Teaching regulatory T cells to treat your disease

A French limited liability company (*société anonyme*) with capital of €3,884,510.40

Registered office: Les Cardoulines, Allée de la Nertière, 06560 Valbonne –Sophia Antipolis

Grasse Trade and Companies Register n° 435 361 209

2016
REGISTRATION DOCUMENT

2016
ANNUAL FINANCIAL REPORT

AMF AUTORITÉ DES MARCHÉS FINANCIERS

DISCLAIMER

The English version of the registration document is a free translation of the official registration document prepared in France and registered with the French financial market authority (*Autorité des Marchés Financiers* – AMF) on April 26, 2017 under number R.17-024. Certain sections have been intentionally omitted.

All possible care has been taken to ensure that the translation is an accurate representation of the original. However, in all matters of interpretation of information, views or opinion expressed therein, the original version of the registration document in French takes precedence over this translation.

Copies of the French language version of this registration document can be obtained free of charge from TxCell (Les Cardoulines, Allée de la Nertière, 06560 Valbonne – Sophia Antipolis), on TxCell's website (www.txcell.com) and on the AMF's website (www.amf-france.org).

Note

In this registration document (the "*Document de Référence*"), the terms "TxCell" or the "Company" mean the company TxCell, a French limited liability company (*société anonyme*) whose head office is located at Les Cardoulines Sophia Antipolis – Allée de la Nertière – 06560 Valbonne, Sophia Antipolis, France, registered with the Grasse trade and companies register under number B 435 361 209.

The *Document de Référence* presents notably:

- the annual financial statements prepared according to French GAAP for the year ended December 31, 2016, and the corresponding statutory auditors' report, presented in paragraph 26.1 of the *Document de Référence*; and
- the annual financial statements prepared according to IFRS for the year ended December 31, 2016, and the corresponding statutory auditors' report, presented respectively in paragraph 20.1 and 20.2 of the *Document de Référence*.

A glossary defining certain terms used in the *Document de Référence* can be found in chapter 27 of the *Document de Référence*.

Disclaimer

Market and competition information

The *Document de Référence* contains, specifically in chapter 6 *"Overview of business activities"*, information relating to the Company's markets and competitive position. Unless otherwise stated, the information contained in the *Document de Référence* on markets and product categories are estimates made by the Company and are provided for illustrative purposes only. This information derives, specifically, from studies conducted by external sources. Publicly available information which the Company believes to be reliable has not been verified by an independent expert, and the Company cannot guarantee that a third party using different methods to collect, analyze and calculate data on these markets would obtain the same results. In addition, the Company's competitors may define markets and categories differently.

Forward-looking information

The *Document de Référence* contains information on the Company's prospects and development priorities. This information is sometimes identified by the use of the future or the conditional tense or forward-looking words such as "consider", "envisage", "think", "aim to", "expect", "understand", "should", "aspire to", "estimate", "believe", "wish", "could" or, where appropriate, the negative of those terms or any other variant or similar terminology. This information is not historical data and should not be interpreted as a guarantee that the facts and data set out herein will happen. This information is based on data, assumptions and estimates which the Company deems reasonable. It is subject to change or amendment due to uncertainties related, specifically, to the economic, financial, competitive or regulatory environment. This information is mentioned in various paragraphs of the *Document de Référence* and contains data about the Company's intentions, estimates and objectives, particularly regarding the market in which it operates, its strategy, growth, results, financial position, cash position and forecasts. The forward-looking information contained in the *Document de Référence* is provided only as at the date of the *Document de Référence*. The Company operates in a constantly changing competitive environment. It may therefore not be able to anticipate all the risks, uncertainties or other factors that may affect its business, their potential impact on its business or the extent to which the occurrence of a risk or a combination of risks could have significantly different results from those implied in any forward-looking information, it being noted that none of this forward-looking information constitutes a guarantee of actual results.

Risk factors

Investors are advised to carefully read the risk factors described in chapter 4 "*Risk Factors*" of the *Document de Référence* before making any investment decision. The occurrence of any or all of these risks may have a material adverse effect on the Company's business, financial position, results or prospects. In addition, other risks, not yet identified or deemed immaterial by the Company at the date of the *Document de Référence*, could also have a material adverse effect.

TABLE OF CONTENT

CORRESPONDENCE TABLE

The correspondence table aims to identify in the *Document de Référence* the information which constitutes the annual financial report (article L.451-1-2 of the Monetary and Financial Code and article 222-3 of the General Regulations of the AMF), which contains the Annual Management Report (articles L. 225-100 and seq. of the French Commercial Code):

ANNUAL FINANCIAL REPORT	*DOCUMENT DE REFERENCE*
Financial statements prepared according to IFRS	Paragraph 20.1
Statutory auditors' report on the financial statements prepared in accordance with the IFRS standards	Paragraph 20.2
Financial statements prepared according to French GAAP	APPENDIX 1 of chaptere 26
Statutory auditors' report on the financial statements prepared according to French GAAP	APPENDIX 1 of chapter 26
Annual Management Report	APPENDIX 2 of chapter 26
Statement of responsibility	Paragraph 1.2
Fees paid to the statutory auditors	Paragraph 2.3

1. PERSONS RESPONSIBLE

1.1 Person responsible for the *Document de Référence*

Mr. Stéphane Boissel, Chief Executive Officer.

1.2 Statement of the person responsible

I hereby certify that, having taken all reasonable measures in this respect, the information contained in this registration document is, to the best of my knowledge, in accordance with reality and does not contain any omission likely to affect its meaning.

I hereby certify, to the best of my knowledge, that the financial statements were prepared in accordance with the applicable accounting standards and give an accurate image of the assets and liabilities, financial situation and results of the company TxCell and that the management report presented on pages 259 to 326 of the French version of the *Document de Référence* reflects the changes in the company's turnover, results and financial position and describes the principal risks and uncertainties that it faces.

I have received a letter of completion of work from the statutory auditors in which they state that they have verified the information concerning the financial position and the financial statements presented in this registration document, and have carried out an overall review of the *Document de Référence*.

The financial statements prepared according to IFRS for the year ended December 31, 2016 presented in the *Document de Référence* were approved in a report by the statutory auditors, presented on pages 194 and 195 of the French version of the *Document de Référence*.

French original signed in Valbonne, France
on April 26, 2017

Stéphane Boissel
Chief Executive Officer

2. STATUTORY AUDITORS

2.1 Principal statutory auditors

ERNST &YOUNG AUDIT

Represented by Cédric Garcia, partner

Tour First, 1 place des Saisons

Paris La Défense – 92400 Courbevoie – France

Start date of first term: December 20, 2013

Term of office expiry date: at the annual general meeting convened to vote on the financial statements for the financial year ending December 31, 2018.

AUDIT CONSEIL EXPERTISE SAS, a member of PKF INTERNATIONAL

Represented by Guy Castinel, partner

17, boulevard Augustin Cieussa

13007 Marseille – France

Start date of first term: Bylaws of the Company incorporated on April 12, 2001

Term of office expiry date: at the annual general meeting convened to vote on the financial statements for the financial year ending December 31, 2018.

2.2 Alternate statutory auditors

AUDITEX

Tour First, 1 place des Saisons

Paris La Défense – 92400 Courbevoie – France

Start date of first term: December 20, 2013

Term of office expiry date: at the annual general meeting convened to vote on the financial statements for the financial year ending December 31, 2018.

FIDEA CONTROLE SARL

101, rue de Miromesnil

75008 Paris – France

Start date of first term: May 22, 2013

Term of office expiry date: at the annual general meeting convened to vote on the financial statements for the financial year ending December 31, 2018.

During the period covered by the historical financial information, no statutory auditor has resigned or been removed from office.

2.3 Fees paid to the statutory auditors

The following table sets out the amount of fees charged by the statutory auditors and members of their network to the Company in 2015 and 2016:

In thousands of euros	Audit Conseil Expertise, member of PKF International				Ernst & Young			
	2016		2015		2016		2015	
	Amount excluding taxes	%	Amount excluding taxes	%	Amount excluding taxes	%	Amount excluding taxes	%
Statutory audit	47	60%	52	90%	84	54%	84	87%
Services other than account certification	32	40%	6	10%	71	46%	12	13%
Total fees	**79**	**100%**	**58**	**100%**	**155**	**100%**	**96**	**100%**

There were no services other than account certification rendered by any members of the network of the statutory auditors to the Company.

3. SELECTED FINANCIAL INFORMATION

The selected financial information presented below is selected from the Company's annual financial statements for the financial years ended December 31, 2016 and 2015, which are set out in paragraph 20.1 of the *Document de Référence* and prepared in accordance with International Financial Reporting Standards ("IFRS") as adopted by the European Union.

