenue par la direction pour évaluer la valeur d'utilité de ces actifs ; - analyser le plan d'activité élaboré par la direction, ces évaluations reposant sur des éléments prévisionnels ; - apprécier les hypothèses opérationnelles clés retenues pour établir les flux de trésorerie futurs ; - apprécier les différentes probabilités de réussite retenues et comparer celles-ci aux pratiques observées dans le secteur des biotechnologies, notamment dans le domaine de l'oncologie ; - étudier la pertinence du taux d'actualisation retenu, avec l'assistance de nos experts en évaluation financière. Des tests de sensibilité ont ainsi été réalisés par la direction de la société et examinés par nos soins ; - apprécier le taux d'imposition retenu avec l'assistance de nos experts en fiscalité ; - examiner les calculs réalisés par la direction de la société dans le plan d'activité et le modèle financier établi.

■ **Exhaustivité des dépenses de recherche et développement sous-traitées (études cliniques)**

Risque identifié	Notre réponse
Cf. « Autres achats et charges externes » de l'annexe aux comptes annuels. La société poursuit des programmes de recherche en collaboration avec des centres de recherche sous contrat. Les dépenses de recherche et développement engagées à ce titre sont systématiquement comptabilisées en charges selon l'avancement des programmes. A la clôture, une estimation des coûts encourus non encore facturés est déterminée par la direction et enregistrée en charge de l'exercice. Ces estimations de coûts sont établies par la direction à partir des informations transmises par les centres de recherche sous contrat et des analyses de coûts réalisées par la direction, les avancements étant déterminés prorata temporis de chacune des prestations de recherche. Compte tenu de l'importance des dépenses de recherche et développement et de leur méthode d'estimation à la clôture de l'exercice, nous avons considéré leur évaluation comme étant un point clé de l'audit.	Nos travaux ont notamment consisté à prendre connaissance des éléments justifiant les estimations clés utilisées par la direction pour déterminer le montant des charges à provisionner dans les comptes à la clôture de l'exercice. Dans ce cadre, nous avons : ► pris connaissance du processus de contrôle interne de suivi de l'avancement des charges mis en place par la société afin d'identifier et d'estimer les coûts à provisionner à la clôture de l'exercice ; ► étudié les contrats significatifs conclus avec les centres de recherche et d'essais cliniques, ainsi que les éléments établis par la direction justifiant des coûts des essais réalisés ; ► étudié, le cas échéant, les débouclages de provisions de l'année précédente afin d'examiner la cohérence des estimations passées de la direction ; ► examiné la cohérence du stade d'avancement des traitements et le calcul de la charge afférente, au regard des informations transmises par les prestataires ou par l'analyse réalisée par la direction sur la base de calendriers de réalisation prévus aux contrats ; ► analysé, si elles ont été émises, les factures émises en période subséquente afin d'examiner l'absence de décalage avec les estimations réalisées.

Vérifications spécifiques

Nous avons également procédé, conformément aux normes d'exercice professionnel applicables en France, aux vérifications spécifiques prévues par les textes légaux et réglementaires.

■ **Informations données dans le rapport de gestion et dans les autres documents sur la situation financière et les comptes annuels adressés aux actionnaires**

Nous n'avons pas d'observation à formuler sur la sincérité et la concordance avec les comptes annuels des informations données dans le rapport de gestion du conseil d'administration arrêté le 26 mars 2020 et dans les autres documents sur la situation financière et les comptes annuels adressés aux actionnaires. S'agissant des événements survenus et des éléments connus postérieurement à la date d'arrêté des comptes relatifs aux effets de la crise liée au Covid-19, la direction nous a indiqué qu'ils feront l'objet d'une communication à l'assemblée générale appelée à statuer sur les comptes.

Nous attestons de la sincérité et de la concordance avec les comptes annuels des informations relatives aux délais de paiement mentionnées à l'article D. 441-4 du Code de commerce.

■ Rapport sur le gouvernement d'entreprise

Nous attestons de l'existence, dans le rapport du conseil d'administration sur le gouvernement d'entreprise, des informations requises par les articles L. 225-37-3 et L. 225-37-4 du Code de commerce.

Concernant les informations fournies en application des dispositions de l'article L. 225-37-3 du Code de commerce sur les rémunérations et avantages versés ou attribués aux mandataires sociaux ainsi que sur les engagements consentis en leur faveur, nous avons vérifié leur concordance avec les comptes ou avec les données ayant servi à l'établissement de ces comptes et, le cas échéant, avec les éléments recueillis par votre société auprès des entreprises contrôlées par elle qui sont comprises dans le périmètre de consolidation. Sur la base de ces travaux, nous attestons l'exactitude et la sincérité de ces informations.

Concernant les informations relatives aux éléments que votre société a considéré susceptibles d'avoir une incidence en cas d'offre publique d'achat ou d'échange, fournies en application des dispositions de l'article L. 225-37-5 du Code de commerce, nous avons vérifié leur conformité avec les documents dont elles sont issues et qui nous ont été communiqués. Sur la base de ces travaux, nous n'avons pas d'observation à formuler sur ces informations.

■ Autres informations

En application de la loi, nous nous sommes assurés que les diverses informations relatives à l'identité des détenteurs du capital ou des droits de vote vous ont été communiquées dans le rapport de gestion.

Informations résultant d'autres obligations légales et réglementaires

■ Désignation des commissaires aux comptes

Nous avons été nommés commissaires aux comptes de la société OSE Immunotherapeutics par votre assemblée générale du 17 septembre 2014 pour le cabinet RBB BUSINESS ADVISORS et par décision de l'associé unique du 27 avril 2012 pour le cabinet ERNST & YOUNG et Autres.

Au 31 décembre 2019, le cabinet RBB BUSINESS ADVISORS était dans la sixième année de sa mission sans interruption et le cabinet ERNST & YOUNG et Autres dans la huitième année, dont cinq années depuis que les titres de la société ont été admis aux négociations sur un marché réglementé.

Responsabilités de la direction et des personnes constituant le gouvernement d'entreprise relatives aux comptes annuels

Il appartient à la direction d'établir des comptes annuels présentant une image fidèle conformément aux règles et principes comptables français ainsi que de mettre en place le contrôle interne qu'elle estime nécessaire à l'établissement de comptes annuels ne comportant pas d'anomalies significatives, que celles-ci proviennent de fraudes ou résultent d'erreurs.

Lors de l'établissement des comptes annuels, il incombe à la direction d'évaluer la capacité de la société à poursuivre son exploitation, de présenter dans ces comptes, le cas échéant, les informations nécessaires relatives à la continuité d'exploitation et d'appliquer la convention comptable de continuité d'exploitation, sauf s'il est prévu de liquider la société ou de cesser son activité.

Il incombe au comité d'audit de suivre le processus d'élaboration de l'information financière et de suivre l'efficacité des systèmes de contrôle interne et de gestion des risques, ainsi que le cas échéant de l'audit interne, en ce qui concerne les procédures relatives à l'élaboration et au traitement de l'information comptable et financière.

Les comptes annuels ont été arrêtés par le conseil d'administration.

Responsabilités des commissaires aux comptes relatives à l'audit des comptes annuels

Objectif et démarche d'audit

Il nous appartient d'établir un rapport sur les comptes annuels. Notre objectif est d'obtenir l'assurance raisonnable que les comptes annuels pris dans leur ensemble ne comportent pas d'anomalies significatives. L'assurance raisonnable correspond à un niveau élevé d'assurance, sans toutefois garantir qu'un audit réalisé conformément aux normes d'exercice professionnel permet de systématiquement détecter toute anomalie significative. Les anomalies peuvent provenir de fraudes ou résulter d'erreurs et sont considérées comme significatives lorsque l'on peut raisonnablement s'attendre à ce qu'elles puissent, prises individuellement ou en cumulé, influencer les décisions économiques que les utilisateurs des comptes prennent en se fondant sur ceux-ci.

Comme précisé par l'article L. 823-10-1 du Code de commerce, notre mission de certification des comptes ne consiste pas à garantir la viabilité ou la qualité de la gestion de votre société.

Dans le cadre d'un audit réalisé conformément aux normes d'exercice professionnel applicables en France, le commissaire aux comptes exerce son jugement professionnel tout au long de cet audit. En outre :

- il identifie et évalue les risques que les comptes annuels comportent des anomalies significatives, que celles-ci proviennent de fraudes ou résultent d'erreurs, définit et met en œuvre des procédures d'audit face à ces risques, et recueille des éléments qu'il estime suffisants et appropriés pour fonder son opinion. Le risque de non-détection d'une anomalie significative provenant d'une fraude est plus élevé que celui d'une anomalie significative résultant d'une erreur, car la fraude peut impliquer la collusion, la falsification, les omissions volontaires, les fausses déclarations ou le contournement du contrôle interne ;

- il prend connaissance du contrôle interne pertinent pour l'audit afin de définir des procédures d'audit appropriées en la circonstance, et non dans le but d'exprimer une opinion sur l'efficacité du contrôle interne ;

- il apprécie le caractère approprié des méthodes comptables retenues et le caractère raisonnable des estimations comptables faites par la direction, ainsi que les informations les concernant fournies dans les comptes annuels ;

- Il apprécie le caractère approprié de l'application par la direction de la convention comptable de continuité d'exploitation et, selon les éléments collectés, l'existence ou non d'une incertitude significative liée à des événements ou à des circonstances susceptibles de mettre en cause la capacité de la société à poursuivre son exploitation. Cette appréciation s'appuie sur les éléments collectés jusqu'à la date de son rapport, étant toutefois rappelé que des circonstances ou événements ultérieurs pourraient mettre en cause la continuité d'exploitation. S'il conclut à l'existence d'une incertitude significative, il attire l'attention des lecteurs de son rapport sur les informations fournies dans les comptes annuels au sujet de cette incertitude ou, si ces informations ne sont pas fournies ou ne sont pas pertinentes, il formule une certification avec réserve ou un refus de certifier ;

- Il apprécie la présentation d'ensemble des comptes annuels et évalue si les comptes annuels reflètent les opérations et événements sous-jacents de manière à en donner une image fidèle.

Rapport au comité d'audit

Nous remettons au comité d'audit un rapport qui présente notamment l'étendue des travaux d'audit et le programme de travail mis en œuvre, ainsi que les conclusions découlant de nos travaux. Nous portons également à sa connaissance, le cas échéant, les faiblesses significatives du contrôle interne que nous avons identifiées pour ce qui concerne les procédures relatives à l'élaboration et au traitement de l'information comptable et financière.

Parmi les éléments communiqués dans le rapport au comité d'audit figurent les risques d'anomalies significatives, que nous jugeons avoir été les plus importants pour l'audit des comptes annuels de l'exercice et qui constituent de ce fait les points clés de l'audit, qu'il nous appartient de décrire dans le présent rapport.

Nous fournissons également au comité d'audit la déclaration prévue par l'article 6 du règlement (UE) n° 537-2014 confirmant notre indépendance, au sens des règles applicables en France telles qu'elles sont fixées notamment par les articles L. 822-10 à L. 822-14 du Code de commerce et dans le Code de déontologie de la profession de commissaire aux comptes. Le cas échéant, nous nous entretenons avec le comité d'audit des risques pesant sur notre indépendance et des mesures de sauvegarde appliquées.

Paris et Paris-La Défense, le 10 avril 2020

Les Commissaires aux Comptes

RBB BUSINESS ADVISORS	ERNST & YOUNG et Autres
Jean-Baptiste Bonnefoux	Cédric Garcia

18.1.2 Change of accounting reference date

Not applicable

18.1.3 Accounting standards

See Part 3 of Section 18.1.6 “Consolidated financial statements”

18.1.4 Change of accounting standards

Not applicable

18.1.5 Separate financial statements for the fiscal year ended on December 31, 2019

(Amount in €K)

ASSETS	12/31/2019	12/31/2018
NON-CURRENT ASSETS		
Intangible assets	42,734	42,734
Tangible assets	1,010	904
Non-current financial assets	50,436	50,246
TOTAL NON-CURRENT ASSETS	**94,179**	**93,884**
CURRENT ASSETS		
Inventory and work in process	-	-
Receivables	6,605	10,696
Investment securities	97	2,944
Cash and Cash Equivalents	25,730	9,461
Prepaid expenses	1,787	1,039
TOTAL CURRENT ASSETS	**34,219**	**24,140**
Unrealized foreign currency losses	6	5
TOTAL ASSETS	**128,403**	**118,029**

EQUITY & LIABILITIES	12/31/2019	12/31/2018
SHAREHOLDERS' EQUITY		
Stated capital	3,001	2,963
Issue, merger and transfer premiums	115,339	115,377
Statutory reserve	-	0
Retained earnings	-13,387	-18,888
Profit (loss) for the period	125	5,501
TOTAL SHAREHOLDERS' EQUITY	**105,078**	**104,954**
OTHER EQUITY		
Conditional advances	9,252	3,704
TOTAL OTHER EQUITY	**9,252**	**3,704**
PROVISIONS FOR LIABILITIES AND CHARGES		
Provision for liabilities	726	91
Provisions for charges	377	233
TOTAL PROVISIONS FOR LIABILITIES AND CHARGES	**1,103**	**323**
LOANS AND OTHER BORROWINGS		
Loans and borrowings from credit institutions	308	688
Loans and other financial liabilities	-	0
Trade payables	6,915	6,553
Other payables	1,493	1,228
Other debts and accruals	-	5
Deferred income	4,239	574
TOTAL LOANS AND BORROWINGS	**12,955**	**9,047**
Unrealized foreign exchange gains	14	1
TOTAL LIABILITIES	**128,403**	**118,029**

INCOME STATEMENT	12/31/2019	12/31/2018
Turnover	10,602	9,601
Other operating income	16,653	15,256
TOTAL OPERATING INCOME	**27,254**	**24,857**
Inventory change		
Other purchases and external expenses	23,629	19,259
Employee benefits expense	5,687	4,366
Taxes and duties	129	136
Allocation to depreciation, amortization and provisions	1,013	241
Other expenses	181	160
TOTAL OPERATING EXPENSES	**30,639**	**24,163**
OPERATING INCOME	**-3,384**	**694**
Financial income	190	63
Financial expenses	16	139
NET FINANCIAL INCOME	**173**	**-76**
PROFIT/(LOSS) BEFORE TAX	**-3,211**	**618**
Extraordinary income	370	669
Extraordinary expenses	23	272
EXTRAORDINARY PROFIT (LOSS)	**347**	**397**
Tax Income	-2,989	-4,486
PROFIT/ (LOSS) FOR THE PERIOD	**125**	**5,501**

18.1.6 Consolidated financial statements for the fiscal year ended on December 31, 2019

Consolidated statement of financial position

(Amount in €K)

ASSETS	Note	12/31/2019	12/31/2018
NON-CURRENT ASSETS			
R&D expenses acquired	1.1	52,600	52,600
Tangible assets	1.2	1,009	904
Rights of use *	1.3	1,692	-
Financial assets	1.4	287	103
Deferred tax assets	10.1	283	272
TOTAL NON-CURRENT ASSETS		***55,871***	***53,879***
CURRENT ASSETS			
Trade receivables	2.2	747	2,253
Other current assets	2.3	6,474	8,338
Current financial assets	2.1	-	2,861
Cash and cash equivalents	2.1	25,842	9,573
TOTAL CURRENT ASSETS		***33,062***	***23,024***
TOTAL ASSETS		**88,933**	**76,903**

EQUITY & LIABILITIES		12/31/2019	12/31/2018
SHAREHOLDERS' EQUITY			
Stated capital	4.1	3,001	2,963
Share premium	4.1	21,670	21,708
Merger premium	4.1	26,827	26,827
Treasury stock	4.4	(148)	(168)
Reserves and retained earnings		11,838	4,934
Consolidated result		(4,652)	5,490
TOTAL SHAREHOLDERS' EQUITY		***58,536***	***61,754***
NON-CURRENT DEBTS			
Non-current financial liabilities	3.5	9,211	3,832
Long-term lease liabilities *	3.5	1,413	
Deferred tax liabilities	10.2	5,066	2,010
Non-current provisions	7	377	233
TOTAL NON-CURRENT DEBTS		***16,067***	***6,074***
CURRENT DEBTS			
Current financial liabilities	3.5	548	628
Short-term lease liabilities *	3.5	309	
Trade payables	3.6.1	6,918	6,555
Current tax liabilities	3.6.2	20	86
Other payables	3.6.2	1,723	1,231
Other debts and accruals	3.6.3	4,812	575
TOTAL CURRENT DEBTS		***14,330***	***9,075***
TOTAL SHAREHOLDER'S EQUITY AND LIABILITIES		**88,933**	**76,903**

*** IFRS 16 was applied by following the modified retrospective approach and, as a result, the opening statement of financial position was not amended.**

Statement of comprehensive income

In €K	Note	12/31/2019	12/31/2018
Turnover	8.1	25,952	24,456
Other operating revenues	8.1	0	0
OPERATING INCOME - RECURRING		**25,952**	**24,456**
R&D expenses	8.2	(21,655)	(15,057)
Overhead expenses	8.3	(3,898)	(3,448)
Expenses related to share-based payments	8.4	(1,868)	(977)
OPERATING PROFIT/LOSS - RECURRING		**(1,469)**	**4,974**
Other operating income - Badwill	8.6	0	0
Other operating expenses	8.6	(2)	(127)
OPERATING RESULT		**(1,472)**	**4,847**
Financial income	9	221	86
Financial expenses	9	(213)	(226)
PROFIT/LOSS BEFORE TAX		**(1,464)**	**4,707**
INCOME TAX	10.3	**(3,188)**	**783**
CONSOLIDATED NET INCOME *		**(4,652)**	**5,490**
Of which consolidated net result attributable to shareholders		***(4,652)***	***5,490***
Net earnings attributable to shareholders			
Weighted average number of shares outstanding	12	14,892,496	14,634,760
- Basic earnings per share (€/share)		(0.31)	0.38
- Diluted earnings per share (€/share)		(0.31)	0.35

In €K	12/31/2019	12/31/2018
NET RESULT	**(4,652)**	**5,490**
Amounts to be recycled in the income statement:		
Unrealized gains on securities available for sale, net of tax		
Currency conversion difference	(43)	(42)
Amounts not to be recycled in the income statement:		
Actuarial gains and losses on post-employment benefits	(37)	12
Other comprehensive income in the period	**(80)**	**(30)**
CONSOLIDATED PROFIT/LOSS *	**(4,732)**	**5,460**

*** IFRS 16 was applied by following the modified retrospective approach and, as a result, the 2018 consolidated profit/(loss) was not amended.**

Statement of changes in consolidated equity

In €k	Capital of consolidated entities	Additional paid-in capital	Premium related to capital for EFFIMUNE	Cumulative impact of exchange rate fluctuations	Treasury shares	Reserves and consolidated profit/(loss)	Total consolidated shareholder's equity
CONSOLIDATED SHAREHOLDERS' EQUITY 12/31/2017	**2,898**	**21,743**	**26,855**	**(15)**	**(191)**	**4,157**	**55,447**
Consolidated profit (loss) for the period						5,490	5,490
Actuarial gains and losses						12	12
Foreign exchange gains and losses				(42)			(42)
Consolidated comprehensive profit/(loss)	**0**	**0**	**0**	**(42)**	**0**	**5,502**	**5,460**
Changes in capital – Effimune share subscription warrants	23						23
Changes in capital - Free Share Allocation	43	(43)					0
Impact of change in deferred tax rate on tax savings on merger costs			(28)			28	0
Subscription of share subscription warrants		7					7
Deferred taxes on actuarial gains and losses (IAS 19)						(1)	(1)
Share-based payments						845	845
Transaction on Treasury shares					23	(49)	(26)
CONSOLIDATED SHAREHOLDERS' EQUITY AS OF 12/31/2018	**2,963**	**21,708**	**26,827**	**(57)**	**(168)**	**10,481**	**61,755**
Consolidated profit/(loss) for the period						(4,652)	(4,652)
Actuarial gain or loss (net of tax)						(37)	(37)
Foreign exchange gains and losses				(43)			(43)
Consolidated comprehensive profit/(loss)	**0**	**0**	**0**	**(43)**	**0**	**(4,689)**	**(4,732)**
Changes in capital - Free Share Allocation	38	(38)					0
Share-based payments						1,511	1,511
Transaction on Treasury shares					20	(17)	3
CONSOLIDATED SHAREHOLDERS' EQUITY AS OF 12/31/2019	**3,001**	**21,670**	**26,827**	**(100)**	**(148)**	**7,286**	**58,536**

*** IFRS 16 was applied by following the modified retrospective approach and, as a result, the opening equity was not amended.**

Statement of cash flows

	In €K	Note	2019	2018
	Consolidated net income *		**-4,652**	**5,490**
+/-	Net depreciation, amortization and provisions	1.2, 7	323	116
+/-	Amortization of rights of use	1.3	251	0
+/-	Calculated revenues and expenses linked to stock options	8.4	1,511	845
+/-	Other calculated revenues and expenses		0	0
	Cash flow after net borrowing cost and taxes		**-2,568**	**6,450**
+	Net borrowing cost	5	30	0
+/-	Income tax expense (including deferred taxes)	10.3	3,188	-783
	Cash flow from operations before net borrowing cost and taxes (A)		**650**	**5,668**
-	Taxes paid		-70	0
+/-	Change in W.C.R. **(2)**		8,555	-4,590
	NET CASH FLOW FROM OPERATING ACTIVITIES (D)		**9,135**	**1,077**
-	Purchases of property, plant & equipment and intangible assets	1.2	-336	-593
+/-	Change in UCITS classified as current financial assets	2.1	2,861	22
+	Proceeds from disposal of non-current financial assets (non-consolidated shares)	1.4	34	40
+/-	Changes in loans and advances	1.4	-184	-27
	NET CASH FLOWS FROM INVESTMENT ACTIVITIES (E)		**2,375**	**-558**
+	Capital increase (including issue premium)	4.1	0	23
+/-	Acquisition and disposal of Treasury shares	4.4	0	-67
+	Subscription of share subscription	4.3	0	7
+	Proceeds from new borrowings	5	5,628	0
-	Loan repayments	5	-455	-485
-	Lease liability repayments	5	-251	0
-	Net interest paid	5	-164	-71
+/-	Other cash flow items from financing activities		0	0
	NET CASH FLOWS FROM FINANCING ACTIVITIES (F)		**4,759**	**-592**
+/-	Impact of changes in foreign exchange rates (G)		0	0
	CHANGE IN NET CASH POSITION H = (D + E + F + G)		**16,269**	**-73**
	OPENING CASH BALANCE (I)	2.1	9,573	9,646
	CLOSING CASH BALANCE (J)	2.1	25,842	9,573
	DIFFERENCE: H-(J-I)		0	0

(1) €1,511,000 in valuation costs for free shares and founders' warrants awarded at December 31, 2019.

(2) The change in working capital requirement was primarily due to the following:

- *decrease in trade receivables amounting to €1,506,000*
- *decrease in other current assets amounting to €1,864,000*
- *increase in trade payables amounting to €363,000*
- *increase in tax and employee-related payables amounting to €493,000*
- *increase in other payables amounting to €4,237,000*

(3) This line relates to the application of IFRS 16 and corresponds to the repayment of lease liabilities amounting to €251,000

At closing, the Group's available cash was as follows:

In €k	2019	2018
Cash and cash equivalents according to IAS7	25,842	9,573
Current financial assets not meeting IAS 7 criteria	0	2,861
AVAILABLE CASH	**25,842**	**12,433**

Notes to the consolidated financial statements

1 - INFORMATION ON THE COMPANY PRESENTING THE FINANCIAL STATEMENTS

OSE Immunotherapeutics is a company created from the merger between OSE Pharma and Effimune on May 31, 2016. Its registered office is in Nantes. Teams are based in Nantes and Paris.

OSE Immunotherapeutics is a biotechnology company focused on developing innovative immunotherapies acting on activator or suppressor cells to stimulate or inhibit the immune response for immuno-oncology and autoimmune diseases and transplantation. It has a portfolio of innovative clinical and preclinical products and agreements with international pharmaceutical groups.

OPI, a wholly owned subsidiary of OSE Immunotherapeutics, is a company governed by Swiss law, founded in February 2012, which owns the rights to Tedopi® (OSE-2101), which it acquired from Biotech Synergy (US) in April 2012. OPI grants OSE Immunotherapeutics the license to Tedopi® (OSE-2101).

OSE Immunotherapeutics Inc. is a company governed by US law, founded in April 2017, in order to serve as a point of support for international scientific collaboration.

2 - HIGHLIGHTS

2.1 Servier exercises Option 1 for OSE-127

In February 2019, Servier exercised the first option under the worldwide licensing agreement for the continuation of the clinical development and potential marketing of OSE-127 in autoimmune diseases.

Under the terms of the licensing agreement, exercise of this first option triggers the payment, by Servier, of a €10 million (excluding tax) milestone payment, received on March 5, 2019, by OSE Immunotherapeutics, after validation of a previously defined development stage.

2.2 Positive results from the Phase 1 clinical trial on OSE-127

In December 2019, the Company announced that the results of the Phase 1 clinical trial of OSE-127 were positive. The results showed a good safety profile and tolerability of the product. All pharmacokinetic and pharmacodynamic parameters are consistent and demonstrate a dose-proportionality across the several dose-levels up to 10 mg/kg. These findings will help determine the dosing and administration schedule for the two planned Phase 2 trials in ulcerative colitis and Sjögren's syndrome. Both trial initiations are expected in 2020.

2.3 Authorization of the Phase 1 trial for OSE-172 and first patient treated

In March 2019, the Company received authorization from the French Federal Agency for Medicines and Health Products (AFMPS) and the French National Agency for the Safety of Medicines and Health Products (ANSM), to launch a Phase 1 clinical trial on the checkpoint inhibitor, OSE-172/BI 765063, in patients with advanced solid tumors, used as a monotherapy or in combination with a monoclonal antibody and PD-1 antagonist, and Boehringer Ingelheim's BI 754091. The first patient was dosed in June 2019. Milestone payments totaling €15 million, excluding tax, were received in the first half of 2019, after this clinical trial was launched.

2.4 Continuation of the Phase 3 clinical trial on Tedopi® "Atalante 1" in advanced lung cancer post checkpoint inhibitor treatment failure, according to the IDMC recommendation

In June 2019, at the end of the clinical data (including safety data) review, the Independent Data Monitoring Committee (IDMC) recommended that the Atalante 1 trial should continue without any modifications. This pivotal Phase 3 clinical trial evaluates Tedopi® in patients with non-small cell lung cancer (NSCLC), post checkpoint inhibitor treatment failure (PD-1/PD-L1), in comparison with chemotherapy.

2.5 Licensing agreement for Tedopi®, in Korea with Chong Kun Dang Pharmaceutical Corporation

In November 2019, the Company signed a licensing agreement with Chong Kun Dang (CKD) Pharmaceutical Corporation for the potential registration and marketing of Tedopi® in Korea.

According to the terms of the agreement, the Company will receive milestone payments amounting to €4.3 million, including €1.2 million on signature and achievement of a short-term milestone, and royalties on product sales as well as a margin based on the transfer price, of just under 30%. The deal applies specifically to development and licensing of Tedopi® in the Korean market which accounts for approximately 1% of the total global oncology market.

2.6 Release of €880,000 after reaching key Milestone 4 of the EFFIMab program

Following the effective launch of the Phase 1 trial on OSE-127 and fulfillment of Bpi France's requirements, in April 2019, the Company received a repayable advance of €820,000 and a grant of €60,000.

2.7 Departure of the Nantes CHU from the EFFIMab consortium

In July 2019, the Nantes CHU informed the Company of its intention to withdraw from the EFFIMab (OSE-127-related research program in partnership with Servier) consortium as sponsor of the phase II ulcerative colitis trial.

Following this announcement, the Company launched a call to tender for different subcontractors capable of conducting this phase II trial, OSE by then being the trial sponsor.

2.8 Release of €5.4 million after reaching key milestone 1 of the EFFI-CLIN program

Following the approval of regulatory preclinical toxicology studies on OSE-172 and fulfillment of Bpi France's requirements, in September 2019, the Company received a repayable advance of €4.8 million and a grant of €647,000.

2.9 French National Research Agency (ANR) funding

Following the evaluation process of the projects submitted as part of the "AAPG 2019" call for projects, the ANR selected the DC-TARGET project and awarded it funding amounting to €800,000. OSE can claim funding of €279,000. The objective is to identify new targets of interest expressed by the myeloid cell family to identify innovative immunotherapies in cancer research.

2.10 Allocation and issue of free shares

During the year, the Company allocated 470,225 free shares (see Section 4-2 of the consolidated financial statements).

2.11 Capital increase

Over the year, the Company carried out capital increases, detailed as follows:

- on June 26, 2019: €30,000 capital increase through the issue of 150,000 new shares.

- on December 10, 2019: €7,742.40 capital increase through the issue of 38,712 new shares.

Following these transactions, the share capital stood at €3,001,144.80.

2.12 2018 Research Tax Credit (CIR) payment received in July 2019

On July 11, 2019, the Company received a 2018 Research tax credit (CIR) of €4,486,000.

BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS

The consolidated financial statements of OSE Immunotherapeutics, the consolidating entity, and its subsidiaries, OPI and OSE Immunotherapeutics Inc ("the Group"), approved by the Board of Directors on March 26, 2020, are presented in thousands of euro (000) and were prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union.

The Board of Directors adopted the going concern assumption, in view of the following:

- Cash and cash equivalents available at December 31, 2019, stood at €25,842,000 and did not include the CIR 31.12.2019 provision totaling €3,059,000.

These capital amounts will permit the Company to finance its development costs for the coming year, enabling it to fund the continuation of its clinical and preclinical programs (Tedopi®; FR104; OSE-127, whose development is partially covered until Phase 2 under the license option agreement with Servier and the EFFIMab consortium; OSE-172, whose development is covered as part of the collaboration and licensing agreement with Boehringer Ingelheim and by the EFFI-CLIN consortium, responsible for several development steps and a clinical program scheduled up to Phase 2.

Please note that:

- the €10 million milestone payment made by Servier to OSE Immunotherapeutics was triggered by Servier's exercise of Option 1 in early February 2019.

- two milestone payments, totaling €15 million, made by Boehringer Ingelheim to OSE Immunotherapeutics, were also triggered by the authorization, in March 2019, of the clinical trial and administration of the product to the first patient on the trial.

- the €700,000 upfront payment made by CKD Pharmaceutical Corporation was received, following signature of a licensing agreement in November 2019.

Lastly, as a listed company, and as authorized by the last General Shareholders' Meeting, the Company has the option, if needed, to use the financial instruments to which listed companies have access.

REPORTING DATE

Consolidated entities' reporting date is December 31 which is the Group's reporting date.

STANDARDS AND INTERPRETATIONS APPLICABLE FROM JANUARY 1, 2019

The Group applied the following standards and interpretations adopted by the European Union:

- Amendments to IFRS 9 - Financial instruments: Prepayment features with negative remuneration.
- Amendments to IAS 28 - Investments in associates and joint ventures: Long-term interests in associates and joint ventures.
- Amendments to IAS 19 – Employee benefits: Plan amendment, curtailment or settlement.
- Amendments to IAS 12 – Income taxes.
- IFRIC 23 – Uncertainty over income tax treatments: applied retrospectively by OSE Immunotherapeutics on January 1, 2019, without restating comparatives.
  In terms of assessing fiscal uncertainties, the Company did not identify any risks on tax positions taken and, as a result, no liability was recognized.
- IFRS 16 – Leases (amendments and associated clarifications, subject to their adoption by the European Union, are applicable on the same date): this standard amends the recognition of leases and sale and leaseback transactions and provides for new disclosure requirements in appendices.
- IFRIC update of November 26, 2019 - clarification on IFRS 16 regarding the determination of cancellable or renewable lease terms, by considering the useful life compared with the lease term. The Company took this clarification into consideration when analyzing and valuing its leases.

OSE Immunotherapeutics applied IFRS 16 from January 1, 2019, using the transition method known as the "modified retrospective" approach where equity appearing in the opening statement of financial position at January 1, 2019, was adjusted without restating comparative periods.

The application of IFRS 16 led to a future lease payment liability and a right-of-use asset being recognized in the statement of financial position for most of these leases. IFRS 16 also resulted in the following presentation changes:

- In the statement of financial position: the Group now shows right of use, long-term lease liabilities and short-term lease liabilities on different lines;
- In the income statement: lease expense previously shown under operating income is now presented, in part, as depreciation and amortization (under Operating result) and, in part, as financial expense.

Statement of cash flows: lease payments previously presented as cash flows from operating activities are now presented as cash flows from financing activities for the amount relating to the repayment of lease liabilities.

The Company opted to exempt leases of low-value assets (under €5,000) from recognition in the statement of financial position. Lease payments were recognized as expenses on a straight line basis over the lease term.

In terms of lease valuation, lease payments were discounted at a marginal borrowing rate of interest determined on the basis of the entity's own credit risk and the lease characteristics.

The marginal borrowing rate of interest used is a risk-free rate adjusted by a margin that is representative of the risk specific to each Group entity (2%).

Impact of the application of IFRS 16 on consolidated financial statements

Reconciliation of off-statement of financial position commitments with IFRS 16 lease liabilities at December 31, 2019

Operating lease commitments as at 12/31/2018	**565**
Effect of discounting	- 28
Recognized lease liabilities as at 1/1/2019	**537**
Of which:	
Current debts	101
Non-current debts	436

Consolidated statement of financial position restated at December 31, 2018

ASSETS	12/31/2018 published	Impact of IFRS 16	12/31/2018 restated
NON-CURRENT ASSETS			
R&D expenses acquired	52600		52,600
Tangible assets	904	537	1,441
Financial assets	103		103
Deferred tax assets	272		272
TOTAL NON-CURRENT ASSETS	***53,879***		***54,416***
CURRENT ASSETS			
Trade receivables	2,253		2,253
Other current assets	3,834		3,834
Current tax receivables	4,504		4,504
Current financial assets	2,861		2,861
Cash and cash equivalents	9,573		9,573
TOTAL CURRENT ASSETS	***23,024***	***0***	***23,024***
TOTAL ASSETS	**76,903**	**537**	**77,441**

EQUITY & LIABILITIES			
SHAREHOLDERS' EQUITY			
Stated capital	2,963		2,963
Share premium	21,708		21,708
Merger premium	26,827		26,827
Treasury stock	(168)		(168)
Reserves and retained earnings	4,934		4,934
Consolidated result	5,490		5,490
TOTAL SHAREHOLDERS' EQUITY	***61,754***	***0***	***61,754***
NON-CURRENT DEBTS			
Non-current financial liabilities	3,382	436	4,269
Deferred tax liabilities	2,010		2,010
Non-current provisions	233		233
TOTAL NON-CURRENT DEBTS	***6,074***	***436***	***6,511***
CURRENT DEBTS			
Current financial liabilities	628	101	729
Trade payables	6,555		6,555
Current tax liabilities	86		86
Other payables	1,231		1,231
Other debts and accruals	575		575
TOTAL CURRENT DEBTS	***9,075***	***101***	***9,176***
TOTAL SHAREHOLDER'S EQUITY AND LIABILITIES	**76,903**	**537**	**77,441**

Impact on the statement of comprehensive income at December 31, 2018

In €K	2018 published	Impact of IFRS 16	2018 restated
R&D expenses	(15,057)		(15,057)
Overhead expenses	(3,448)	(3)	(3,451)
Expenses related to share-based payments	(977)		(977)
OPERATING PROFIT/LOSS - RECURRING	**4,974**	**(3)**	**4,971**
Financial income	86		86
Financial expenses	(226)	(9)	(235)
PROFIT/(LOSS) BEFORE TAX	**4,707**	**(9)**	**4,698**
INCOME TAX	**783**	**0**	**783**
CONSOLIDATED NET RESULT	**5,490**	**(12)**	**5,478**

Impact on the statement of comprehensive income at December 31, 2019

In €k	2019 Not restated	IFRS 16	2019 published	Change
Overhead expenses	(3,901)	3	(3,898)	(3)
OPERATING PROFIT/LOSS - RECURRING	**(550)**	**3**	**(547)**	**(3)**
Financial expenses	(180)	(33)	(213)	33
PROFIT/(LOSS) BEFORE TAX	**(509)**	**(33)**	**(542)**	**33**
INCOME TAX	**(3,191)**	**3**	**(3,188)**	**(3)**
CONSOLIDATED NET RESULT	**(4,625)**	**(27)**	**(4,652)**	**27**

Impact on the statement of cash flows at December 31, 2018

In €K	2018 published	Impact of IFRS 16	2018 restated
Net result	**5,490**	**0**	**5,490**
Net depreciation, amortization and provisions	116	81	197
Change in W.C.R.	(4,590)		(4,590)
NET CASH FLOW FROM OPERATING ACTIVITIES	**1,077**	**81**	**1,158**
Loan repayments	(485)		(485)
Lease liability repayments		(72)	(72)
Net interest paid	(71)	(9)	(80)
NET CASH FLOWS FROM FINANCING ACTIVITIES	**(592)**	**(81)**	**(673)**
Impact of changes in foreign exchange rates (G)	0		0
CHANGE IN NET CASH FLOW	**(73)**		**(73)**

STANDARDS, AMENDMENTS AND INTERPRETATIONS ADOPTED BY THE EUROPEAN UNION AND APPLICABLE TO ANNUAL PERIODS BEGINNING ON OR AFTER JANUARY 1, 2020, AND NOT EARLY ADOPTED BY THE COMPANY

The Company did not early adopt other standards, amendments, revisions and interpretations of published standards effective for annual periods beginning on or after January 1, 2020. Management does not expect these standards to have a material impact on the Company's financial statements.

This involves the following standards, amendments, revisions and interpretations:

- Amendments to IAS 1 – Presentation of financial statements
- Amendments to IFRS 3 – Business combinations
- Amendments to IAS 8 – Accounting policies, changes in accounting estimates and errors

KEY ACCOUNTING ESTIMATES AND JUDGMENTS

The preparation of financial statements in accordance with IFRS requires judgments, estimates and assumptions to be made which affect the amounts and disclosures that appear in the financial statements. Actual results may prove to be very different from these estimates depending on the various assumptions or conditions and, where applicable, a sensitivity analysis may be carried out if the difference is significant.

Estimates and assumptions

The main items in question related to share-based payments, deferred taxes, intangible assets arising from the merger, revenue and provisions for liabilities and charges.

- **Valuation of free share allocation plans (AGA), share subscription warrant plans (BSA) and founders' warrant allocation plans (BSPCE).**

The fair value of the AGA, BSA and BSCPE awarded is measured on the basis of a valuation model that takes into consideration the probability of the plans' vesting requirements being met.

The fair value of the share subscription warrants and Company founders' warrants granted is measured on the basis of actuarial valuation models. These models require the Company to use certain calculation assumptions such as the expected volatility of the share price (see Note 4.3).

- **Recognition of corporate tax**

The Company is liable to pay income tax in France for its business activities.

Deferred tax assets mainly relate to tax loss carryforwards which are only recognized to the extent that it is probable that future taxable profits will be available. The Group must use its judgment to determine the probability of the existence of future taxable profits.

These deferred tax assets are recognized within the limit of tax liabilities recognized in the form of deferred tax liabilities, payment of which may be avoided by the Company, and the thresholds provided for by tax legislation. (see Note 10).

- **Revenue recognition**

Within the context of a sale or licensing agreement, the Company may defer recognition of a portion of revenue, irrespective of the payments received (see Note 8.1). Determining the duration of this deferral requires the use of estimates.

- **Intangible assets arising from the acquisition of Effimune**

The fair value of intangible assets associated with the FR104 and OSE-127 molecules was estimated on the basis of business plans reflecting the best management estimate. (see Note 1.1).

- **Estimation and recognition of R&D expenses provisioned under trade payables**

R&D expenses are systematically recognized as expenses as the research programs progress. Based on the information supplied by service providers or by work schedules provided for in contracts, on the reporting date, Management determines the progress of each of the research services on a pro rata basis and, where necessary, settles the expenses for the fiscal year.

FINANCIAL STATEMENTS AND TRANSACTIONS IN FOREIGN CURRENCIES

Each consolidated entity decides on the operating currency in line with its own economic environment and the conditions under which it conducts its business transactions.

Financial statements in foreign currencies

The financial statements of entities whose operating currency differs from the presentation currency are converted using the closing rate method. This conversion is as follows:

Assets and liabilities are converted into the presentation currency, i.e. into euros at closing rates.

Income and expenses are converted using the average rate for the period. The Group used an annual average, considering this to be an acceptable approximation of the conversion applicable on the date of each transaction.

Foreign exchange gains and losses arising from this conversion are recognized in other comprehensive income under “foreign exchange gains and losses.”

Transactions in foreign currencies

Transactions in foreign currencies are converted into the presentation currency at the current rate on the transaction date. Monetary items are converted at the foreign exchange rate on the annual reporting date and the effects of these revaluations are recognized in profit or loss for the period.

INTANGIBLE ASSETS

Intangible assets are recognized in the statement of financial position when they satisfy IAS 38 recognition criteria.

Intangible assets acquired are recognized at their acquisition cost, on the assumption that recognition criteria (reliable valuation and probability that economic benefits will be generated by the asset) have been met.

Research & Development expenses

Research expenses are systematically recognized as expenses.

Under IAS 38, development expenses are only recognized as intangible assets if all the following criteria have been met:

- Technical feasibility needed to complete the development project;
- Company's intention to complete the project and use the asset;
- Ability to use the intangible asset;
- Demonstration of the probability of future economic benefits attached to the asset;
- Availability of technical, financial and other resources to complete the project; and
- Reliable valuation of development expenses.

Given the uncertainty surrounding the technical feasibility of the completion of the research in progress, the Company's development expenses do not currently meet the IAS 38 criteria and are therefore recognized as expenses over the period during which the research commitment was made.

Acquired R&D projects are recognized as intangible assets at their fair value, even in the absence of marketing authorization. These assets fall into two categories:

They are classed as assets with a defined useful life when they generate economic benefits. In this case, their fair value as recognized in the statement of financial position less, where applicable, the remaining value, is amortized over the period of use expected by the Company.

Other cases include non-current assets in development which are not amortized but are subject to annual impairment tests.

Patents

Costs relating to filing existing patents, incurred by the Company until said patents are obtained, are recognized as expenses, in line with the position taken for recognizing R&D expenses.

TESTING NON-CURRENT ASSETS FOR IMPAIRMENT

Intangible assets and property, plant and equipment with a finite life are tested for impairment when circumstances dictate that the recoverability of their carrying amount has been put into doubt and this test is conducted at least once a year on the reporting date (see Note 4.1.1). An impairment is recognized for the difference between the carrying amount and the recoverable amount of the asset.

The recoverable amount of an asset is its fair value less selling costs or, if higher, its value in use.

FINANCIAL ASSETS

Financial assets within the scope of IFRS 9 are classed and measured in three categories:

- Amortized cost;
- Fair value through other comprehensive income;
- Fair value through profit or loss.

Upon initial recognition, financial assets are measured at their fair value plus, in the case of investments which are not recognized at fair value through profit or loss, any directly attributable transaction costs.

The Company determines the classification of its financial assets upon initial recognition and, once authorized and appropriated, reviews this classification at each annual reporting date.

NON-CURRENT FINANCIAL ASSETS

Non-current financial assets include long-term financial assets, in particular:

- Cash SICAVs (money market funds);
- Loans and receivables;
- And the "cash portion" of the liquidity contract associated with share buybacks.

Loans and receivables;

This category of non-current financial assets includes advances and collateral deposits pledged to third parties. Repayable advances and collateral deposits are non-derivative financial assets. They are recognized at amortized cost using the effective interest rate method in accordance with IFRS 9.

Loans and receivables are impaired when a loss event occurs, their carrying amount reduced to the sum of the cash flows expected.

CURRENT FINANCIAL ASSETS

Current financial assets include trade and other receivables, other current assets, cash and cash equivalents and current financial instruments.

These assets are recognized by type, based on the following rules.

Trade receivables

Trade receivables are initially recorded and recognized at the fair value of the consideration received or receivable. Where applicable, receivables are impaired to take recovery risk into consideration.

Current financial instruments

The Company classes its investments in current financial instruments in one of these three categories:

- **Investments held to maturity recorded at amortized cost**

The Company did not hold any of these types of investment over the period.

- **Assets at fair value through profit or loss**

They are held-for-trading assets, i.e. assets acquired by the Company intended for short-term sale. The objective is to realize a capital gain.

These assets are part of a portfolio of financial instruments managed together and for which there is a practice of short-term selling. They are measured at fair value and changes in fair value are recognized through profit or loss.

These financial assets are recognized at their fair value without deducting the transaction costs that may be incurred when they are sold. Realized or unrealized gains or losses, associated with the change in fair value of these assets are recognized through profit or loss under Income from cash or cash equivalents.

- **Financial assets at fair value through other comprehensive income**

The Company did not hold any of these types of investment over the period.

Cash and cash equivalents

Cash equivalents are highly liquid, short-term investments, which are easily convertible into a known amount of cash, and which are subject to negligible risk of change of value.

Cash and cash equivalents include cash at bank and in hand, as well as cash investments in transferable securities or term deposits maturing in less than three months and with a very low sensitivity to interest rate risk.

When preparing the statement of cash flows, cash and cash equivalents comprise bank sight deposits, highly liquid short-term investments, net of bank overdrafts. In the statement of financial position, bank overdrafts are shown as borrowings under financial liabilities.

CONSOLIDATED SHAREHOLDERS' EQUITY

Consolidated shareholders' equity is the shareholders' equity of consolidated group entities.

Common and preference shares are classed as shareholders' equity. Capital transaction costs directly attributable to the issue of new shares or options are recognized in equity as a deduction from the proceeds of the issue.

Transactions with non-controlling shareholders

Transactions with shareholders holding non-controlling interests in Group entities which do not modify the nature of the control over the entity are recognized as capital transactions, directly through equity.

Transaction costs incurred in this way are recognized in a similar fashion.

TREASURY SHARES

The acquisition cost of the OSE Immunotherapeutics shares held by the Group are recognized as a deduction from consolidated equity.

Since April 8, 2015, for a two-year period, automatically renewable for subsequent one-year periods, OSE Immunotherapeutics has charged an organization with implementing a liquidity contract that complies with the Ethics charter drafted by the French Association of Investment Firms (Association française des entreprises d'investissement) and approved by the AMF in a decision dated March 21, 2011.

At December 31, 2019, OSE Immunotherapeutics securities held through the liquidity account, as well as the profits or losses generated over the fiscal year on transactions conducted by the liquidity contract manager were reclassified as shareholders' equity. The cash portion of the liquidity account is classed under "Other financial assets."

SHARE-BASED PAYMENTS

The Group introduced compensation plans paid out in equity instruments in the form of share subscription warrants, Company founders' warrants or free shares awarded to employees, management, consultants, service providers and members of the Board of Directors.

In application of IFRS 2, for share-based payment transactions settled in equity instruments, the Company measures the related remuneration, at the fair value of the goods and services received, unless such fair value cannot be reliably estimated.

In order to apply these last provisions, the amount of benefits granted is measured using the Bjerksund & Stensland model and is recognized under expenses, over the period in which the rights to benefit from the equity instruments vest, offset by increases in equity.

The fair value of the share subscription warrants granted is determined by applying the option-pricing model described in Note 4.3.

The fair value of the free shares awarded is measured on the basis of a valuation model that takes into consideration the probability of the plans' vesting requirements being met.

FINANCIAL LIABILITIES

A financial liability is defined as a contractual obligation to deliver cash or another financial asset to another entity. A financial instrument can be classed as a financial liability (debt, derivative financial instrument) or an equity instrument.

The acquisition price of a financial liability is the amount actually paid, net of transaction costs (unless measured at fair value through profit or loss) and net of any redemption premiums.

There are three categories of financial liabilities:

- **Liabilities measured at amortized cost**

These are trade and other payables, tax and social liabilities, loans and financial liabilities such as BPI France (formerly OSEO) repayable advances and P2RI loans. They are recognized at amortized cost using the effective interest rate method.

The portion of financial liabilities maturing in less than one year is shown under "Current financial liabilities."

- **Liabilities measured at fair value through profit or loss**

The Company did not hold any of these types of investment over the period.

- **Liabilities measured optionally at fair value under the through profit or loss**

The Company did not hold any of these types of investment over the period.

PUBLIC FUNDING

The Company received public funding in the form of conditional advances and grants. Details of this funding are supplied in Note 5.

Public grants are recognized as assets where there is reasonable assurance that:

- The Company will comply with the conditions attached to the grants; and
- Grants will be received.

Operating subsidies that offset the expenses incurred by the Group are recognized in the income statement, less R&D expenses, as the costs are incurred for the research programs in question.

Interest-free conditional advances are intended to fund research programs. They are repayable, in full, if the project is a success and, in part, if the program fails.

Interest-free repayable advances are classed as financial liabilities to be measured at amortized cost at each reporting date, by discounting all future cash payments at the prevailing market rate (the 10-year OAT in the case of advances recorded).

The difference between the current value of the advance at the market rate and the amount of cash received from the public body constitutes a grant within the meaning of IAS 20. This difference must be recognized as an income-related grant and recognized in the income statement, less R&D expenses, as the costs are incurred for the research programs in question.

These advances are recognized as non-current financial liabilities and current financial liabilities depending on their maturity. In the event of a marked failure, the debt waiver granted is recorded as a subsidy.

PROVISIONS FOR LIABILITIES AND CHARGES

Provisions for liabilities and charges are commitments arising from disputes and other risks, with uncertain timing and amounts, that the Company may face in the course of its activities.

A provision is recognized when the Company has a legal or constructive obligation to a third party arising from a past event and when it is probable or certain that this will result in an outflow of funds to said third party, with no equivalent consideration expected from the latter, and when the future outflows of liquidity can be reliably estimated.

The amount recognized as a provision is the best estimate of the expenditure needed to discharge the obligation, discounted on the reporting date.

Pension-related commitments

On leaving the Company, employees receive a pension in accordance with legal requirements and the applicable collective agreement.

The valuation and accounting methods used by the Group are those set out by IAS 19 "Employee benefits."

In accordance with this standard:

- Expenses relating to defined-contribution schemes are recognized as the expenses are incurred.
- Commitments for each defined-benefit scheme are determined using the projected unit credit method. These calculations are based on assumptions relating to mortality, staff turnover and projections of wage increases. They take the economic situation in individual countries into consideration.
- Actuarial gains and losses are recognized as other comprehensive income.

REVENUE

To date, the Company's revenue is mainly generated by licensing agreements with pharmaceutical companies. Generally speaking, these contracts are made up of different components, such as amounts billable on signing and amounts billable when certain pre-defined development targets have been met, one-off funding payments to finance R&D expenses and the assignment of royalties on future product sales. Royalties on future product sales are a percentage of the net sales generated by the partner.

Amounts billable on signing the contract, for the assignment of a molecule's intellectual property rights, are immediately recognized as revenue when the contract comes into force where the amounts are non-refundable and the Company has no future development commitments.

Revenue related to development services carried out on behalf of the client acquiring the intellectual property rights, are initially recognized as deferred income and spread over the estimated length of the Company's involvement in future development, which is subject to periodic reviews.

Amounts billable once certain pre-defined development targets have been met are recorded as revenue, in full, once these targets have actually been met, provided that the Company has no further contractual obligation to provide development services on behalf of the client acquiring the intellectual property rights, after the target has been met. On the downside, all or some of the amounts billed when a development target is met, may be spread over the estimated duration of the Company's involvement in future development, which is subject to periodic reviews.

LEASES

OSE Immunotherapeutics has leases (as a tenant) mainly for offices and other equipment.

Under operating leases, within the meaning of IFRS 16, the Group recognizes right of use assets and lease liabilities for all these leases, apart from short-term leases (12 months of less) and those relating to low-value assets.

Payments under these leases not recognized in the statement of financial position are recognized as operating expenses on a straight line basis over the lease term.

At the start of the lease, the liability for future lease payments is discounted using a marginal borrowing rate corresponding to a risk-free rate adjusted by a margin that is representative of the risk specific to each Group entity.

As lease payments are spread over the lease term, OSE IMMUNOTHERAPEUTICS applies a discount rate based on the duration of these payments.

Payments taken into consideration when assessing liability for future lease payments excludes non-lease components and includes fixed amounts that OSE Immunotherapeutics expects to pay to the lessor over the probable lease term.

Once the lease has commenced, the liability for future lease payments reduces as lease payments are made and increases as interest is added. The liability is revalued, where applicable, to reflect a new assessment or change to future lease payments.

Once the lease has commenced, the right of use asset, initially valued at cost, is amortized on a straight line basis over the lease term and, where applicable, is subject to an impairment test.

INCOME TAX

Income tax is the total amount of tax payable by the different Group companies, corrected for deferred tax.

Deferred tax is recognized using the balance sheet approach, in accordance with IAS 12, for all temporary differences arising from the difference between the tax base and the carrying amount of assets and liabilities appearing in the financial statements (apart from, for example, goodwill, etc.). They are not discounted.

Deferred tax assets are recognized to the extent that it is probable that future profits will be sufficient to absorb tax loss carryforwards or up to the amount of deferred tax liabilities, within the limit of current thresholds.

RESEARCH TAX CREDIT

Research tax credits are granted by the French Government to companies to encourage them to carry out technical or scientific research. Companies that can prove that they have incurred expenses that meet the required criteria receive a tax credit which can be used to pay their corporate tax liability for the fiscal year in which the expenses were incurred and for the three subsequent fiscal years, or if applicable, any surplus can be refunded.

The research tax credit is shown in the income statement, less R&D expenses, in accordance with IAS 20.

SEGMENT INFORMATION

The application of IFRS 8 "Operating segments" did not have any impact on the Group's segment information. In fact, the Group only considers itself to operate in a single aggregated segment: Research & Development on pharmaceutical products with a view to their future sale.

In addition, most of the research and development activity is located in France alongside the Company's principal operational decision-makers who measure performance against the cash consumed by its activities.

For these reasons, the Group's management does not believe it to be opportune to set up separate operating segments in its internal reporting.

OTHER COMPREHENSIVE INCOME

Income and expenses for the period recognized direct in equity are shown under "Other comprehensive income."

For the periods shown, this heading includes foreign exchange gains and losses associated with the entity operating in Switzerland, as well as actuarial losses on employee benefits.

EARNINGS PER SHARE

Basic earnings per share are calculated over all the periods shown based on shares outstanding in OSE Immunotherapeutics which is legally considered to be the parent company.

Diluted earnings per share are calculated by adding the weighted average number of shares outstanding to the number of shares that would result from the conversion of all common shares with a potentially dilutive effect.

If taking instruments giving future access to equity (BSA, etc.) into account when calculating diluted earnings per share, generates an anti-dilutive effect, these instruments are not taken into consideration.

On the reporting dates shown, given there was a net profit, diluted earnings per share amounted to -€0.26 per share. Instruments with a dilutive effect still to be exercised, accounting for 1,223,939 shares, would bring the diluted earnings per share to -€0.26 (see Note 12).

3 - NOTES TO THE FINANCIAL STATEMENTS

NOTE 1: NON-CURRENT ASSETS

1.1 Intangible assets

In €K	12/31/2018	Increase	Decrease	12/31/2019
R&D expenses acquired	52,600	-	-	52,600
	52,600	**-**	**-**	**52,600**

In 2016, following the acquisition of Effimune, the Company valued two molecules, FR104 and OSE-127. These molecules were valued on the basis of future cashflow estimates.

Impairments tests are carried out once a year on non-current assets with an indefinite useful life or which cannot be amortized.

As regards FR-104, as a result of Janssen Biotech's decision to return the program to OSE Immunotherapeutics in 2018, the Company regained worldwide rights to its CD28 antagonist in order to continue its clinical development. The Company regained the rights with effect from December 31, 2018.

In 2019, OSE Immunotherapeutics focused on conducting the phase 1 trial and on organizing preliminary works prior to the operational launch of the subsequent Phase II trial. In addition, discussions were opened with a number of pharmaceutical laboratories to seal a new licensing agreement for the worldwide rights to FR-104.

As regards OSE-127, research and development work continues as a result of the option exercised by Servier. In addition, the withdrawal of the Nantes CHU from the EFFIMAB consortium (listed as a highlight) is not an indication of an impairment for the Company.

The value in use of these two molecules, at December 31, 2019, was measured using the discounted cash flow method (DCF). These are the two main assumptions made:

- 18-year time horizon (with no terminal value);
- Probabilities of success used in line with probabilities of success generally observed in the field of autoimmune diseases;
- 10% tax rate (in accordance with the new tax regime for income from the sale or licensing of patents).

The following sensitivity tests were carried out, none of which resulted in any impairment of these molecules' net carrying amount:

- Discount rate: sensitivity analysis carried out within a range of between 14% and 16% with a respective impact of €15 million more, or less, not resulting in any impairment of the net carrying amount of these molecules.
- Probability of success: sensitivity analysis conducted within a range of 10% more, or less, not resulting in an impairment of the net carrying amount of these molecules.

1.2 Property, plant and equipment

Property, plant and equipment break down as follows:

In €K	12/31/2018	Increase	Decrease	12/31/2019
Gross values				
Buildings	153	132	0	284
Equipment and tools	804	209	14	998
Office and computer equipment, furniture	129	9	6	133
	1,086	**350**	**20**	**1,416**
Amortization				
Buildings	21	39	0	59
Equipment and tools	110	161	2	270
Office and computer equipment, furniture	51	31	4	77
	182	**231**	**6**	**406**
Net values				
Buildings	132	93	0	225
Equipment and tools	693	48	12	729
Office and computer equipment, furniture	78	(21)	1	56
	904	**119**	**14**	**1,009**

The Company mainly invested in construction associated with the development of new premises in Paris Suffren and in laboratory equipment.

1.3 Rights of use

OSE Immunotherapeutics reviewed its operating leases to assess the potential impact of first-time adoption of IFRS 16 which resulted in a future lease payment liability and a right-of-use asset being recognized in the statement of financial position for operating leases.

A right-of-use asset was recognized in an amount identical to the liability for future lease payments adjusted, where applicable, for advance payments or amounts set aside for future lease payments.

OSE Immunotherapeutics identified ten leases (covered by the standard) with the following characteristics:

- Three tenancy agreements. All leases are for real estate in France. The incremental borrowing rate used was 2%.
- One property lease signed on December 30, 2019, but effective from January 1, 2020. In accordance with IFRS 16, the right of use will be recognized on the effective date at €1.37 million.
- Six leases involving low-value assets (office equipment and small equipment worth less than €5,000) that the Company decided not to recognize in the statement of financial position (lease payments will be recognized as expenses on a straight-line basis over the lease term).

Rights of use break down as follows:

In €K	12/31/2018	01/01/2019	Increase	Decrease	12/31/2019
Gross values (non-current assets)					
Lease Agreement (Nantes Lot 1)	0	537	0	0	537
Lease Agreement (Nantes Lot 2)*	0	0	208	0	208
Lease agreement (Paris) **	0	0	1,198	0	1,198
	0	**537**	**1,406**	**0**	**1,943**
Amortization					
Lease Agreement (Nantes Lot 1)	0	0	103	0	103
Lease Agreement (Nantes Lot 2)	0	0	26	0	26
Lease agreement (Paris)	0	0	122	0	122
	0	**0**	**251**	**0**	**251**
Net values					
Lease Agreement (Nantes Lot 1)		537	(103)	0	434
Lease Agreement (Nantes Lot 2)*		0	182	0	182
Lease agreement (Paris) **		0	1,076	0	1,076
	0	**537**	**1,155**	**0**	**1,692**

* effective lease date April 1, 2019
** effective lease date February 1, 2019

1.4 Non-current financial assets

In €k	12/31/2018	Increase	Decrease	12/31/2019
Deposits and guarantees	77	193	(26)	244
Liquidity contract - cash balances	26	159	(142)	43
	104	352	(168)	**287**
Total non-current financial assets	**104**	**352**	**(188)**	**287**

NOTE 2: CURRENT ASSETS

2.1 Available cash and cash equivalents and current financial assets

In €K	12/31/2018	Increase	Decrease	12/31/2019
Bank accounts	4,478	174	(1,570)	3,082
Term deposit	5,094	17,676	(11)	22,760
Cash on deposit	**9,753**	**17,850**	**(1,581)**	**25,842**
Current financial liabilities (bank accounts)	(3)	(0)	1	(2)
Net cash	**9,570**	**17,850**	**(1,579)**	**25,840**

The Company invested the funds received from Servier and Boehringer Ingelheim in risk-free term accounts, meeting the definition of cash & cash equivalents (available in the short term).

In €K	12/31/2018	Fair value re-adjustment	Decreases	12/31/2019
Other UCITS	2,861		2,861	0
Total current financial assets	**2,861**	**-**	**2,861**	**0**

The Company sold the OPCVM (investment funds) held at 12/31/2018, generating a capital gain of €25,000.

2.2 Trade receivables

In €K	Closing balance 12/31/2018	Increase	Decreases	Closing balance 12/31/2019
Trade receivables	2,253		(1,506)	747
Total net trade receivables	**2,253**	**-**	(1,506)	**747**

The change in the level of trade receivables was mainly due to the reinvoicing of development expenses and unbilled revenue in respect of Boehringer Ingelheim for OSE-172/BI 765063

2.3 Other current assets

Other current assets break down as follows:

In €k	12/31/2019	12/31/2018
Value Added Tax **(1)**	978	1,277
Trade debtors **(2)**	77	431
Prepaid expenses **(3)**	1,787	1,039
Prepaid income **(4)**	546	1,087
Government - tax receivable **(5)**	28	0
Research tax credit **(5)**	3,059	4,504
Total	**6,474**	**8,338**

(1) "Value added tax" includes applications for VAT refunds amounting to €295,000 and VAT on FNP amounting to €245,000.

(2) "Trade debtors" mainly comprises €76,000 of trade discounts and rebates receivable.
(3) "Prepaid expenses" mainly comprise R&D expenses.
(4) "Prepaid income" mainly comprises grants receivable amounting to €396,000.
(5) "Government - tax receivable" or "Current tax receivables" comprises a research tax credit for 2019.

NOTE 3: FINANCIAL ASSETS AND IMPACT ON INCOME

The Company's financial assets were measured as follows as at December 31, 2019:

	12/31/2019				
In €K	**Statement of Financial Position**	**JV**	**JV per income statement**	**Loans and receivables**	**Liabilities at amortized cost**
Non-current financial assets	287	287		287	
Rights of use	1,692	1,692		1,692	
Trade receivables	1,669	1,669		1,669	
Other current assets	3,415	3,415		3,415	
Current financial assets	-	-	-		
Cash and cash equivalents	25,842	25,842		25,842	
Total financial assets	**32,905**	**32,905**	**-**	**32,905**	**-**
Non-current financial liabilities	9,211	9,211			9,211
Non-current lease liabilities	1,413	1,413			1,413
Current financial liabilities	548	548			548
Current lease liabilities	309	309			309
Trade payables	6,918	6,918			6,918
Other current debts	4,812	4,812			4,812
Total financial liabilities	**23,211**	**23,211**	**-**	**-**	**23,211**

	Impacts on the income statement at December 31, 2019	
In €K	Interest	Change in fair value
Assets in JV through income statement	82	(11)
Loans and receivables		
Assets at amortized cost		
Cash and cash equivalents	70	
Total	**152**	**(11)**
Lease liabilities at amortized cost	33	
JV liabilities through income statement		(2)
Liabilities measured at amortized cost	16	132
Total	**49**	**130**

NOTE 4: CAPITAL

4.1 Capital issued

Date	Nature of transactions	Capital in €	Issue premium in €	Number of shares created	Number of shares making up the capital	Nominal value in €	Stated capital in €
	At December 2017	**2,897,764**	**48,598,701**	**4,439,880**	**14,488,821**	**0.20**	**2,897,764**
June	Capital increase - Free Share Allocation	10,000	(10,000)	50,000	14,538,821	0.20	2,907,764
June	Capital increase - Free Share Allocation	24,608	(24,608)	123,040	14,661,861	0.20	2,932,372
July	Capital increase - Free Share Allocation	8,030	(8,030)	40,151	14,702,012	0.20	2,940,402
July	Subscription of 2017 share subscription warrants	0	7,200	0	14,702,012	0.20	2,940,402
September	Capital Increase - 2012 share subscription warrants	6,000	0	30,000	14,732,012	0.20	2,946,402
September	Capital Increase - 2012 share subscription warrants	6,000	0	30,000	14,762,012	0.20	2,952,402
October	Capital Increase - 2012 share subscription warrants	5,000	0	25,000	14,787,012	0.20	2,957,402
November	Capital Increase - 2012 share subscription warrants	6,000	0	30,000	14,817,012	0.20	2,963,402
December	Correction Deferred Tax Rate on Merger Costs	0	(28,151)	0	14,817,012	0.20	2,963,402
	At December 31, 2018	**2,963,402**	**48,535,112**	**4,768,071**	**14,817,012**	**0.20**	**2,963,402**
June	Capital increase - Free Share Allocation (1)	30,000	(30,000)	150,000	14,967,012	0.20	2,993,402
December	Issue of 38,712 free shares (2)	7,742	(7,742)	38,712	15,005,724	0.20	3,001,144
	At December 31, 2019	**3,001,144**	**48,497,370**	**4,956,783**	**15,005,724**	**0.20**	**3,001,144**

(1) Capital increase through the acquisition and issue of 150,000 free shares.

(2) Capital increase through the acquisition and issue of 38,712 free shares.

On December 31, 2019, the share capital stood at €3,001,144.80. It was divided into 15,005,724 fully subscribed and paid up common shares with a par value of €0.20.

4.2 Equity instruments authorized but not issued

On May 31, 2016, the Combined General Shareholders' Meeting gave the Board of Directors full authority to increase the capital, on one or more occasions, by a maximum nominal amount of €80,000, i.e. a maximum of 400,000 new shares, in accordance with the following procedures:

- Issue of shares or other transferable securities giving access to equity reserved for members of savings schemes: allocation expiring on July 31, 2017.
- Share subscription warrants and founders' warrants issued to a single category of person: allocation expiring on November 30, 2017.
- Allocation of existing or future free shares to employees and corporate officers: allocation expiring on July 31, 2019.

The Combined General Shareholders' Meeting of June 14, 2017, gave the Board of Directors full authority to increase the capital, on one or more occasions, by a maximum of 500,000 equity instruments:

- At December 31, 2018, there were still 242,538 equity instruments to be issued.
- On March 12, 2019, the Board of Directors decided to issue 150,000 free shares to non-corporate officer employees. As a result of the Chief Executive Officer's decision, 149,200 free shares were allocated.
- On December 10, 2019, the Board of Directors decided to allocate 22,625 free shares to Alexis Peyroles.

On December 31, 2019, the Board of Directors still had not allocated 69,913 of the 500,000 equity instruments.

The Combined General Shareholders' Meeting of June 13, 2018, gave the Board of Directors full authority to increase the capital, on one or more occasions, by a maximum of 500,000 new shares:

- On June 26, 2019, the Board of Directors decided to:
  - Issue 150,000 free shares to Alexis Peyroles.
  - Allocate 150,000 free shares to all of the Company's permanent employees, apart from corporate officers. As a result of the Chief Executive Officer's decision, 148,400 free shares were allocated.
  - The issue of 60,000 2019 founders' warrants to non-salaried, non-executive directors (i.e. 10,000 founders' warrants per director).

On December 31, 2019, the Board of Directors still had not allocated 140,000 of the 500,000 equity instruments.