The Company's unconsolidated annual financial statements for the financial year ended December 31, 2016 prepared in accordance with the applicable French accounting standards, which are the only legally valid financial statements, are included in the statutory auditors' report on the financial statements and reproduced in APPENDIX 1 of section 26 of the *Document de Référence*. The Company's annual financial statements for the financial year ended December 31, 2015 prepared in accordance with the applicable French accounting standards are incorporated by reference to the *Document de Référence* (see chapter 24 of the *Document de Référence*).

The key figures summarized below should be read in conjunction with (i) the Company's audited financial statements prepared in accordance with IFRS for the financial years ended December 31, 2016 and 2015, presented in paragraph 20.1 of the *Document de Référence* or incorporated by reference (ii) the review of the Company's results and financial position presented in chapter 9 of the *Document de Référence* or incorporated herein by reference (iii) the review of the Company's cash flow and equity position presented in chapter 10 of the *Document de Référence* or incorporated herein by reference.

Extracts of the financial information for the financial years ended December 31, 2016 and December 31, 2015 (in accordance with IFRS)

Selected financial information from income statement

In thousands of euros	12/31/2016	12/31/2015
Revenue	0	920
Other income	2,948	3,718
Total current operating expenses	(15,644)	(14,782)
Current operating profit / (loss)	(12,697)	(10,145)
Other operating income and expenses	(87)	(1,167)
Operating profit / (loss)	(12,783)	(11,312)
Financial income and expenses	(787)	15
Net profit / (loss) before tax	(13,570)	(11,297)
Net profit / (loss)	(13,570)	(11,297)
Basic earnings per share (in €) *	(1.04)	(0.93)

Selected financial information from balance sheet

In thousands of euros	12/31/2016	12/31/2015
Total assets	**12,794**	**20,720**
Non-current assets	**7,031**	**6,939**
Intangible assets	5,911	5,907
Property, plant and equipment	736	876
Other property, plant and equipment under lease purchase agr	63	0
Financial assets	322	155
Current assets	**5,763**	**13,781**
Trade receivables	4	4
Other current assets	2,277	4,570
Cash and cash equivalents	3,482	9,208
Total liabilities	**12,794**	**20,720**
Shareholder's equity	**1,192**	**11,589**
Non-current liabilities	**3,709**	**1,664**
Financial debt - non current	3,650	1,641
Debts related to finance leases > 12 months	51	0
Other non-current liabilities	9	23
Current liabilities	**7,893**	**7,467**
Financial debt - current	1,575	0
Trade payables	893	1,608
Other payables	5,358	5,087
Debts related to finance leases < 12 months	12	0
Provisions - current	55	772

Selected financial information from cash-flow statement

In thousands of euros	12/31/2016	12/31/2015
Cash flows generated from / (used in) operations	(12,479)	(9,687)
Change in working capital	2,044	(379)
Net cash flows generated from / (used in) operating activities	**(10,435)**	**(10,066)**
Net cash flows generated from / (used in) investing activities	**(460)**	**(2,274)**
Net cash flows generated from / (used in) financing activities	**5,170**	**7,631**
Net increase / (decrease) in cash and cash equivalents	(5,725)	(4,710)
Cash and cash equivalents at the beginning of the year	9,208	13,917
Cash and cash equivalents at the end of the year	3,482	9,208

4. RISK FACTORS

Investors are advised to consider all of the information contained in the *Document de Référence*, including the risk factors described in this chapter before deciding to acquire or subscribe for shares in the Company. When preparing the *Document de Référence*, the Company conducted a review of the risks that could have a material adverse effect on the Company, its business, financial position or ability to achieve its objectives, and has identified no material risks other than those described below. However, investors' attention is drawn to the fact that there may or could be other risks, which are unknown or deemed, at the date of the *Document de Référence*, unlikely to have an adverse effect on the Company, its business, financial position, results or prospects.

Risks presented below are summarized in the following table:

Section	Nature of the risk	Summary of the risk	Risks specific to	
			the Company	the sector
4.1	**Risks associated with the Company's business**			
4.1.1	Risks associated with clinical development	*The Company's chosen therapeutic approach continues to generate many uncertainties*	X	
		Development of the Company's products may be delayed or unsuccessful	X	
		The clinical studies are subject to authorization from and continuous monitoring by the regulatory authorities		X
		The Company has limited experience in the clinical development of products	X	
4.1.2	Risks related to the manufacturing process for products developed by the Company	*Manufacturing biologics is particularly complex*	X	
		Manufacturing processes must be developed and/or optimized to secure the economic viability of the Company's products	X	
		Technology transfer is necessary prior to any production	X	
4.1.3	Risks associated with the technology platform	*The ongoing products are based on the same platform of products, safety or therapeutic efficacy issues could question this platform*	X	
4.1.4	Risks associated with the market and competition	*Competition on the market of the treatment of diseases targeted by the Company is intense*	X	X
		The commercial success of the Company's products cannot be guaranteed		X
4.1.5	Risks associated with the Company's business and strategic development	*Obtaining marketing authorizations and other certifications prior to any marketing may be uncertain*		X
		The Company may never be able to produce its products at costs acceptable to payers	X	
4.1.6	Risk of dependence on third parties	*The Company could encounter a dependency situation vis-à-vis subcontractors to which it will outsource the manufacturing of the products it develops*	X	
		The supply of specific raw materials and products needed to conduct clinical trials and manufacture the Company's products is not guaranteed	X	
		The Company could find itself in a situation where it is dependent on the subcontractors to whom it outsources its clinical trials	X	
4,2	**Regulatory and legal risk**			
4.2.1	Risks associated with the Company's intellectual property rights	*Protection of the Company's patents, patents applications and other intellectual property rights is uncertain*		X
		The Company benefits from certain intellectual property rights through joint ownership or licenses	X	
		The Company cannot guarantee that it will not infringe intellectual property rights or that its own rights will not be infringed		X
		The Company may not be able to prevent the disclosure to third parties of confidential information likely to have an impact, in particular on its future intellectual property rights		X
4.2.2	Risks associated with product liability	*Criminal complaints or lawsuits could be filed or brought against the Company by patients, regulatory agencies, pharmaceutical companies or any other third party using or marketing its products*		X

Section	Nature of the risk	Summary of the risk	Risks specific to	
			the Company	the sector
4.2.3	Risks associated with a restrictive and evolving regulatory framework	*The cell therapy treatment developed by the Company being very innovative, regulations on the subject are still being drawn up, additional requirements may come into play*		X
4.2.4	Risks associated with the pharmaceutical company status of the Company or its manufacturers	*The Company's subcontractors could lose their pharmaceutical company status*		X
		The Company could have to produce itself the drugs it develops but cannot guarantee that it will the pharmaceutical company status will be granted, nor that they be partially or fully suspended or revoked	X	
4,3	**Risks associated with the Company's organization**			
4.3.1	The Company could lose key employees and not be able to attract other qualified personnel	*The Company competes with other research entities and academic institutions to recruit and retain highly qualified scientific, technical and management personnel*	X	
4.3.2	The Company's development will depend on its ability to manage growth	*As part of the Company's growth strategy, the Company will likely be required to develop its operational capacity, which could use a significant amount of its internal resources*	X	
4,4	**Industrial risks**	*The Company's operations involve the handling of biological and chemical materials during research and manufacturing, which exposes it to health risks (occupational diseases)*	X	
4.5	**Risks related to information systems**	*The Company has formalized rules to protect the safety of information systems and their users, but cannot guarantee absolute safety and availability of the information system as well as the integrity and the confidentiality of data*	X	
4,6	**Financial risks**			
4.6.1	Risks associated with historical and future losses	*The Company could have to seek for other sources of financing and cannot guarantee that the terms proposed by any new partner would be identical or even financially acceptable*	X	
4.6.2	Risks relating to the business model	*The duration of treatment will vary depending on each patient and according to their response to the treatment, revenues and margins could therefore vary for each patient, given that production costs are concentrated on the manufacturing phase of the personalized product, regardless of the length of the treatment*	X	
4.6.3	Risk associated with research tax credit	*The Company cannot exclude the possibility of the tax authorities challenging the methods used by the Company for calculating research and development expenditure or of the CIR being called into question (for past or future fiscal years) pursuant to a regulatory change or it being challenged by the tax authorities*	X	X
4.6.4	Risks associated with carrying losses forward in the future	*It cannot be excluded that regulatory or legislative developments regarding corporation tax will call into question, in whole or in part, the possible offsetting of these prior losses against future profits, or impose a time limit on such offsetting*	X	X
4.6.5	Risks related to access to public grants and advances	*In the event the Company does not comply with the contractual conditions set out in innovation grant agreements entered into, it may be required to repay any advances early*	X	
4.6.6	Dilution risk	*Exercise of instruments giving entitlement to the outstanding capital as well as all new issuances or allotments would lead to a potentially significant dilution for the current and future shareholders of the Company*	X	
4.7	**Market risk**			
4.7.1	Liquidity risk	*The Company may need to strengthen its capital base or seek additional funding to ensure its development*	X	
4.7.2	Foreign exchange rate risk	*The Company considers that it is not exposed to foreign currency exchange risks in that only a small portion of its supplies are obtained outside the euro zone and invoiced in foreign currencies*	X	
4.7.3	Credit risk	*Credit risk relating to liquid assets, equivalents and short term financial instruments is not significant in view of the quality of the co-contracting financial institutions*	X	
4.7.4	Interest rate risk	*The Company does not have any variable-rate debt. Its debt repayments are not subject to interest rate risk*	X	
4.7.5	Equity risk	*The Company considers that it is not exposed to any risk associated with equities or other financial instruments, given that it does not hold any interest or security in listed companies*	X	
4.8	**Insurance and risk cover**	*Quantification of potential risks in the absence of direct loss or loss indicators for its industry, makes it difficult to determine an insurable amount*		X
4.9	**Significant events and legal action**	*The Company could be subject to governmental, judiciary or arbitration proceedings. At the date of the Document de Référence, there are no ongoing procedures to the Company's knowledge*		X