4.3 Share subscription warrants, founders' warrants and free shares

The Company issued the following share subscription warrant and founders' warrant plans:

Type	Creation date	Exercise price	Subscription period	Total created	Subscriptions during the fiscal year							Total subscribed and/or exercised at 12/31/2019
					2013 and before	2014	2015	2016	2017	2018	2019	
Share subscription warrants and founders' share warrants												
2012 share subscription warrants	11/29/2013	€1	11/29/2013-02/28/2014	40,000	17,000	23,000			-			40,000
Share subscription warrants 2014 1	06/02/2014	€8	06/02/2014-06/30/2014	118,649	-	118,649			-			118,649
Share subscription warrants 2014 2	07/01/2014	€8	07/01/2014-07/16/2014	33,333	-	33,333			-			33,333
2014 3 share subscription warrants	3/27/2015	€8	03/27/2015-09/30/2016	120,000	-	-	100,000	10,000	-			110,000
Share subscription warrants 2014 4	3/27/2015	€8	Undetermined	125,000	-	-	36,744	88,256	-			125,000
Share subscription warrants 2014 5	3/27/2015	€8	04/01/2016-10/01/2016	25,000	-	-	-	25,000	-			25,000
Share subscription warrants 2014 6	3/27/2015	€8	04/01/2017-10/01/2017	10,000	-	-	-		-			-
Share subscription warrants 2014 7	12/01/2015	€8	12/01/2015-09/30/2016	50,000				39,000	-			39,000
EFFIMUNE share subscription warrants 2010-2	10/29/2010	€5.8	12/08/2011-12/07/2016	23,620	23,620				-			23,620
EFFIMUNE share subscription warrants 2014-2	07/01/2014	€7	07/01/2014-06/30/2019	30,700				30,700	-			30,700
EFFIMUNE share subscription warrants 2014-1	11/25/2014	€7	11/25/2014-11/24/2019	3,500				3,500	-			3,500
Share subscription warrants 2015	3/27/2015	€10.8	03/27/2015-05/30/2015	136,222	-	-	136,222		-			136,222
Founders' share warrant 2015 1	3/27/2015	€10.8	04/01/2017-10/01/2017	15,000	-	-	-		-			-
Founders' share warrant 2015 2	3/27/2015	€10.8	04/01/2018-10/01/2018	25,000	-	-	-		-			-
Founders' share warrant 2015 3	3/27/2015	€10.8	04/01/2019-10/01/2019	25,000	-	-	-	-	-			-

Founders' share warrants 2016	09/09/2016	€6.66	09/09/2016-03/09/2018	12,162				12,162	-			12,162
Share subscription warrants 2016	12/13/2016	€6.06	12/13/2016-12/31/2018	25,000					-			-
Founders' share warrants 2017	03/28/2017	€6.59	03/28/2017-03/28/2018	4,098					4,098			4,098
Share subscription warrants 2017	7/18/2017	4.65 €	07/18/2017-07/17/2021	52,000					30,000	12,000		42,000
Founders' share warrants 2018	6/13/2018	€4.17	06/13/2018-06/13/2023	25,900						25,900		25,900
Share subscription warrants 2018	6/13/2018	€4.17	06/13/2018-06/13/2023	42,850								-
Founders' share warrants 2019	6/26/2019	€3.58	06/26/2019-06/26/2024	60,000							60,000	60,000
Total share subscription warrants and founders' share warrants					**40,620**	**174,982**	**272,966**	**208,618**	**34,098**	**37,900**	**60,000**	**829,184**

The Company issued the following free share plans:

Allocation date	Exercise period	Total allocated	Exercised during the fiscal year		Total exercised at 12/31/2019
			2018	2019	
Free Share Allocation					
5/31/2016	05/31/2016-05/30/2018	98,000	98,000		98,000
12/13/2016	12/13/2016-12/12/2018	50,000	50,000		50,000
03/28/2017	03/28/2017-03/27/2018	25,040	25,040		25,040
7/18/2017	07/18/2017-07/17/2018	41,155	40,151		40,151
6/13/2018	06/13/2018-06/12/2019	150,000	-	150,000	150,000
12/5/2018	12/05/2018-12/04/2019	20,000	-	20,000	20,000
12/5/2018	12/05/2018-12/04/2019	18,712	-	18,712	18,712
3/12/2019	03/12/2019-03/11/2020	149,200			-
6/26/2019	06/26/2019-06/25/2020	150,000			-
6/26/2019	06/26/2019-06/25/2020	148,400			-
12/10/2019	12/10/2019-12/09/2020	22,625			-
Total Free Share Allocation		**873,132**	**213,191**	**188,712**	**401,903**

On March 12, 2019, the Board of Directors allocated free shares with the following characteristics:

Allocation to employees:

- Number of shares allocated (existing or to be issued): 149,200
- Value of the share on the allocation date (according to the market price): €4.09
- Vesting period and employment requirement: 1 year
- Lock-up period: 1 year

On June 26, 2019, the Board of Directors allocated free shares with the following characteristics:

Allocation to Alexis Peyroles:

- Number of shares allocated (existing or to be issued): 150,000
- Value of the share on the allocation date (according to the market price): €3.52
- Vesting period and employment requirement: 1 year
- Lock-up period: 1 year

Allocation to employees:

- Number of shares allocated (existing or to be issued): 148,400
- Value of the share on the allocation date (according to the market price): €3.52
- Vesting period and employment requirement: 1 year
- Lock-up period: 1 year

On December 10, 2019, the Board of Directors allocated free shares with the following characteristics:

Allocation to Alexis Peyroles:

- Number of shares allocated (existing or to be issued): 22,625
- Value of the share on the allocation date (according to the market price): €3.59
- Vesting period and employment requirement: 1 year
- Lock-up period: 1 year

As shares were subscribed and warrants exercised, tables of plans introduced in previous fiscal years were updated as follows:

	2014 3 share subscription warrants	**2014 4-a share subscription warrants**	**2014 4-b share subscription warrants**	**2014 5 share subscription warrants**	**2014 6 share subscription warrants**	**2014 7 share subscription warrants**	**2015 share subscription warrants**	**2015 1 founders' share warrants**	**2015 2 founders' share warrants**	**2015 3 founders' share warrants**
Date of GM establishing plan	3/27/2015	3/27/2015	3/27/2015	3/27/2015	3/27/2015	12/01/2015	3/27/2015	3/27/2015	3/27/2015	3/27/2015
Number of authorized shares	120,000	36,744	88,256	25,000	10,000	50,000	136,222	15,000	25,000	25,000
Subscription price	€0.10	0.10	0.10	€0.10	€0.10	€0.10	€1.08	€1.08	€1.08	€1.08
Subscription date	3/27/2015	09/09/2015	ND	04/01/2016	04/01/2017	12/01/2015	5/30/2015	04/01/2017	04/01/2018	04/01/2019
Vesting of share subscription warrants	on subscription	on subscription	on subscription	on subscription	on subscription	on subscription	on subscription	on subscription	on subscription	on subscription
Exercise price	€8/share	€8/share	€8/share	€8/share	€8/share	€8/share	€10.80/share	€10.80/share	€10.80/share	€10.80/share
Option type	American	American	American	American	American	American	American	American	American	American
Spot rate	€10.12	€10.12	€10.12	€10.12	€10.12	€8.56	€10.12	€10.12	€10.12	€10.12
Maturity	5 years	5 years	5 years	5 years	5 years	3.5 years	5 years	5 years	5 years	5 years
Volatility	52.94%			54.70%	54.70%	55.88%	51.26%	54.70%	51.26%	49.71%
EUR interest rate	-0,0375%			0.3543%	0.3543%	-0.0318%	0.4690%	0.3210%	0.4690%	0.6241%
Dividend yield	0%			0%	0%	0%	0%	0%	0%	0%
Estimated fair value per share subscription warrant	4.95			4.95	4.95	3.59	4.14	3.93	4.14	4.46
Number of options subscribed	110,000	36,744	88,256	25,000	0	39,000	136,222	0	0	0
Subscription price	0.10	0.10	0.10	0.10	0.10	0.10	1.08	1.08	1.08	1.08
Number of options exercised	-	**36,744**	**88,256**	-	-	**0**	**0**	**0**	-	-
Contractual expiration date	6/30/2019	ND	ND	6/30/2019	6/30/2019	6/30/2019	3/30/2020	10/1/2017	10/1/2018	10/1/2019
Vesting period	none	none	none	none	none	none	none	none	none	none

	2016 share subscription warrants	2016 founders' share warrants	2017 share subscription warrants	2017 founders' share warrants
Date of GM establishing plan	5/31/2016	5/31/2016	5/31/2016	5/31/2016
Number of authorized shares	25,000	12,162	52,000	4,098
Subscription price	€1.00	€0.00	€0.60	€0.00
Subscription date	12/13/2016	09/09/2016	7/18/2017	03/28/2017
Vesting of share subscription warrants/founders' warrants	on subscription	on subscription	on subscription	on subscription
Exercise price	€6.06/share	€6.66/share	€4.65/share	€6.59/share
Option type	American	American	American	American
Spot rate	6.20	7.00	€4.05	€6.78
Maturity	2.05 years	18 months	4 years	12 months
Volatility	44.02%	44.87%	46.98%	44.27%
EUR interest rate	-0.1583%	-0.2141%	0.1494%	-0.2137%
Dividend yield	0%	0%	0%	0%
Estimated fair value per share subscription warrant/founders' share warrant	1.58	1.64	1.30	1.26
Number of options subscribed	0	12,162	42,000	4,098
Subscription price	1.00	0.00	0.60	0.00
Number of options exercised	-	-	-	-
Contractual expiration date	12/31/2018	6/13/2018	7/17/2021	03/28/2018
Vesting period	none	none	none	none

In view of market prices, 2016 and 2017 founders' warrants were not exercised and lapsed in 2018.

During 2019, the Group introduced the plan described below:

The Board of Directors decided to issue a total of 60,000 2019 founders' warrants, i.e. 10,000 founders' warrants for each non-salaried non-executive director in office on June 26, 2019.

	2018 share subscription warrants	2018 founders' share warrants	2019 founders' share warrants
Date of GM establishing plan	6/14/2017	6/14/2017	6/13/2018
Number of authorized shares	42,850	25,900	60,000
Subscription price	€0.70	€0.00	€0.00
Subscription date	6/13/2018	6/13/2018	6/26/2019
Vesting of share subscription warrants/founders' warrants	on subscription	on subscription	on subscription
Exercise price	€4.17/share	€4.17/share	€3.58/share
Option type	American	American	American
Spot rate	€4.09	€4.09	€3.52
Maturity	5 years	5 years	5 years
Volatility	47.08%	47.08%	44.67%
EUR interest rate	0.3812%	0.3812%	-0.2062%
Dividend yield	0%	0%	0%
Estimated fair value per share subscription warrant/founders' share warrant	1.64	1.64	1.32
Number of options subscribed	0	25,900	60,000
Subscription price	0.70	0.00	0.00
Number of options exercised	-	-	-
Contractual expiry date	6/13/2023	6/13/2023	6/26/2024
Vesting period	none	none	none

Corporate officers, employees and consultants

The expense recognized on December 31, 2019, for benefits paid in equity instruments to corporate officers, employees and consultants stood at €1,511,000, exclusively associated with the 2019 free share allocation plans and the 2019 founders' warrant plan.

The employer's contribution in relation to free shares stood at €357,000. Expenses associated with share-based payments totaled €1,868,000.

All these benefits were granted to corporate officers, employees and consultants.

Share subscription warrants/founders' warrants measured at the fair value of the options determined using the Bjerksund & Stensland model.

Free share allocations were measured using a model that considers the probability of achieving related vesting conditions.

The conditions of share subscription warrant/founder's warrant plans were measured by an external service provider.

4.4 Company's buyback of its own shares

The Combined General Meeting of Shareholders of June 13, 2018, authorized the Board of Directors to implement, on one or more occasions, a share buyback program in accordance with the provisions of Article L. 225-209 of the French Commercial Code and pursuant to the General Regulation of the French Financial Markets Authority (AMF), in the circumstances described below:

Share buyback objective:

- To boost liquidity in Company shares through the intermediary of an investment services provider acting independently under a liquidity contract in accordance with the AMAFI Ethics charter recognized by the French Financial Markets Authority;

- The allocation of shares to employees or corporate officers of the Company or of French companies or groups of companies related to it in accordance with legal requirements, particularly within the context of sharing in the fruits of the Company's expansion, employee share ownership plans or Company savings plans, stock options or the free allocation of shares or in any other circumstance permitted by regulations;
- The delivery of shares in payment, or exchange, in connection with acquisitions;
- Ensuring the coverage of debt securities giving access to equity;
- The cancellation of shares by reducing the share capital, particularly for the purposes of optimizing net earnings per share, subject to the adoption of the 20th resolution below, aiming to authorize the Board of Directors to reduce the share capital;
- The implementation of any market practice that would be permitted by the French Financial Markets Authority and, more generally speaking, the completion of any transaction that complies with current regulations.

Maximum purchase price: €21.60 per share, not including costs and commissions, capped at €10 million overall.

Maximum number of shares that can be purchased: 10% of the total number of shares making up the Company's share capital, on the date of the share buyback. When the shares are acquired with the aim of boosting trading and liquidity, the number of shares taken into consideration when calculating the 10% cap provided for above, corresponds to the number of shares purchased, less the number of shares resold during the authorization period.

Summary of shares bought and sold in 2019:

	2019				
	1st quarter	2nd quarter	3rd quarter	4th quarter	Total
Securities purchased	13,179	12,040	6,520	6,832	38,571
Price (in euros)	3.73	3.70	3.56	3.69	3.68
Total amount (in thousands of euros)	**49**	**45**	**23**	**25**	**142**
Securities Sold	17,969	9,849	8,353	5,777	41,948
Price (in euros)	3.82	3.79	3.76	3.78	3.80
Total amount (in thousands of euros)	**69**	**37**	**31**	**22**	**159**

On December 31, 2019, the Company owned 40,583 OSE Immunotherapeutics shares, acquired for a total of €148,000. Sales of treasury shares generated a net loss on disposal of €3,000 in 2019. These amounts were restated in equity in accordance with IAS 32.

NOTE 5: FINANCIAL LIABILITIES

Financial liabilities are presented in the table below which distinguishes between non-current and current debts:

In €K	12/31/2018	Increase	Decrease	Other transactions *	12/31/2019	Interest at 12/31/2019
OSEO Advances						
BPI EFFIMAB advance	2,328	820			3,148	
BPI EFFICLIN Advance	1,236	4,808			6,044	
P2RI Loan	211		(375)	164	0	
BPI EFFIDEM Advance	57		(30)	(8)	19	
Non-current derivative instrument	0				0	
Non-current financial liabilities	**3,832**	**5,628**	**(405)**	**156**	**9,211**	
Nantes Lot 1 Lease		436		(104)	332	
Nantes Lot 2 Lease		175		(26)	149	
Paris Suffren Lease		1,035		(103)	932	
Non-current lease liabilities		**1,646**		**(233)**	**1,413**	
OSEO Advances	28		(50)	22	0	(22)
BPI EFFIMAB advance	49			42	92	(42)
BPI EFFICLIN Advance	29			66	95	(66)
P2RI Loan	486			(165)	321	(2)
BPI EFFIDEM Advance	31			8	39	0
Bank overdrafts	3	3	(3)		3	
Non-current derivative instrument	2			(2)		2
Current financial liabilities	**628**	**3**	**(52)**	**(29)**	**549**	**(130)**
Nantes Lot 1 Lease		101	(93)	104	112	(9)
Nantes Lot 2 Lease		34	(23)	26	37	(3)
Paris Suffren Lease		163	(106)	103	160	(21)
Current lease liabilities		**297**	**(221)**	**233**	**309**	**(33)**
Total financial liabilities	**4,460**	**7,574**	**(679)**	**127**	**11,482**	**(163)**

* This column includes the recurring and non-recurring breakdown as well as IFRS 9, IAS 20 and IFRS 16) restatements for the year.

The table below shows the schedule of financial liabilities:

In €K	Less than 1 year	December 2021	December 2022	December 2023	December 2024 and after	Total
OSEO Advances	0					**0**
BPI EFFIMAB Advances	92				3,148	**3,240**
BPI EFFICLIN Advance	95				6,044	**6,139**
P2RI Loan	321		-			**321**
BPI EFFIDEM Advance	39		19			**58**
Bank overdrafts	3					**3**
Financial liabilities	**549**		**19**	**-**	**-**	**9,192**	**9,760**
Nantes Lot 1 Lease	112		104	104	103	21	**445**
Nantes Lot 2 Lease	37		35	35	35	43	**186**
Paris Suffren Lease	160		139	137	134	522	**1,091**
Leasing liabilities	**309**		**278**	**276**	**272**	**586**	**1,722**
Total financial liabilities	**858**		**297**	**276**	**272**	**9,778**	**11,482**

Lease liabilities (see Note 1.3)

A P2RI (regional industrial redeployment) loan of €1,500,000 and derivative instruments transferred at the time of the merger.

In September 2013, the Company received loans from BNP Paribas, CIC, Crédit Mutuel and from Région des Pays de la Loire, each for €375,000, i.e. a total loan of €1.5 million. The purpose of this loan is to finance development and innovative projects.

This loan was recognized at amortized cost, calculated using the effective interest rate.

The loan from the banking pool amounts to €1.125 million. It has a term of seven years, including a three-year grace period for capital repayment. The interest rate is equal to the three-month Euribor rate plus a fixed margin of 300 basis points. This loan has been repaid quarterly since October 5, 2016. Interest is payable quarterly.

At December 31, 2019, the remaining balance stood at €211,000. This loan was subject to an interest rate cap, the hedging period having expired on April 15, 2019. Interest on payments after this date is not hedged.

The Company received the full amount of the loan from Région des Pays de la Loire, amounting to €375,000, in December 2013. The term of the loan is seven years, including a three-year grace period for repayment. The annual percentage rate stands at 4.06% payable annually.

At December 31, 2019, the remaining balance stood at €94,000.

These balances exclude accrued interest not yet due and measurement effects according to IFRS 9 standard (for a total amount of €16,000).

Bpifrance repayable advance of €100,000

In September 2014, Effimune also obtained an interest-free repayable advance from Bpifrance for a maximum of €100,000, as part of the OSE 172 (Formerly EFFI-DEM) project: Feasibility of immunomodulatory monoclonal antibodies in the treatment of cancer.

Bpifrance payments were staggered between the signing of the contract and the end of the project, i.e.:

An initial payment of €80,000 once the contract was signed (received on December 23, 2014).

A second payment of €20,000 received on December 2, 2015, settling the balance of payments to be received from this advance.

As a result of the success of this project, repayment of this support will commence as follows:

- €20,000 on September 30, 2018
- €40,000 on September 30, 2019
- €40,000 on September 30, 2020

The fair value of this advance was based on an annual market interest rate estimated at 0.867% for the first repayment of €80,000 and 0.786% for the second repayment of €20,000. The difference between the advance amount at historical cost and that of the advance discounted at market rate is recognized less R&D expenses, as costs are incurred for the relevant research programs.

At December 31, 2019, the remaining balance stood at €60,000.

Bpifrance repayable advance for EFFIMab project of €2,328,000 and €820,000.

On June 19, 2017, the Company received from Bpifrance a first payment of €2,328,000 as part of a repayable advance for the EFFIMab project.

This interest-bearing advance (discount rate of 1.66% under the contract) was initially for an amount up to €3,609,000 paid on achievement of three key milestones within a completion period of 72 months.

If all milestones are achieved, a notional repayment in annual installments was to be put in place from June 30, 2021, based on a notional amount of €3,609,000 at the applicable contractual discount rate of 1.66%, i.e. a fixed amount of €4,100,000, including interest of €490,595. Repayments, amounting to €4,100,000, were spread between June 30, 2021 and June 30, 2025.

Following the signature of Amendment no. 2 on December 28, 2018, this interest-bearing advance now stands at an amount of up to €3,991,000 to be paid on achievement of four key milestones within a completion period of 115 months.

If all milestones are achieved, the notional repayment in annual installments from December 31, 2024, based on a receivable notional amount of €3,991,000, now stands at a fixed amount of €4,590,000.

Repayments will be spread between December 31, 2024 and December 31, 2028.

The Company received a portion of the advance on achievement of the third key milestone, i.e. €2,328,000 in accordance with the amendment to the initial contract.

The Company received the second payment of the repayable advance, i.e. €820,000, on achievement of the fourth key milestone on April 10, 2019.

Bpifrance repayable advance of €1,236,000 and €4,808,000

On December 18, 2017, the Company received from Bpifrance a first payment of €1,236,000 as part of a repayable advance for the EFFI-CLIN project. This interest-bearing advance (discount rate of 0.90% according to the contract) is for up to €8,106,000 paid on achievement of four key milestones within a completion period of 60 months.

If all milestones are achieved, a notional repayment in annual installments from June 30, 2024, based on the notional amount of €8,106,000 at the applicable contractual discount rate of 0.90%, will be a fixed amount of €9,850,000, including interest of €1,744,000.

Repayments, amounting to €9.85 million, will be spread between June 30, 2024 and March 31, 2028.

The Company received a portion of the advance, i.e. €1,236,000 at the start of the study.

On September 18, 2019, the Company received the second payment of the repayable advance, i.e. €4,808,000 on achievement of the first key milestone.

If the Company's program is successful, the first payment will be repaid between June 30, 2024 and March 31, 2028.

NOTE 6: CURRENT DEBTS

6.1 Trade payables

In €K	12/31/2019	12/31/2018
Trade payables	4,284	4,826
Accrued invoices	2,634	1,729
Total trade payables	**6,918**	**6,555**

This item was almost unchanged from the 2018 reporting date.

6.2 Tax and social security liabilities

In €K	12/31/2019	12/31/2018
Staff costs	773	485
Social security and other social organizations	852	630
Other taxes, duties and similar payments	99	116
Other payables	*1,723*	*1,231*
Current tax liability	20	86
Tax and social security liabilities	**1,743**	**1,317**

The increase in tax and social security liabilities was in line with the increased workforce.

6.3 Other current debts

In €K	12/31/2019	12/31/2018
Deferred income	4,811	574
Miscellaneous	2	2
Total other debts and accruals	**4,812**	**575**

The €4.24 million increase in deferred income was mainly due to:

The deferment of a €10 million milestone received on March 5, 2019, as a result of the exercise of Servier's option for OSE 127, generating deferred income of €3,356,000 on the reporting date.

The deferment of a €15 million milestone received in the first half of 2019 under a collaboration and licensing agreement signed with BI (OSE 172), generating deferred income of €572,000.

Other deferred income breaks down as follows:

- BI: €764,000 within the context of re-invoicing of development expenses
- DC TARGET and IMMUNOMONITOR grant of €119,000

NOTE 7: CURRENT AND NON-CURRENT PROVISIONS

Provisions break down as follows:

In €K	12/31/2018	Increase	Decrease	Changes in scope	12/31/2019
Provision for pension commitments	233	144			377
	233	**144**	**-**	**-**	**377**

The provision for pension commitments was measured in accordance with the applicable collective agreement, i.e. the pharmaceutical industry collective agreement. The assumptions made were as follows:

- Mortality table: regulatory table TH (men)/TF (women) 00-0
- Estimated retirement age: 65
- Ratio of wage increases: 2%
- Staff turnover: low turnover
- Discount rate: 0.77%
- Social security contribution rates: between 40% and 44% depending on the category

On December 31, 2019, the average monthly headcount stood at 35, compared with 29 on December 31, 2018.

NOTE 8: OPERATING INCOME

8.1 Revenue from collaboration agreements

In €K	2019		2018	
	Revenue	Deferred income	Revenue	Deferred income
BI agreement				
Disposal of IP	12,456		13,895	
Re-invoicing of co-development costs	1,195	572	6,809	262
Re-invoicing of direct costs	4,253	764		
Servier agreement				
Milestones	6,645	3,355		
Re-invoicing of development costs	626		3,706	
Supplementary development service			40	
RAFA Agreement				
Distribution License	77		6	77
CKD Agreement				
Distribution License	700			
Total	**25,952**	**4,692**	**24,456**	**339**

Revenue stood at €26,874,000 and comprised:

- €12,456,000 for the first part of milestone payments amounting to €15,000,000 under the agreement with Boehringer Ingelheim following the start of the Phase 1 clinical study. This milestone payment portion is remuneration for the transfer of a right to use the OSE technology related to OSE-172.
- €1,195,000 in co-development costs, including €572,000 in PCA related to milestone payments received and deferred to include development services to be provided by OSE for BI.
- €4,254,000 for reinvoicing of expenses as provided in the agreement signed with Boehringer Ingelheim.
- €6,645,000 for the first portion of milestone payments amounting to €10,000,000 received upon exercise of the option by Servier.
- €626,000 for the sale of OSE-127 vials as provided in a supply contract signed with Servier and for the reinvoicing of a portion of intellectual property-related fees.
- €77,000 for the upfront payment of €100,000 as provided in the licensing and distribution agreement signed with the Israeli pharmaceutical company RAFA.
- €700,000 for the signing of a contract with CKD.

For deferred income, see Note 6.3. Other current debts.

8.2 R&D expenses

In €K	12/31/2019	12/31/2018
Sub-contracting	18,909	15,771
Fees	1,559	835
Employee benefits expense	3,830	2,851
Allocation/reversal of depreciation, amortization and provisions	156	97
Charges	0	3

Taxes and duties	33	25
Other	760	108
R&D expenses	**25,247**	**19,690**
CIR	(3,059)	(4,389)
Subsidy received	(533)	(244)
Total restated R&D expenses	**21,655**	**15,057**

The increase in subcontracting costs was due to robust CMC and clinical activity for OSE-127 products, which will enter Phase 2 trials in 2020 and BI 765063 (OSE-172), currently in Phase 1, as well as the Phase 3 clinical trial of Tedopi®. These activities required larger teams and broader skills, resulting in increased employee benefits expense.

At the same time, fees, particularly those relating to intellectual property, rose due to the number of filings made over the last months and years.

Lastly, the other expenses item, mainly comprising expenditure on consumables, conference travel and access to Inserm premises, rose in line with the increase in activity and workforce.

The provision for research tax credits (CIR) was down €1.33 million on 2018, following the receipt of public funding.

8.3 Overhead expenses

In €K	12/31/2019	12/31/2018
Storage sub-contracting	0	1
Fees	1,353	1,380
Employee benefits expense	1,571	1,362
Allocation to depreciation, amortization and provisions	326	21
Charges	8	4
Taxes and duties	43	27
Directors' fees	151	138
Other	446	515
Total overhead expenses	**3,898**	**3,448**

Fees comprised miscellaneous expenses (legal, accounting, insurance, listing, etc.) and were almost unchanged from 2018.

Other overheads amounting to €446,000 mainly comprised lease expenses, maintenance and travel costs. As a result of changes of location, increased floor space leased in Nantes and Paris sites resulted in increased expenditure.

8.4 Expenses related to share-based payments

The benefits associated with the allocation of financial instruments in 2019 break down as follows:

In €K	12/31/2019	12/31/2018
Expenses related to share-based payments	1,868	977

Expenses of €1,868,000 included €1,511,000 in expenses relating to corporate officers, employees or consultants (see Note 4.3) and €357,000 in employer's contribution to free shares.

8.5 Employee benefits expense

R&D expenses of €3,830,000 and overheads of €1,722,000 recognized as employee benefits expense break down as follows:

In €K	12/31/2019	12/31/2018
Salary and wage benefits	5,148	4,215
Directors' fees	151	138
Pension commitments	253	3
	5,552	**4,350**
Expenses related to employee share-based payments	1,789	977
	1,789	**977**

On December 31, 2019, the average monthly headcount stood at 35, compared with 29 on December 31, 2018.

NOTE 9: NET FINANCIAL INCOME

In €K	12/31/2019	12/31/2018
Foreign exchange gain	64	45
Revenue on cash equivalents	70	35
Other financial income	2	5
Reversal of prevision for foreign exchange loss	2	0
Change in fair value of marketable securities	82	0
Total financial income	**221**	**86**
Foreign exchange loss	22	14
Interest expense	148	100
Research Tax Credit prefinancing interest	0	86
Interest on lease liabilities	33	0
Provision for liabilities and charges	0	4
Provision for impairment of marketable securities	11	22
Total financial expenses	213	226
Total financial income	**8**	**(140)**

The increase in net financial income was mainly due to:

- The positive change in the fair value of the AMUNDI mutual fund of €82,000.
- The increase in foreign exchange gains rising to €64,000.
- The increase in revenue from cash equivalents to €70,000 (from €35,000 at December 31, 2018), including €25,000 for the disposal of AMUNDI mutual fund units.

The lack of prefinancing interest at December 31, 2019, compared with €86,000 at December 31, 2018.

NOTE 10: CORPORATE TAX

10.1 Deferred tax assets

The Company recognized a deferred tax asset for OPI (Swiss subsidiary) valued at €1.17 million.

At December 31, 2019, deferred tax assets stood at €283,000.

10.2 Net deferred tax liabilities

In 2016, the Company recognized a deferred tax liability for the FR104 and OSE-127 molecules, valued at €52.6 million. This was estimated on the basis of a tax rate of 15% up to June 30, 2018 (reduced rate applicable to revenue from royalties), i.e. €7,890,000.

In accordance with IAS 12, until December 31, 2018, this deferred tax liability was offset by the deferred tax assets of the French company: the net deferred tax liability stood at €2,010,000 at December 31, 2018.

Under the 2019 finance act modifying the tax regime for income from the sale or licensing of patents, the Company applied a deferred tax rate of 10% when calculating deferred tax liabilities and assets (symmetrically).

Pending administrative clarifications, the tax loss carryforwards at December 31, 2018 are not chargeable to the profits eligible for the preferential regime (at the rate of 10%) but only to the profits at the standard rate.

Given these factors, deferred tax assets initially recognized on tax loss carryforwards at December 31, 2018, were impaired, i.e. an impact of €3,178,000.

At December 31, 2019, net deferred tax liabilities were up €3,057,000 at €5,066,000 (compared with €2,010,000 at December 31, 2018).

10.3 Income tax expense

At December 31, 2019, the Group generated a net income tax expense of €3,188,000, which breaks down as follows:

Deferred tax expense of €3,063,000, primarily relating to:

- An increase in deferred tax liabilities of €3,182,000 between December 31, 2018, and December 31, 2019 (including €3,178,000 relating to the impairment of deferred tax assets on tax loss carryforwards at December 31, 2018).
- An increase of €111,000 in deferred tax assets between December 31, 2018, and December 31, 2019 (including €53,000 for the loss for 2019). Given the option envisaged by the preferential regime in respect of certain assets and the analysis of the 2019 result for tax purposes, deferred tax assets were offset against the loss incurred in relation to the FR104 molecule (i.e. a tax base of €527,000).

Tax expense payable of €125,000 (including the €54,000 company value-added contribution (CVAE) and €70,000 in

NOTE 11: COMMITMENTS

11.1 Research-related obligations

On January 25, 2018, the Company signed a contract with ACCELOVANCE, the prime subcontractor conducting the Atalante clinical trial, and committed to a budget of €10.1 million which was re-estimated during the course of 2018.

To continue the trial, this budget was re-estimated at a maximum of €13.5 million.

11.2 Commitments received under licensing and distribution contracts where applicable

Under licensing and distribution agreements, BOEHRINGER INGELHEIM, SERVIER, RAFA and CKD, agreed to pay the Company:

One-off payments when certain development milestones and revenue are reached;

Royalties on product sales.

11.3 Commitments in view of sublicensing contracts with SELEXIS

Under commercial licensing agreements with SELEXIS, OSE IMMUNOTHERAPEUTICS agreed to pay SELEXIS:

One-off payments when certain milestones are reached, in consideration of the license granted by SELEXIS;

Royalties or milestone payments (options depending on the level of sales) when products are sold.

11.4 Commitments in view of sublicensing contracts with Inserm

Two operating agreements were signed with the Nantes Institute of Health and Medical Research (Inserm):

- In October 2011 for the MD707 project, including filing a co-ownership patent; and
- In March 2013 for the FR104 project, including filing a co-ownership patent.

These agreements grant worldwide operating rights on the patent licenses for each of the projects. For FR104, if OSE IMMUNOTHERAPEUTICS signs an agreement with a sub-licensee, the agreement provides for the payment of royalties calculated on the basis of revenues from sublicensing agreements.

11.5 Other off-statement of financial position commitments

As part of the initial transaction for the acquisition of Memopi® (including Tedopi®I) assets from the pharmaceutical company Takeda, the Company agreed to pay an earn-out when its product was registered, then no more than single-digit royalties on future sales.

The following commitments were transferred to the Company through merger.

Collateral pledged

Interest-bearing bank account pledged to Crédit Mutuel as collateral, amounting to €10,000.

Interest-bearing bank account pledged to CIC as collateral, amounting to €146,000.

Guarantees given

€18,000 lease payment guarantee to CIC

Guarantees received

The Company received a guarantee from Bpifrance covering 70% of the original amount of its loans from BNP, Crédit Mutuel and CIC, for €375,000 each. The outstanding principal at December 31, 2019, amounted to €211,000.

The Company does not have any other off-statement of financial position commitments.

NOTE 12: EARNINGS PER SHARE

Earnings per share are calculated by dividing consolidated net income by the weighted average number of shares outstanding in the fiscal year.

In €K	12/31/2019	12/31/2018
Profit (loss) for the period (€K)	**4,652**	**5,490**
Weighted average number of shares outstanding	14,892,496	14,634,760
Basic earnings per share (€/share)	0.31	0.38
Diluted earnings	**12/31/2019**	**12/31/2018**
Profit (loss) for the period (€K)	**4,652**	**5,490**
Weighted average number of shares outstanding	14,892,496	14,634,426
Adjustment for dilutive effect of share subscription warrants, founders' share warrants and free share allocation	854,207	882,426
Diluted earnings per share (€/share)	**0.31**	**0.35**

The weighted average number of shares at December 31, 2019, takes capital increases occurring during the fiscal year into consideration.

Diluted earnings per share are calculated using the profit or loss attributable to equity holders and the weighted average number of shares outstanding, adjusted for the effects of all potentially dilutive shares.

NOTE 13: FINANCIAL RISK MANAGEMENT

The Group's main financial instruments are in cash. These instruments are managed for the purpose of funding the Company's activities. The Group's policy is not to subscribe for financial instruments for speculative purposes. The Group does not use any financial derivatives.

The main risks to which the Company is exposes are liquidity risk, foreign exchange risk and interest rate and credit risk.

13.1 Liquidity risk

The Company conducted a specific review of its liquidity risk, considering that its available cash on the situation date, as well as future cash flows associated with Servier's exercise of its option on OSE-127 and the milestone reached for OSE-172, will enable it to fund the Phase 3 lung cancer trial in 2020 as well as the Phase 2 trial on pancreatic cancer, the ongoing development of OSE-127 and OSE-172 through their clinical milestones, as well as research work on products at the earliest stages of their development.

13.2 Foreign exchange risk

The Company's exposure to foreign exchange risk is solely due to trading relations with clients and suppliers outside the euro area (currencies in USD, GBP).

At this stage of its development, the Company has not made any hedging arrangements to protect its business against foreign exchange rate fluctuations.

The Company cannot, however, discount the fact that a significant increase in its business would increase its exposure to foreign exchange risk.

The Company then envisages implementing a suitable policy to hedge such risks.

13.3 Credit risk

Credit risk is from cash and deposits with banks and financial institutions, as well as exposures to client credit, particularly outstanding receivables and agreed transactions.

Credit risk associated with cash and current financial instruments was immaterial considering the quality of the co-contracting financial institutions.

13.4 Interest rate risk

The Company's exposure to interest rate risk mainly concerns the variable-rate P2RI loan which is hedged by a fixed-rate CAP. The CAP ended in April 2019.

NOTE 14: RELATED PARTIES

14.1 Compensation of management and members of the Board of Directors

No post-employment benefits were granted to members of the Board of Directors.

Compensation paid to management and members of the Board of Directors breaks down as follows:

In €K	12/31/2019	12/31/2018
Salaries and other short-term advantages*	809	979
Directors' fees	142	138
Share-based payments**	689	720
Fees	11	9
Total	**1,651**	**1,846**

* Excluding social charges

** Relating to the allocation of free shares and share subscription and founders' warrants

Methods used to measure the benefit of share-based payments are shown in Note 4.3.

NOTE 15: EVENTS AFTER THE REPORTING PERIOD

- **COVID-19**

The emergence and spread of the Coronavirus in early 2020 have impacted the global economic environment.

At this point, although management cannot reliably assess the impacts that this crisis may have on the Group's business, the medium-term impact is likely to be moderate and should not affect the Group as a going concern.

The main impacts are likely to be as follows:

As a result of the quarantine measures taken by the French Government on March 17, 2020, the Company may experience a slowdown in its operations.

The rate of recruitment of patients onto clinical trials will be reduced, given the measures taken in hospitals which are focused on fighting COVID-19.

Likewise, research laboratory activity is likely to stall due to the slowdown in the supply of consumables and limited access to animal facilities.

The Company may also be subject to subcontractor prioritization policies, particularly for clinical batch production of its products.

- **Positive outcome of Step 1 of the Phase 3 Tedopi® clinical trial, Atalante 1, in non-small cell lung cancer**

On April 1, 2020, the Company announced the positive outcome of the Step 1 provided in the protocol of the Phase 3 clinical trial on non-small cell lung cancer post-immune checkpoint inhibitor failure (PD-1/PD-L1):

The primary endpoint of Step 1 was met: 12-month survival rate for patients treated with Tedopi®;

Detailed analysis of the Step 1 results will help identify the best options for the further clinical development of Tedopi® and the strategy of potential partnerships.

Based on the positive results of Step 1 and in the context of the COVID-19 epidemic, the Company will discuss with the regulatory agencies the best options to continue development of Tedopi®, at the same time as the voluntary and definitive suspension of the recruitment of new patients in Step 2 planned for the clinical trial.

- **Amendment to the OSE-127 contract with Servier**

On March 17, 2020, the Company and Servier signed an amendment of the worldwide licensing option for OSE-127, an IL-7 receptor antagonist developed in autoimmune diseases.

This amendment covers the terms and conditions for exercising the licensing option by modifying Step 2 of the option. OSE Immunotherapeutics will thus receive a milestone payment of €5 million from Servier on enrollment of the first patient in Phase 2a clinical study scheduled to start in Sjögren's Syndrome and an additional payment of €15 million on exercise of the option at the end of the two scheduled Phase 2 studies, with priority being given to the study in Sjögren's Syndrome. The initial agreement provided for a total payment of €20 million at the end of Phase 2 in ulcerative colitis.

18.2 Interim financial information

Please refer to the half-year financial report, including the financial statements at June 30, 2019, which was released on September 5, 2019, and incorporated by reference into this Universal Registration Document.

18.3 Audit of historical annual financial information

18.3.1 Audit of historical annual financial information

The financial information in this document has been the subject of an independent audit carried out by the statutory auditors, in accordance with Directive 2014/56 / EU of the European Parliament and of the Council and Regulation (EU) No 537/2014 of European Parliament and the Council.

18.3.2 Other information audited by statutory auditors

None.

18.3.3 Other information non audited by statutory auditors

None.

18.4 Pro forma financial information

None.

18.5 Dividend policy

18.5.1 Dividend payment policy

Given the development stage of the Company, there are no plans to initiate a short-term dividend payment policy.

18.5.2 Dividends paid in the last three fiscal years

None.

18.6 Legal and arbitration proceedings

On the registration date of this Universal Registration Document, there were no governmental, legal or arbitration proceedings, including those of which the Company is aware, which are pending or threatened, that may have, or have had in the last 12 months, materially impacted the Company's financial position, business or results and/or its subsidiaries.

18.7 Significant change in financial position

There has been no significant change in the Group's financial position since the publication of the audited financial statements for the fiscal year ended on December 31, 2019.

19 Additional information

19.1 Stated capital

19.1.1 Issued capital

As of the date of this Universal Registration Document, the share capital stood at €3,029,504.80.

It was divided into 15,147,524 shares with a nominal value of €0.20 each.

As of January 1, 2019, there were 14,817,012 Company shares outstanding.

Please also refer to Chapter 18 of this Universal Registration Document

19.1.2 Non-equity shares

There were no non-equity shares.

Please refer to Section 15.2.

19.1.3 Treasury shares

On December 31, 2019, the Company owned 40,583 OSE Immunotherapeutics shares, valued at the market price at €156,000. Sales of treasury shares generated a net loss on disposal of €3,000 in 2019.

19.1.4 Potential capital

As of the date of this Universal Registration Document, the Company had:

- Issued 65,000 founders' warrants:
  25,000 of which could be subscribed for from October 1, 2019 – if all these founders' warrants were exercised, this would give entitlement to 25,000 new shares.

If all these founders' warrants were exercised, this would give entitlement to 25,000 new shares.

- Issued and allocated 52,000 2017 share subscription warrants – if all these share subscription warrants were exercised, this would give entitlement to 42,000 new shares, given the lapse of 10,000 2017 share subscription warrants.

There were also 34,200 share subscription warrants, issued on March 25, 2014, by Effimune and exercisable over five years which, as a result of the merger, would give automatic entitlement to the same number of OSE Immunotherapeutics share subscription warrants. At an exchange ratio of 1.93, these share subscription warrants could result in the creation of 66,006 new OSE Immunotherapeutics shares. As of December 31, 2019, no share subscription warrants had been exercised. All of the Effimune 2014 share subscription warrants have therefore lapsed.

- Issued and allocated 42,850 2018 share subscription warrants to Gérard Tobelem (to replace the 25,000 2016 share subscription warrants) – if all these share subscription warrants were exercised, this would give entitlement to 42,850 new shares;

- Issued and allocated 25,900 2018 share subscription warrants to Dominique Costantini (to replace the 12,162 2016 founders' warrants) – if all these founders' warrants were exercised, this would give entitlement to 25,900 new shares;

- Issued and allocated 60,000 2019 founders' warrants to each of the non-salaried, non-executive directors in post at June 26, 2019 – if all these founders' warrants were exercised, this would give entitlement to 60,000 new shares;

- Issued and allocated 150,000 free shares to management and non-corporate officer employees of OSE Immunotherapeutics – if all these free shares vested, they would give entitlement to 148,400 new shares; given that 1,600 free shares were not allocated;

- Issued and allocated 150,000 free shares to Alexis Peyroles – if all these free shares vested, they would give entitlement to 150,000 new shares;

- Issued and allocated 22,625 free shares to Alexis Peyroles – if all these free shares vested, they would give entitlement to 22,625 new shares.

Details of the various dilutive instruments outstanding are given in paragraph 15.2.1.1 of this Universal Registration Document.

	No. of shares created	Percentage interest	Dilution
Existing securities	15,147,524	1.00%	-
If only the 2015 founders' warrants are exercised	25,000	1.00%	0.16%
If only the 2017 share subscription warrants are exercised	42,000	1.00%	0.28%
If only the 2018 share subscription warrants are exercised	42,850	1.00%	0.28%
If only the 2018 founders' warrants are exercised	25,900	1.00%	0.17%
If only the 2019 founders' warrants are exercised	60,000	1.00%	0.39%
If only 150,000 free shares actually vest (end of the vesting period)*	148,400	0.99%	0.97%
If only 150,000 free shares actually vest (end of the vesting period)*	150,000	0.99%	0.98%
If only 22,625 free shares actually vest (end of the vesting period)*	22,625	1.00%	0.15%
If all dilutive instruments are exercised	15,664,299	0.49%	3.30%

On the date of this Universal Registration Document, the total number of shares likely to be created by the exercise, and as the case may be, the vesting of instruments allocated and outstanding, giving access to the Company's equity, stood at 516,775 new shares, thus generating a dilution of 3.30% based on existing share capital to date.

In addition, the Company could, in the future, allocate or issue new instruments giving access to equity. The Company was also authorized by the General Shareholders' Meeting on June 26, 2019, to carry out capital increases by private investment of up to 20% of the capital.

The exercise of instruments giving access to outstanding capital, any new allocation or issue of such instruments, or any capital increase by private investment, in particular, by the Board of Directors using the authorizations referred to below, would result in a significant dilution for shareholders.

The table below shows the different financial authorizations in progress which were granted by the Company's General Shareholders' Meetings on June 14, 2017, June 13, 2018, and June 26, 2019:

Purpose of the resolution	Resolution	Duration and expiry of the authorization	Methods	Setting the price of the shares issued	Maximum nominal amount in euros	Use
Capital increase, through the issue – with preferential subscription rights – of shares and/or transferable securities giving access to the Company's equity and/or the issue of transferable securities giving entitlement to the allocation of debt securities	12th	26 months from the General Shareholders' Meeting of June 26, 2019	Delegation of power to the Board of Directors	The price of one share issued will be at least equal to the nominal value of the share on the issue date	1,500,000*	
Capital increase through the issue – without preferential subscription rights – of shares and/or transferable securities giving access to the Company's equity and/or the issue of transferable securities giving entitlement to the allocation of debt securities through an offering, as referred to in Article L. 411-2 II of the French Financial and Monetary Code, in particular, to qualified investors or a restricted circle of investors	13th	26 months from the General Shareholders' Meeting of June 26, 2019	Delegation of power to the Board of Directors	The price of one share will be at least equal to the average price weighted by volume based on the last three (3) trading sessions prior to the issue price being set, which may be reduced by a maximum discount of five (5)%	1,500,000*	
Capital increase, through the issue of shares and/or debt securities and/or transferable securities giving access to equity or giving entitlement to a debt security, without preferential subscription rights, with no indication of beneficiaries and by public offering	14th	26 months from the General Shareholders' Meeting of June 26, 2019	Delegation of power to the Board of Directors	The price of one share will be at least equal to the average price weighted by volume based on the last three (3) trading sessions prior to the issue price being set, which may be reduced by a maximum discount of five (5)%	10% of the capital 1,500,000*	
Capital increase through the issue of common shares and/or any other transferable securities giving access to equity and/or giving entitlement to the allocation of debt securities – without preferential subscription rights – to categories of persons with specific characteristics	15th	18 months from the General Shareholders' Meeting of June 26, 2019	Delegation of power to the Board of Directors	The common share issue price will be at least equal to the average weighted price based on the last three trading sessions prior to the issue price being set, which may be reduced by a maximum discount of 20% or increased by a surcharge at the full discretion of the Board of Directors depending on the category of person	1,500,000*	
Issue of financial instruments comprising and/or giving entitlement to (upon exercise of subscription warrants) to debt securities giving access to Company equity, to which share subscription warrants are	16th	18 months from the General Shareholders' Meeting of June 26, 2019	Delegation of power to the Board of Directors	The issue price of financial instruments comprising debt securities giving access to Company equity, to which share subscription warrants are attached, will be determined on the basis of	1,500,000*	

attached – without preferential subscription rights – to a single category of person in accordance with Article L. 225-138 of the French Commercial Code				their nominal value, which may be reduced by a discount of no more than 10%. The issue price of the common shares, resulting from the exercise of rights attached to these debt securities or share subscription warrants, will be at least equal to the lowest daily price, weighted by volume, based on the last ten trading sessions prior to the issue price being set, which may be reduced by a discount of no more than 10%		
Increase in the number of securities to be issued in the event of a capital increase, with or without preferential subscription rights for shareholders, in the event of over-subscription, of up to 15% of the initial issue	18th	26 months from the General Shareholders' Meeting of June 26, 2019	Delegation of power to the Board of Directors	Same price as that used for the initial issue and within thirty days of closure of the subscription period	*	
Capital increase through the incorporation of premiums, reserves, profits or other items	19th	26 months from the General Shareholders' Meeting of June 26, 2019	Delegation of power to the Board of Directors	N/A	1,500,000	
Issue of common shares and/or transferable securities giving access to Company equity, as payment in kind comprising equity securities or transferable securities giving access to equity	20th	26 months from the General Shareholders' Meeting of June 26, 2019	Delegation of power to the Board of Directors	None	*	
Issue of common shares and/or transferable securities giving access to Company equity, in the event of a public exchange offering initiated by the Company	21st	14 months from the General Shareholders' Meeting of June 26, 2019	Delegation of power to the Board of Directors	None	1,500,000*	
Allocation of existing or future free shares to the Group's salaried members of staff and corporate officers, or to some of them	24th	38 months from the General Shareholders' Meeting of June 26, 2019	Delegation of power to the Board of Directors	N/A	Overall cap of 500,0000 securities	
Issue of founders' warrants under the terms provided for in Article 163 bis G of the French General Tax Code without preferential subscription rights for shareholders, to a single category of person	25th	18 months from the General Shareholders' Meeting of June 26, 2019	Delegation of power to the Board of Directors	The price of a share will be at least equal to the average closing price based on the last twenty (20) trading sessions prior to the allocation date without, if the capital increase was carried out through the issue of securities giving entitlement to equivalent rights within the last six months prior to allocation, the price being lower than the issue price of said securities		

Issue of share subscription warrants to a single category of person**	26th	18 months from the General Shareholders' Meeting of June 26, 2019	Delegation of power to the Board of Directors	The issue price of a share subscription warrant will be set by the Board of Directors on the basis of a valuation report prepared by an independent expert in accordance with the requirements of Article 262-1 of the AMF general regulation The subscription price of shares issued as a result of share subscription warrants being exercised will be no less than the average closing price based on the last twenty (20) trading sessions prior to the date on which the share subscription warrants were allocated		
Allocation of free performance shares to be issued to the Group's salaried members of staff and corporate officers, or just some of them, without preferential subscription rights	30th	38 months from the General Shareholders' Meeting of June 14, 2017	Delegation of power to the Board of Directors	N/A The maximum total number of common shares that may result from the conversion of preference shares allocated is set at 287,500, i.e. 2% of the Company's share capital	Overall cap of 500,0000 securities	
Allocation of existing or future free shares to the Group's salaried members of staff and corporate officers, or to some of them	31st	38 months from the General Shareholders' Meeting of June 14, 2017	Delegation of power to the Board of Directors	N/A		Board of Directors meeting on 12/05/2018 Board of Directors meeting on 12/10/2019
Issue of founders' warrants under the terms provided for in Article 163 bis G of the French General Tax Code without preferential subscription rights for shareholders, to a single category of person	32nd	18 months from the General Shareholders' Meeting of June 14, 2017	Delegation of power to the Board of Directors	The price of a share will be at least equal to the average closing price based on the last twenty (20) trading sessions prior to the allocation date without, if the capital increase was carried out through the issue of securities giving entitlement to equivalent rights within the last six months prior to allocation, the price being lower than the issue price of said securities		Board of Directors meeting on 06/13/2018
Issue of share subscription warrants to a single category of person**	33rd	18 months from the General Shareholders' Meeting of June 14, 2017	Delegation of power to the Board of Directors	The issue price of a share subscription warrant will be set by the Board of Directors on the basis of a valuation report prepared by an independent expert in accordance with the requirements of Article 262-1 of the AMF general regulation The subscription price of shares issued as a result of share subscription warrants being exercised will be no less than the average closing price based on the last twenty (20) trading sessions prior to the date on which the share		Board of Directors meeting on 06/13/2018

				subscription warrants were allocated		
Issue of share subscription or purchase warrants to eligible Company employees or corporate officers	34th	38 months from the General Shareholders' Meeting of June 14, 2017	Delegation of power to the Board of Directors	N/A		
Allocation of existing or future free shares to the Group's salaried members of staff and corporate officers, or to some of them	26th	38 months from the General Shareholders' Meeting of June 13, 2018	Delegation of power to the Board of Directors	N/A		Board of Directors meeting on 06/26/2019
Issue of founders' warrants under the terms provided for in Article 163 bis G of the French General Tax Code without preferential subscription rights for shareholders, to a single category of person	27th	18 months from the General Shareholders' Meeting of June 13, 2018	Delegation of power to the Board of Directors	The price of a share will be at least equal to the average closing price based on the last twenty (20) trading sessions prior to the allocation date without, if the capital increase was carried out through the issue of securities giving entitlement to equivalent rights within the last six months prior to allocation, the price being lower than the issue price of said securities		Board of Directors meeting on 06/26/2019
Issue of share subscription warrants to a single category of person**	28th	18 months from the General Shareholders' Meeting of June 13, 2018	Delegation of power to the Board of Directors	The issue price of a share subscription warrant will be set by the Board of Directors on the basis of a valuation report prepared by an independent expert in accordance with the requirements of Article 262-1 of the AMF general regulation The subscription price of shares issued as a result of share subscription warrants being exercised will be no less than the average closing price based on the last twenty (20) trading sessions prior to the date on which the share subscription warrants were allocated	Overall cap of 500,0000 securities	

* The overall maximum nominal amount of capital increases that may be carried out under these resolutions is capped at €1,500,000.

** The right to subscribe for share subscription warrants was allocated to the category of persons defined as follows: members of the Board of Directors who are not employees or executive corporate officers subject to the Company's tax arrangements for employees, as well as the Company's external consultants, i.e. natural or legal persons outside the Company who, due to their expertise, help the Company to develop in particularly specialized technical and state-of-the-art fields of a scientific, medical or operational nature.

19.1.5 Information on requirements governing any acquisition right and/or any obligation attached to authorized, but not issued, capital or on any company aiming to increase the capital

None.

19.1.6 Information on the share capital of any member of the Group that is subject to an option or conditional or unconditional agreement to place it under option

None.

19.1.7 Table showing the history of the Company's share capital

Dates	Nature of the transaction	Nominal (in €)	Additional paid-in capital (in €)	Price per share (in €)	Adjusted price per share	Number of shares created/canceled	Total number of shares	Capital after the transaction (in €)
	Creation							
4/27/2012	10 for 1 split	1	0	1		1,000	1,000	1,000
4/27/2012	Increase	1		1		25,500	26,500	26,500
4/27/2012	Increase	1	0	1		500,000	526,000	526,000
4/10/2014	5 for 1 split	0.20	0	0.20			2,632,500	526,500
4/10/2014	Increase	0.20	9.80	10		5,000,000	7,632,500	1,526,500
6/30/2014	Increase	0.20	7.80	8		355,947	7,988,447	1,597,689.40
7/29/2014	Increase	0.20	7.80	8		37,500	8,025,947	1,605,189.40
3/30/2015	Increase	0.20	10.60	10.80		1,955,000	9,980,947	1,996,189.40
6/24/2015	Increase	0.20	7.80	8		31,250	10,012,197	2,002,439.40
09/09/2015	Increase	0.20	7.80	8		36,744	10,048,941	2,009,788.20
5/31/2016	Increase	0.20	-	-	-	4,107,187	14,156,128	2,831,225.60
5/31/2016	Increase	0.20	7.80	8		88,256	14,244,384	2,848,876.80
6/17/2016	Increase	0.20	5.60	5.80		6,369	14,250,753	2,850,150.60
12/6/2016	Increase	0.20	5.60	5.80		39,217	14,289,970	2,857,994
03/28/2017	Increase	0.20	-	-		85,000	14,374,970	2,874,994
12/13/2017	Increase	0.20	-	-		113,851	14,488,821	2,897,764.20
6/13/2018	Increase	0.20	-	-		173,040	14,661,861	2,932,372.20
7/18/2018	Increase	0.20	-	-		40,151	14,702,012	2,940,402.40
12/5/2018	Increase	0.20	0.80	1		115,000	14,817,012	2,963,402.40
6/26/2019	Increase	0.20				150,000	14,967,012	2,993,402.40
12/10/2019	Increase	0.20				38,712	15,005,724	3,001,144.80
3/26/2020	Increase	0.20	-	-		141,800	15,147,524	3,029,504.80

19.2 Company's constitution and bylaws as of the date of this Universal Registration Document

19.2.1 Company's purpose (Article 2)

The Company is registered with the Nantes Trade and Companies Register under number 479 457 715.

The Company's purpose, in France and abroad:

- The design, research and development of healthcare products from creation to obtaining marketing authorization, and all related operations including marketing;
- The acquisition, filing, obtaining, sale or licensing of all patents, brands, licenses and use processes;
- The acquisition of interests in any companies or undertakings already established or to be established, in France or abroad, whether or not they have a similar purpose to that of the Company;

- The provision of services, consultancy in research and development, marketing or commercial consultancy, consultancy on market access (pricing and reimbursement), structural audits in the field of healthcare, pharmaceuticals, cosmetics, nutrition and veterinary;
- And, more generally, all industrial, commercial, financial, civil, intangible property or real estate transactions directly or indirectly related to one of the above purposes or to any similar or related purpose that could be useful to the achievement and development of the Company's business;
- It may carry out any transactions that are compatible with, related to and contribute to achieving this purpose.

19.2.2 Rights attached to shares (Articles 11 to 18)

Article 11 – Rights and obligations attached to shares

I – Common rights attached to common shares

Each common share confers the right to company profits and assets in proportion to the portion of capital that it represents.

Shareholders are only liable for losses up to their contributions.

The rights and obligations attached to common shares follow said shares, regardless of any change of ownership.

Ownership of common shares automatically entails full compliance with the bylaws and decisions taken by General Shareholders' Meetings.

Each common share confers the right to participate, under the terms set by legislation and the bylaws, in General Shareholders' Meetings and vote on resolutions.

Whenever it is necessary to own more than one share in order to exercise any given right, or even in the event of an exchange, grouping or allocation of shares, or as a result of a capital increase or reduction, a merger or any other transaction, owners of isolated shares or numbers of shares below the required number may only exercise said right on condition that they personally carry out the grouping and, where appropriate, the purchase or sale of the common shares necessary.

II – Rights attached to A Shares

A Shares and the rights of their owners are governed by the French Commercial Code, in particular, by Articles L. 228-11 et seq.

A Shares are subject to all the provisions of the bylaws and decisions taken by general meetings of owners of common shares.

A Shares do not confer distribution rights in the event of any distribution or, where applicable, allocation of assets, decided on for each common share.

A Shares do not have preferential subscription rights for any capital increase or transaction with entitlement to common shares; on the other hand, the conversion ratio will be adjusted to preserve the rights of holders of A Shares, in accordance with legal and regulatory requirements, as shown in Article 12 of these bylaws. With regards to ownership of Company assets, A Shares confer the right to liquidating dividends in proportion to the amount of capital that they represent.

A Shares do not confer voting rights at ordinary and extraordinary meetings of common shareholders, given that they have voting rights at special meetings of A Shareholders. Holders of A Shares meet at special meetings for any proposed modifications of the rights attached to A Shares. In addition, in accordance with Article L. 228-17 of the French Commercial Code, any plans for the merger or spin-off of the Company under which A Shares may be exchanged for shares conferring equivalent special rights, will be subject to the approval of any related special meeting.

Decisions taken by special meetings are only valid if the shareholders present or represented by proxy hold, upon first convocation, at least one third, and on second convocation, one fifth, of the preference shares with voting rights. In the event of modification or depreciation of capital, the rights of A Shareholders are adjusted to preserve their rights in accordance

with Article L. 228-99 of the French Commercial Code. Given that the other rights attached to A Shares are temporary, these rights are specified in Article 12 of these bylaws.

Article 12 –A Shares

Subject to fulfilling the conditions set out below, A Shares, on their conversion date, will automatically be converted by the Company into common shares.

The Company may inform holders of A Shares that the shares are being converted, by whatever means, before the effective conversion date.

Two years after the A Shares are allocated by the Board of Directors, they will be converted into common shares using a conversion ratio which is dependent on at least one criterion based on changes in the market price of the common share compared with an initial threshold which cannot be lower than the market price of the common share as recognized on the date on which the A Shares were allocated and one criterion relating to the Group's performance.

Subject to adjustment in accordance with legal and regulatory requirements, the conversion ratio will be 100 common shares per A Share where the target objective is met in full, for the criterion based on changes in the market price, with a proportional and linear reduction in the event of failure to meet the criterion in full and, for the performance-based criterion, a reduction in line with the degree of fulfillment of the criterion if it has not been met in full.

Where the total number of common shares due to be received by the holder by applying the conversion ratio to the number of A Shares held is not a whole number, the number of shares received by said holder will be rounded down to the next whole number.

Notwithstanding the above, the conversion may take place prior to the two-year deadline from the date of allocation of the A Shares by the Board of Directors, if the beneficiary becomes disabled (category two or three disability provided for in Article L. 341-4 of the French Social Security Code), at the beneficiary's request, at any time after said disability is recognized.

The Board of Directors, or by delegation of authority under the terms set out by legal requirements, the Chairman of the Board of Directors, shall recognize the conversion of A Shares into common shares where the conversion is carried out under the conditions set out above.

At intervals which it shall itself determine, the Board of Directors shall acknowledge, where applicable, the number of common shares resulting from the conversion of A Shares in the fiscal year in question and shall make the necessary changes to the bylaws, in particular, with regard to the breakdown of shares by category. This option may be delegated to the Chief Executive Officer in accordance with legal requirements.

Common shares arising from the conversion of A Shares will be identical in all respects to outstanding common shares.

Article 13 – Type of shares

Shares are either registered or bearer shares, at the shareholder's choice. They can only be bearer shares once they are fully paid-up.

Fully paid-up A Shares are registered shares.

The Company is authorized to identify the holders of bearer securities by simple request to the organization in charge of clearing bearer securities, the name or corporate name, nationality, year of birth or year of incorporation, address of the holders of securities as well as the quantity of securities held by each of them.

Article 14 – Payment for shares

In the event of a capital increase, at least one quarter of the nominal value of shares issued for cash and, where necessary, the full issue premium, is paid up at the time of subscription.

The balance may be paid in one or more installments at the Board of Director's request, within five years of the date on which the transaction becomes final in the case of a capital increase.

Shareholders are notified of calls for funds by individual recorded delivery letters, at least fifteen days prior to the date set for each payment.

Shareholders who fail to make the payments owing for the shares by the due date shall, automatically, and without any formal notification, be liable to pay the Company late payment interest calculated on a daily basis, from the due date, at the legal rate applicable to commercial transactions, plus three points.

In order to secure the payment of these sums, the Company is entitled to apply the sanctions provided for by Articles L. 228-27 et seq. of the French Commercial Code.

Article 15 – Transfer of shares

Shares are freely transferable as soon as they are issued, in accordance with the procedures laid down by law.

They are registered in a share account and transferred between accounts on the basis of instructions signed by the transferor or their qualified representative.

Article 16 – Disclosure thresholds

Pursuant to Article L. 233-7 of the French Commercial Code, any individual or legal entity, acting alone or in concert, within the meaning of Article L. 233-10 of the French Commercial Code, who comes to hold or ceases to hold a number of shares representing a fraction equal to 5%, 10%, 15%, 20%, 25%, 30%, 33.33%, 50%, 66.66%, 90% or 95% of the share capital or voting rights, is required to disclose to the Company no later than the close of trading on the fourth trading day following the date on which the aforementioned shareholding threshold is crossed, the number of shares and voting rights held. The individual required to disclose the above information shall specify the number of securities held giving future access to the share capital and related voting rights.

A shareholder who has not properly made the required disclosures as referred to above shall be stripped of the voting rights attached to the shares in the conditions pursuant to the French Commercial Code.

Article 17 – Indivisibility of shares – Bare ownership – Usufruct

(i) The shares are indivisible in respect of the Company.

Joint owners of undivided shares are represented at General Shareholders' Meetings by one owner or by a single proxy. In the event of a disagreement, the proxy is appointed by the court at the request of the joint owner acting first.

(ii) The beneficial owner has the voting right at Ordinary General Shareholders' Meetings and the bare owner at Extraordinary General Shareholders' Meetings. Shareholders may, however, agree to any distribution of voting rights at General Shareholders' Meetings. The Company is notified of the agreement by registered letter, and is obliged to apply this agreement for any meeting that may be held after one month has lapsed since the letter was sent.

Article 18 – Double voting rights

Each common share and each A Share confers entitlement to one vote. Double voting rights of those conferred by other common shares in terms of the portion of capital that they represent are given to any fully paid-up common shares that can be proven to have been registered for at least two years in the name of the same shareholder.

Should obtaining double voting rights result in the shareholding threshold being crossed, under the requirements of Article 16 of the bylaws, the shareholder in receipt of the double voting rights would be obliged to comply with the provisions of said article.

This double voting right is also conferred on ordinary registered shares, as soon as they are issued, in the event of a capital increase through the incorporation of reserves, profits or issue premiums, allocated free of charge to shareholders who hold old common shares which confer this right.

Common shares transferred as a result of inheritance, the liquidation of community property between spouses or inter vivos gifts to a spouse or close relative do not result in the loss of the right acquired and do not interrupt the qualifying periods provided for above.

It is likewise, in the event of transfer of common shares following the merger or spin-off of a corporate shareholder.

In addition, the merger or spin-off of the Company does not affect the double voting rights that may be exercised within one or more beneficiary companies if permitted by their bylaws.

19.2.3 Company bylaws, charters or regulations that may have the effect of delaying, postponing or preventing a change of control.

None.

20 Major contracts

In the two years prior to the publication of this Universal Registration Document, the Company did not enter into any material contract (it being recalled that the Boehringer Ingelheim contract to develop BI 765063 (OSE-172) was signed on April 4, 2018).

As of the date of this Universal Registration Document, the Group as a whole is bound by the following contracts, conferring a material obligation or right for the entire group:

- OSE Pharma retained the confidential contractual obligations entered into by its subsidiary, OPI, in respect of Takeda, with a milestone payment upon registration of Tedopi® in the United States and in Europe, then additional payments (fees or royalties) corresponding to a percentage of sales of Tedopi® by OSE Pharma, this being no greater than a single-digit percentage.
- OSE Pharma signed a licensing contract with OPI in Switzerland in July 2012 for Tedopi® (OSE-2101). This first contract gives OSE Pharma the commercial rights to market the product in Europe as well as responsibility for international development in Europe and the USA. OSE Pharma will set up an international development team and will seek to obtain the green light from the two Registration Agencies (EMA and FDA) in both Europe and the USA.

21 Publicly available documents

So long as this Universal Registration Document is valid, the following documents (or copies of them) may be physically viewed at the Company's registered office at 22, Boulevard Benoni Goullin – 44200 Nantes, France:

- the Company's instrument of incorporation and bylaws;

- any reports, letters and other documents, historical financial information, assessments and statements produced by an expert at the Company's request, some of which are included or referred to in this Universal Registration Document;

- the Company's historical financial information for each of the three fiscal years preceding the publication of this Universal Registration Document.

The regulated information within the meaning of the General Regulation of the AMF is available on the Company's website (www.ose-immuno.com) and the websites of the AMF (www.amf-france.org) and Euronext (www.euronext.com).

22 Glossary

Adjunctive: an antigen mixed for example with a mineral oil (adjunctive), generates an inflammatory reaction at the point of injection and an activation of innate immunity (cells presenting antigens) leading to recognition of those antigens, then co-stimulation signals on the surface of antigen-presenting cells that will be necessary for the activation of T lymphocytes.

Antibodies: these are proteins produced by cells, plasmocytes, resulting from the activation of B lymphocytes (B lymphocyte cells at the origin of antibodies). Antibodies are specifically directed against the tumor antigens. They bind onto these latter to form an immune complex. The existence of this complex triggers several defense mechanisms including the recruitment of innate immunocompetent cells such as macrophages or NK cells.

Monoclonal antibodies: antibodies that possess the same chemical structure and therefore a unique specificity for an antigen. Produced by recombinant protein technology in bioreactors, they are used as therapeutic agents in many areas of medicine, in particular in cancerology, immunology and inflammation.

Tumor antigens or tumor-associated antigens: these are macromolecules, proteins and protein fragments specific to the tumor. They betray its presence. When they are recognized by the immune system, they produce a response specifically directed against the tumor cells. Sometimes shared with other healthy tissues, they are not recognized since they are considered as "self-antigens".

Dendritic cells: these are "sentinel" cells present in tissues and migrating in lymphoid tissues. They have the capacity to present tumor antigens to T lymphocytes to activate them. They also secrete substances called cytokines, messengers that stimulate the overall immune response.

Myeloid cells: these are white blood cells that play a major role in the initiation and control of inflammation. Suppressive myeloid cells accumulate in some forms of cancer, where they prevent the T cells from destroying the tumor.

Checkpoint Inhibitor: specific antibodies of certain cellular signaling channels that intervene in immuno-oncology treatments.

Cytokines: molecules that play a messenger role allowing communication between cells. These are the regulating principles of the immune response.

Tumor escape: the capacity of tumor cells to escape the surveillance of the immune system and create metastases in other parts of the body.

HLA: the human Major Histocompatibility Complex (MHC) is also called HLA (Human Leukocyte Antigens). HLA plays a role in the acceptance or rejection of a transplant. The presentation of the antigen (in reality a small peptide called epitope or antigenic determinant) is provided by the HLA system. Two classes exist: class I and class II.

HLA-A2 (also called HLA-A*02 or A*02): HLA serotype (belonging to the class I MHC, is measured by a positive or negative serology test). This receptor is involved in immunosurveillance and in T cell response. It is expressed in approximately 45% of the general population.

Epitope: this fragment of tumor antigen called "antigenic determinant", which is the often very small molecular structure that binds to cell receptors and triggers an immune response.

T Lymphocytes: these cells provide the specific cellular response. A distinction is made between T-CD8 lymphocytes, activated in cytotoxic lymphocytes that will directly attack the tumor cells and, on the other hand, T-CD4 cells, helper T cells or auxiliaries, that mainly provide the functions of stimulation/regulation of the immune response. Initially naive (that is "non-informed") these cells are educated by the dendritic cells that teach them to specifically recognize tumor antigens.

Regulatory T Lymphocytes (Treg): these cells control the occurrence and the intensity of immune responses made by the T lymphocytes. They are naturally present and their absence leads to autoimmune diseases. Inversely, their accumulation reduces autoimmunity and prevents the rejection of transplants.

NK Lymphocytes: these innate immunity cells can recognize and kill tumor cells without having been activated. Their mechanism of recognition is non-specific for tumor antigens. In the absence of unique receptors for a particular antigenic target, the NK cells cannot distinguish the self from the non-self.

Major Histocompatibility Complex (MHC): MHC molecules are on the surface of antigen-presenting cells and ensure the antigen is presented to the T lymphocytes in order to activate them. There are class I and class II MHC molecules. In humans, we speak of HLA antigens, This group of genes is expressed on the surface of cells and has been analyzed internationally for organ transplants. The class I genes are the A, B, C genes; the class II genes are the DP, DQ and DR genes.

MHC I molecules are present on all nucleated cells of the organism and present the antigen to cytotoxic T lymphocytes.

The MHC II molecules are found on the surface of antigen-presenting cells (APC) as dendritic cells, activated B lymphocytes, macrophages, in order to educate the lymphocytes in the non-recognition of self-peptides and the recognition of "foreign" peptides of the non-self.

These two systems take part in immune responses and are the key to cellular immunity and communication between cells providing for the protection of the organism.

TCR: this is a specific immunoreceptor, the T lymphocytes express this TCR receptor (T-Cell Receptor) on their surface. It only recognizes the epitopes presented by the major histocompatibility system (or HLA system).