4.1 Risks associated with the Company's business

4.1.1 Risks associated with clinical development

The Company's chosen therapeutic approach continues to generate many uncertainties

At the date of the *Document de Référence*, there are only a few cell therapy products with marketing authorization. The Company's efforts to develop its drug candidates have focused on regulatory T cells (Tregs). These drug candidates have an effect on patients' immune systems, an area in which there are still many unknowns.

The Company is conducting preclinical and clinical research and development programs which are ultimately intended to result in the marketing of personalized cellular therapies to treat severe inflammatory and autoimmune diseases (such as Crohn's disease and multiple sclerosis), as well as transplantation-related inflammatory disorders (such as rejection of grafts following an organ transplant) (see paragraph 6.1.1 of the *Document de Référence*).

The development of a drug candidate is a long and expensive process consisting of several phases which aim to demonstrate the therapeutic benefit of the drug candidate for one or more specific indications. Failure at any one of the various research phases or preclinical and clinical development phases for a given indication could delay the development, manufacturing and marketing of the therapeutic drug concerned, or even result in complete stoppage of its development.

At the time of the *Document de Référence*, none of the Company's products have reached an advanced stage of development. With the exception of the Company's first drug candidate, Ovasave®, from the ASTrIA platform, which generated positive results in an initial Phase I/IIa (CATS1) clinical study, all are in the research or preclinical study phase. Not only are tests on animals not necessarily indicative of the results which could be obtained on humans, but any successful results obtained from early clinical phase trials on a limited number of patients might not be confirmed by subsequent phases involving a larger number of patients.

If this were to occur, the development of the drug candidate may not continue and this could have a material adverse effect on the Company's business, results, financial position and growth.

Development of the Company's products may be delayed or unsuccessful

The Company's first drug candidate, Ovasave®, from the ASTrIA platform, is the only one currently at the clinical development stage for the treatment of moderate to severe cases of Crohn's disease that are refractory to all current treatments. Following the positive results of an initial Phase I/IIa (CATS1) clinical study, a Phase IIb (CATS29) clinical study began in December 2014. However, in June 2015, the ASTrIA platform ran into industrial difficulties, which led to the CATS29 study being suspended. There were two reasons for these industrial difficulties: a proprietary industrial site (based in Besançon, France) that is ill-suited to the regulatory constraints of Good Manufacturing Practices, and a manufacturing process that is too complex and expensive to be used on a large scale.

The issue of the production site was resolved by the Company's decision in 2015 to close its Besançon plant and to outsource its existing and future manufacturing activities to Contract Manufacturing Organizations (CMOs), such as MaSTherCell in Belgium and PCT in the United States.

After filing an amendment to the clinical protocol for the CATS29 trial, which included the change of manufacturing site to MaSTherCell, in May 2016 the Company obtained approval from the European regulatory authorities, via a VHP (Voluntary Harmonized Procedure) to resume its CATS29 study.

At the same time, to resolve the problem of the procedure used to manufacture its non-genetically-modified Treg cells (ASTrIA), the Company simultaneously invested in a laboratory specialized in developing manufacturing technology procedures and transfer. To support this process the Company has strengthened its skills in industrial process development with key new hirings.

The first results of this investment were obtained in mid-2016 when a new method for isolating the type 1 Treg cells used in the ASTrIA platform was identified, which could significantly reduce the time, cost and risks of manufacturing the ASTrIA platform products.

In September 2016, the Company therefore decided to suspend product developments from the ASTrIA platform until this new process had been confirmed and validated under GMP conditions, where applicable.

Given these initial encouraging results and its strict cost management policy, in September 2016 the Company decided to complete this new manufacturing process and make it compliant with Good Manufacturing Practice (GMP) before starting production, which meant delaying new clinical development of a product from the ASTrIA platform, including Ovasave®. As a result, the IND status granted to Ovasave® was temporarily inactivated in the United States and the European regulatory authorities were notified of the stoppage of the CATS29 clinical study. Validation for this procedure is expected in 2017 and a strategic review is scheduled by the end of 2017 to take a decision on the possibility of resuming clinical development for ASTrIA, including Ovasave®®.

However, it may be that the Company is unable to complete this new manufacturing process or to ensure compliance with Good Manufacturing Practice, and be unable to obtain the regulatory authorizations necessary to resume a clinical study based on this new procedure. Furthermore, given the cost of the clinical developments, the Company may not have sufficient resources to successfully complete all programs from its ASTrIA and ENTrIA platforms, and may have to make choices which reflect its priorities.

Similarly, during clinical trials, patient recruitment might not be carried out according to a timetable compatible with the development needs or testing of the Company's products.

Either of these events could have an adverse effect on the development schedule for its products, particularly Ovasave®.

Any failure or delay in the development of products could have a material adverse effect on the Company's business, results, financial position and prospects.

The clinical studies are subject to authorization from and continuous monitoring by the regulatory authorities

Biomedical research is subject to a rigorous regulatory framework. In France in particular, clinical studies must obtain a positive opinion from the *Comité de Protection des Personnes* (Ethical committee for the protection of the person) ("CPP") and an authorization from the *Agence Nationale de Sécurité du Médicament et des produits de santé* (National agency governing the safety of medicines and healthcare products) ("ANSM"), prior to their launch and if there are substantial amendments made to the study. The organization of clinical studies must identify a site, investigator doctors and patients meeting the inclusion criteria for the needs of the trial and giving their consent to participate, which can be long or difficult and cause delays in the Company's projected timeline.

In accordance with Good Clinical Practices ("GCP"), the Company has established a Data Safety Monitoring Board; given that GCP require the recommendations of the committee to be followed, these recommendations could lead to early terminations or delays in products development. Moreover, depending on the information which may be communicated during the trial, in particular on the occurrence of serious undesired events, the health authorities could impose the suspension or the early termination of the trial.

Moreover, at each stage of development, the Company presents the results of its clinical studies to authorities in different countries according to its development plan. In particular, insofar as the regulatory framework applicable to cell therapy is still being developed (please refer to paragraph 4.2.3 of the *Document de Référence*), additional requirements may be necessary regarding, for example, study protocols, patient characteristics, length of treatment, post-treatment follow-up or discrepancies in the interpretation of results by local regulatory agencies and, where applicable, could lead to requests for additional studies. Any decision by the health authorities to request further trials or examinations would be likely to delay or interrupt the development of the therapeutic products in question.

Therefore, the Company cannot guarantee that, following a modification to the ASTrIA manufacturing process and even if the process is made more robust, the regulatory authorities will not require product comparability studies to be conducted, particularly on Ovasave®.

Moreover, the occurrence of side effects which are currently not identifiable could delay or interrupt the development of the products concerned. Finally, since clinical trials are necessarily of a limited duration, the Company cannot guarantee the efficacy of any product over a long period. If the effects of its products, and hence its effectiveness on patients, decrease over time, additional studies may be required.

If after obtaining a Marketing Authorization ("MA"), the therapeutic products of the Company cause unacceptable side effects or side effects that are undetected during the clinical trial phase, it will become impossible for the Company to continue to market it for all or part of the targeted indications, which would have a material adverse effect on the Company's business, prospects, financial position, results and development.

To date, the Company therefore cannot guarantee that the development of drug candidates, now or in the future, will be successful, or that *a fortiori* it will happen within a timeframe compatible with the requirements of the market. Any failure or delay in the development of products could have a material adverse effect on the Company's business, results, financial position and prospects.