LIST OF ABBREVIATIONS

ALK	Anaplastic Lymphoma Kinase: genetic abnormality with abnormal activation of the ALK protein, i.e. 4 to 5% of non-small cell lung cancers for which targeted therapies are available
APC	Antigen-Presenting Cells: dendritic, macrophage cells, etc. presenting antigens
ASCI	Antigen-Specific Cancer Immunotherapeutic: a vaccine targeting a tumor antigen, an antigenic proteinaceous macromolecule
ASCO	American Society Of Clinical Oncology: annual cancer conference in the United States
GLP, GMP, GCP	Good Laboratory Practices, Good Manufacturing Practices, Good Clinical Practices
BRCA1	Breast Cancer Gene 1: mutations of this gene with an increased risk of cancer
CEA	Carcino Embryogenic Antigen: tumor antigen very frequently expressed on the surface of tumor cells
CMC	Chemistry Manufacturing Control: part of a drug's pharmaceutical dossier
CMO	Contract Manufacturing Organization: organization for production of industrial lots
MHC class I	Major Histocompatibility Complex or HLA system: the MHC class I molecules enable presentation of the peptide (or antigenic determinant = epitope) to the T CD8-lymphocytes - the most important are the HLA-A, HLA-B and HLA-C molecules.
MHC class II	The MHC class II molecules enable the presentation of the antigenic peptide to the T CD4 lymphocytes. The most important are the HLA-DP, HLA-DQ and HLA-DR molecules.
APC	Antigen Presenting Cells: or APC see above.
CRO	Contract Research Organization: organization subcontracting trials
CTLA-4	Cytotoxic T Lymphocyte-Associated Protein 4: checkpoint blocking T responses
EBV	Epstein Barr Virus: an oncogenic virus at the origin of some cancers
ECOG	Eastern Cooperative Oncology Group Performance Status: index of patient's condition 239
EGFR	Epidermal Growth Factor Receptor: mutations of the EGFR gene in some cancers, overexpression of the EGFR protein, therapies targeted on that target, the frequency of EGFR mutations is 5 to 20%
ELISPOT	Enzyme-Linked Immunosorbent Spot assay: measures specific responses of T lymphocytes
EMA	European Medicines Agency: European drug agency
EP-2101	Former code of OSE2101:
ER	Estrogen receptor: a marker in breast cancer influencing the therapeutic options
ErbB	Family of epidermal growth factors EGFR and HER/neu belong to this family of receptors, involved in many cancers.
FDA	Food And Drug Administration: American drug agency
FIGO	International Federation of Gynecology and Obstetrics
GCP	Good Clinical Practice
GLP	Good Laboratory Practice

GMP	Good Manufacturing Practice
HER-2/neu	Human Epidermal Receptor-2/Neurological: Tumor antigen
HLA	Human Leukocytes Antigens: molecules on the surface of cells that allow identification by the immune system. These proteins are called "Major Histocompatibility Complex" (MHC) molecules.
ICH	International Conference on Harmonization (of Technical Requirements for Registration of Pharmaceuticals for Human Use) International Pharmaceutical Standards
IFN	Interferon: a cytokine produced by the cells of the immune system,
IL	Interleukin cytokine produced by cells to communicate between themselves
IND – United States IMPD – Europe	Investigational New Drug Application: complete documentation of a pharmaceutical dossier in the United States Investigational Medicinal Product Dossier: complete documentation of a pharmaceutical dossier in Europe
Ligand	A molecule able to bind itself to a specific protein
MAGE 2/ MAGE 3	Melanoma Antigen type 2/type 3: tumor antigens expressed in many cancers
MDSC	Myeloid-Derived Suppressor Cells
MHC	Major Histocompatibility Complex
MUC	Tumor antigen associated with many cancers
NSCLC	Non-Small Cell Lung Carcinoma: non-small cell lung cancer or non-small cell bronchial carcinoma NSCLC, the most common form of lung cancer
NK	Natural Killer: these natural killer cells are immunity cells.
ORR	Overall Response Rate: tumor response rate
OSE-2101	Product code of the multiepitopes targeting 5 tumor antigens – Tedopi® trademark, from the optimized multiepitope technology - Memopi® trademark
PARP	Poly ADP Ribose Polymerase enzyme, targeted cancer therapies targeting that enzyme
PCT	Patent Cooperation Treaty: treaty for cooperation on patents (PCT) at the international level
PDCD1	Programmed Cell Death 1: checkpoints blocking T responses
PD-L1	PD-1 Ligand 1: checkpoints blocking T responses
PR	Progesterone Receptors: a breast cancer marker influencing therapeutic options
p53	A Nuclear Regulatory Protein Oncogene: The gene coding for the p53 protein is disabled in half of human cancers. This protein is a tumor antigen.
QP	Qualified Person: person qualified for pharmaceutical responsibility in Europe
RCC	Renal Cell Carcinoma: kidney cancer
RECIST	Response Evaluation Criteria In Solid Tumor: RECIST criteria are used to evaluate and measure the tumor response.
TAM	Tumor-Associated Macrophages
CD4 T	CD4 T Lymphocytes: helper or auxiliary T cells are "amplifier cells" of the immune response. They carry a CD4 marker on their surface.

CD8 T	Cytotoxic T Lymphocytes (CD8 T or killer T cells) destroy the infected or "foreign" cells, and are able to destroy target cells that present specific antigens through the MHC class I. They carry a CD8 marker on their surface.
TCR	T-Cell Receptor: the TCR receptor, expressed on the surface of T cells, recognizes a peptide presented in a molecule of the Major Histocompatibility Complex (MHC)
TIL	Tumor Infiltrating Lymphocytes: intra-tumoral lymphocytic infiltrate
TKI	Tyrosine Kinase Inhibitors: therapies targeted on certain mutations or molecular alterations of the cancerous cell (for example, erlotinib and gefitinib)
TNBC	Triple Negative Breast Cancer: triple negative breast cancer, tumor cells negative for three prognostic markers (estrogen receptors (ER), progesterone receptors (PR), overexpression of the HER2 protein)
EU	European Union
VEGF	Vascular Endothelial Growth Factorhttp://fr.wikipedia.org/wiki/Endoth%C3%A9lium plays a role in tumor growth. Bevacizumab is the first monoclonal antibody directed against the VEGF and marketed for treatment against come cancers in 2004.

Appendix A – Board of Directors' Management Report

OSE IMMUNOTHERAPEUTICS

Limited company (société anonyme) with a Board of Directors

with capital of 3,029,504.80 euros

Registered office: 22 boulevard Benoni Goullin, 44200 Nantes

479 457 715 Nantes Trade and Companies Register

BOARD OF DIRECTORS' MANAGEMENT REPORT PRESENTED TO THE COMBINED GENERAL SHAREHOLDERS' MEETING OF JUNE 16, 2020

Fiscal year ended December 31, 2019

Dear Shareholders,

In accordance with legal and regulatory provisions, we have convened this Combined General Shareholders' Meeting (Ordinary and Extraordinary), in order to report to you on the Company's position and business as well as the results achieved during the fiscal year ended December 31, 2019.

The Statutory Auditors will provide you, in their report on the separate financial statements, with all information concerning the regularity and fairness of the financial statements presented to you.

We will give you all additional clarifications and information concerning the material and documentation provided for by the regulations in force and which were made available to you within the legal deadlines.

In accordance with the provisions of Article L. 225-100 of the French Commercial Code, please note that the various information provided in this report constitute our objective and exhaustive analysis of the business development, results and financial position of the Company for the fiscal year ended on December 31, 2019.

1. ACTIVITY OF THE COMPANY DURING FISCAL YEAR 2019

1.1 Position and development of the Company's business over the fiscal year

1.1.1 Capital structure at December 31, 2019

See Section 16.1 of the Universal Registration Document.

1.1.2 Development of the Company's business

During 2019, the Company continued to develop.

In January 2019, the Company received a notice of allowance by the Japanese Patent Office and the United States Patent and Trademark Office (USPTO) for a new patent family related to Tedopi®, for its use in the treatment of brain metastasis originating from cancers, including non-small cell lung cancer, in HLA-A2 positive patients. This patent protects the use of Tedopi® in the treatment of brain metastasis until 2034.

In February 2019, Servier exercised the first option under the two-step worldwide licensing agreement for the continuation of the clinical development and potential marketing of OSE-127 in autoimmune diseases. Under the terms of the licensing agreement, exercise of this first option resulted in the payment, by Servier, of a milestone payment of €10 million (excluding tax) to the Company, after validation of a previously defined development stage.

In March 2019, the Company presented BiCKI®, its new bispecific fusion protein platform built on the key backbone component anti-PD-1 (OSE-279), a new standard cancer treatment, to be paired with innovative immunotherapy targets, at the World Immunotherapy Congress in Boston.

The Company received authorization from the National Agency for the Safety of Medicines and Health Products (ANSM) in France and the Federal Agency for Medicines and Health Products (FAMHP) in Belgium to launch a Phase 1 clinical study of BI 765063 (OSE-172), a checkpoint inhibitor, in advanced solid tumors used as a monotherapy or in combination with a monoclonal antibody and PD-1 antagonist Boehringer Ingelheim's BI 754091.

In late March, OSE announced a research collaboration with the Léon Bérard Cancer Center to identify new targets in immuno-oncology using artificial intelligence technologies.

In April 2019, the Canadian Intellectual Property Office (CIPO) granted a patent that covers FR104 and its therapeutic applications in T lymphocyte-mediated autoimmune diseases, chronic inflammatory diseases and graft applications; a notice of allowance was also issued by the United States Patent and Trademark Office (USPTO) providing additional protection covering use of the product in the treatment of T lymphocyte-mediated chronic inflammatory diseases. These new patents protect the therapeutic applications of FR104 in autoimmune diseases, chronic inflammatory diseases and graft applications in Canada and the United States up to 2031.

The Company attended the Annual Congress of the American Association of Cancer Research (AACR), held from March 29 to April 3, 2019, in Atlanta, with:

- An oral presentation of Tedopi® on the initial signs of the product's efficacy after failure from previous treatment with anti-PD1/anti-PD(L)1 checkpoint inhibitors. Improvement in the results of clinical cases related to three patients after checkpoint inhibitor treatment have shown that the clinical benefit of Tedopi® in third-line therapy. One patient showed a partial response and two patients had stable disease according to RECIST 1.1 criteria. The tolerability profile was manageable in these three patients and none of them had to stop the treatment because of toxicity.
- A presentation on BI 765063 (OSE-172) showing preclinical and ex vivo results in humans. The research concluded that as blockade of SIRPα prevents T cell transmigration, the selective anti-SIRPα activity of BI 765063 and its ability to promote T cell infiltration of solid tumors are crucial for this product's potential success as a novel cancer therapy.

In May 2019, a notice of allowance was granted by the United States Patent and Trademark Office (USPTO) covering OSE-127 and protecting it up to 2035.

In June 2019, the first patient was treated in the Phase 1 clinical trial to evaluate BI 765063, the selective antagonist targeting SIRPα, in patients with advanced solid tumors; milestone payments worth €15 million were made by Boehringer Ingelheim to OSE Immunotherapeutics upon clinical trial authorization and treatment of the first patient.

In July 2019, OSE received €800,000 in funding from the French National Research Agency (ANR) to validate new targets linked to myeloid cells that could be used to identify innovative immunotherapy targets. The Cancer Research Center of Lyon (CRCL) in France, as part of the Léon Bérard Center, managed the project.

In September 2019, the Company was issued a new patent by the European Patent Office strengthening protection for OSE-703, a humanized monoclonal antibody targeting the extracellular portion of the alpha chain of the Interleukin-7 receptor (CD127), and cytotoxic to human cells expressing CD127, and its use in immuno-oncology treatments. This new patent protects OSE-703 at least up to 2037.

OSE received a milestone payment of €5.4 million from Bpifrance to develop SIRPα-antagonist monoclonal antibody, BI 765063 as part of the collaborative EFFI-CLIN project.

New preclinical data were presented on the Company's novel bispecific checkpoint inhibitor (BICKI®) platform targeting the PD-1 receptor and cytokines to overcome tumor resistance to checkpoint inhibitor blockade (International Cancer Immunotherapy Conference, Paris, September 25-28).

In November 2019, a license agreement was signed with Chong Kun Dang (CKD) Pharmaceuticals Corp. for the development of Tedopi® in Korea. Financial terms of the contract include both upfront and short-term milestone payments of €1.2 million with total milestones payments of €4.3 million, as well as royalties on sales and transfer price in the high twenties. The deal applies specifically to development and licensing of Tedopi® in the Korean market which accounts for approximately 1% of the total global oncology market.

New preclinical and clinical data on its immuno-oncology products were showcased: Tedopi®, BI 765063 (OSE-172) and the BiCKI® platform (Society for Immunotherapy of Cancer [SITC] conference on November 6–10 at National Harbor, Maryland, United States).

In late November, OSE Immunotherapeutics signed an agreement with HalioDx, a specialist immuno-oncology diagnostic company based in Marseille, to conduct a translational study on immune biomarkers as part of the ongoing Phase 3 clinical trial of Tedopi® in patients with non-small cell lung cancer.

In December 2019, the Company announced positive clinical results from the Phase 1 clinical trial of OSE-127, showing a good safety and tolerability profile for the product. All pharmacokinetic and pharmacodynamic parameters were consistent and demonstrated dose-proportionality throughout the dose escalation to 10 mg/kg. These findings will help determine the dosing and administration schedule for the two planned Phase 2 clinical trials in ulcerative colitis and Sjögren's Syndrome (Servier is conducting this second study simultaneously). Both trial initiations are expected in 2020.

1.1.3 Issue of share warrants (BSA), founders' warrants (BSPCE) and free shares

See Section 19.1.4 of the Universal Registration Document.

1.2 Progress made and difficulties encountered

IN IMMUNO-ONCOLOGY: CLINICAL AND PRECLINICAL ADVANCES

Tedopi®, an innovative combination of neoepitopes, currently in a Phase 3 clinical trial for non-small cell lung cancer (NSCLC), in Europe, the United States and Israel.

In December 2017, following a review of additional data, a new recruitment strategy was defined that exclusively targets patients after failure from previous treatment with PD-1/PD-L1 checkpoint inhibitors. The aim of this strategy is to adjust for rapidly-evolving clinical practices with the approvals of PD-1/PD-L1 checkpoint inhibitors in first- and second-line treatment of non-small cell lung cancer.

In the first quarter of 2018, the competent authorities in the United States and Europe approved resumption of patient accrual in the trial using a revised protocol in patients in failure after treatment with PD-1/PD-L1 checkpoint inhibitors. Concentrating exclusively on these patients, Tedopi® addresses a high therapeutic need because no product has to date been registered for this population in immune escape. Furthermore, based on the same revised protocol, the competent Israeli authorities gave the green light in March 2018 to initiate the trial in this new country.

In June 2019, after reviewing global study data including safety data, the Independent Data Monitoring Committee (IDMC) for this trial recommended the continuation of the Atalante 1 study without any modifications.

In September 2017, a collaboration agreement was concluded with GERCOR, an independent association of physicians dedicated to clinical oncology research, to evaluate Tedopi®, in monotherapy or in combination with a PD-1 checkpoint inhibitor, versus Folfiri,* in locally advanced or metastatic pancreatic cancer.

In 2018, GERCOR, sponsor of the TEDOPaM study, finalized the design of this Phase 2 maintenance trial using Tedopi®, in monotherapy or in combination with Opdivo®, in patients with stable disease after four months of standard chemotherapy with Folfirinox.** And, in late 2018, the ANSM gave its authorization to start up the Phase 2 currently underway.

** Folfiri: a chemotherapy regimen combining folinic acid, fluorouracil and irinotecan*

*** Folfirinox: a chemotherapy regimen combining folinic acid, fluorouracil, irinotecan and oxaliplatin*

BI 765063 (OSE-172), a new-generation checkpoint inhibitor targeting the SIRPα receptor: new preclinical data presented at international immuno-oncology and immunology conferences have shown that BI 765063 (OSE-172) has a strong impact on the tumor microenvironment by blocking suppressive myeloid cells, which tackles cancer via a specific blockade of SIRPα, giving the product a selective and original pharmacological profile which re-enables T lymphocytes to destroy tumor cells.

In July 2017, the Company obtained €9.2 million in funding from Bpifrance as part of a collaborative project (EFFI-CLIN) to support the development of BI 765063 (OSE-172). This project notably includes product manufacturing, translational studies and a clinical program planned until Phase 2.

In April 2018, Boehringer Ingelheim acquired the global rights to the development, registration and marketing of BI 765063 (OSE-172), underlining its constant commitment to research and innovation in immuno-oncology.

The Company has validated the production steps for BI 765063 (OSE-172) and the preclinical toxicology studies. After drafting the protocol for Phase 1, in March 2019, the Company obtained regulatory authorizations in Belgium and France for the launch of Phase 1 aimed at evaluating BI 765063 in patients with advanced solid tumors.

In June 2019, OSE Immunotherapeutics announced the treatment of the first patient in the Phase 1 clinical trial and the payment of €15 million in milestone payments by Boehringer Ingelheim following clinical trial authorization and treatment of the first patient.

OSE-703, a humanized monoclonal antibody targeting the extracellular portion of the alpha chain of the Interleukin-7 receptor (CD127), and cytotoxic for human cells expressing CD127: in June 2017, a research collaboration agreement was signed with the Memorial Sloan Kettering Center in New York aimed at evaluating the product in solid tumors with a first model in non-small cell lung cancer (NSCLC).

IN THE FIELD OF AUTOIMMUNE DISEASES: A PRODUCT READY TO ENTER PHASE 2 IN AUTOIMMUNE DISEASES OR GRAFT APPLICATIONS, A PRODUCT WHICH HAS COMPLETED THE PHASE 1 CLINICAL TRIAL WITH POSITIVE RESULTS, IS READY TO ENTER PHASE 2 CLINICAL TRIALS FOR 2 INDICATIONS: SJÖGREN'S SYNDROME AND ULCERATIVE COLITIS

FR104, a CD28 antagonist: in post-Phase 1, the product was the subject of a licensing agreement with Janssen Biotech in July 2016 for the continuation of its clinical development in autoimmune diseases.

This agreement was triggered by positive clinical results from the initial Phase 1 study of FR104 in healthy volunteers which demonstrated good product tolerability and immunosuppressive activity.

On November 2, 2018, the Company acquired all the worldwide rights to FR104 from Janssen Biotech Inc., effective December 31, 2018. Janssen Biotech's decision to return the FR104 program to OSE Immunotherapeutics was motivated by an internal strategy review and prioritization of its own product portfolio.

The Company is evaluating the best options for continuing sustainable development of FR104, a Phase 2-ready asset, in autoimmune diseases or in transplantation, including worldwide partnering opportunities.

OSE-127, an Interleukin-7 receptor antagonist: new positive preclinical results and translational data, presented in June 2017 at the annual meeting of FOCIS (Federation of Clinical Immunology Societies) showed that OSE-127 had a differentiated mechanism of action to combat local pathological accumulation of inflammatory T lymphocytes, key factors in the chronicity of autoimmune diseases. These results and translational data showing the strong expression of Interleukin-7 receptor in biopsies of patients with ulcerative colitis, support planned clinical applications in inflammatory bowel diseases.

In 2018, following the validation of preclinical toxicology studies and the validation of the production process according to GMP standards, the Company worked on drafting the Phase 1 clinical protocol, for which it obtained authorization from the Federal Agency for Medicines and Health Products (FAMHP) in Belgium and the Belgian Ethics Committee in November 2018. In December 2018, the Phase 1 study started, and the first healthy volunteers dosed.

This Phase 1 clinical study ended in December 2019 with positive clinical results, showing a good safety and tolerability profile for the product. All pharmacokinetic and pharmacodynamic parameters were consistent and demonstrated dose-proportionality throughout the dose escalation to 10 mg/kg. These findings will help determine the dosing and administration schedule for the two planned Phase 2 clinical trials in ulcerative colitis and Sjögren's Syndrome (Servier is conducting this second study simultaneously). Both trial initiations are expected in 2020.

1.3 Foreseeable changes and future outlook

IN IMMUNO-ONCOLOGY: RESULTS OF THE FIRST STEP OF PHASE 3 CLINICAL TRIAL OF TEDOPI® EXPECTED IN THE FIRST QUARTER OF 2020; CONTINUATION OF THE CLINICAL PHASE 1 STUDY OF BI 765063 (OSE-172)

Tedopi® is currently being evaluated in a Phase 3 trial, called Atalante 1, in advanced NSCLC for HLA-A2 positive patients after failure from previous treatment with PD-1/PD-L1 checkpoint inhibitors.

In June 2019, at the end of the clinical data (including safety data) review, the Independent Data Monitoring Committee (IDMC) recommended that the Atalante 1 trial should be continued without any modifications.

On April 1, 2020, the Company announced the positive outcome of Step 1 of the Tedopi® Phase 3 clinical trial. Analysis of the data showed that the primary endpoint for this milestone was achieved with a 12-month survival rate in patients treated with Tedopi® and a 10% absolute difference in this survival rate compared to chemotherapy.

These results confirm the therapeutic benefit of Tedopi® in a patient group for which there is no confirmed treatment to date and which is awaiting new therapeutic options. The Company will initiate discussions with the regulatory authorities to analyze these positive clinical results and determine the best options to pursue the development of Tedopi® and maximize the positive benefit/risk ratio data obtained. At the same time, given that the positive Step 1 results significantly strengthened the value of Tedopi®, the Company is continuing to explore any potential partnering opportunities for the product.

Due to the global epidemic of COVID-19, the Company, in conjunction with the Independent Data Monitoring Committee (IDMC) and the Trial Steering Committee, analyzed the potential impact of this epidemic on the Atalante 1 trial. The clinical trials data could be strongly impacted by the worldwide COVID-19 pandemic and by the increased risk for patients with advanced lung cancer, as COVID-19 can cause serious pulmonary complications in this immunocompromised patient population. Moreover, for patient safety, several scientific and medical societies currently recommend the voluntary suspension of new patient recruiting in clinical trials in oncology.

Consequently, following the recommendation from both IDMC and Atalante 1 Steering Committee, OSE Immunotherapeutics voluntarily decided to terminate patient screening and accrual in the Step 2 initially planned and now cancelled.

A Phase 2 clinical trial was launched in 2019, in collaboration with the GERCOR, a cooperative group of digestive oncology experts, to assess Tedopi® when used in maintenance alone or in combination with a PD-1 checkpoint inhibitor versus Folfiri,* in locally advanced or metastatic pancreatic cancer. GERCOR is the sponsor of this Phase 2 maintenance trial using Tedopi® in patients with stable disease after four months of standard chemotherapy with Folfirinox.**

This trial is underway but, due to COVID-19, GERCOR, the study sponsor, indicated in late March 2020 that patient screening would continue but the inclusion of new patients in the study would be temporarily suspended.

** Folfiri: a chemotherapy regimen combining folinic acid, fluorouracil and irinotecan*
*** Folfirinox: a chemotherapy regimen combining folinic acid, fluorouracil, irinotecan and oxaliplatin*

Tedopi® could also be evaluated, in monotherapy or in combination with a checkpoint inhibitor, in a number of cancers of interest in which:

- There is a high therapeutic need,
- The role of HLA-A2 in immunosurveillance failures is established,
- The five tumor antigens are expressed at an advanced stage,
- These include, for example, lung cancer (Tedopi® in combination), ovarian cancer and rarer tumors.

BI 765063 (OSE-172), a new generation checkpoint inhibitor targeting suppressive myeloid cells via the SIRPα receptor: in April 2018, Boehringer Ingelheim acquired the global rights to the development, registration and marketing of BI 765063 (OSE-172) (a monoclonal antibody targeting SIRPα, expressed by the myeloid cell family), strengthening its constant commitment to research and innovation in immuno-oncology. According to the terms of the agreement, OSE Immunotherapeutics received €15 million on contract signature, €10 million after regulatory authorization to launch Phase 1 and another €5 million in milestone payments when the first patient was included in the Phase 1 study. In total, OSE

Immunotherapeutics could potentially receive over €1.1 billion euros according to predefined development, marketing and sales steps, plus royalties on net global sales of the product.

After obtaining regulatory authorizations in Belgium and France in March 2019 for the launch of Phase 1 aimed at evaluating BI 765063 in patients with advanced solid tumors and the treatment of the first patient in the trial in June 2019, the Phase 1 clinical trial is continuing.

As of the date of this Universal Registration Document, due to the COVID-19 crisis, the screening and inclusion of new patients in the study are temporarily suspended.

IN THE FIELD OF AUTOIMMUNE DISEASES: POSITIVE PHASE 1 CLINICAL RESULTS FOR OSE-127 AND TWO PHASE 2 TRIALS PLANNED IN 2020; FURTHER CLINICAL DEVELOPMENT OF PRODUCTS VIA PARTNERSHIPS

FR104: After regaining the rights to FR104 from Janssen Biotech on December 31, 2018, the Company has been working to enhance the product's value. After the positive results from Phase 1, FR104 is an asset that is ready to enter Phase 2 in autoimmune diseases or transplantation thanks to all the required preclinical and clinical data.

OSE-127: The Phase 1 clinical trial for OSE-127 ended in December 2019. The positive study results showed a good safety and tolerability profile. All pharmacokinetic and pharmacodynamic parameters were consistent and demonstrated dose-proportionality throughout the dose escalation to 10 mg/kg. These findings will help determine the dosing and administration schedule for the two planned Phase 2 clinical trials in ulcerative colitis and Sjögren's Syndrome (Servier will conduct this second study simultaneously). Both trial initiations are expected in 2020.

However, given the changing situation with regard to COVID-19, these studies can only be set up once all the preparatory steps have been completed and hospitals and healthcare professionals are able to conduct a clinical trial and ensure patient care in optimal safety conditions.

Product development will also continue until the Phase 2 clinical trial as part of the EFFIMab consortium (with public and private partners and with OSE Immunotherapeutics as leader). Continued development after this Phase 2 will be ensured by Servier under the licensing option concluded in December 2016.

The Company continues to seek new collaboration or license agreements that could be initiated at various stages of product development, with industry players involved in the field of activation and regulation immunology and in therapeutic combinations of high clinical interest.

SIGNIFICANT EVENTS SINCE THE END OF THE FISCAL YEAR

January 2020

The Japanese Patent Office Brevets has issued a new family of patents relating to Tedopi®, a combination of neoepitopes, covering the product's method for inducing an early T-lymphocyte memory response when using the product to treat cancer in HLA-A2 positive patients. This patent protects the product until 2035.

February 2020

The Company signed a collaboration agreement with the innovative company MAbSilico (Tours, France), specializing in the use of artificial intelligence algorithms to discover and characterize therapeutic antibodies. The objective of this three-year collaboration involving six antibody programs is to build on artificial intelligence to develop monoclonal antibodies, including innovative bispecific antibodies (BiCKI® platform).

March 2020

The Company signed an amendment to the two-step global licensing option agreement on the exclusive rights of OSE-127, Interleukin-7 receptor antagonist, signed with Servier in December 2016. This amendment covers the terms and conditions for exercising the licensing option by modifying Step 2 of the option. OSE Immunotherapeutics will thus receive a milestone payment of €5 million from Servier on enrollment of the first patient in Phase 2 clinical study scheduled to start in Sjögren's Syndrome and an additional payment of €15 million on exercise of the option at the end of the two scheduled Phase 2 studies, and in priority upon completion of the study in Sjögren's Syndrome, the second being planned in ulcerative colitis, sponsored by OSE Immunotherapeutics. The initial agreement provided for a total payment of €20 million at the end of Phase 2.

Due to the COVID-19 crisis, when the Company published its 2019 financial results and provided an update on its activities, the Company announced its forecast of the potential impact of COVID-19 on its activities and clinical development:

- The situation generated by COVID-19 is a major public health issue that could have a significant impact on its clinical trials currently underway. In the last days of March, health agencies and expert groups clarified that the conduct of clinical trials in hospitals would be extremely disrupted because medical teams were needed elsewhere, because of confinement measures and the potential risks relating to the COVID-19 epidemic for vulnerable patients. The Company's short-term priority is to do its part to mobilize all the resources necessary to combat COVID-19 and reduce its demands on healthcare professionals, while ensuring the safety of patients in its clinical trials already underway.
- Phase 3 clinical trial of Tedopi® in non-small cell lung cancer after failure of previous treatment with PD-1/PD-L1 checkpoint inhibitors (Atalante 1 trial): due to the COVID-19 epidemic and given the directives from regulatory agencies and taking into account the safety of patients participating in the trial, compliance with good clinical practice (GCP) and the risks of trial protocol deviation during the pandemic, OSE Immunotherapeutics is analyzing the potential impact of this epidemic on the Atalante 1 trial. The Company will announce the outcome of this review and the Step 1 results provided for in the protocol as soon as possible, in the coming weeks.
- Phase 2 clinical trial of Tedopi® in combination with the Opdivo® (nivolumab) checkpoint inhibitor in pancreatic cancer (TEDOPaM trial), sponsored by the GERCOR cooperative group in oncology and with the support of Bristol-Myers Squibb: because of COVID-19, patient screening will continue but the inclusion of new patients in the study will be suspended temporarily according to GERCOR, the study sponsor.
- Phase 1 clinical trial of BI 765063 (OSE-172) in advanced solid tumors, in partnership with Boehringer Ingelheim: during the second quarter of 2020, screening and enrollment of new patients in this study will be impacted by the COVID-19 crisis. Additional information will be made available as soon as possible.
- On OSE-127, developed in partnership with Servier: the start of the two Phase 2 clinical studies (in Sjögren's Syndrome, sponsored by Servier, and in ulcerative colitis, sponsored by OSE) expected in 2020 will depend on the developments of the COVID-19 situation. These studies can only be set up once all the preparatory steps have been completed and hospitals and healthcare professionals are able to conduct a clinical trial and ensure patient care in optimal safety conditions.

April 2020

On April 1, 2020, the Company announced the successful completion of Step 1 of Tedopi® Phase 3 clinical trial, Atalante 1, in non-small cell lung cancer:

- The primary endpoint of Step 1 was met: 12-month survival rate for patients treated with Tedopi®;
- Detailed analysis of the Step 1 results will help determine the best options for the further clinical development of Tedopi® and the strategy of potential partnerships;
- Based on the positive results of Step 1 and in the context of the COVID-19 epidemic, the Company will discuss with the regulatory agencies the best options to continue development of Tedopi®, at the same time as the voluntary and definitive suspension of the recruitment of new patients in Step 2 planned for the clinical trial.

1.4 Research and development activities

The Company is conducting Research & Development projects in immuno-oncology (Tedopi®, BI 765063 (OSE-172), OSE-703, BiCKI® platform), and in autoimmune diseases (FR104, OSE-127), on its own or in partnerships.

In fiscal year 2019, R&D expenses amounted to €K25,480 and research tax credits recognized in respect of 2019 were €K3,059.

Tedopi®

The international Phase 3 clinical trial of Tedopi® (Atalante 1) is underway in patients with non-small cell lung cancer (NSCLC) after failure from previous treatment with PD-1/PD-L1 checkpoint inhibitors.

- The trial was planned in two steps: a first step including approximately 100 patients overall with a planned analysis of data on the percentage of patients achieving 12 months' survival. At the end of this first step, and depending on the results obtained, the Company had to decide on the best development strategy for Tedopi® in lung cancer after failure of checkpoint inhibitor therapy.
- On April 1, 2020, the Company announced positive results for Step 1 of the study. Analysis of the data showed that the primary endpoint for this milestone was achieved with a 12-month survival rate in patients treated with Tedopi® and a 10% absolute difference in this survival rate compared to chemotherapy.
- These results confirm the therapeutic value of Tedopi® in a population of patients for whom there is currently no validated treatment, pending new therapeutic options. The Company will initiate discussions with the regulatory authorities to analyze these positive clinical results and determine the best options to pursue the development of Tedopi® and maximize the positive benefit/risk ratio data obtained. At the same time, given the significant enhanced value of Tedopi® as a result of these positive Step 1 results, the Company continues to explore potential partnership opportunities for its product.
- A Phase 2 clinical trial of Tedopi® is underway in patients with pancreatic cancer. This study (TEDOPaM), conducted under the sponsorship of the GERCOR cooperative group, is a maintenance trial with Tedopi® in monotherapy or in combination with a PD-1 checkpoint inhibitor versus Folfiri,* in locally advanced or metastatic pancreatic cancer in patients with stable disease after four months of standard chemotherapy with Folfirinox.**

  In view of the COVID-19 situation, GERCOR indicated at the end of March 2020 the continuation of patient screening but the provisional suspension of including new patients in the TEDOPaM study.

  ** Folfiri: a chemotherapy regimen combining folinic acid, fluorouracil and irinotecan*
  *** Folfirinox: a chemotherapy regimen combining folinic acid, fluorouracil, irinotecan and oxaliplatin*

BI 765063 (OSE-172)

- In March 2019, the Company announced that it had received authorization from the National Agency for the Safety of Medicines and Health Products (ANSM) in France and the Federal Agency for Medicines and Health Products (FAMHP) in Belgium for a Phase 1 clinical study in advanced solid tumors used as a monotherapy or in combination with a monoclonal antibody and PD-1 antagonist, and Boehringer Ingelheim's BI 754091.
- In June 2019, the first patient was treated in the Phase 1 clinical trial, which is ongoing.
- The study will be impacted by the COVID-19 situation in terms of screening and inclusion of new patients in the second quarter of 2020.

OSE-703

In June 2017, a research collaboration agreement was concluded with Memorial Sloan Kettering Cancer Center in New York to evaluate the efficacy profile and development prospects for immunotherapy OSE-703, a cytotoxic monoclonal antibody that targets the alpha chain of the Interleukin-7 receptor in solid tumors. This collaboration has continued since then.

BiCKI®

- In March 2019, the Company presented BiCKI®, its new bispecific fusion protein platform built on the key backbone component anti-PD-1 (OSE-279) at the World Immunotherapy Congress in Boston. This is a new reference treatment in oncology merged with innovative immunotherapy targets. The BiCKI® platform aims to inhibit key immune checkpoint inhibitors while simultaneously delivering cytokines capable of modulating regulatory T cells, and/or increasing the responses of exhausted T cells within the tumor. It can also incorporate other therapeutic methods to modify the tumor microenvironment by delivering, for example, costimulation signals to restore the activity of antitumor T lymphocytes or restore phagocytic functions and macrophage polarization.
- Based on an anti-PD-1 bifunctional antibody platform technology, BiCKI® is designed to expand the type of patients responding to immunotherapies. This is the second generation of PD-(L)1 inhibitors used to increase antitumor efficacy

in hard-to-treat cancers by addressing untapped immune escape mechanisms. The first cytokine selected to be paired with the anti-PD-1 in the bispecific antibody is Interleukin-7 (IL-7), which has been shown to improve immune functions and cancer immunotherapy efficacy. Preclinical results have shown that OSE Immunotherapeutics's bifunctional anti-PD-1/IL-7 modifies immune balance in favor of effector T cells by stimulating the functions of these cells while disarming regulatory T cells (presentation of a poster session entitled "A novel bifunctional anti-PD-1 / IL-7 fusion protein potentiates effector function of exhausted T cell and disarms Treg suppressive activity" at the International Cancer Immunotherapy Conference (CICON) in Paris).

OSE-127

- After the stages of industrial transposition, manufacturing of clinical batches and toxicology, the clinical phase started in December 2018. This product has been developed in collaboration with Servier, following the collaboration and license agreement signed in December 2016. This study was a first-in-human dose-escalation, randomized, double-blind, placebo-controlled Phase 1 trial, aimed to evaluate the safety and tolerability of single- and multiple-ascending intravenous and subcutaneous doses of OSE-127 in 63 healthy volunteers. Secondary endpoints included measures of pharmacokinetics, pharmacodynamics and immunogenicity to help assess and understand how the drug is absorbed and metabolized.
- The OSE-127 Phase 1 clinical trial ended in December 2019. The positive study results showed a good safety and tolerability profile. All pharmacokinetic and pharmacodynamic parameters were consistent and demonstrated dose-proportionality throughout the dose escalation to 10 mg/kg. These findings will help determine the dosing and administration schedule for the two planned Phase 2 clinical trials in ulcerative colitis and Sjögren's Syndrome (Servier will conduct this second study simultaneously). Both trial initiations are expected in 2020.
- However, the start of these two Phase 2 clinical studies will depend on the development of the COVID-19 situation. These studies can only be set up once all stages of preparation have been completed and hospitals and healthcare professionals are in a position to ensure the safe conduct of a clinical trial and patient care.

FR104

The Company regained the worldwide rights to FR104, its CD18 first-in-class antagonist, from Janssen Biotech Inc., with effect from December 31, 2018. The positive results of Phase 1 clinical proof-of-concept study of FR104, combined with the preclinical tolerability profile and the efficacy data for a large number of preclinical models of inflammatory and autoimmune diseases support the continuation of the product's clinical development. The Company is assessing the best options for continuing to develop FR104 in the Phase 2 study in autoimmune diseases or transplantation, including global partnering opportunities.

Based on OSE's diverse scientific and technological platforms (neoepitopes, agonist or antagonist monoclonal antibodies), the Company is pursuing advancement of new innovative research programs.

1.5 Main risks and uncertainties to which the Company is exposed

See Section 3 of the Universal Registration Document.

1.6 Use of financial instruments by the Company

The Company used financial instruments during the past fiscal year (see Note 3 to the financial statements, Section 18.1.6 of the Universal Registration Document).

1.7 Transactions with related parties

See Section 17.1.2 of the Universal Registration Document.

2. FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDING DECEMBER 31, 2019

2.1 Presentation of the Company's statutory financial statements

Please note that the presentation rules regarding and the valuation methods used to prepare the statutory financial statements for the fiscal year ended comply with the regulations in force.

General accounting policies have been applied in accordance with the prudence principle, in line with the following basic assumptions:

- Going concern;
- Consistency of accounting rules from one fiscal year to another;
- Independence of fiscal years.

And in accordance with the general rules for preparing and presenting the separate financial statements as described in the opinion of the French National Accounting Council (Article R. 123-180 of the Commercial Code and Art. 531-1 §1 of the French General Tax Code).

For more information on the accounting rules and methods, please see the notes to the statutory financial statements.

2.1.1 Statement of financial position

The Company's overall statement of financial position at December 31, 2019 was €128,403,000 against €118,029,000 the previous fiscal year.

Assets include €50,436,000 in equity interests, €42,734,000 in intangible assets, €1,009,000 in property, plant and equipment, €747,000 in trade receivables and €5,858,000 in other receivables, €25,827,000 in cash and cash equivalents and marketable securities and €1,787,000 in prepaid expenses.

Apart from share capital of €3,001,000, liabilities include €115,339,000 in share premiums, (€13,387,000) in retained earnings, €1,103,000 in provisions for risks and expenses, €9,252,000 in conditional advances, €308,000 in borrowings from credit institutions, €6,915,000 in trade payables, €1,493,000 in other payables and €4,239,000 in deferred income

2.1.2 Income statement

In 2019, the Company generated revenue of €10,602,000, mainly comprised of the upfront payment from Servier, recognized as expenses were incurred, and of the re-invoicing to Boehringer Ingelheim of development costs borne by OSE for BI 765063 (OSE-172).

In 2018, the Company generated revenue of €9,601,000, mainly comprised of the upfront payment from Servier, recognized as expenses were incurred.

In 2019, other operating revenue stood at €16,653,000, corresponding mainly to milestone payments received from Boehringer Ingelheim, to the upfront payment received following the signing of a license agreement with CKD and subsidies received over the fiscal year.

In 2018, other operating revenue stood at €15,256,000, which corresponded to the upfront payment received under the license agreement with Boehringer Ingelheim and subsidies received over the fiscal year.

2019 operating expenses totaled €30,639,000 versus €24,163,000 in 2018.

Operating expenses by type – in €K	2019	2018
Purchases and external expenses	23,629	19,259
Taxes and similar payments	129	136
Employee benefits expense	5,687	4,366
Allocation to depreciation, amortization and provisions	1,013	241
Other expenses	181	160
Total	**30,639**	**24,163**

The "external expenses" item in 2019 broke down as follows:

- €18,909,000 for sub-contracting: conducting the Phase 3 clinical trial of Tedopi, conducting and validating GMP batches for OSE-127 and BI 765063 (OSE-172), Phase 1 clinical studies for OSE-127 and BI 765063 (OSE-172), consulting international clinical experts on the pivotal Phase 3 trial with Tedopi®, for OSE-127 and BI 765063 (OSE-172);
- €2,908,000 in fees: fees relating to the Company's status as a listed company and legal operations, industrial property fees;
- €1,812,000: cost of premises, insurance premiums, travel expenses, consumables and other.

Employee benefits expense in 2019 totaled €5,687,000 versus €4,366,000 in 2018.

Average headcount was 35 in 2019 versus 29 in 2018.

Operating income for fiscal year 2019 was -€3,384,000.

With net financial income of €173,000, extraordinary income of €347,000 and tax income of €3,059,000 (CIR), the net profit (loss) for fiscal year 2019 was €125,000.

2.2 Presentation of the Company's consolidated financial statements

The consolidated financial statements of OSE Immunotherapeutics and its subsidiaries (the Group), are presented in euros and are drawn up in accordance with IFRS standards (International Financial Reporting Standard) as adopted by the European Union.

2.2.1 Consolidated statement of financial position

The Company's consolidated statement of financial position at December 31, 2019 was €88,933,000 against €76,903,000 the previous fiscal year.

2.2.2 Consolidated income statement

The Group recognized €25,952,000 in revenue in 2019 against €24,456,000 in revenue generated in 2018.

Contrary to French accounting standards, the milestone payment received under the agreement signed with Boehringer Ingelheim was recognized as revenue under IFRS.

Operating expenses by function in €K	2019 (consolidated)	2018 (consolidated)
Research & Development expenses	21,655	15,057
Overhead expenses	3,898	3,448
Expenses related to share-based payments	1,868	977
Total	**27,421**	**19,482**

R&D expenses in 2019 mainly comprised:

- €20,468,000 in sub-contracting and fees, before recording the research tax credit of €3,059,000, and subsidies received in the amount of €533,000;
- €3,830,000 in employee benefits expense allocated to research and development;
- €760,000: seminars, insurance premium, storage costs and other.

Overhead expenses in 2019 mainly comprised:

- €1,353,000 in fees: accounting, legal, consultancy, stock-market listing and advertising costs;
- €1,571,000 in employee benefits expense allocated to operations management, finance, communication and Company Secretary;
- €151,000 in Directors' fees;
- €446,000: cost of premises, insurance premiums, travel expenses, and other.

Operating income for fiscal year 2019 was -€1,742,000.

Net income for fiscal year 2019 was -€4,652,000.

2.3 Indebtedness (statutory financial statements and consolidated financial statements)

Statutory financial statements

Other receivables amount to €5,858,000, of which €4,036,000 in tax receivables, €1,153,000 in current account advances granted to its subsidiary OPI, €396,000 in accrued revenue (subsidies and miscellaneous), and €77,000 in assets receivable.

The cash available to OSE Immunotherapeutics stood at €25,827,000 at December 31, 2019, of which €9,067,000 in cash and cash equivalents and €16,759,000 in term deposits and other short-term investments.

The total amount of the Company's operating liabilities is €8,407,000 (comprising €6,915,000 in trade payables and €1,493,000 in other payables).

The amount of loans with financial institutions is €308,000 (P2RI loan) and the amount of repayable advances is €9,252,000.

Consolidated financial statements

Other receivables amount to €6,474,000 and correspond to tax receivables, prepaid income and accrued income (prepaid expenses).

Funds available to the Group stood at €25,842,000 in net cash at December 31, 2019.

The total amount of the Company's operating liabilities is €8,641,000 (comprising €6,912,000 in trade payables and €1,723,000 in other payables).

The amount of loans with financial institutions is €321,000 (P2RI loan) and the amount of repayable advances is €9,437,000.

Other liabilities amount to €4,812,000 and correspond to deferred income.

2.4 Expenses mentioned in Article 39-4 of the General Tax Code

In accordance with Article 223 quarter of the General Tax Code, please note that for the fiscal year ending on December 31, 2019, there were no expenditure or costs of the type qualifying as "extravagant expenditure" under point 4 of Article 39 of the General Tax Code, or excessive amortization as referred to in the same point 4.

2.5 Information on payment terms for suppliers and customers

We hereby inform you that the Company's financial statements as submitted show trade payables in the amount of €6,912,000 at December 31, 2019.

In accordance with the provisions of Articles L. 441-6-1 and D. 441-4 of the Commercial Code, please find below the following information relating to the breakdown of the balance of trade payables at the close of the last two fiscal years by due date:

Balance of trade payables and receivables at December 31, 2019 by due date (in €K):

Invoices received and not paid on the reporting date							
Maturities	**1 to 30 days**	**31 to 60 days**	**61 to 90 days**	**91 days and over**	**Total**	**Invoices not yet due**	**Total #401**
Number of invoices	73	15	-	15	103	124	227
Amount incl. VAT in €K	2,147	146	-	511	2,805	1,471	4,276
% of amount incl. VAT of purchases during the fiscal year	8.3%	0.6%	0.0%	2.0%	10.9%	5.7%	16.6%
Invoices issued and not paid on the reporting date							
Maturities	**1 to 30 days**	**31 to 60 days**	**61 to 90 days**	**91 days and over**	**Total**	**Invoices not yet due**	**Total #411**
Number of invoices	-	1	4	2	7	5	12
Amount incl. VAT in €K	-	29	14	20	62	181	243
% of amount incl. VAT of purchases during the fiscal year	0.0%	0.1%	0.0%	0.1%	0.2%	0.5%	0.7%

Valance of trade payables and receivables at December 31, 2018 by due date (in €K):

Invoices received and not paid on the reporting date							
Maturities	**1 to 30 days**	**31 to 60 days**	**61 to 90 days**	**91 days and over**	**Total**	**Invoices not yet due**	**Total #401**
Number of invoices	118	21	8	17	164	175	339
Amount incl. VAT in €K	2,063	90	350	293	2,795	2,023	4,818
% of amount incl. VAT of purchases during the fiscal year	9.7%	0.4%	1.6%	1.4%	13.1%	9.5%	22.6%
Invoices issued and not paid on the reporting date							
Maturities	**1 to 30 days**	**31 to 60 days**	**61 to 90 days**	**91 days and over**	**Total**	**Invoices not yet due**	**Total #411**
Number of invoices	-	1	-	2	3	3	6
Amount incl. VAT in €K	-	0	-	7	7	1,115	1,122
% of amount incl. VAT of purchases during the fiscal year	0.0%	0.0%	0.0%	0.0%	0.0%	5.2%	5.3%

2.6 The Company's results over the last five years

In accordance with the provisions of Article R. 225-102 of the Commercial Code, the Company's results over the last five fiscal years can be found in Note 1.

2.7 Proposed appropriation of net income for the fiscal year

The separate financial statements the fiscal year ended on December 31, 2019 show a profit of €125,113, which we propose to appropriate to retained earnings, which, as a result, will rise from -€13,386,516 to -€13,261,403.

In order to comply with the provisions of Article 243 bis of the General Tax Code, please note that no dividends have been distributed over the last three fiscal years.

3. SUBSIDIARIES AND EQUITY INTERESTS – INVESTMENT SECURITIES

3.1 Subsidiary activities

The activity of our subsidiary OPI is limited to managing the industrial property of our OSE-2101 technology.

The activity of our subsidiary OSE Immunotherapeutics Inc. remains limited at the current time. Over the medium term, it will be used to support international scientific or pharmaceutical collaborations.

3.2 Equity holdings or takeovers

N/A.

3.3 Controlled company

Since March 25, 2014, the Company holds all capital and voting rights in OPI and OSE Immunotherapeutics Inc., established in the State of Delaware in 2017, and is managed by Alexis Peyroles as Chief Executive Officer.

EMPLOYEE SHAREHOLDING

In accordance with the provisions of Article L. 225-102 of the French Commercial Code, please note that there were nineteen employee shareholders in the Company on the last day of the fiscal year, i.e. December 31, 2019, the most important of which (in terms of share ownership on the basis of 15,005,724 shares) were as follows:

Dominique Costantini, whose employment contract dates from July 1, 2014 as Director of Development, who holds 1,978,663 shares, representing 13.19% of share capital at December 31, 2019.

Alexis Peyroles, Chief Executive Officer, whose employment contract dates from July 1, 2014, as Chief Operations Officer, who holds 330,874 shares (directly) and 265,000 shares (via his company, Aperana Consulting), representing 3.97% of share capital at December 31, 2019.

Maryvonne Hiance, whose employment contract dates from May 31, 2016, as Director of Public Relations, who holds 211,666 shares (directly) and 187,418 shares (via her company, Hiance MD2A), representing 2.66% of share capital at December 31, 2019.

Nicolas Poirier, whose employment contract dates from May 31, 2016, as Chief Scientific Officer, who holds 42,802 shares, representing 0.29% of share capital at December 31, 2019.

On December 5, 2018, the Board of Directors approved in principle the issue and allocation of 150,000 free shares to employees who are not corporate officers of the Company and gave all powers to the CEO to issue and allocate said shares. Thus, on March 12, 2019, the CEO decided to issue and allocate 149,200 free shares to employees who are not corporate officers of the Company.

On June 26, 2019, the Board of Directors approved in principle the issue and allocation of 150,000 free shares to employees who are not corporate officers of the Company and gave all powers to the CEO to issue and allocate said shares. Thus, on June 26, 2019, the CEO decided to issue and allocate 148,400 free shares to employees who are not corporate officers of the Company.

However, the Company does not have any employee shareholder whose shares are subject to collective management as per the above-mentioned article (i.e. as part of an employee savings scheme or company mutual fund).

4. INFORMATION ON THE FINANCIAL RISKS RELATING TO THE EFFECTS OF CLIMATE CHANGE

Given the nature of its business, the Group is not significantly exposed to environmental risks and has not identified any financial risks relating to the effects of climate change. The risks of climate change are limited due to the fact that the Company is not involved in any industrial activity, marketing or research and development.

5. CONTROL MECHANISM

Article 18 of the bylaws gives double voting rights to all fully paid-up shares that have been registered in the name of the same shareholder for at least two years.

Apart these double voting rights, there are no other special rights attached to the shares.

There are also no control mechanisms in employee shareholding arrangements or agreements between shareholders of which the Company is aware and which could lead to restrictions on share transfers.

6. GENERAL INFORMATION ON THE COMPANY AND ITS SHARE CAPITAL

6.1 Identity of the Company

(i) Name

The name of the Company is OSE Immunotherapeutics.

(ii) Registered office

The registered office of the Company is: 22 boulevard Benoni Goullin, 44200 Nantes.

(iii) Legal form

OSE Immunotherapeutics is a limited company (société anonyme) with a Board of Directors, whose shares have been listed in compartment C of Euronext Paris under ISIN code FR0012127173 since March 30, 2015.

(iv) Capital

The share capital of OSE Immunotherapeutics currently amounts to three million, twenty-nine thousand, five hundred and eighty-four euros and eighty cents (€3,029,504.80). It is made up of fifteen million, one hundred forty-seven thousand, five hundred and twenty-four (15,147,524) shares with twenty (20) euro cents par value, all of the same class.

(v) Company's buyback of its own shares

The Combined General Meeting of Shareholders of June 13, 2018 authorized the Board of Directors to implement a share buyback program in the conditions described in Section 18.1.6 (Note 4.4 to the consolidated financial statements) of this Universal Registration Document.

In this respect, the Company carried out the following transactions in fiscal year 2019:

Number of shares purchased	38,571
Average purchase price	€3.68
Number of shares sold	41,948
Average sale price	€3.80
Total trading expenses	N/A
Number of shares used in 2019	3,377
Number of shares registered in the name of the Company at fiscal year-end and percentage of share capital	40,583 (i.e. 0.27% of share capital)
Value measured at average purchase price	€148,117
Total nominal value	€8,116.60

All of these purchases were made under the liquidity agreement with Invest Securities covering the Company's shares. As at the date of the Board of Director's meeting of March 26, 2020, the number of Treasury shares held by the Company stood at 40,867 shares, representing 0.27% of share capital.

(vi) Term

The Company was incorporated for a term of 99 years from the date of its registration with the Trade and Companies Register.

(vii) Incorporation details

The Company is registered with the Nantes Trade and Companies Register under number 479 457 715.

(viii) APE code

The APE code of OSE Immunotherapeutics is as follows: 7211Z.

(ix) Consultation of legal documentation

At the registered office of OSE Immunotherapeutics, at the register of the Nantes Commercial Court and on the Company’s website: http://ose-immuno.com/

(x) Company's purpose

The purpose of OSE Immunotherapeutics in France and abroad is:

- The design, research and development of healthcare products from creation to obtaining marketing authorization, and all related operations including marketing;
- The acquisition, filing, obtaining, sale or licensing of all patents, brands, licenses and use processes;
- The acquisition of interests in any companies or undertakings already established or to be established, in France or abroad, whether or not they have a similar purpose to that of the Company;
- The provision of services, consultancy in research and development, marketing or commercial consultancy, consultancy on market access (pricing and reimbursement), structural audits in the field of healthcare, pharmaceuticals, cosmetics, nutrition and veterinary;
- And, more generally, all industrial, commercial, financial, civil, intangible property or real estate transactions directly or indirectly related to one of the above purposes or to any similar or related purpose that could be useful to the achievement and development of the Company's business;
- It may carry out any transactions that are compatible with, related to and contribute to achieving this purpose.

(xi) Fiscal year

The fiscal year of OSE Immunotherapeutics begins on January 1 and ends on December 31 of each year.

(xii) General Shareholders' Meetings

See Section 19.2.2 of the Universal Registration Document and Articles 29–35 of the Company's bylaws.

(xiii) Shareholding disclosure thresholds

The Company's bylaws provide that the crossing of thresholds will be subject to the following disclosures:

ARTICLE 16 – DISCLOSURE THRESHOLDS"

Pursuant to Article L. 233-7 of the French Commercial Code, any individual or legal entity, acting alone or in concert, within the meaning of Article L. 233-10 of the French Commercial Code, who comes to hold or ceases to hold a number of shares representing a fraction equal to 5%, 10%, 15%, 20%, 25%, 30%, 33.33%, 50%, 66.66%, 90% or 95% of the share capital or voting rights, is required to disclose to the Company no later than the close of trading on the fourth trading day following the date on which the aforementioned shareholding threshold is crossed, the number of shares and voting rights held. The individual required to disclose the above information shall specify the number of securities held giving future access to the share capital and related voting rights.

A shareholder who has not properly made the required disclosures as referred to above shall be stripped of the voting rights attached to the shares in the conditions pursuant to the French Commercial Code."

(xiv) Identification of bearer securities

ARTICLE 13 – TYPE OF SHARES

Shares are either registered or bearer shares, at the shareholder's choice. They can only be bearer shares once they are fully paid-up.

The Company is authorized to identify the holders of bearer securities by simple request to the organization in charge of clearing bearer securities, the name or corporate name, nationality, year of birth or year of incorporation, address of the holders of securities as well as the quantity of securities held by each of them."

(xv) Distribution of profits

ARTICLE 39 - APPROPRIATION AND DISTRIBUTION OF EARNINGS

The difference between income and expenses for the fiscal year constitutes the profit or loss for the fiscal year.

At least 20% of profit, less any prior losses, are appropriated to the statutory reserve. This appropriation is no longer mandatory once the reserve equals one-tenth of the share capital. It becomes mandatory again if, for any reason, the reserve falls below this one-tenth percentage.

The profit available for distribution is made up of the profit for the fiscal year less any prior losses and the appropriation referred to above, and plus any retained earnings.

This profit is available to shareholders who, on the proposal of the Board of Directors, can decide to carry it forward in full or in part, to allocate it to general or special reserve funds, or to distribute it to shareholders as dividends. The dividend can be in the form of Company shares.

The General Shareholders' Meeting may also decide to distribute amounts deducted from reserves, in which case, the resolution must expressly indicate the reserve items from which the deductions are made. However, dividends must be taken as a priority from the distributable profit for the fiscal year.

Losses carried forward by resolution of the General Shareholders' Meeting are registered in a special account on the liabilities side of the statement of financial position, to be charged to the profits of subsequent years until extinction, or posted as a deduction of reserves.

ARTICLE 40 – PAYMENT OF DIVIDENDS

Dividends are paid annually at the times and places determined by the General Shareholders' Meeting or the Board of Directors within a maximum period of nine months from fiscal year end. An extension of this deadline may be granted by court order.

If shareholders wish to receive their dividend in the form of shares, they must make a request to this effect within a deadline set by the General Shareholders' Meeting no more than three months after the date of the meeting. This deadline may be suspended for a period not exceeding three months by decision of the Board of Directors in the event of a capital increase."

6.2 Company activity

OSE Immunotherapeutics is a biotechnology company specializing in immune response activation and regulation with agonist and antagonist biotherapies developed in immuno-oncology and in autoimmune diseases.

(i) Intellectual property

See Section 5.5 of the Universal Registration Document.

(ii) Important contracts

See Section 20 of the Universal Registration Document.

7. INTERNAL CONTROL AND RISK MANAGEMENT PROCEDURES CONCERNING THE PREPARATION AND PROCESSING OF ACCOUNTING AND FINANCIAL INFORMATION.

This presentation of the internal control and risk management procedures implemented by the Company is based on the reference framework implementation guide published by the AMF and applicable to financial market mid-cap and small-cap stocks.

In view of the Company's headcount (42 people at year-end 2019), OSE Immunotherapeutics considers that the internal control procedures are not relevant overall in order to assess its reliability. Nevertheless, OSE Immunotherapeutics has implemented measures proportionate to its specific organizational structure, and plans to develop assignments focused on these elements, and to improve them gradually as its operational and financial position progresses. These items are presented below.

OBJECTIVES OF INTERNAL CONTROL

OSE Immunotherapeutics has implemented an internal control organization, in order to guarantee optimization of control within the Company, taking particular care to ensure that there are no material elements capable of jeopardizing the reliability of the statutory and consolidated financial statements presented to shareholders.

The aim of this organization is to ensure:

- Compliance with applicable legislation and regulations,
- Safeguarding and protection of assets,
- Reliability of financial information,
- Prevention and control of risks, and implementation of process optimization.

This internal control mechanism contributes to prevention and control of risks from the Company's activity, including those linked to risks of error and fraud. Like any control system, it cannot however provide an absolute guarantee that these risks will be completely eliminated.

ORGANIZATION OF INTERNAL CONTROL

Internal control is also based on a specific organizational structure.

Therefore, in order to liaise with every level of OSE Immunotherapeutics, internal control is based on three internal control lines, and is based on the recommendations formulated by the external auditors, as presented below:

1st control line: compliance with procedures

Each Company employee contributes to the efficiency and smooth operation of the internal control mechanism, by complying with the procedures in place in their field of activity. The existence and application of the procedures, supervised by the Financial Director, is thus the first level of control.

2nd control line: support services and tools

This level of control is provided by specific control, monitoring and steering functions and tools, providing key decision support to the Board of Directors.

- Budgetary control carried out by the Chief Financial Officer. This provides quarterly monitoring of the budgetary commitments made by the Company and its subsidiaries OPI and OSE Immunotherapeutics Inc. and is given to the Board of Directors every quarter. This reporting also contains non-financial and prospective information to optimize steering of its subsidiary.
- An out-sourced accounting department, guaranteeing financial information reliability, and liaising with the Finance Department. The Company's tax statements are prepared by an out-sourced chartered accountant and verified by the

Chief Financial Officer of OSE Immunotherapeutics. These statements are in addition regularly reviewed by external consultants.

- The legal status of OSE Pharma International (OPI), a Swiss law-subsidiary, enables OSE Immunotherapeutics to carry out controls based on the information and management by its single director.
- The legal status of OSE Immunotherapeutics, Inc., a U.S. law-subsidiary, enables OSE Immunotherapeutics to carry out control based on the information and management by its CEO who is also Chief Executive Officer of the French parent Company.
- Centralized cash reporting to monitor legal operations (contract, legal secretariat, dispute management, internal restructuring and external growth operations), making occasional use of advice from external consultants.
- Consolidation is carried out by an out-sourced accountancy firm and reviewed by the Chief Financial Officer, in order to guarantee consistency of consolidation restatements, and ensure they comply with the Company's rules and procedures. Reporting data are reconciled with the prepared consolidated financial statements and published semi-annually.

3rd control line: compliance and optimization audits

Due to the Company's size, it does not have an internal audit department.

However, following creation of an Audit Committee at the meeting of the Board of Directors on March 27, 2015, this Committee also has the mission to monitor issues relating to the preparation and control of accounting and financial information. It is responsible for continuous assessment of the existence and efficiency of the Company's financial control and risk control procedures, in particular concerning internal control (see Section 1.1.2.1 of the Universal Registration Document).

External recommendations: legal audits

In addition to the control lines presented above, as part of their work, the Statutory Auditors assess the internal control procedures, and may issue recommendations, which are taken into account to improve reliability and timeliness when preparing financial information, as well as in risk management.

IMPLEMENTATION OF INTERNAL CONTROL

Main actions in the 2019 fiscal year

OSE Immunotherapeutics implemented a number of procedures in 2016, which were renewed in the subsequent fiscal years.

These procedures are as follows:

- Control of document standards
- Personnel training
- Organization of the Pharmacovigilance system
- Management of product quality claims
- Selection of GLP, GMP, GCP suppliers
- Management of discrepancies, preventive and corrective actions
- Management of internal and external audits / inspections
- Management of products for clinical trial
- Management of clinical trials
- Batch recall
- Filing and archiving
- Administrative and financial management
- Human resources management
- Management of inventions and inventors
- Pre-study site visit
- Site initiation visit
- Monitoring visits

- Close out visit
- Management of privileged information
- Medical review
- Change control
- Personal data protection

2020-2021 areas of work

The areas of work for the 2020-2021 fiscal year will concern in particular the continuous improvement of the main procedures that have been put in place, as well as implementation of procedures directly associated with clinical trials.

MAIN CHANGES

As a continuation of the efforts devoted by the Company during the fiscal year 2019, the Company will continue its work on internal control to achieve its internal governance goals. Accordingly, the Company plans to double its efforts to implement its policy to improve internal control mechanisms during fiscal year 2020. Therefore, the Company will strive to put into practice the risk management system and to focus on tracking the identified action plans by preparing a more detailed mapping of the risks encountered. The Company will also continue to update its internal control mechanism by taking into account the changes in its internal organization and its activity, as well as real time changes to its risk management process.

8. SERVICES OTHER THAN CERTIFICATION OF THE ACCOUNTS, PROVIDED BY THE STATUTORY AUDITORS.

None

9. POWERS TO CARRY OUT FORMALITIES

We propose that you confer full powers on the bearer of copies or extracts of these minutes in order to perform all legal formalities.

The Board of Directors

Chairman

Appendix to the management report: Summary of transactions by management and persons mentioned in Article L. 621-18-2 of the French Monetary and Financial Code

In accordance with Article 223-26 of the general regulations of the AMF, a summary of the transactions listed in Article L. 681-18-2 of the French Monetary and Financial Code during fiscal year 2019 and concerning the Company shares is presented below:

Category (1)	Person concerned	Nature of the transaction (2)	Date of the transaction	Amount of the transaction (€)	Average unit price (€)	Number of shares
a	Dominique Costantini	A	December 19, 2019	30,277.50	3.67	8,250
a	Dominique Costantini	A	October 3, 2019	39,690	3.78	10,500
a	Dominique Costantini	A	September 12, 2019	51,870	3.90	13,300

Categories:

a: members of the Board of Directors, the Management Board, the Supervisory Board, the Chief Executive Officer, the Chief Operating Officer;

b: any other person, who, within the conditions defined by the General Regulations of the French Financial Markets Authority, has the power within the issuer to take management decisions concerning its development and its strategy, and who also has regular access to privileged information that directly or indirectly concerns this issuer;

c: persons who, within the conditions defined by decree of the French Council of State, have close personal ties with the persons mentioned in paragraphs a and b.

Type of transaction: A: Acquisition; C: Sale; S: Subscription; E: Exchange.

Appendix B - The Company's results over the last five years

Nature of the indications	2019 fiscal year	2018 fiscal year	2017 fiscal year	2016 Fiscal Year	2015 Fiscal Year
I. Capital at fiscal year end					
Stated capital	€3,001,144.80	€2,963,402.40	€2,897,764.20	€2,857,994	€2,009,788
Number of existing common shares	15,005,724	14,817,012	14,488,821	14,289,970	10,048,941
Number of bonds convertible into shares	0	0	0	0	0
Number of existing common shares	15,005,724	14,817,012	14,488,821	14,289,970	10,048,941
II. Transactions and profit (loss) for the period					
Revenue excluding tax	10,601,683	€9,600,963	€6,824,627	€1,974,522	- €
Profit (loss) before tax, depreciation, amortization and provisions	- €1,960,524	€1,170,394	- €13,965,647	- €2,701,210	- €4,879,802
Income tax (tax credit)	-2,988,795	- €4,485,807	- €2,939,842	- €2,645,482	- €661,219
Profit (loss) after tax, depreciation, amortization and provisions	€125,113	€5,501,174	- €11,150,716	- €159,876	- €4,340,354
Amount of profit distributed	- €	- €	- €	- €	- €
III Operating earnings per share					
Profit (loss) after tax, but before depreciation, amortization and provisions	€0.20	€0.07	- €0.76	- €0.19	- €0.49
Profit (loss) after tax, depreciation, amortization and provisions	€0.01	€0.38	- €0.96	- €0.01	- €0.43
Dividend paid per share	- €	- €	- €	- €	- €
IV Personnel					
Number of employees	35	29	25	22	4
Payroll	€3,745,399	€3,011,508	€2,121,280	€1,976,218	€413,095
Amounts paid in respect of social benefits	€1,817,092	€1,354,951	€982,557	€1,030,954	€157,694

Appendix C - Corporate governance report

In accordance with Article L. 225-37 of the French Commercial Code, the corporate governance report for fiscal year 2019 comprises information concerning the Board's composition, and the application of the principle of gender balance on the Board, the conditions for preparation and organization of the work of the Board of Directors, as well as information concerning the corporate officers. This report also specifies that the Company voluntarily applies a corporate governance code, indicates the specific arrangements concerning participation of shareholders in the General Shareholder's Meeting and presents the principles and rules adopted by the Board of Directors to determine the compensation and benefits in kind granted to the corporate officers. Finally, it mentions disclosure of the information pursuant to Article L. 225-100-3 of the French Commercial Code.

This report was reviewed by the Audit Committee at its meeting on March 23, 2020, in the presence of representatives of the OSE Immunotherapeutics' Statutory Auditors, and was then approved by the Board of Directors at its meeting on March 26, 2020, in the presence of representatives of the OSE Immunotherapeutics' Statutory Auditors.

This report is presented as part of the Ordinary and Extraordinary General Shareholders' Meeting of OSE Immunotherapeutics to be held on June 16, 2020.

1. Supervisory and management bodies

Since the IPO of the Company, the Board of Directors has decided that the role of Chairman of the Board of Directors should be separate from that of Chief Executive Officer. The Board of Directors is chaired by Dominique Costantini. The Chief Executive Officer of the Company is Alexis Peyroles.

1.1 Board of Directors

1.1.1 Composition of the Board of Directors

These provisions are pursuant to Article 1 of the Board of Directors Internal Rules.

No one over the age of 70 may be appointed director if their appointment would mean that more than one-third of the members of the Board of Directors would be over 70.

If this proportion is exceeded, the oldest director is deemed to have resigned automatically at the end of the Ordinary General Shareholders' Meeting called to approve the financial statements of the fiscal year during which this threshold was crossed.

The Board discussed the desired balance in its composition and in that of its Committees, in particular concerning balanced gender representation, representation of nationalities and the diversity of skills, and the provisions capable of providing guarantees to shareholders and the market that its missions are accomplished with the necessary independence and objectivity.

The Company's directors originate from different backgrounds and have a variety of experience and skills thereby reflecting the goals of the Board of Directors. The Council also intends to comply with Law No. 2011-103 of January 27, 2011, which provides that the Board must be comprised of 40% women following the first General Shareholders' Meeting after January 1, 2017.

The details of the corporate offices held by members of the Board of Directors in office on the date of this Universal Registration Document are given in the following table:

First name – Last name or corporate name of the member	Other corporate offices currently held in other companies	Other corporate offices and positions held in other companies in the last five years and not held as of the date of this Universal Registration Document
Dominique Costantini	Director of Theranexus SAS Director of Smart Immune	Director of Abivax Director of Theradiag Director of Carthera SAS Director of Sensorion
Maryvonne Hiance	Vice Chairman of France Biotech Vice Chairman of the Atlanpole Biotherapies cluster Director of APAVE Chairman of the Strategic Advisory Board of Olmix, Bréhan Strategic Adviser for Goliver, Nantes	President of France Biotech
Sophie Brouard	1st Class Director of Research, CNRS	Director of the Centaure Foundation Director of the French Society of Immunology (SFI) Vice Chairman Biologie Santé Pays de la Loire
Jean-Patrick Demonsang	Chairman of Demonsang Consulting SAS Chairman of the Supervisory Board of G1J Ile-de-France	Chairman of Parexi SAS Chief Executive Officer of Genode Partners SAS
Brigitte Dreno	None	Vice-Dean Research at the Faculty of Medicine, Nantes University Hospital
Didier Hoch	President of the Supervisory Board of Pherecydes Pharma Member of the Board of University of the Underground Charity Foundation Member of the Board of the Foundation for the Université Grenoble Alpes Strategic Advisor for Goliver Therapeutics	Independent Director of DBV Technology, Genticel, Germitech Member of the Strategic Board – Advisory Committee of Myastérix, Curavac
Alexis Peyroles	Chairman of Aperana Consulting CEO of OSE Immunotherapeutics Inc.	N/A
Gérard Tobelem	Director of Dendrogenix	Director of the Louis Dreyfus business foundation Director of SupBiotech (end of term: July 2017) Chairman of Théradiag SA
Nicolas Poirier	Member of the Scientific Board of MabDesign and MabSillico	None

- **Presentation of each member of the Board of Directors**

The nine current members of the Board of Directors, whose current composition is detailed in Section 14.1 of this Universal Registration Document, combine international expertise in development of drugs, marketing, industry and finance, as well as experience with listed biotechnology companies.