The Company has limited experience in the clinical development of products

In addition to date, the Company does not have any strategic partner, which would enable it to benefit from its clinical development experience. The Company therefore intends to develop its products either on its own, or through future partnerships. These partnerships would be sources of funding and could in addition allow the Company to benefit from a leading player in the pharmaceutical or in the biotechnology sector with a clinical development experience if need be.

However, it is possible that the Company will not be able to engage in a development partnership on financially reasonable terms or to develop the product on its own. Such an event could have an adverse effect on the timetable for the development of its products, and on the Company's financial position, results and prospects.

4.1.2 Risks related to the manufacturing process for products developed by the Company

Manufacturing biologics is particularly complex

The Company's drug candidates are biologics and the process of manufacturing them is complex, highly-regulated and subject to multiple risks. Manufacturing its cell therapy drug candidates is a complex process, which involves collecting T cells from patients, selecting regulatory T cells naturally specific to the antigen (for ASTrIA) and transducing a chimeric receptor to the antigen (for ENTrIA), proliferating these cells to obtain the desired dose, freezing them and finally injecting these cells back into the patients.

As a result of these complexities, it takes longer and is more expensive to manufacture cellular therapy products in general, and the Company's drug candidates in particular, than is the case for traditional molecule chemical compounds.

The Company's manufacturing process is susceptible to product loss or failure due to:

- logistical issues associated with the collection of white blood cells, or starting material, from the patient, shipping such material to the manufacturing site, shipping the final product back to the patient, and infusing the patient with the product; or
- manufacturing issues associated with the differences and unique character of patient-specific starting materials, time required for and interruptions in the manufacturing process, contamination, equipment or reagent failure, improper installation or operation of equipment, supplier or sub-contractor error, inconsistency in cell growth, and variability in product characteristics.

Even minor deviations from normal manufacturing processes could result in reduced production yields, product defects, and other supply disruptions. If for any reason the Company loses a patient's starting

material or later-developed product at any point in the process, the manufacturing process for that patient will need to be restarted and the resulting delay may adversely affect that patient's outcome. If microbial, viral, or other contaminations are discovered in its drug candidates or in the manufacturing facilities in which its drug candidates are made, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination. Because its drug candidates are manufactured for each particular patient, the Company will be required to maintain a chain of identity with respect to materials as they move from the patient to the manufacturing facility, through the manufacturing process, and back to the patient.

Maintaining such a chain of identity is difficult and complex, and failure to do so could result in adverse patient outcomes, loss of product, or regulatory action including withdrawal of authorizations to conduct clinical trials. Further, as drug candidates are developed through preclinical to late stage clinical trials towards approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods, are altered along the way in an effort to optimize processes and results. Such changes carry the risk that they will not achieve these intended objectives, and any of these changes could cause the drug candidates to perform differently and affect the results of planned clinical trials or other future clinical trials.

Although the Company is working to develop commercially viable processes, doing so is a difficult and uncertain task, and there are risks associated with scaling to the level required for advanced clinical trials and commercialization, including, among others, cost overruns, potential problems with process scale-out, process reproducibility, stability issues, lot consistency, and timely availability of reagents or raw materials. The Company may ultimately be unable to reduce the manufacturing cost of drug candidates to levels that will allow for an attractive return on investment if and when those drug candidates are commercialized, which would have a material adverse effect on the Company's financial position and its prospects.

Manufacturing processes must be developed and/or optimized to secure the economic viability of the Company's products

Following the industrial difficulties encountered by the ASTrIA platform in June 2015, which led to the stoppage of the CATS29 study, the Company has made the resumption of any clinical development on the ASTrIA platform dependent on an improved manufacturing process validated under GMP conditions. Simultaneously, in 2015, the Company began to develop a new platform called ENTrIA. Like the ASTrIA platform, the ENTrIA platform is made up of antigen-specific regulatory T cells (Tregs), but its main innovation comes from the fact that the antigen specificity, instead of being natural, is introduced by genetic engineering using a chimeric antigen receptor (CAR-Tregs). This genetic engineering stage makes the ENTrIA production procedure different to the ASTrIA production procedure, although some of the stages are the same, allowing for industrial synergies.

In this context, in early 2016 the Company launched its new laboratory specialized in the development of manufacturing process and technology transfer. In addition to its role facilitating technology transfer to CMOs such as MaSTherCell, the main objectives of this unit in terms of process development are as follows: (i) to improve the manufacturing process for the Company's first platform made up of naturally antigen-specific Tregs (ASTrIA), and (ii) to develop a new manufacturing process for its second platform made up of genetically modified Tregs (ENTrIA).

On the ASTrIA platform, for which a manufacturing process at the clinical stage already exists, the Company intends to develop, either alone or in partnership with subcontractors, a simplified, automated production system based on the robotization of means of production and on improving the existing manufacturing process. This should enable it to reduce the time needed to manufacture its products as well as its production costs (see paragraph 6.5.1 of the *Document de Référence*). Such optimization and standardization is essential to the Company's business strategy (time required to release products in compliance with medical practice and increased production volumes) and financial strategy (decreased production costs per patient). The Company initially identified a new method for isolating its non-genetically-modified Treg cells which should achieve significant decreases in production costs and in the overall manufacturing leadtime, as well as reducing non-compliance risks of future output for clinical trials and the potential commercial launch of products from the ASTrIA platform. This work is

essential for the ASTrIA platform, but could also be used by the ENTrIA program to develop CAR-Tregs, which could be made up of Tr1 type cells in the future.

However, the results obtained by using this optimized manufacturing process may prove to be different from those obtained previously. The Company may therefore be forced to conduct further studies, which could entail additional costs and potentially even delay resumption of the clinical development and marketing of its products, including Ovasave®.

The manufacturing process for ENTrIA is currently being developed. The Company also aims to have an initial GMP-compliant manufacturing process ready and transferred to a third party by the time the first CAR-Treg clinical study on humans starts, scheduled for the end of 2018. Although the Company may benefit from its know-how and the expertise gained from its first platform, the development of the ENTrIA procedure generates its own specific problems, notably linked to cell engineering. The Company cannot guarantee that it will come up with solutions to all these problems or do so on a timescale compatible with market needs.

Any failure or delay in developing or improving the manufacturing processes for its products, then in transferring them to the CMOs could have a significant negative impact on the Company's business, results, financial position and outlook.

Technology transfer is necessary prior to any production

In 2015, the Company decided to outsource its existing and future manufacturing operations to Contract Manufacturing Organizations (CMOs), such as MaSTherCell in Belgium and PCT in the United States. Any future production of candidate products for clinical or commercial purposes therefore presupposes technology can be transferred from the Company to a CMO, i.e. a formal transfer of manufacturing know-how and procedures.

The Company’s drug candidates are biologics and the process of manufacturing them is complex, highly-regulated and subject to multiple risks.

Technology transfer is thus itself long and complex, and requires CMO personnel to have specific skills or training in the transferred manufacturing process. The CMO must also have the necessary equipment and premises which must be adapted in order to manufacture the product. Further, the CMO must correctly determine the needs for consumables or raw materials, as well as the procedures and specifications applicable to the transferred product.

Future technology transfers may not take place according to a timescale compatible with the Company's growth or with product testing needs. Likewise, the CMO responsible for future manufacturing may not be sufficiently skilled in the production technology being transferred. This could have an impact on manufacturing quality and timescales. The results obtained after transferring the technology to the CMOs may be different from previous results, forcing the Company to conduct further studies, and generating additional costs; its clinical trials or the marketing of its products could also be delayed.

The occurrence of one or other of these events could have a material adverse effect on the Company's business, its results, financial position and outlook.

4.1.3 Risks associated with product platform

The Company's most advanced products, such as Ovasave® come from the first product platform (ASTrIA), based on naturally antigen-specific regulatory T cells and which the Company owns. If studies conducted on one or other of these products were to reveal safety and/or therapeutic efficacy problems, or if the Company is unable to confirm the necessary optimization of the manufacturing process specific to this platform, the very operation of the ASTrIA platform could be thrown into question, and further R&D may be required to try and remedy the problems encountered. Product development could take longer and potentially even be jeopardized.

This would have a material adverse effect on the Company's business, prospects, development, financial position and results.

Since 2015, the Company has diversified its technological base by developing a new platform (ENTrIA), this time based on regulatory T cells whose antigen specificity has been achieved through genetic

engineering (CAR-Treg). By doing this, the Company has begun to address other regulatory T cell populations, particularly a group of cells referred to as FoxP3+ cells.