Dominique Costantini **(65 years old, French)**	**286 boulevard Raspail – 75014** **Paris**	**1,978,663 shares**

Chairman of the Board of Directors, Director

Professional experience / Areas of expertise

Dominique Costantini previously founded BioAlliance in 1997 and was its Chief Executive Officer until 2011. This innovative company focuses on oncology and support care. It has designed and developed innovative drug delivery technologies (Euronext: Bio). Her main financial achievements include fundraisings with the main venture capital firms, an IPO on Euronext at the end of 2005 and private placements in 2007 and 2011. These successful fundraising activities were based on international development steps of a number of products. Three products were released on the market: Loramyc® in Europe, in the United States and in Asia, Setofilm® in Europe, and Sitavig® in Europe and in the U.S. She has concluded industrial partnerships (Europe, United States, China, Japan, Korea, Israel) representing more than €130 million in contracts signed, with significant royalties. Dominique has more than 20 years of experience in the pharmaceutical industry and in biotechnology, with management positions held within HMR (today Sanofi). She has led departments covering the different drug fields, ranging from research, to pre-clinical and clinical development, registration and reimbursement. She has also led medical marketing and marketing launches (fields: Immunology, Asthma, Infectiology, Oncology, Vaccines, Anti-inflammatories). She holds a Doctorate in medicine - Immunology - Necker Paris V.

Duration of term of office

April 27, 2012	Term of office in progress

List of corporate offices and other positions held with French and foreign companies

Corporate offices and positions within the Ose Immunotherapeutics Group	Corporate offices and positions outside the OSE Immunotherapeutics Group
Director and Chief Executive Officer	Director of Theranexus SAS Director of Smart Immune

Gérard Tobelem (72 years old, French)	113, rue Monge – 75005 Paris	31,250 shares

Director

Professional experience / Areas of expertise

Gérard Tobelem won the first Diderot Innovation prize in 2006. He has held industrial, medical and scientific positions, including as Executive Chairman of the French Blood Establishment. Gérard Tobelem has held strategic roles at the French Ministry of Higher Education and Research. He has advised a variety of international pharmaceutical companies on their Research & Development strategies. He is also non-executive Chairman of the Theradiag Board of Directors. Previously, he taught hematology at Paris 7 University and was head of the Department of Blood Disorders at Lariboisière Hospital in Paris.

Duration of term of office

April 10, 2014	Term of office in progress

List of corporate offices and other positions held with French and foreign companies

Corporate offices and positions within the Ose Immunotherapeutics Group	Corporate offices and positions outside the OSE Immunotherapeutics Group
Director	Director of Dendrogenix

Jean-Patrick Demonsang **(67 years old, French)**	**149, rue Louis Rouquier – 92300** **Levallois-Perret**	**30,000 shares**

Director

Professional experience / Areas of expertise

Jean-Patrick Demonsang joined the Board of Directors of OSE Pharma in 2014. During his tenure as Chairman and Chief Executive Officer of Seventure Partners until 2013, he supported the activities of more than 150 companies. Seventure is now a leading venture capital firm in France, managing more than €500 million with a team of 12 experts, in two investment sectors: information technologies and life sciences, in France and Europe.

Jean-Patrick Demonsang is also an entrepreneur who has created and led several SMEs, and he is currently leading an entrepreneurial project involving a theme park in the south of France. Jean-Patrick holds an MBA from HEC and a degree in physics.

Duration of term of office

April 10, 2014	Term of office in progress

List of corporate offices and other positions held with French and foreign companies

Corporate offices and positions within the Ose Immunotherapeutics Group	Corporate offices and positions outside the OSE Immunotherapeutics Group
	Chairman of Demonsang Consulting SAS
Director	Chairman of the Supervisory Board of G1J Ile-de-France

Mayvonne Hiance (71 years old, French)	35, rue Edison, 44000 Nantes	399,084 shares

Director and Vice Chairman of the Board

Professional experience / Areas of expertise

Maryvonne Hiance, who was previously the Chairman and co-founder of Effimune, is an engineer who specializes in nuclear science. For 14 years she managed a neutron studies program at FRAMATOME (Areva).

Over the past 20 years, she has led several innovative biotechnology companies: SangStat Atlantic, whose parent company, Sangstat Medical Corporation, was acquired by the Genzyme in 2003 for its product portfolio in immunosuppression and transplantation; she also led innovative companies, DrugAbuse Sciences and TcLand.

Maryvonne founded and managed Strategic Ventures, a consulting firm that works with technology companies. Maryvonne Hiance has been a member of the French Strategic Council for Innovation and has served as advisor to the French SMEs and Industry Ministry.

Duration of term of office	
May 31, 2016	Term of office in progress

List of corporate offices and other positions held with French and foreign companies	
Corporate offices and positions within the Ose Immunotherapeutics Group	Corporate offices and positions outside the OSE Immunotherapeutics Group
Vice Chairman of the Board of Directors	Director of APAVE Vice Chairman of France Biotech Vice Chairman of the Atlanpole Biotherapies cluster Chairman of the Strategic Advisory Board of Olmix, Bréhan Strategic Adviser for Goliver, Nantes

Sophie Brouard 49 years old, French	Les Vaux, 44240, Sucé sur Erdre	202,904 shares

Director

Professional experience / Areas of expertise

Sophie Brouard is an immunologist and veterinarian who specializes in transplants. She completed postdoctoral studies at Harvard Medical School in Boston.

She is a director of research at CNRS, co-director of an INSERM research unit specializing in immunotherapy of autoimmune diseases and grafts, and leads an INSERM research unit in Nantes on transplantation and its mechanisms. Her current research work focuses on understanding the rejection mechanism during a transplant in order to find biomarkers of the survival of the transplant.

She also chairs the Executive Committee of the Centaure Foundation. Centaure is a world-renowned foundation and pioneer in pancreas transplants that performs around two-thirds of the simultaneous liver and pancreas transplants in France. This accomplishment is due to the strong commitment of the surgical and research teams. Centaure has also won worldwide recognition for its work on the immunological mechanisms of diabetes, in experimental models and its therapy trials in diabetic patients. Centaure combines three key centers of excellence - Nantes, Lyon and Paris -enabling them to collaborate on research in transplantation, in connection with an international committee of Europeans and Americans.

Duration of term of office	
May 31, 2016	Term of office in progress

List of corporate offices and other positions held with French and foreign companies	
Corporate offices and positions within the Ose Immunotherapeutics Group	Corporate offices and positions outside the OSE Immunotherapeutics Group
Director	1st Class Director of Research, CNRS

Alexis Peyroles **(46 years old, French)**	**158, rue Diderot, 94300 Vincennes**	**595,874 shares**

Director, Chief Executive Officer

Professional experience / Areas of expertise

With EDHEC and Executive MBA from Imperial College, London, Alexis Peyroles joined OSE Pharma as Chief Financial Officer in September 2013.

Alexis has more than 20 years of international management experience, mainly in healthcare, having worked for Sanofi in Japan and in eastern Europe, where he served as Financial Control Manager for the Baltic States and then Head of Activities for Business Development in Eastern Europe.

He then joined Guerbet, where he served as Financial Control Manager and then Chief Executive Officer for Latin America based in Brazil, where he managed all the marketing and manufacturing operations. He was Director of Operations for OSE Pharma and then OSE Immunotherapeutics from 2014.

Alexis joined OSE Pharma as Chief Financial Officer, responsible for Business Development in September 2013. From May 2016 (date of the merger between OSE Pharma and Effimune) to April 2018, Alexis was Chief Operating Officer of OSE Immunotherapeutics, responsible for Finance, Business Development and Operations. Since April 2018, he has held the position of Chief Executive Officer.

Duration of term of office	
May 31, 2016	Term of office in progress

List of corporate offices and other positions held with French and foreign companies	
Corporate offices and positions within the Ose Immunotherapeutics Group	Corporate offices and positions outside the OSE Immunotherapeutics Group
Director representing the employee shareholders and Chief Operating Officer of OSE Immunotherapeutics	Chairman of Aperana Consulting CEO of OSE Immunotherapeutics Inc.

Didier Hoch **(64 years old, French)**	**1508 route de Bellegarde, la Sauzée, 42210 Saint Cyr les Vignes**	**7,334 shares**
Director		

Professional experience / Areas of expertise

Didier Hoch is a medical doctor and Chairman of the Biovision Forum and of Big Booster, a start-up accelerator. He also serves as a director for listed companies, including Genticel and, previously, DBV Technologies.

From 2000 to 2010, he was Chairman of Sanofi-Pasteur-MSD, a joint venture between Sanofi and Merck dedicated to vaccines. He also held a variety of managerial positions at Rhône Poulenc Rorer and then Aventis where he was Vice Chairman for Middle East & Africa.

He previously served as Chairman of the European Vaccine Manufacturers' Association and Chairman of the LEEM Biotechnology Committee.

Duration of term of office	
May 31, 2016	Term of office in progress

List of corporate offices and other positions held with French and foreign companies	
Corporate offices and positions within the Ose Immunotherapeutics Group	Corporate offices and positions outside the OSE Immunotherapeutics Group
Director	Independent Director: DBV, Genticel, Germitech Member of the Strategic Board – Advisory Committee of Myastérix/Curavac

Brigitte Dréno (67 years old, French)	10 rue Voltaire 44000 Nantes	0 shares

Director

Professional experience / Areas of expertise

Professor Brigitte Dréno is head of the Dermatology Department at the Nantes University Hospital Center, which develops research expertise and groundbreaking treatments in skin oncology. Brigitte Dréno is also the Director of the Biotherapy Clinical Investigation Center and Director of the Unit of Cell and Gene Therapy, and as such closely oversees all immuno-oncology advances. She is Vice Dean of the Medical School. In collaboration with the academic leadership, she supports OSE Immunotherapeutics' R&D initiatives on the Nantes University campus.

Duration of term of office	
June 14, 2017	Term of office in progress

List of corporate offices and other positions held with French and foreign companies

Corporate offices and positions within the Ose Immunotherapeutics Group	Corporate offices and positions outside the OSE Immunotherapeutics Group
Director	Head of Dermatology department at the Nantes University Hospital Vice Dean of the Medical School.

Nicolas Poirier **(37 years old, French)**	**1, Chemin du Passe Temps** **44119 Trellières**	**42,802 shares**

Director representing employee shareholders

Professional experience / Areas of expertise

Nicolas Poirier holds a Ph.D. in immunology and has a strong expertise in the development of immunotherapies. Nicolas Poirier has been chief scientific officer of OSE Immunotherapeutics since 2016. He joined the company in 2009 as project leader and then as director of scientific programs. His role has been to implement innovative therapeutic strategies on new targets and pathways in immunology addressing severe pathologies with high therapeutic need, thus making a robust contribution to the Company's growth. Along with his R&D team, Dr. Poirier continues pursuing the identification of novel preclinical targets and translating them into first-class clinical-stage immunotherapies. He is the author of several high-level international publications in the area of immunotherapy.

Duration of term of office	
June 26, 2019	Term of office in progress

List of corporate offices and other positions held with French and foreign companies	
Corporate offices and positions within the Ose Immunotherapeutics Group	Corporate offices and positions outside the OSE Immunotherapeutics Group
Director	Member of the Scientific committee of MabDesign and MabSilico

- **Changes in composition of the Board of Directors**

During fiscal year 2019, Nicolas Poirier was elected as the director representing the employee shareholders for a term of three years expiring at the end of the Ordinary General Shareholders' Meeting which will be called to approve the financial statements for the fiscal year ending December 31, 2021. Since his appointment as the director representing the employee shareholders was based on his position as a pre-existing employee, Nicolas Poirier's employment contract is considered a standard agreement entered into under normal conditions.

Alexis Peyroles' term of office as director was renewed by the General Shareholders' Meeting on June 26, 2019 for a term of three years expiring at the end of the Ordinary General Shareholders' Meeting which will be called to approve the financial statements for the fiscal year ending December 31, 2021.

Walter Flamenbaum resigned from his position as director on February 19, 2020. This resignation was recorded by the Board of Directors on March 26, 2020.

The terms of office as director of Jean-Patrick Demonsang, Brigitte Dréno and Gérard Tobelem expire at the end of the General Shareholders' Meeting approving the financial statements for the fiscal year ending December 31, 2019. Their renewal shall be submitted to a vote at the General Shareholders' Meeting convened for June 16, 2020.

- **Independence**

These provisions are pursuant to Articles 1 and 11 of the Board of Directors Internal Rules.

As of December 31, 2019, the Company had six independent directors: Gérard Tobelem, Jean-Patrick Demonsang, Walter Flamenbaum, Didier Hoch, Sophie Brouard and Brigitte Dréno. Independent directors must fulfill the following criteria of the December 2008 AFEP-MEDEF code adopted as the Middlenext corporate governance code of December 2009:

- They must not be a salaried employee or corporate officer of the Company, a salaried employee or director of its parent company or of a company that it consolidates, and must not have held such a position in the previous five years;
- They must not be a corporate officer of a company in which the Company directly or indirectly holds a directorship or in which a salaried employee appointed as such or a corporate officer of the Company (currently or who has held such a position in the course of the last five years) holds a directorship;
- They must not be a significant customer, supplier, merchant banker or commercial banker of the Company or its group, or a customer, supplier, merchant banker or commercial banker for whom the company or its group represents a significant share of its business, and this must not have been the case in the course of the last two years;
- They must not be a reference shareholder of the Company;
- They must not have a close family relationship with a corporate officer or reference shareholder;
- They must not have been an auditor of the Company during the previous six years.

The Board of Directors discusses and reviews the qualification of independent directors every year prior to publication of the annual report. Subject to justifying its position, the Board may consider as independent one of its members who does not fulfill all these criteria, and vice versa; it may also consider that one of its members who fulfills all these criteria is not independent.

In the event that the permanent representative of a legal entity director qualified as independent ceases its position, this director will be deemed to have resigned.

Each of the independent directors fulfills the above-mentioned criteria.

- **Representation of women and men**

To date, the Company has 44.4% of women, in compliance with the regulations applicable to listed companies since January 1, 2017.

1.1.2 Functioning of the Board of Directors

These provisions are pursuant to Articles 2 and 3 of the Board of Directors Internal Rules.

- **Missions of the Board of Directors**

In compliance with Article 22 of the Company's Bylaws, the Board of Directors determines the Company's business strategies and ensures that they are implemented. Subject to the powers expressly granted by law to shareholders' meetings and to the extent of the corporate purpose, it examines any issue affecting the proper functioning of the Company and through its proceedings resolves matters that concern it.

The Board of Directors determines the Company's business strategies, validates them and ensures that they are implemented. Subject to the powers expressly granted to General Shareholders' Meetings and to the extent of the corporate purpose, it examines any issue affecting the proper functioning of the Company and through its proceedings resolves matters that concern it.

In this context, the Board of Directors approves the Company's significant transactions prior to their implementation, and in particular:

- Regarding control:

  - Adoption of the annual and semi-annual statutory financial statements and consolidated financial statements, and preparation of the Group management report and the semi-annual financial report;
  - Verification of the relevance and consistency of the accounting rules adopted to prepare the Company's consolidated and statutory financial statements;
  - Review of the means implemented by the Company, the Statutory Auditors and the internal audit to ensure that the statutory and consolidated financial statements are true and fair;
  - Review of the financial position, cash position and commitments of the Company, adoption of the forward planning documents and corresponding reports;
  - Review and approval of the budget;
  - Monitoring of the effectiveness of the internal control and risk management systems and adoption of the corresponding report;
  - Authorization of the related-party agreements, and in particular the agreements concluded to the benefit of the Chairman, the Chief Executive Officer or the Chief Operating Officers, corresponding to components of compensation, indemnities or benefits due or likely to be due as a result of the termination or change of their positions or subsequently;
  - Prior authorization of decisions by Executive Management described in Chapter II of these regulations below:
    - Regarding appointments and compensation;
    - Appointment and dismissal of the Statutory Auditors;
    - Determination of the methods used to carry out Executive Management of the Company;
    - Appointment and dismissal of the Chief Executive Officer and setting of his compensation;
    - Appointment and dismissal of the Chief Operating Officers following proposal by the Chief Executive Officer, setting of their compensation, where appropriate;
    - Selection and dismissal of the Chairman of the Board of Directors;
    - Co-opting of directors in the event of resignation or death;
    - Distribution of directors' fees;
    - Notice of meeting for General Shareholders' Meetings, setting the agenda, preparation of the corresponding reports.

In relations with third parties, the Company is bound even for actions by the Board of Directors that do not fall within the corporate purpose unless it proves that the third party knew that the action in question exceeded this purpose or that it could

not be unaware of this given the circumstances, it being stated that the mere publication of the bylaws is not sufficient to constitute this proof.

The Board of Directors may at any time perform the audits and verifications it deems appropriate. All directors must receive the information required for completing their assignments and they may obtain all documents they consider necessary from the Executive Management. The Board of Directors may give any agent of its choice any delegation of authority within the bounds of its powers under the law and these bylaws.

It may decide to create working committees tasked with studying the issues the Board or the Chairman of the Board submits to it. The Board of Directors is not qualified to vote on or authorize a bond issue; these bylaws reserve that power for the General Shareholders' Meeting.

- **Information for Directors**

The Board of Directors carries out the verifications and controls that it deems appropriate, at any period during the year. For this purpose, each director must receive the information necessary to accomplish their mission.

In this context, the Chief Executive Officer shall provide each director with all the documents and information that it judges necessary to carry out their control mission.

The Chief Executive Officer, the Chairman of the Board of Directors, as well as the Chairman of each of the Committees, prior to each meeting of the Board of Directors, shall provide the directors with the information and documents necessary for them to fully carry out their mission. In particular, the Chairman of each Committee shall provide the directors with the reports, assessments or consultations prepared as part of their mission.

Directors who judge that they are not in a position to deliberate in full possession of the facts have a duty to inform the Board of this situation, and to demand the necessary information. Outside the sessions of the Board of Directors, the directors receive from the Chief Executive Officer the appropriate information required at any stage in the life of the Company or Group, if warranted by the importance or urgency of the information.

They receive the press releases issued by the Company, as well as a review of press articles and financial analysis recommendations concerning the Company.

- **Notices of meetings, meetings and proceedings**

The Board of Directors meets as often as is required in the interests of the Company, and at least once every quarter, by notice of meeting from its Chairman or on request from the Chief Executive Officer or from at least one third of the directors if it has not met for at least two months. The meetings are held either at the registered office, or at any other place specified by the sender of the notice of meeting.

The notices of meetings are issued by any written means, in particularly by letter, electronic means or by facsimile, within a period of three business days except in the case of an emergency.

The Board of Directors may invite external persons to attend the Board meetings.

- **Representation**

Any director can give another director power of attorney to represent them and to vote on their behalf at a specific Board session.

The Board is the sole judge of the validity of the power of attorney which may be given by any written means, in particular by simple letter, by facsimile and including by electronic power of attorney.

Each director may only represent one other director.

The provisions of the two paragraphs above are applicable to the permanent representative of a legal entity director.

- **Quorum and majority**

The proceedings of the Board of Directors are only valid if at least half of its members are present.

In compliance with the bylaws, decisions are taken by the majority of the directors present or represented. In the event of a tied vote, the Chairman of the session has the casting vote.

An attendance register signed by all the members participating in each Board session is kept at the registered office. However, the names of directors participating remotely in the Board meeting are simply recorded on the attendance register.

- **Video conference and other means of telecommunication**

The Board of Directors can opt to allow its members to participate in the proceedings (discussions and votes) by video conference (which entails a combination of sound and vision), or by a means of telecommunication such as a telephone conference call enabling them to be identified by voice transmission by each participant, and guaranteeing their effective participation in accordance with the requirements of the applicable regulations.

Videoconferencing or telephone conference calls, or other means of telecommunication must meet the technical requirements guaranteeing effective participation in the meeting of the Board of Directors, the proceedings of which are transmitted, that is, transmission of voice and picture, or at least the voices of all the participants simultaneously and continuously.

If these requirements are met, the directors participating in the meeting by video conference or telephone conference call or other means of telecommunication are deemed to be present for calculation of the quorum and majority.

A director participating in the meeting by video conference, telephone conference call or other means of telecommunication can represent another director, provided that on the day of the meeting the Chairman is in possession of a power of attorney from the director thereby represented.

Recourse to videoconferencing, telephone conference calls or other means of telecommunication is prohibited when the Board of Directors is called to approve and control the separate financial statements and the consolidated/combined financial statements, preparation of the management report and the report on management of the Group, and on appointment or dismissal of the Chairman of the Board of Directors, the Chief Executive Officer and the Chief Operating Officers.

The register of attendance at Board of Directors' sessions must indicate, if necessary, that the relevant directors are participating by video conference or by means of telecommunication.

The minutes of the Board of Directors' meeting must indicate the names of the directors participating in the meeting via video conference or by means of telecommunication.

They must also report any technical incident that may occur concerning a video conference, telephone conference call or other means of telecommunication if this incident disrupted the proceedings of the session, including the interruption and restoration of remote participation.

If malfunctioning of the video conference or telephone conference call system or the means of telecommunication is noted by the Chairman of the session, the Board of Directors is entitled to deliberate and/or to continue with only the members that are physically present, or for whom transmission of voices and/or picture remains continuous and simultaneous, provided that the quorum requirements are met.

A director participating remotely in the Board meeting that cannot be deemed present due to a malfunction may then give power of attorney, provided it meets the requirements stipulated in Articles 1316 to 1316-4 of the French Civil Code (written document, e-mail, facsimile, etc.), to a director who is physically present, provided this power of attorney is known to the Chairman. Directors may also communicate a power of attorney in advance, stipulating that it will only take effect in the event of a malfunction preventing them from being deemed present.

- **Participation of third parties and non-voting members at the sessions of the Board of Directors**

Invitations

Depending on the items included on the agenda, the Chairman of the Board of Directors may decide, in particular following a proposal by a member of the Board of Directors, to invite any person they believe useful, whether or not a Company employee, to give a presentation or to clarify the discussions in preparation for the proceedings.

Statutory Auditors

The Statutory Auditors are given notice to attend all meetings of the Board of Directors during which the separate or interim financial statements are reviewed or adopted, consolidated/combined or not.

The Statutory Auditors are given notices of meetings at the same time as the members of the Board of Directors, but their notice is sent by registered letter with a request for acknowledgment of receipt.

Non-voting members

Non-voting members are given notice to attend all meetings of the Board of Directors.

They take part in the proceedings in an advisory capacity.

In particular, their mission is to ensure the bylaws are strictly enforced. In particular, their role is to provide information, advice and supervision to the Board of Directors.

- **Confidentiality obligation**

If a third parties who are not members of the Board of Directors are invited to a session of the Board of Directors or to the preparatory session for such a meeting, the Chairman of the Board of Directors reminds them of their confidentiality obligations concerning the information received during the meeting of the Board of Directors or in advance of such a meeting.

- **Board of Directors Internal Rules**

The applicable Internal Rules are the Rules as adopted by the decision of the Board of Directors on March 27, 2015, amended on June 14, 2017. The complete version of the Board of Directors Internal Rules can be consulted, following a prior written request, and the Company's registered office.

- **Presentation of the main provisions**

The Internal Rules of the Company contain all of the provisions relating to the methods for assigning corporate governance duties to the different Company bodies. Accordingly, it gives details of all the powers of the Board of Directors and of all the advisory committees, as well as those of the Chairman of the Board of Directors and of the Chief Executive Officer. The Rules also contain the rules concerning ethics, detailing all the principles that the Company directors must uphold, in particular relating to insider trading and market transactions.

- **Assessment of the Board of Directors**

Upon the initiative of the Chairman at the meeting of March 26, 2020, the members of the Board of Directors were invited to give their opinion regarding the functioning of the Board, the Audit Committee and the Appointments and Compensation Committee, and on the preparation of its proceedings for the fiscal year 2019.

This self-assessment by the members of the Board of Directors of the Board's performance was carried out on the basis of precise criteria such as the operating methods and the effective contribution of its members.

The results of this assessment were discussed in an overall and open manner by the directors, who consistently work to improve internal communication.

1.1.3 Work of the Board of Directors in 2019

- **Number of meetings**

In 2019, the functioning of the Board was governed by the provisions of the bylaws. In addition to the obligatory Board meetings (adoption of the separate and semi-annual financial statements), meetings were held as justified by the course of business.

During 2019, the Company's Board of Directors met four times:

- March 28, 2019 (review and adoption of the statutory financial statements for the fiscal year ending December 31, 2018, review and adoption of the consolidated financial statements for the fiscal year ending December 31, 2018, review of the agreements pursuant to Articles L. 225-38 of the French Commercial Code, review of the terms of office of the directors and Statutory Auditors, discussion as to the appropriateness of the delegations, review of the compensation of management and setting of the directors' fees, preparation of the Board of Directors' management report and of the other reports pertaining to it, setting of the agenda for the Combined General Shareholders' Meeting);
- June 26, 2019 (recognition of the 2018 allocation of free shares, allocating free shares to all employees who are not corporate officers, issue of the 2019 founders' warrants, determination of compensation of the Chief Executive Officer, of the Chairman and of the Vice Chairman, renewal of the Committee members, level of the directors' fees);
- September 5, 2019 (review and approval of the consolidated financial statements for the first half of 2019);
- December 10, 2019 (issue of free shares following their allocation, validation of the 2019 variable objectives of the management team, and setting of the 2020 objectives).

The average attendance rate of the Board members was 97.25%.

- **Main subjects discussed**

During fiscal year 2019 the Board took a certain number of decisions relating in particular to the review of financial statements, and approval of the separate financial statements. It gave an opinion on the issuance of financial instruments (free shares, share subscription warrants, founders' warrants) and monitored the progress of work on TEDOPI®, OSE-127 and BI 765063 (OSE-172), as well as the Business Development projects.

1.1.4 Limitations placed on the powers of the Chief Executive Officer by the Board of Directors

These provisions are stipulated in Chapter II of the Board of Directors' Internal Rules.

The position of Chief Executive Officer is held by Alexis Peyroles who is invested with the most extensive powers to take action in any circumstances in the name of the Company, within the limits nevertheless of the provisions of Article 10 of the Internal Rules of the Board of Directors.

Accordingly, the Chief Executive Officer cannot adopt certain decisions or conclude certain acts, commitments or contracts if these have not been authorized in advance by the Board of Directors.

As an internal measure not binding on third parties, the Chief Executive Officer may not take the following decisions outside the limits set by the annual budget adopted and approved by the Board of Directors without the prior agreement of the Board:

- Decisions relating to acquisition or sale in any form, in return for payment or not, rental, lease, of any real estate asset or intangible non-current assets;
- Any proposal to create subsidiaries or to acquire Companies (or a business) including any project to acquire a holding in any entity, any project to sell, liquidate or dissolve subsidiaries, to start new business activities, or to take under lease management all or part of any business;
- Taking out a loan for an amount greater than €400,000 excluding the annual budget with the exception of bank overdrafts according to the authorization of the overdraft authorized by the banks, or deposits granted by partners:
- Conclude contracts or investments relating to the Company's activity corresponding to an income or expense greater than €400,000 excluding the annual budget per fiscal year;
- Constitute sureties, grant guarantees, endorsements greater than €500,000;
- Grant loans;
- Conclude agreements with shareholders;
- Any decision relating to initiation of a dispute, conduct of legal proceedings and any decision concerning any transactional settlement of the dispute;
- Pronounce the early dissolution of a subsidiary in which the Company holds all or more than the majority of the equity securities and voting rights.
- Any project to grant licenses, to sell or acquire licenses, for any intellectual property right that the Company holds such as, for example, patents, know-how or brands not identified in the annual budget, with the exception of that pertaining to the ordinary course of business of the Company.

Similarly, as an internal measure not binding on third parties, the Chief Executive Officer cannot without the prior agreement of the Extraordinary General Shareholder's Meeting:

- Liquidate, dissolve or close down the Company, including any closure concerning all or part of the Company's activity, or any event deemed to constitute a liquidation (including its methods and conditions);
- Carry out any substantial modification in the type or nature of the Company's activity;
- Acquire significant shares or assets from another company or any other economic entity or conclude any transaction outside the normal sphere of business;
- Any decision concerning a project for merger, demerger or contribution concerning the Company;
- Any decision relating to a proposal to issue securities, to increase or reduce the share capital and any decision relating to a proposal to reorganize the share capital (share buyback, reduction in number of shares, etc.), except for share capital increases resulting from the exercise of share subscription warrants or founders' warrants;
- Any decision relating to a proposal to distribute dividends, interim dividends or reserves of any kind whatsoever;
- Any decision relating to a proposal to issue or allocate founders' warrants, share subscription warrants or any other security; setting of methods for exercise or subscription of these securities.

1.1.5 Combination of employment contract and duties as corporate officers

Dominique Costantini, Chairman of the Board of Directors, has had an open-ended employment contract since July 1, 2014, as Director of Development, receiving gross annual compensation of €140,000 (for 104 working hours per month). Variable compensation equal to up to three months' salary is provided for based on the achievement of certain targets. Her employment contract was amended in April 2015 to increase her hours to 133 working hours per month, for gross annual compensation of €180,000 excluding variable compensation. Following the recommendation of the Appointments and Compensation Committee on June 22, 2015, the Board of Directors, on June 23, 2015, awarded gross variable compensation of €25,000 to Dominique Costantini for fiscal year 2014. Ms. Constantini signed an addendum to her employment contract on October 1, 2016, bringing her monthly working hours to 151.67 hours, i.e. gross annual compensation of €205,314 which was increased to €275,000 from July 1, 2019. Variable compensation equal to up to three months' salary is provided for based on the achievement of certain targets.

The Company is continuing this contract due to Dominique Costantini's unique technical roles in terms of business development and relations with health authorities. She reports to Chief Executive Officer Alexis Peyroles. The scope of her

employment contract includes the implementation of strategies to define and achieve proofs of concept and explore mechanisms of action.

Dominique Costantini receives no compensation for her position of Chairman of the Board of Directors.

Alexis Peyroles, Chief Executive Officer, signed an open-ended employment contract on July 1, 2014, modified by an addendum effective July 1, 2018 as Director of Operations with a gross annual salary of €250,000, then again modified by an addendum effective July 1, 2019 for an annual gross salary of €350,000. Variable compensation equal to up to 50% of the gross annual compensation is provided for based on the achievement of certain targets, with 50% of it in the form of free shares.

The Company is continuing this contract due to Alexis Peyroles' seniority and his unique technical roles in terms of international business collaborations and implementing licensing agreements. He reports to, and acts under the authority and instructions of, the Board of Directors. The characteristics of his employment contract relate to operational management and international business collaborations.

Maryvonne Hiance, Vice Chairman of OSE Immunotherapeutics, has an operational role as Director of Public Relations within the Executive Management under a contract dated May 31, 2016. Compensation under this employment contract is calculated on the basis of €120,000 in gross annual salary. The employment contract took effect on May 31, 2016, concurrently with the completion of the merger. Variable compensation equal to up to three months' salary is provided for based on the achievement of certain targets. The Company is continuing this contract due to Maryvonne Hiance's unique technical roles in terms of strategy and relations with public authorities.

1.1.6 Delegations of authority and powers granted to the Board of Directors in the area of capital increases

See Section 19.1.4 of the Universal Registration Document.

1.1.7 Board of Directors Committees

1.1.7.1 Audit Committee

- Composition

The Audit Committee consists of Jean-Patrick Demonsang (Committee Chairman) and Didier Hoch, appointed for a two-year term at the Board of Directors' meeting on June 26, 2019.

The independent members are Jean Patrick Demonsang and Didier Hoch. Jean Patrick Demonsang also has specific financial, accounting and auditing skills.

- Operating procedures

Duties

The Audit Committee is responsible for overseeing issues relating to the preparation and audit of accounting and financial information. It is responsible for continually assessing the existence and effectiveness of the Company's financial control and risk control procedures, and has as its duties:

Internal control

- Ensuring that the internal control and risk management systems are effective;
- Verifying the smooth operation with assistance from the Finance Department;
- Reviewing the schedule of internal and external audits;
- Ensuring that the Statutory Auditors conduct the statutory audit of the separate financial statements and, where applicable, the consolidated financial statements;

Statutory financial statements and financial information

After regularly reviewing the financial position, the cash position and the commitments appearing in the Company's separate financial statements:

- Reviewing the accounting and financial documents, annual and interim financial statements;
- Overseeing the process of issuing the statutory and consolidated/combined financial statements and the process of preparing the financial information;
- Reviewing the internal control measures;
- Reviewing the material risks for the Company, particularly off-balance sheet risks and commitments;
- Validating the relevance of accounting rules and choices;
- Verifying the relevance of the financial information reported by the Company.

Risk management

- Reviewing any item likely to have material, financial and accounting impacts;
- Reviewing the status of major litigation;
- Reviewing off-balance sheet risks and commitments;
- Reviewing the relevance of the risk monitoring procedures;
- Reviewing any related-party agreements.

Statutory Auditors

- Leading the selection of the Statutory Auditors, managing their compensation and ensuring their independence;
- Ensuring the proper implementation of their assignment;
- Monitoring the statutory audit of the separate financial statements and, where applicable, the consolidated financial statements by the Statutory Auditors;
- Establishing the rules for using the Statutory Auditors for tasks other than the audit of the financial statements and ensuring the proper implementation of their assignment;
- Issuing a recommendation on the proposals for the appointment and potential reappointment of the Statutory Auditors presented to the General Shareholders' Meeting, their fees and any issues related to their independence.

Internal Rules

The operating procedures of the Audit Committee are governed by Article 7 of the Internal Rules of the Board of Directors. These Internal Rules may be viewed at the Company's registered office upon prior written request.

- Work in 2019

The Audit Committee met twice in 2019, to review and approve the statutory and consolidated financial statements for fiscal year 2018 (March 25, 2019) and to review and approve the consolidated financial statements for first-half 2019 (September 5, 2019).

1.1.7.2 Appointments and Compensation Committee

- Composition

The Appointments and Compensation Committee consists of Gérard Tobelem (Committee Chairman) and Maryvonne Hiance, appointed for a two-year term at the Board of Directors' meeting on June 26, 2019.

The independent member is Gérard Tobelem.