On the recommendation of its new Scientific Advisory Board (SAB), the Company is focusing its resources on four CAR-Treg programs launched in 2016 for different indications such as lupus nephritis, bullous pemphigoid, multiple sclerosis and transplantation to generate new proof of concept data at the preclinical stage then begin a first clinical study on humans by the end of 2018. These programs are developed internally or in partnership with academic laboratories, in the same way as the first three partnerships begun in 2016 with *Ospedale San Raffaele* (OSR), the Lübeck Institute of Experimental Dermatology (LIED) and the University of British Columbia (UBC). When developing this new platform, in June, 2016, the Company also signed a global exclusive license agreement with Yeda Research Development Co. Ltd. giving it exclusive global rights over the development and marketing of CAR-Treg products to treat autoimmune and inflammatory diseases, as covered by the family of patents. (see paragraphs 4.2.1 and 11 of the *Document de Référence*).

These new developments may reduce the risk linked to the first platform by diversifying the technology, cellular populations addressed, mechanisms of action, indications targeted, and the research teams allocated to development.

Nevertheless, given the embryonic developmental stage of this second platform, the Company may be unable to generate preclinical proof of concept data to validate the therapeutic approach or to develop a viable manufacturing process for this platform. Such a situation could throw into question the very operation of the ENTrIA platform and thus the diversification of the Company's product and technology portfolio, which would have a material adverse effect on the Company, its outlook, development, financial position and results.

4.1.4 Risks associated with the market and competition

Competition on the market of the treatment of diseases targeted by the Company is intense

Many entities, pharmaceutical companies, biotechnology companies, institutions, universities and other research organizations are actively committed to the discovery, research, development and marketing of therapeutic remedies to treat chronic autoimmune and inflammatory diseases. The market for treating these diseases is characterized by intense competition. In view of their size and their well-established technologies used to develop drugs for treating chronic autoimmune and inflammatory diseases, the Company's main competitors have access to significantly greater resources and experience in clinical development, management, manufacturing, marketing and research than the Company.

However, the Company considers that its products, by virtue of their innovative approach and specific mechanism of action, will constitute an alternative solution to the treatments currently on offer for the targeted pathologies. Despite this positioning, the Company cannot guarantee that its competitors will not develop, concurrently or subsequently, alternative therapeutic solutions, which will cause those currently under development by the Company to be less attractive or even obsolete, or which would be preferred by medical centers, doctors or patients.

Finally, given the particularly competitive environment of the pharmaceutical industry, the Company cannot guarantee that its partners and/or employees will not over time join or work with competing structures, or that its competitors will not be favored by medical centers, doctors or patients.

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

The commercial success of the Company’s products cannot be guaranteed

Even if the Company obtains a MA to market its therapeutic products, it may however not receive the immediate support of the medical community, prescribing physicians and third-party payers which may be reluctant to adopt these products.

Due to the innovative nature of the drug candidates developed by the Company, the development prospects of products arising from these treatments, their safety, efficacy and acceptance by patients, doctors and third-party payers are uncertain.

The degree of acceptance by the market of each of the Company's products depends on several factors, in particular:

- the perception of the therapeutic benefit of the product by prescribing physicians;
- the possible occurrence of undesirable side effects not detected during the clinical trials once the MA has been obtained, making it impossible to market it for all or some of the indications in question;
- the ease of use of the product (particularly in terms of its method of administration), stability of the product initially manufactured and how long the treatment remains effective, on average;
- the cost of treatment;
- the reimbursement policies in different countries and, more generally, of public or private payers;
- the effective implementation of a scientific publication strategy; and
- the development of one or more competing products for the same indication.

The duration of the treatment, and therefore the degree of acceptance by each patient will also have a significant impact on the Company's business. In this way, the Company's economic model is different from the economic model for traditional autologous products (whose margins are squeezed by the need to produce one-specific batches for each one-off treatment), since production costs are incurred only once, irrespective of how long treatment lasts (see paragraph 6.5.3 of the *Document de Référence*) and where the products are intended for patients suffering from chronic illnesses and requiring long-term treatments.

While the Company believes that its products will provide a therapeutic response to a currently unmet need, poor market penetration resulting from one or more of the factors described above could have an adverse effect on the Company's business, prospects, financial position, results and development.

4.1.5 Risks associated with the Company's business and strategic development

Obtaining marketing authorizations and other certifications prior to any marketing may be uncertain

In Europe, the United States, and Asia, as well as in many other countries, access to the drug market is controlled and marketing must be authorized by a regulatory authority.

While the Company does not at present have any particular MA application in process, an MA file is elaborated over the duration of a drug candidate’s development. The Company therefore seeks to ensure that it always complies with good practice so as not to jeopardize its chances of obtaining future MAs on good terms.

The Company's obtaining of a marketing authorization for each of its therapeutic products requires compliance with stringent standards imposed by the regulatory authorities and the reporting to the authorities of a considerable amount of information on the new product regarding its toxicity, dosage, quality, effectiveness and safety. While the process for obtaining the authorization involves substantial investment, the outcome is uncertain.

The grant to the Company of a MA for each of its therapeutic products will depend on several factors, and in particular:

- the possibility to pursue the development of its products currently in preliminary clinical phases or to move the products currently in a preclinical development phase to a clinical phase or from a clinical phase to the next phase;

- the ability of the Company or its subcontractors to complete the requested clinical trials within the time limits and with the human, technical and financial resources initially planned.

If the Company fails to obtain a MA, it would not be able to manufacture or market any products. In addition, it is possible that a product may not obtain a MA for a given geographic area, which could significantly restrict the marketing thereof. Finally, even once granted in accordance with the relevant procedures, a MA may be suspended, especially when an adverse effect is subsequently discovered.

The Company may never be able to produce its products at costs acceptable to payers

The Company's ability to sell its products successfully will depend partly on government authorities, private insurers or other bodies in Europe and in the United States setting sufficiently high reimbursement rates for its drugs and the associated treatments. Third-party payers are increasingly questioning the price of therapeutic products and medical services. Cost-saving measures implemented by healthcare providers and reimbursement bodies, as well as potential reforms to healthcare systems could negatively affect the Company's operating results.

The Company's ability to make sufficient profits from the sale of its products will therefore depend in part on how widely available they are and their coverage by state health authorities, private health insurers and healthcare management bodies in the various countries where they are sold.

It is therefore critical that the Company is able to develop products at costs acceptable to third-party payers. However, development of cell therapy products is currently much more costly than more traditional pharmaceutical approaches (chemical and biological entities). In particular, the manufacturing cost for this type of product is a major part of the drug's final cost price and therefore is of crucial importance not only at the early stages due to costs incurred in developing the products, but also later on for the future economic viability of these treatments, particularly when they may run into reimbursement problems. At its development stage, the Company is still using very manual, long and therefore expensive production processes. It will have to optimize its manufacturing procedures to make them economically viable.

To this end, in early 2016 the Company launched its new laboratory specialized in the development of manufacturing process and technology transfer. One of the main objectives of this laboratory is to develop or optimize manufacturing procedures by automating them to make them more robust and cheaper. Thanks to this investment, the Company has already identified a new method to isolate its non-genetically-modified Treg cells, which should bring production costs down significantly from current levels while cutting the overall manufacturing leadtime, and reducing the risks of non-compliance for future clinical and commercial output. This work could be useful for ASTrIA, but also for ENTrIA, whose CAR-Tregs could be made up of Tr1 type cells in the future.

However, there is still a long way to go before a final manufacturing procedure is found which is economically viable at the commercial stage. The Company cannot guarantee that it will succeed in sufficiently improving its manufacturing procedures and in reducing costs to a level acceptable to payers.

Therefore, it may not be able to secure satisfactory reimbursement for its products, which would hinder their acceptance on the market. In this case the Company would be unable to make a sufficient return on its research and development costs. The materialization of one or several of these risks may have a material adverse effect on the business, prospects, financial position, results and development of the Company.

4.1.6 Risk of dependence on third parties

The Company could encounter a dependency situation vis-à-vis *subcontractors to which it will outsource the manufacturing of the products it develops*

The Company does not operate any manufacturing or logistics unit. It outsources the manufacturing and packaging of its products to CMO subcontractors (such as MaSTherCell, exclusive subcontractor in

Europe for the products from the ASTrIA platform and PCT in the United States – please refer to section 22 of the *Document de Référence*) with strong expertise in the manufacturing of cell therapy products and which are selected by the Company after careful assessment of their quality department and of the traceability of their operations.

The manufacture of the Company's products is particularly complex and demanding, especially due to the regulations and the requirement specifications applicable to the trials and for the MA should the Company, in the future, succeed in the marketing of a product. In the event the Company would need to change a critical subcontractor for the manufacturing of its products, tests and additional validations could be required to maintain any authorizations granted for its clinical trials. These procedures could be costly, time-consuming and require the attention of the most qualified personnel of the Company. Should any clinical studies be interrupted, the Company may be constrained to search for another subcontractor, which could delay the development, the manufacturing and the marketing of its products and increase the manufacturing costs. Such a transfer of the manufacturing process implies to find a new subcontractor within the few companies with the required expertise and usually takes 12 months.