- Operating procedures

Duties

The Appointments and Compensation Committee issues recommendations to the Board of Directors on the following topics:

- Advice and assistance regarding compensation, the pension and welfare benefit plan, supplementary pensions, benefits in kind, various cash entitlements of the executive corporate officers, allocations of free or performance shares, stock subscriptions or purchase options;
- The determination of the procedures for setting the variable portion of the compensation of the executive corporate officers, and overseeing the enforcement of these procedures;
- The distribution of the directors' fees, where necessary, to the directors taking into account their attendance record and tasks accomplished on the Board of Directors;
- Any extraordinary compensation of the directors for specific assignments or duties given to them by the Board;
- Any changes to the composition of the Board of Directors or the Executive Management;
- Prevention of conflicts of interest on the Board of Directors;
- Oversight of the establishment of structures and procedures making it possible to apply proper governing practices within the Company;
- Ensuring compliance with ethical principles within the Company and in its relations with third parties;
- Discussions on the classification of independent director for each director when the director is first appointed and every year before the publication of the Universal Registration Document, and presentation of the report of its recommendations to the Board of Directors.

In addition, the Executive Management proposes to it the various stock subscription or purchase option plans, equity warrant plans, founders' warrant allocation plans or free share allocation plans.

Internal Rules

The operating procedures of the Appointments and Compensation Committee is governed by Article 6 of the Board of Directors' Internal Rules. These Internal Rules may be viewed at the Company's registered office upon prior written request.

- Work in 2019

The Appointments and Compensation Committee met three times in 2019: on March 28 to appoint a candidate representing employee shareholders and renew a director's term of office; on June 26 to review the compensation of the management and award free shares to employees, equity warrants and founders' warrants; and on December 10 to award free shares and set the targets for the Chief Executive Officer and Chairman of the Board of Directors.

1.1.8 Statements relating to the Board of Directors

In the last five years, none of the members of the Company's Board of Directors have been:

- Convicted of fraud or subject to an incrimination or official public sanction by the statutory or regulatory authorities;
- Involved in any bankruptcies, receiverships or liquidations as a manager or corporate officer;
- Prevented from acting as a member of an administrative, management or supervisory body or from participating in the management or conduct of business of an issuer;
- Subject to any incrimination and/or official public sanction by the statutory or regulatory authorities (including designated professional organizations).

There are no family ties between directors.

1.1.9 Conflicts of interest

- Describe arrangements for preventing and managing conflicts of interest

Each director strives to avoid any potential conflict between their moral and material interests and those of the companies. He or she notifies the Board of Directors in advance and in full of any actual or potential conflicts of interest between him or

herself (or any other legal or natural person with whom he or she has business dealings) and the Company or any of the companies in which the Company has an investment or any of the companies with which the Company is planning on entering into an agreement of any type in which he or she may be directly or indirectly involved.

Directors must notify the Board of Directors of any conflict of interest that arises after taking office as soon as they become aware of it. They must not take part in any discussions and decision-making related to the issues in question and, where appropriate, must resign.

If a member of the Board of Directors has a doubt as to the existence of a conflict of interest or potential conflict of interest, he/she must immediately notify the Chairman of the Board of Directors who must independently decide whether there are grounds for notifying the Board of Directors.

If the Board member referred to in the previous paragraph is also the Chairman of the Board of Directors, he/she should notify the Board of Directors.

An absence of information amounts to the acknowledgement that no conflict of interests exists.

Where the agreement in question is not an agreement entered into under normal conditions, the relevant Board member shall not take part in the vote on entering into the agreement in question nor in the discussion prior to this vote.

Moreover, the Chairman of the Board of Directors, members of the Board of Directors, Chief Executive Officer and any Chief Operating Officers will not be required to disclose to any Board members of whom they have good reason to believe has a conflict of interest within the meaning of this article, information or documents relating to the agreement or transaction giving rise to the conflict of interest, and will inform the Board of Directors of this lack of such disclosure.

- List potential conflicts of interest and state the opinion of the Board of Directors

To the Company's knowledge, as of the date of this Universal Registration Document, there are no existing or potential conflicts of interest between the duties towards the Company and the private interests and/or duties of the individuals that comprise the administrative, management and executive management bodies.

- Agreements between the members of the Board of Directors and companies of the OSE Immunotherapeutics Group.

As stated in paragraph 1.1.5, Ms. Costantini has had an open-ended employment contract since July 1, 2014 as Director of Development, receiving gross annual compensation of €275,000 excluding variable compensation, as of July 1, 2019.

As stated in paragraph 1.1.5, Alexis Peyroles, Chief Executive Officer, signed an open-ended employment contract as Director of Operations, receiving gross annual compensation of €350,000. Variable compensation equal to up to 50% of the gross annual compensation is provided for based on the achievement of certain targets, with 50% of it in the form of free shares.

Maryvonne Hiance, Vice Chairman of OSE Immunotherapeutics, has an operational role as Director of Public Relations within the Executive Management under a contract dated May 31, 2016. Compensation under this employment contract is calculated on the basis of €120,000 in gross annual salary. The employment contract took effect on May 31, 2016, concurrently with the completion of the merger. Variable compensation equal to up to three months' salary is provided for based on the achievement of certain targets.

1.2 Application of the Middlenext Corporate Government Code for listed companies.

Through a decision dated March 27, 2015, the Board of Directors wished to establish Internal Rules in order to specify, supplement and implement the rules for its organization and operation that apply to it under the law (and to its committees), the Company's regulations and bylaws, and the ethical rules that apply to all the directors and the corporate governance principles by which it refers (Corporate Governance Code for Small and Midcaps, MiddleNext, December 2009).

In accordance with the law of July 3, 2008, the disclosures presented herein are established by referring to the corporate governance code and additional recommendations regarding communication on the compensation of executive corporate officers of listed companies as defined by Middlenext. The Middlenext Code used as a reference by the Company can be

consulted at the address https://www.middlenext.com/IMG/pdf/c1_-_cahier_10_middlenext_code_de_gouvernance_2016.pdf.

The Reference Code contains key areas of vigilance to ensure proper governance of French companies with reminders of the questions the Board of Directors must ask itself to promote effective governance. The Company's Board of Directors acknowledged these vigilance areas at its meeting on March 27, 2015.

The Reference Code contains recommendations relating more specifically to corporate officers and the Board of Directors. The Company complies with all recommendations in the Reference Code.

1.3 Compensation of management

1.3.1 Compensation of executive corporate officers

- Compensation policy (fixed part, variable part and allocation criteria etc.) common to all executive corporate officers

In accordance with the law of July 3, 2008, the disclosures presented herein are established by referring to the corporate governance code and additional recommendations regarding communication on the compensation of executive corporate officers of listed companies as defined by Middlenext.

In accordance with Article 2 of the Internal Rules of the Board of Directors, in order to determine the level of compensation of its management as well as the information disclosed in this respect, the Board of Directors will draw on the following seven principles.

- Comprehensiveness: determining the compensation of executive corporate officers must be comprehensive: fixed part, variable part (bonuses), stock-options, free shares, attendance fees, retirement conditions and personal benefits must be factored in when assessing overall compensation.
- Balance between the different components of compensation: reasons must be given for each component of compensation which must be in the Company's general interest.
- Benchmark: insofar as possible, this compensation must be assessed based in the context of a given role and reference market and proportionate to the Company's position, while paying attention to its inflationary impact.
- Consistency: the compensation of the executive corporate officer must be consistent with that of other managers and employees within the Company.
- Legibility of rules: rules must be simple and transparent; performance criteria used to calculate the variable part of compensation or, where relevant, to allocate options or free shares, must be consistent with the business's objectives, be stringent, explicable and, where possible, long-term.
- Balanced: when determining compensation and the allocation of options or free shares, the right balance must be struck between the general interest of the Company, market practices and the performance of management.
- Transparency: annual information is provided to shareholders on the compensation received by management in accordance with applicable regulations.

Moreover, the following have been introduced:

- A preliminary vote at the GSM on the principles and criteria for determining the compensation of executive corporate officers,
- A vote at the GSM in the following fiscal year to approve the compensation paid to corporate officers in respect of the previous fiscal year.

In fiscal year 2019, Dominique Costantini, Maryvonne Hiance and Alexis Peyroles were the only executive corporate officers. No compensation was paid to executive corporate officers in 2019 in respect of their corporate offices.

- Compensation policy (fixed part, variable part and allocation criteria etc.) applicable to the Chairman of the Board of Directors

Dominique Costantini has held an open-ended employment contract since July 1, 2014 for her position as Director of Development. Compensation in respect of this employment contract has been calculated on the basis of the gross annual sum of €275,000 (for 151.67 working hours per month) since July 1, 2019. This increase was agreed at the meeting of the Board of Directors on June 26, 2019, in accordance with the compensation criteria set out in Article 2 of the Board of Director's Internal Rules (comprehensiveness, balance between the different components of compensation, consistency, legibility of rules, balance, transparency), and on the basis of the Benchmark for compensation of equivalent biotech management.

Variable compensation equal to up to three months' salary is provided for based on the achievement of certain targets.

At its meeting on December 5, 2018, the Board of Directors set the following objectives for Dominique Costantini in respect of her contract as Director of Early Development: continue to develop the Clinical portfolio; look to the future with new Research projects to be brought to the Clinical portfolio. These objectives were met in the 2019 fiscal year. Variable compensation equivalent to three months' salary was paid in cash.

For the 2020 fiscal year, Dominique Costantini's objectives were set as follows: continue the successful clinical development of the Company's portfolio, R&D engine and scientific recognition. Variable compensation equivalent to no more than three months' salary is to be paid in cash.

- Compensation policy (fixed part, variable part and allocation criteria etc.) applicable to the Chief Executive Officer.

Alexis Peyroles, Chief Executive Officer, signed an open-ended employment contract on July 1, 2014, modified by an addendum effective July 1, 2018, as Director of Operations with a gross annual salary of €250,000, then again modified by an addendum effective July 1, 2019, for an annual gross salary of €350,000. This increase was agreed at the meeting of the Board of Directors on June 26, 2019, in accordance with the compensation criteria set out in Article 2 of the Board of Director's Internal Rules (comprehensiveness, balance between the different components of compensation, consistency, legibility of rules, balance, transparency), and on the basis of the Benchmark for compensation of equivalent biotech management.

Variable compensation equal to up to 50% of the gross annual compensation is provided for based on the achievement of certain targets, with 50% of it in the form of free shares.

At its meeting on December 5, 2018, following the recommendation of the Appointments and Compensation Committee, the Board of Directors set Alexis Peyroles' objectives for the 2019 fiscal year as follows: continue to develop the Clinical portfolio; look to the future with new Research projects to be brought to the Clinical portfolio; ensure the Company's growth; prepare alternative scenarios for Tedopi. 95% of these objectives were met in the 2019 fiscal year. They gave rise to the payment of variable compensation of €166,250, in the form of €83,125 in cash and 22,625 shares.

In respect of the 2020 fiscal year, at its meeting on December 10, 2019, following the recommendation of the Appointments and Compensation committee on that date, the Board of Directors set Alexis Peyroles' objectives as follows: continue the clinical development of the Company's portfolio, R&D engine and scientific recognition, sign a new partnership agreement in the portfolio and/or obtain funding.

Variable compensation is 50% of the fixed compensation per objective, half of which is to be paid in shares.

- Compensation policy (fixed part, variable part and allocation criteria, etc.) applicable to other corporate officers

Maryvonne Hiance, Vice Chairman of OSE Immunotherapeutics, has an operational role as Director of Public Relations within the Executive Management under a contract dated May 31, 2016. Compensation under this employment contract is calculated on the basis of €120,000 in gross annual salary. The employment contract took effect on May 31, 2016, concurrently with the completion of the merger. Variable compensation equal to up to three months' salary is provided for based on the achievement of certain targets.

This compensation was confirmed at the meeting of the Board of Directors on June 26, 2019, in accordance with the compensation criteria set out in Article 2 of the Board of Director's Internal Rules (comprehensiveness, balance between the

different components of compensation, consistency, legibility of rules, balance, transparency), and on the basis of the Benchmark for compensation of equivalent biotech management.

At its meeting on June 26, 2019, the Board of Directors decided to grant Maryvonne Hiance an incentive in the form of 25,000 free shares, deducted from the allocation of 150,000 free shares for non-corporate officer employees approved on the same day.

Nicolas Poirier, elected as the director representing the employee shareholders on June 26, 2019, is employed as Chief Scientific Officer under an employment contract dated May 31, 2016. Compensation under this employment contract is calculated on the basis of €180,000 in gross annual salary. Variable compensation is also provided for. Since his appointment as the director representing the employee shareholders was based on his position as a pre-existing employee, Nicolas Poirier's employment contract is considered a standard agreement entered into under normal conditions.

At its meeting on December 5, 2018, the Board of Directors decided to grant Nicolas Poirier an incentive in the form of 20,000 free shares in respect of his leadership of the Research team (shares vested on December 4, 2019).

- Breakdown of compensation and benefits in kind for each executive corporate officer.

None.

- Summary of compensation and benefits in kind of executive corporate officers

None.

- Summary of employment contracts, specific retirement benefits, severance payments and non-compete clauses of executive corporate officers.

The Company has not provisioned sums for the purpose of payment of pensions, retirement and other benefits for the benefit of corporate officers and/or executive corporate officers who do not benefit elsewhere (or have not benefited) from severance or a hiring bonus within the Company.

1.3.1.2 Equity ratios

This presentation was provided in accordance with the terms of Article L. 225-37-3 of the French Commercial Code, as amended by Law no. 2019-486 of May 22, 2019, on the expansion and transformation of companies, the so-called Pacte Law, and supplemented by decree no. 2019-1235 of November 27, 2019, with a view to ensuring immediate compliance with the new requirements on transparency in relation to management compensation.

It sets out the level of compensation of the Chairman of the Board of Directors and the Chief Executive Officer as a ratio of both the mean compensation of employees and the median compensation of employees (excluding corporate officers) of the Company, as well as how these ratios have changed over the previous two fiscal years.

The ratios below were calculated on the basis of fixed and variable annualized compensation paid in the relevant fiscal years as well as free shares and founders' warrants allocated in the same periods at fair value. The scope of this information is based on the workforce of OSE Immunotherapeutics.

	2015 fiscal year	2016 fiscal year	2017 fiscal year	2018 fiscal year	2019 fiscal year
Chairman of the Board of Directors *					
Ratio with average employee compensation	281%	518%	485%	597%	470%
Ratio with median employee compensation	281%	700%	644%	799%	622%
Chief Executive Officer **					
Ratio with average employee compensation	185%	491%	1657%	1351%	1514%
Ratio with median employee compensation	185%	664%	2199%	1809%	2004%

* Ms. Dominique Costantini was Chief Executive Officer between 2014 and March 2018 and has been Chairman of the Board of Directors since that date. The ratios were calculated on the basis of aggregate remuneration paid to Ms. Costantini for her office and employment contract. Free share allocations were also factored in when calculating these ratios.

** Mr. Alexis Peyroles was Chief Operating Officer between May 2016 and March 2018, and since then has been Chief Executive Officer. The ratios were calculated on the basis of aggregate remuneration paid to Mr. Peyroles for his office and employment contract. Free share allocations were also factored in when calculating these ratios.

1.3.1.3 Compensation of members of the Board of Directors

- Policy on the distribution of directors' fees;

The Board of Directors may receive fixed annual compensation in the form of directors' fees, set by the General Shareholders' Meeting, the amount of which is charged to operating expenses.

The Board of Directors decides on the distribution of directors' fees among directors following a proposal by the Appointments and Compensation Committee. This distribution may take into account directors' specific experience, their actual participation at Board meetings or their actual participation at Committee meetings.

Under Article L. 225-46 of the French Commercial Code, they may also receive exceptional compensation for specific assignments or offices assigned by the Board.

In addition, in its annual report and the Board of Directors' management report, the Company provides information on the directors' fees paid in accordance with the provisions of article L. 225-102-1, paragraphs 1 to 3 of the French Commercial Code as well as the AMF recommendations of December 22, 2008 on information on corporate officer compensation to be provided in the Universal Registration Document.

The General Shareholders' Meeting of June 14, 2017 set the total directors' fees allocated to the Board of Directors at two hundred thousand euros (€200,000) net for previous years, pending any subsequent resolution passed by the Ordinary General Shareholders' Meeting.

At its meeting on June 26, 2019, the Board of Directors voted to allocate directors' fees to the directors as follows:

- €2,500 per meeting attended in person (one meeting is scheduled per quarter);
- €1,500 per meeting attended by videoconference or other means of telecommunication subject to the internal rules;
- Travel and lodging costs incurred by each Committee participant for meetings of the Board of Directors held outside of Europe will be covered for an amount of €2,500 per meeting, while costs incurred for meetings in Europe will be covered for an amount of €500 per meeting.

At its meeting on March 28, 2019, the Board voted to include the Chairman of the Board and Directors and Chief Executive Officers among the directors entitled to these directors' fees.

In respect of fiscal year 2019, OSE Immunotherapeutics allocated to members of its Board of Directors a net sum of €151,000 in directors' fees.

Summary of directors' fees allocated to members of the Board of Directors

Last name First Name **Company** **Name**	**Appointment/Current term of office**	**Position on the Board and Board Committees**	**Attendance rate during the 2019 fiscal year**	**Directors' fees (for the 2019 fiscal year)**
Board of Directors				
M. Hiance	GSM called to approve the financial statements for the fiscal year ended December 31, 2021, i.e., six years	Vice Chairman of the Board of Directors Appointments and Compensation Committee	100%	€14,775
D. Costantini	GSM called to approve the financial statements for the fiscal year ended December 31, 2020, i.e., three years	Director – Chairman of the Board of Directors	100%	€11,062*
N. Poirier	GSM called to approve the financial statements for the fiscal year ended December 31, 2021, i.e., three years	Director representing employee shareholders	100%	€8,837
S. Brouard	GSM called to approve the financial statements for the fiscal year ended December 31, 2021, i.e., six years	Director	100%	€15,429
D. Hoch	GSM called to approve the financial statements for the fiscal year ended December 31, 2021, i.e., six years	Director	100%	€20,571
G. Tobelem	GSM called to approve the financial statements for the fiscal year ended December 31, 2019, i.e., three years	Director Compensation and Appointments Committee (Chairman)	100%	€24,000
B. Dréno	GSM called to approve the financial statements for the fiscal year ended December 31, 2019, i.e., three years	Director	75%	€12,000
JP. Demonsang	GSM called to approve the financial statements for the fiscal year ended December 31, 2019, i.e., three years	Director Audit Committee (Chairman)	100%	€24,000
A. Peyroles	GSM called to approve the financial statements for the fiscal year ended December 31, 2021, i.e., three years	Chief Executive Officer of OSE Immunotherapeutics, Director	100%	€10,011*
W. Flamenbaum	GSM called to approve the financial statements for the fiscal year ended December 31, 2019, i.e.,	Director	100%	€10,447*

	three years/resigned February 19, 2020	

* Since the meeting of the Board of Directors on March 28, 2019

1.3.2 Pensions and other benefits

1.3.2.1 Compensation, payments and benefits due or likely to become due as a result of taking or leaving a corporate office or a change in duties

The Company has not provisioned sums for the purpose of payment of pensions, retirement and other benefits for the benefit of corporate officers and/or executive corporate officers who do not benefit elsewhere (or have not benefited) from severance or a hiring bonus within the Company.

1.3.2.2 Other benefits

At December 31, 2019, the Company provisioned for retirement benefits as well as for bonuses for corporate officers and/or executive corporate officers who are not otherwise entitled (or have not previously been entitled) to severance or a hiring bonus.

1.3.3 Draft resolutions on the principles and criteria for setting, distributing and allocating components of compensation for executive corporate officers for the purposes of the ex ante vote - Draft resolution of the Combined Annual General Shareholders' Meeting on June 16, 2020 on the compensation policy

At the Combined Annual General Shareholders' Meeting on June 16, 2020, a proposal will be made to approve the principles and criteria for setting, distributing and allocating the fixed, variable and exceptional components of total compensation and any benefits in kind to be allocated to executive corporate officers.

"Voting under the conditions of quorum and majority required for Ordinary General Shareholders' Meetings and having considered the Board of Directors' report on the compensation policy of executive corporate officers, produced in accordance with Article L. 225-37-2 of the French Commercial Code and appended to the Company's 2018 Annual Financial Report, the General Shareholders' Meeting hereby approves the principles and criteria for setting, distributing and allocating the fixed, variable and exceptional components of the total compensation and benefits in kind to be allocated to executive corporate officers in respect of their office as presented in this report."

2. Information on corporate officers

2.1 Agreements covered by Articles L. 225-38 et seq. of the French Commercial Code

See Section 17.1.2 of the Universal Registration Document.

2.2 Governance and list of offices and positions held by each corporate officer

See Sections 12 (Governing, management, supervisory bodies and executive management) and 13 (Compensation and benefits) of the Universal Registration Document.

3. Items likely to have an impact in the event of a public offering

In accordance with Article L. 225-100-3 of the French Commercial Code, the items likely to have an impact in the event of a public offering are as follows:

The Company's capital structure	See Note to the Financial Statements Number 4: Capital, Section 18.1.6 of the Universal Registration Document
The restrictions contained in the Bylaws on exercising voting rights and share transfers or agreement clauses brought to the attention of the Company in accordance with Article L. 233-11 of the French Commercial Code.	See (iv) Shareholding disclosure thresholds (Article 16 of Bylaws)
Any direct or indirect investments in the Company's share capital of which it is aware under Articles L. 233-7 and L. 233-12 of the French Commercial Code.	None
The list of holders of any securities conferring special control rights and description of these securities.	None
The control mechanisms provided for in any employee shareholding plan when control rights are not held by employees	None
Shareholder agreements of which the Company is aware and which may include restrictions on share transfers and on exercising voting rights.	None
Rules governing the appointment and replacement of members of the Board of Directors as well as changes to the Company's Bylaws.	See Report on corporate governance and legal and statutory provisions
The powers of the Board of Directors, in particular issuing or buying back shares.	See Appendix C - Corporate governance report, Sections 1.1.2 (Functioning of the Board of Directors) and 1.1.4 (Restrictions on the powers of the Chief Executive Officer and Board of Directors)
Any agreements entered into by the Company that are amended or terminated in the event of a change of control of the Company, unless this disclosure would seriously harm its interests, notwithstanding any legal disclosure duty.	See Note 4 to the consolidated financial statements: Capital (Section 18.1.6 of the Universal Registration Document)
Agreements providing for severance payments for the Board of Directors or employees should they resign or be dismissed without proper cause or if their employment is terminated as a result of a public offering.	None

4. Draft resolutions relating to the principles and criteria for setting, distributing and allocating the components of executive corporate officers' compensation for the purposes of the *ex ante* vote.

In accordance with the provisions of Article L. 225-37-2 of the French Commercial Code, this section sets out the principles and criteria for setting the fixed, variable and exceptional components of the total compensation and benefits in kind of executive corporate officers: Chairman of the Board of Directors and Chief Executive Officer of OSE Immunotherapeutics for the 2019 fiscal year.

On the basis of a report issued by the Board of Directors, a proposal will be submitted to the Combined General Shareholders' Meeting on June 16, 2020 to approve the compensation policy of executive corporate officers for the next fiscal year.

In the event that the Combined General Shareholders' Meeting of June 16, 2020 does not approve the resolution adopting the compensation policy for executive corporate officers, compensation will be set in line with the compensation allocated in the previous fiscal year or, if no such compensation was allocated in respect of the previous fiscal year, in line with current Company practice.

In accordance with Article L. 225-37-2 of the French Commercial Code, the payment of variable and exceptional components of compensation will be subject to the approval by the General Shareholders' Meeting of the components of the compensation of the relevant individuals under the conditions set out in Article L. 225-100 of the French Commercial Code.

4.1 Principles applicable to all executive corporate officers

The work of the Appointments and Compensation Committee is based on review meetings through the course of the year and interim preparatory meetings chaired by the Committee Chairman. The principles and criteria for setting, distributing and allocating the components of total compensation and benefits in kind of executive corporate officers of OSE Immunotherapeutics for the 2019 fiscal year were thus reviewed by the Appointments and Compensation Committee before being proposed to and approved by the Board of Directors.

The Board will present the components of compensation due or allocated to each of the executive corporate officers in respect of the fiscal year ended to the Ordinary Annual General Shareholders' Meeting for approval. This presentation is to be followed by a mandatory shareholder vote. Should the Ordinary General Shareholders' Meeting reject the proposal, following the recommendation of the Appointments and Compensation Committee, the Board shall vote on the changes to be made to the compensation due or allocated in respect of the fiscal year ended or the future compensation policy. It will immediately post a statement on the Company's website setting how it intends to act on the vote by the Ordinary General Shareholders' Meeting and submits a report at the following meeting.

The Appointments and Compensation Committee submits a proposal to the Board of Directors on the compensation of executive corporate officers consistent with the rules for setting such compensation in view of the medium-term outlook and Company's results.

The Company draws on market practices of comparable Companies in particular in order to determine the structure of this compensation. These surveys are conducted with reference to a panel of French companies with similar characteristics, selected according to the following criteria: market capitalization, industrial activity, revenue, total workforce.

It ensures that none of the components of compensation are disproportionate and analyzes compensation as a whole, taking into account all components.

4.2 Description of the principles and criteria on which the Chairman of the Board of Directors' compensation is based

- No fixed or variable compensation

According to the Company's bylaws, the compensation of the Chairman of the Board of Directors of OSE Immunotherapeutics is set by the Board for the duration of his three-year term. However, the Chairman of the Board of Directors does not receive any fixed compensation in respect of his office, nor variable compensation.

However, Dominique Costantini, the Chairwoman of the Board of Directors, has a current employment contract, signed as Head of Development in 2014. Her contract was amended in October 2016 making it a full-time contract (151.67 working hours), with gross annual compensation of €205,314 (excluding variable compensation), increased to the gross annual sum of €275,000 at July 1, 2019.

- No exceptional compensation

Other than her compensation in respect of her unemployment contract (see a) above), the Chairman of the Board of Directors is not entitled to severance pay or to any compensation in respect of a non-compete clause.

- Benefits

The Chairman of the Board of Directors has been receiving directors' fees since March 28, 2019. She receives no other benefits.

4.3 Description of the principles and criteria on which the Chief Executive Officer's compensation is based

According to the Company's bylaws, the compensation of the Chief Executive Officer of OSE Immunotherapeutics is set by the Board.

- No fixed or variable compensation

The Chief Executive Officer does not receive any compensation in respect of his corporate office.

Alexis Peyroles initially signed an open-ended employment contract on July 1, 2014, modified by an amendment dated October 1, 2016, then modified by an amendment dated July 1, 2018 as Chief Operating Officer for a gross annual salary of €250,000 (for 151.67 working hours per month), and then modified again in an amendment effective from July 1, 2019, for gross annual compensation of €350,000. Variable compensation equal to up to 50% of the gross annual compensation is provided for based on the achievement of certain targets, with 50% of it in the form of free shares.

- No exceptional compensation

Other than compensation in respect of his employment contract (see a) above), the Chief Executive Officer is not entitled to severance pay nor to compensation in respect of a non-compete clause.

- Allocation of securities giving access to capital

In 2019, Alexis Peyroles was allocated 150,000 free shares at the end of the vesting period. The Board of Directors also allocated 172,625 shares to him in 2019. He received other allocations in respect of previous years as described in the annual financial report included in the Universal Registration Document.

In accordance with Article L. 225-197-1 II of the French Commercial Code and standard Company practice in terms of the allocation of free shares to management, Alexis Peyroles has committed to holding 5% of the free shares allocated to him as registered shares until the end of his corporate office within the Company.

- Allocation of directors' fees

As a director, Alexis Peyroles received €10,011 in directors' fees for 2019.

- No other benefits

Alexis Peyroles receives no other benefits.

4.4 Description of the principles and criteria on which the Chief Operating Officer's compensation is based

The Company had no Chief Operating Officer during the 2019 fiscal year.

4.5 Draft resolution to the Ordinary Annual General Shareholders' Meeting on June 16, 2020 on the compensation policy

At the Combined Annual General Shareholders' Meeting on June 16, 2020 a proposal will be made to approve the principles and criteria for setting, distributing and allocating the fixed, variable and exceptional components of total compensation and any benefits in kind to be allocated to executive corporate officers.

"Voting under the conditions of quorum and majority required for Ordinary General Shareholders' Meetings and having considered the Board of Directors' report on the compensation policy of executive corporate officers, produced in accordance with Article L. 225-37-2 of the French Commercial Code and appended to the Company's 2019 Annual Financial Report, the General Shareholders' Meeting hereby approves the principles and criteria for setting, distributing and allocating the fixed,

variable and exceptional components of the total compensation and benefits in kind to be allocated to executive corporate officers in respect of their office as presented in this report."

4.6 Summary of compensation awarded to management

A breakdown of the compensation awarded to corporate officers is presented in summary form in Section 13.1 "Overall gross compensation for members of the Board of Directors and General Management."

The Board of Directors

Appendix D - Cross-reference tables

INFORMATION FROM THE PROVISIONS OF APPENDICES 1 AND 2 OF THE COMMISSION DELEGATED REGULATION (EU) 2019/980 OF MARCH 14, 2019 SUPPLEMENTING REGULATION (EU) 2017/1129 OF THE EUROPEAN PARLIAMENT AND THE COUNCIL

The cross-reference table below can be used to identify in the Universal Registration Document the information required under Appendices 1 and 2 of the Delegated Regulation (EU) 2019/980 of March 14, 2019.

Commission Delegated Regulation (EU) 2019/980 of March 14, 2019 supplementing Regulation (EU) 2017/1129 (Appendices 1 and 2)		**Universal Registration Document**
Number	**Section**	**Reference**
1	Responsible persons, third-party information, experts' reports and approval from the competent authority	1
1.1	Persons responsible for information	1.1
1.2	Statement of the persons responsible	1.2
1.3	Person acting as an expert	1.3
1.4	Statement regarding third-party information	1.4
1.5	Statement regarding approval of the Universal Registration Document by the competent authority	1.5
2	Auditors	2
2.1	Name and addresses of the Company's Statutory Auditors	2.1
2.2	Change of Statutory Auditors	2.2
3	Risk factors	3
4	Information about the Company	4
4.1	Company purpose and commercial name	4.1
4.2	The Company's place of registration, its registration number and legal entity identifier	4.2
4.3	Date and term of incorporation of the Company	4.3
4.4	Domicile, legal form, legislation, country of incorporation, address, telephone number and website	4.4
5	Business overview	5
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5.2	Principal markets	5.2
5.3	Important events in the development of the Company's business	5.3
5.4	Strategy and objectives	5.4
5.5	The extent to which the Company is dependent on patents or licenses, industrial, commercial or financial contracts or new manufacturing processes	5.5
5.6	Competitive position	5.6
5.7	Investments	5.7
6	Organizational structure	6

6.1	Description of the Group and the position of the Company	6.1
6.2	List of the Company's significant subsidiaries	6.2
7	Review of the financial position and results	7
7.1	Financial position	7.1
7.2	Operating profit	7.2
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8.2	Source and amount of cash flows	8.2
8.3	Financing requirements and structure	8.3
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9	Regulatory environment	9
10	Information on trends	10
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10.2	Trends, uncertainties, demands, commitments or events that are reasonably likely to have a material effect on the Issuer's prospects	10.2
11	Profit/(loss) forecasts or estimates	11
12	Administrative, management and supervisory bodies, and senior management	12
12.1	Information on members of the administrative, management or supervisory bodies;	12.1
12.2	Conflicts of interest	12.2
13	Compensation and benefits	13
13.1	Amount of compensation and benefits in kind	13.1
13.2	Total provisions for pensions and retirement	13.2
14	Operating procedures of the administrative and management bodies	14
14.1	Expiration date of the current term of office	14.1
14.2	Service contracts	14.2
14.3	Audit committee and Compensation committee	14.3
14.4	Statement on the corporate governance regime	14.4
14.5	Potential material impacts on the corporate governance	14.5
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15.1	Number of employees	15.1
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15.3	Employee shareholding	15.3
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16.1	Name of any person who has a percentage interest in the share capital or voting rights which is notifiable	16.1
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16.3	Information on control	16.3

16.4	Description of any arrangements which may result in a change in control	16.4
17	Related-party transactions	17
18	Financial information concerning the Issuer's assets, liabilities, financial position and results	18
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18.2	Interim and other financial information	18.2
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CROSS-REFERENCE TABLE FOR THE MANAGEMENT REPORT

The cross-reference table below can be used to identify the information in this Universal Registration Document which comprises the management report to be published in accordance with the provisions of Article L. 225-100 of the French Commercial Code.

Management report	**Paragraph in this document**
Presentation of the Company's position during the past financial year (Article L. 232-1 II)	Appendix A, 1.2
Major events between the reporting date and the publication of the management report (Article L. 232-1 II)	Appendix A, 1.3
Foreseeable changes to the Company's position (Article L. 232-1 II)	Appendix A, 1.3
List of existing subsidiaries (Article L. 232-1 II)	6.2
Research and development activities (Article L. 232-1 II)	5.1.3
Objective and comprehensive analysis of business development	Appendix A
Financial and any relevant non-financial key performance indicators	7.2
Description of main risks and uncertainties	3
Information on the use of financial instruments (Article L. 225-100-1 1° to 3° and 6°)	18.1.6 (3., Note 13)
Main features of the internal control and risk management procedures concerning the preparation and processing of accounting and financial information (Article L. 225-100-1 5°)	Appendix A, 8
Adjustments in the event that securities giving access to capital are issued (Article L. 228-99)	N/A
Executive corporate officers' requirements to hold shares until the termination of their positions by the Board of Directors when deciding on the allocation of free shares (Article L. 225-197-1 II para. 4)	Appendix C, 4.3

Non tax-deductible expenses and reintegrated expenses following a tax adjustment (Articles 223 c and 22 d of the French General Taxation Code.	N/A
Identity of the direct or indirect holders of more than one-twentieth, one-tenth, three-twentieths, one-fifth, one-quarter, one-third, one-half, two-thirds, eighteen-twentieths, nineteen-twentieths of the share capital or voting rights (Article L. 233-13)	16.1.1
Share buy-back transactions (Article L. 225-211 para. 2)	N/A
Securities transactions carried out by management (Article 223-26 of the General Regulations of the French Financial Markets Authority)	14. Appendix A, appended to the report
Employee shareholding (Article L. 225-102)	15.2
Breakdown of currently valid delegations	19.1.4
Payment terms for customers and suppliers (article L. 441-6-1 para. 1)	2.5 Appendix A

CROSS-REFERENCE TABLE FOR THE ANNUAL FINANCIAL REPORT

The cross-reference table below can be used to identify any information in this Universal Registration Document which makes up the annual financial report to be published in accordance with articles L. 451-1-2 of the French Monetary and Financial Code and 222-3 of the General Regulations of the French Financial Markets Authority.

Number	**Section**	**Paragraph in this document**
1	Separate financial statements	18.1.5
2	Consolidated financial statements	18.1.6
3	Management report (see above)	Appendix A
4	Statement by natural persons who take responsibility for the annual financial report	1.1
5	Statutory Auditors' report on the separate financial statements	18.1.1.2
6	Statutory Auditors' report on the consolidated financial statements	18.1.1.1