Moreover, problems could occur during the manufacturing and the distribution of the Company's products, which could cause delays and even a total halt of the deliveries. This could lead to a delay in the clinical trials or, at a marketing phase, to a decrease in the sales combined with a deterioration of the relationship with customers. Such events could also result in an increase of costs and, in some cases, the recall of products, damaging its reputation, and increasing the risk for the Company to be held legally responsible. In case of non-compliance of the products manufactured by these third parties with regulatory standards, sanctions could be imposed on the Company including fines, injunctions, judgments to pay damages, the suspension or the withdrawal of the authorizations granted or the cancellation of licenses. Therefore, the Company will strive to monitor manufacturing performance by its CMOs to ensure that the products used have the required qualities to deliver the expected effects while ensuring a good safety profile for patients. However, the Company cannot guarantee that its partners will adhere closely to the manufacturing designs and to the tests it has defined to ensure the quality of the manufactured products. Such failure from its partners would be likely to have a material adverse effect on the Company, its business, its financial position and its reputation.

Finally, in case of a break down or deterioration of its relationship with its subcontractors or in case of expansion in its activity, the Company may have to seek new subcontractors. It cannot guarantee that it will be able to enter into new contracts in the desired time frames and on acceptable commercial terms, given the limited number of specialized companies with the infrastructure, experience, as well as the necessary authorizations and approvals for the manufacturing of the medical products developed by the Company.

The activity, the financial situation, the results, the development and the financial prospects of the Company in the mid and long term could be significantly affected by the occurrence of one or several of these risks.

> *The supply of specific raw materials and products needed to conduct clinical trials and manufacture the Company's products is not guaranteed*

The Company is dependent on third parties for the supply of various materials and chemical or biological products necessary to manufacture both the experimental cell drugs used in its clinical trials and future drugs developed by the Company.

Supply to the Company of any of these materials and products could be cut back or interrupted. In this event, the Company could be unable to source other suppliers of materials or chemical or biological products of satisfactory quality, in the appropriate quantities and at an acceptable cost. If its key suppliers or manufacturers were to default or if the supply of products and materials were cut back or interrupted, it is possible that the Company would not be able to continue to develop, produce and market its products in a timely and competitive manner. Given that authorizations are granted by health authorities for specific manufacturing procedures and named suppliers, any amendment requires a new review by the authorities, which could cause delays and additional costs.

In addition, these materials and products are subject to stringent manufacturing requirements and rigorous testing. Delays in the completion and validation of the plants and the manufacturing process for these materials and products by the Company's suppliers could affect the Company's ability to complete clinical trials and to market its products profitably and within a reasonable timeframe.

To prevent such situations during its future clinical studies, the Company has initiated and will continue to implement with certain suppliers of essential raw materials contractual components (supply agreement, customized batch production contracts) aimed at securing supply. The Company will also ensure, for most of the raw materials and materials it deems critical, that it identifies alternative supply sources which meet its quality criteria.

If the Company were to encounter difficulties in the supply of these materials, chemical or biological products, or was unable to maintain its existing supply agreements or make new agreements in order to develop and manufacture its products in the future, its business, prospects, financial position, results and development could be materially affected.

The Company could find itself in a situation where it is dependent on the subcontractors to whom it outsources its clinical trials

The Company does not have at this stage of development, sufficient infrastructures and resources to conduct the clinical trials essential for developing the drugs it designs. These are therefore entrusted to specialized healthcare establishments or companies specializing in the management of clinical trials (Contract Research Organizations (CROs)). The subcontracting of clinical trials generates risks relating to the selection of such establishments. Operational difficulties could also occur, especially due to the remoteness or geographical dispersion of these clinical trial centers.

Any failure by the Company's subcontractors could affect the timetable, or even the continuation of clinical studies, as well as the quality of data obtained – which must meet strict standards (Good Manufacturing Practice ("GMP"), GCP or other international standards) imposed by the regulatory authorities – and thus delay the marketing of products.

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

4.2 Regulatory and legal risk

4.2.1 Risks associated with the Company's intellectual property rights

Protection of the Company's patents, patents applications and other intellectual property rights is uncertain

The Company's business plan depends notably on its ability to obtain, maintain and guarantee the protection, *vis-à-vis* third parties, of its patents, trademarks and related applications together with other intellectual property or similar rights (such as, in particular, its trade secrets, business secrets and know-how) or those it is permitted to use within the scope of its activities. It is also important for the success of its business that the Company is able to receive similar protection for all its other intellectual property rights in Europe, the United States, Asia and other key countries. The protection by the Company of its intellectual property rights constitutes a significant cost due to, among others, fees relating to filings, the patent office proceedings and the renewal of patents and the management of its other intellectual property rights. The Company, which devotes significant financial and human resources in this regard, intends to pursue its protection policy by filing new patent and trademark applications, as and when it deems appropriate. To the best of its knowledge, its technology is, to date, effectively protected by patents and patent applications it has filed or for which it holds an exclusive license.

However, it is possible that the Company might not be able to continue to protect its intellectual property rights, in which case it might lose its technological and competitive advantage.

Firstly, the Company's intellectual property rights provide protection for a period which can vary from one jurisdiction to another (this period may be, for example, 20 years from the date of filing a patent

application in France and in Europe, while it may be extended for up to an additional 5 years when a supplementary protection certificate has been filed).

Secondly, the Company could experience difficulties in connection with the examination of some of its applications for patent, trademark or other intellectual property right currently being reviewed and/or registered. For example, at the time of filing a patent or a trademark application, other filings of patents or trademarks previously constituted but not yet published may be enforceable. Despite the prior art searches and monitoring it performs, the Company therefore cannot be certain that it is the first to have conceived an invention and to file a related patent application; it is important to note that in particular with regard to patents, in most countries, the publication of patent applications occurs 18 months after such filings and that findings are sometimes not published or do not become the subject of a patent application until months and often even years later. Similarly, when registering trademarks in a particular country, the Company could find that the trademark in question is not available in that country. A new trademark would have to be found for that particular country or an agreement negotiated with the owner of the pre-existing trademark. There is therefore no certainty that current and future applications with regard to the Company's patents, trademarks and other intellectual property rights will lead to registration.

Thirdly, the simple granting of a patent, trademark or other intellectual property rights does not guarantee their validity or enforceability. Indeed, the Company's competitors may at any time challenge the validity or enforceability of the Company's patents, trademarks or applications relating thereto before a court or under other specific procedures, which, depending on the outcome of said challenges, could reduce their scope, cause them to become invalid or allow them to be circumvented by competitors. In addition, developments, changes or differences in interpretation of the legal framework governing intellectual property in Europe, the United States or other countries could allow competitors to use the Company's inventions or intellectual property rights, or to develop or market the Company's products or technology without paying it any financial compensation. This applies not only to patents or patent applications which are owned or jointly owned by the Company, but also to those for which it benefits from or could benefit from a license. For instance, in June 2015 as part of the development of the ENTrIA platform, the Company optioned an exclusive license over certain patent applications for genetically modified, redirected, regulatory T cells and their use in suppressing an autoimmune disease, belonging to Yeda Research and Development Company Ltd. ("Yeda"). Following the issue of European patent application number EP2126054 (covering in substance redirected genetically modified regulator T cells and their use in suppression of autoimmune and inflammatory disease), the Company exercised its option and in June 2016, signed an exclusive license agreement giving it exclusive rights to develop and market CAR-Treg products for the treatment of autoimmune and inflammatory diseases (see paragraph 22.3 of the *Document de Référence*). Four oppositions to the European patent were filed with the European Patent Office within the opposition period, expired on 6 April 2017. The US patent application with number 12525270 covering in substance the same invention is still undergoing examination. If this patent is not issued in the United States, or, if the patents, once issued, are invalid, competition is likely to arise, particularly in the United States. This could have a material adverse effect on the Company's activity, outlook, development, financial position and results. Furthermore, although the coverage of these patents and patent applications is relatively wide at this stage, the Company does not have a worldwide monopoly on their exploitation; it only has a monopoly in the territories stated in the patents issued and the patent applications subject to the corresponding rights being granted in each of these territories.

Indeed, the question of the patentability of drugs and medical devices is very complex and raises legal, scientific and factual issues: uncertainties remain as to the interpretation of the impact of the claims which could be granted, which is still at a domestic law issue. Evolutions or changes in the interpretation of the laws applicable to intellectual property in Europe, the United States or in any other country may modify the legal framework and the situation of the Company compared to its competitors. In addition, there are still some countries that do not protect intellectual property rights in the same way as do Europe and the United States; effective procedures and rules necessary to protect the Company's rights may not exist in such countries. There is therefore no guarantee that the Company's existing and future patents, trademarks and other intellectual property rights will not be challenged, invalidated or circumvented, or

that they will provide effective protection against the competition and third-party patents covering similar inventions.

In addition, the Company cannot guarantee that it will indefinitely benefit from the license rights which are granted to date, such as, inter-alia, rights to certain patents and/or patent applications which are owned by or jointly owned with the French National Public Health and Medical Research Institute (*Institut National de la Santé et de la Recherche Médicale* or "INSERM"). Should the licenses granted expire or be terminated, it cannot be excluded that the Company will find itself in a situation of dependence vis-à-vis the patents and/or the patent applications, or may not be in a position to continue their exploitation or find a suitable alternative.

Consequently, the Company's rights over its patents, trademarks, related applications and other intellectual property rights might not give the expected protection against competitors. The Company cannot therefore guarantee with any certainty that:

- applications for patents, trademarks and other intellectual property rights under examination will actually result in the granting of registered patents, trademarks or other intellectual property rights;
- patents, trademarks or other intellectual property rights granted to the Company will not be challenged, invalidated or circumvented;
- the scope of protection afforded by the Company's patents, trademarks and intellectual property rights is and will remain sufficient to protect it against competitors and third-party patents, trademarks and intellectual property rights covering similar devices, products, technologies, developments or similar signs;
- that it will manage to develop new inventions which might generate an application for, or the granting of a patent nor that it will have the necessary resources to ensure and maintain, in the countries in which it foresees to use such inventions, an efficient protection.

Such contingencies, should they occur, could have negative effects on the Company and its development.

The Company benefits from certain intellectual property rights through joint ownership or licenses

The Company also takes part in research and development jointly conducted with scholars at academic institutions or other public or private entities. Such research can lead to the creation of inventions, for which the right (patent or patent application) could be jointly owned between the Company and the entity with which the work was undertaken. In these situations, the Company may have to sign a joint ownership agreement to define the terms of the joint owners' relationship, as has been the case regarding patents and patent applications for families PTXC1 and PTXC5 with INSERM (see paragraph 22.1 of the *Document de Référence*). When there is no joint ownership agreement in place, or it has not been finalized (as has been the case regarding patents and patent applications for the PTXC11 family, resulting from a partnership with the University of Montpellier) (see paragraph 11.2.2 of the *Document de Référence*), the general law on joint ownership of patents/patent applications set out in Articles L. 613-29 et. seq. of the French Intellectual Property Code applies. The Company could find itself in a situation of dependence vis-à-vis these patents and not be able to renew its long-term agreements on reasonable financial terms or find an alternative to these partnerships.

Likewise, most of the partnership agreements entered into with academic laboratories state that the Company acquires alone or jointly the intellectual property rights generated by the works carried out (see Chapter 22 of the *Document de Référence*).

The Company, following the terms of contractual agreements, also granted among other things an option enabling Trizell Holding SA ("Trizell") (which was substituted for Ferring International Center ("Ferring")) to obtain, in the event the option is exercised, an exclusive sublicense covering the PTXC1 and PTXC5 patent families and the related know-how owned by INSERM either solely or jointly with the Company. On December 2, 2015, the Company and Trizell entered into an agreement terminating the current contracts, meaning that Trizell has not obtained, and is no longer entitled to, an exclusive

sublicense over said patent families and the associated know-how. In addition, Trizell has transferred to the Company intellectual property rights which it (or Ferring before it) could have developed within the scope of the contractual agreements mentioned above (see paragraph 22.2 of the *Document de Référence*).

Finally, in June 2016, the Company signed an exclusive license agreement with Yeda Research and Development Co. Ltd, giving it exclusive rights over the development and marketing of CAR-Treg products to treat autoimmune and inflammatory diseases, followed in December 2016 by an exclusive worldwide license with INSERM Transfert for two patent families covering a new type of regulatory T cell (Treg) carrying the CD8 marker, and the use of CAR-Treg cells manufactured using CD8+ Tregs.

Such contracts also expose the Company to the risk of having third parties (i) claim the benefits of the intellectual property rights on the inventions or other intellectual property rights of the Company, (ii) breach the confidentiality of innovations or non-patented improvements as well as confidential information and know-how of the Company, (iii) disclose the Company's commercial secrets to competitors or develop independently commercial secrets and/or (iv) violate such contracts, without the Company having appropriate recourse against such violations.

The Company cannot guarantee that it will not infringe intellectual property rights or that its own rights will not be infringed

The Company's commercial success will also depend on its ability to develop products and technologies that do not infringe patents or other third-party rights. It is important for the success of its business, that the Company be able to freely exploit its products without them infringing patents or other third-party intellectual property rights and without third parties infringing the Company's rights, in particular its intellectual property rights.

As it has done to date, the Company continues to conduct preliminary studies it deems necessary, in the context of the above-mentioned risks, before making investments to develop its various products and technologies. With the help of its intellectual property lawyers, it keeps a watch on its competitors' activities, particularly in terms of patent applications.

However, monitoring the unauthorized use of the Company's products and technology and therefore the infringement of its rights is difficult.

The Company cannot guarantee with any certainty that:

- it will be able to prevent, punish and obtain compensation for the misappropriation or the unauthorized use of its products and technology, particularly in foreign countries where its rights would be less well protected due to the territorial scope of industrial property rights;
- there are no prior patents or other third-party rights (particularly over intellectual property), likely to cover certain Company products, processes, technologies, results or activities and, consequently, that third parties will not sue the Company for patent infringement or infringement of their rights in order to obtain damages and/or termination of manufacturing and/or marketing activities of the Company for the relevant products, processes and other identified technologies;
- no prior third-party trademark rights or other rights likely to lead to an infringement or liability action against the Company exist; and/or
- the Company's domain names will not be the subject of a Uniform Dispute Resolution Policy (UDRP) procedure, or a similar procedure, or an infringement action by a third party having prior rights (e.g. trademark rights).

In the event of a dispute regarding intellectual property, the Company could be required to:

- stop developing, selling or using the product or products to which the disputed intellectual property rights relate;

- obtain a license from the holder of the intellectual property rights, it being possible that this license might be unobtainable or only obtainable on terms which are financially unfavorable to the Company;
- redesign some of its products and/or technologies or, in the case of trademark applications, rename its products to avoid infringing third-party intellectual property rights, which may be impossible or require a lengthy and expensive process, and could, consequently, impact its marketing efforts.

Moreover, third parties (even Company employees) could use or attempt to use parts of the Company's technology protected by an intellectual property right, which would be harmful to the Company. The Company could therefore be forced to initiate judicial or administrative proceedings against these third parties in order to enforce its rights, particularly intellectual property rights, (patents, trademarks, drawings, models and domain names) before the courts.

Regardless of the outcome, any dispute or litigation could result in substantial costs, affect the Company's reputation, adversely affect its results and financial position and not provide the required protection or lead to the sanction sought. Some competitors with access to greater resources than the Company may be in a better position to bear the costs of litigation.

However, on the date of the *Document de Référence*, the Company has not found itself in any of these situations and has not been involved in any litigation, whether as claimant or defendant, regarding its own rights, particularly intellectual property rights, or those of a third party.

The Company may not be able to prevent the disclosure to third parties of confidential information likely to have an impact, in particular on its future intellectual property rights

It is also important for the Company to protect itself against unauthorized use and disclosure of its confidential information, know-how and trade secrets. Indeed, unpatented and/or unpatentable technologies, processes, methods, know-how and proprietary data are considered trade secrets which the Company seeks to protect, partly through confidentiality agreements. Moreover, the rules of transfer to the Company of inventions that its employees have or could make, and the related remuneration arrangements, are governed by Article L. 611-7 of the French Intellectual Property Code, which is considered public policy in France.

The Company enters into diverse collaboration, partnership and research agreements or other types of cooperation between it and researchers with academic institutions and other public or private entities, subcontractors etc., such as services contracts with MaSTherCell for the exclusive outsourcing of the manufacturing of products from the ASTrIA platform in Europe or collaboration agreements with Ospedale San Raffaele, the University Hospital of Schleswig-Holstein or the University of British Columbia (see section 22 of the *Document de Référence*). Under these agreements, various types of information and/or products may be entrusted to Company’s counterparty in order for it to perform certain tests and clinical trials. In such cases, the Company requires a confidentiality agreement to be signed.

It cannot be guaranteed that the agreements put in place to protect the Company's technology and trade secrets and/or the expertise that it has developed will provide the required protection or that such agreements will not be breached by subcontractors of the Company or by other third parties, that the Company will have appropriate solutions to counter such violations, or that trade secrets will not be disclosed to its competitors or independently developed by them. Within the scope of the agreements the Company concludes with third parties, it at times takes the precaution of stipulating that the latter are not allowed to use the services of third parties or that they can do so only with the Company's prior approval. Nevertheless, it still cannot guarantee that some of its contractual counterparties will not use third parties. In this event, the Company has no control over the conditions under which its subcontractors protect their confidential information, regardless of the fact that the Company stipulates in its agreements with co-contractors that they pass on such confidentiality obligations to their own contractual counterparties.

Consequently, the Company's rights over its confidential information, trade secrets and know-how may not give the protection it expects against its competitors and the Company cannot guarantee with any certainty that:

- its know-how and trade secrets will not be acquired, usurped, circumvented, disclosed or used without its permission;
- the Company's competitors have not already developed technologies, products or devices similar or comparable in nature or purpose to those of the Company;
- another contractual counterparty will not claim the right to use all or part of the Company's intellectual property rights to inventions, knowledge or results that it owns individually or jointly, or in respect of which it could be granted a license;
- employees of the Company will not claim rights or the payment of additional compensation, or a price, for the inventions that they have helped to develop.

Any one or more of these risks could have a material adverse effect on the Company's business, prospects, financial position, results and development.

4.2.2 Risks associated with product liability

The Company may be exposed to risks involving liability during the clinical development of its products, in particular product liability relating to the testing and manufacturing of therapeutic products for humans and animals. It could, for instance, be held liable *vis-à-vis* patients taking part in clinical trials in the context of the development of the therapeutic products being tested for unexpected side effects resulting from the administration of such products.

Criminal complaints or lawsuits could be filed or brought against the Company by patients, regulatory agencies, pharmaceutical companies or any other third party using or marketing its products. These actions may include claims arising from the actions of its partners, licensees and subcontractors, over which the Company exerts little or no control. The Company could also incur liability during the product marketing phase.

The Company cannot guarantee that its insurance policies (please refer to paragraph 4.8 of the *Document de Référence*) or that contractual undertaking for damages, contractually capped where applicable, agreed to by its subcontractors will be sufficient to cover any liability claims that may be brought against it.

If its liability or that of its partners, licensees or subcontractors were thus engaged, or if the Company or its partners, licensees or subcontractors were not able to obtain and maintain adequate insurance cover at an acceptable cost, or if the Company was unable to protect itself in any manner against liability claims, this would result in the Company's marketing of its products being seriously affected and, more generally, would harm its business, results, financial position and development prospects.

4.2.3 Risks associated with a restrictive and evolving regulatory framework

All over the world, the pharmaceutical industry faces constant changes in its regulatory environment and its increased monitoring by competent regulatory authorities, notably the ANSM in France, the European Medicines Agency ("EMA"), and the Food and Drug Administration ("FDA") in the United States. Accordingly, the public is requiring more guarantees vis-à-vis the safety and effectiveness of drugs.

Health authorities – particularly the ANSM, EMA and FDA – have imposed increasingly stringent requirements in terms of the volume of data required to demonstrate the efficacy and safety of a product. Products already on the market are also subject to a periodic reassessment of their benefit/risk ratio after authorization. The late discovery of problems not detected during the research phase can lead to marketing restrictions, suspension or withdrawal of the product and an increased risk of litigation.

Furthermore, as the cell therapy treatment developed by the Company is very innovative, and regulations on the subject are still being drawn up, additional requirements may become applicable.

Insofar as new regulations would increase the cost of obtaining and maintaining product marketing authorizations or limit the economic value of a new product for its inventor, the growth prospects of the pharmaceutical industry and the Company could be reduced.

Occurrence of any one or more of these risks could have a material adverse effect on the Company's business, prospects, financial position, results and development.

4.2.4 Risks associated with the Company's status as a pharmaceutical company or its manufacturers

In France, the manufacture, import, export and wholesale distribution of drugs and the manufacture, import and distribution of investigational medicines may only be carried out in pharmaceutical companies.

Obtaining pharmaceutical company status and/or the GMP certificate requires an application file to be submitted to the ANSM who will only grant authorization after examining the file, usually after verifying that the Company has adequate premises, the necessary personnel (including a head pharmacist in charge) and the appropriate organization with satisfactory procedures to carry out the planned pharmaceutical activities. The ANSM will thereafter conduct regular checks on the pharmaceutical company to verify its compliance with applicable regulations. If the ANSM notices significant disparities regarding the GMP, it can decide to suspend the Company's pharmaceutical company status and its GMP certificate.

The present strategy of the Company is to outsource its manufacturing activities to specialist manufacturers (CMO). In this perspective, it must ensure that its subcontractors have the required regulatory authorizations, and in particular the GMP certificate for the countries in which they perform. The loss by one of its subcontractors of one of these authorizations, in particular in case of non-compliance with manufacturing rules, could cause delay in the manufacturing of the products developed by the Company.

The Company could, in addition and depending on the situation, produce the drugs it develops itself for use in clinical trial or in the marketing phase. Under these circumstances, the Company cannot guarantee that the pharmaceutical company status and/or the GMP certificate for one of its sites will be granted, nor can it guarantee that they will not be partially or fully suspended or revoked afterwards. One of these events would affect the Company's products manufacturing and marketing deadlines.

The materialization of one or several of these risks may have a material adverse effect on the business, prospects, financial position, results and development of the Company.

4.3 Risks associated with the Company's organization

4.3.1 The Company could lose key employees and not be able to attract other qualified personnel

The Company's success depends largely on the work and expertise of its management team and its Chief Executive Officer. To date, the Company has not taken out any so-called key person insurance (permanent disability/death insurance policy). The temporary or permanent unavailability of such individuals could impair the Company's ability to achieve its objectives, in particular by depriving it of their know-how and technical capabilities.

In addition, the Company will need to recruit new managers and qualified scientific personnel in order to develop its business and as and when the Company expands in areas requiring additional skills, such as manufacturing, regulatory matters and, ultimately, marketing. The Company competes with other companies, research organizations and academic institutions to recruit and retain highly qualified scientific, technical and managerial personnel. As this competition is very intense, the Company may not be able to attract or retain key personnel on financially acceptable terms.

The Company's inability to attract and retain key personnel could prevent it from achieving its overall objectives and have a material adverse effect on its business, results, financial position and prospects.

4.3.2 The Company's development will depend on its ability to manage growth

As part of its growth strategy, the Company will likely be required to develop its operational capacity, which could use a significant amount of its internal resources.

Accordingly, the Company will notably have to:

- anticipate the spending associated with this growth as well as the related funding requirements;
- anticipate the demand for its products and the income they are likely to generate;
- recruit, train, manage, motivate and retain a growing number of employees;
- increase the capacity of its existing operational IT, financial and management systems; and
- manage the outsourcing of the manufacturing of its drugs developed via its present subcontractors and, if need be, to new subcontractors.

The Company's inability to manage growth or unexpected difficulties encountered during its expansion could have a material adverse effect on its business, results, financial position, development and prospects.

4.4 Industrial risks

The Company's operations involve the handling of biological and chemical materials during research and manufacturing, which exposes it to health risks (i.e., occupational diseases).

Although the Company believes that the safety measures it adopts in terms of handling such materials meet the standards prescribed by rules and regulations in force and allow its employees to carry out their activities under good environmental, health and safety conditions, the risk of accidental contamination or occupational disease cannot be ruled out completely. In the event of an accident, the Company could be held liable for any damage resulting therefrom and such liability could exceed the caps specified in the insurance policies taken out by the Company, or not be covered by such insurance.

4.5 Risks related to information systems

The main risks regarding the Company’s information systems are related to the safety and the availability of the system, as well as the integrity and the confidentiality of the data (including patients' personal data or R&D information).

In order to preserve the safety of the information systems and to protect users, the Company has formalized rules governing their use (in particular in employment contracts or in certain internal control procedures) to set forth precautions and recommendations that all user must comply with when using the information systems within the Company.

However, the Company cannot guarantee that the users will comply with these rules and that they are sufficient to avoid risks of cyber-attacks, losses of sensitive data, discontinuation in the operation and risks for the Company to be held liable for loss or damage. These risks could, if they occur, have a material adverse effect on the business, the financial position, the results, the reputation or the development of the Company.

For example, any loss of scientific data could cause delays in the development of the Company's products and in the granting of regulatory authorizations and thus have a material adverse effect on its business, results, financial position and prospects.

4.6 Financial risks

The accounting data mentioned in this section is produced from the Company's annual financial statements restated under IFRS accounting rules for the 2015 and 2016 financial years. The reader is also invited to refer to Note 25 "Financial Risk Management", relating to such financial statements, and appearing in paragraph 20.1.5 of the *Document de Référence*.

4.6.1 Risks associated with historical and future losses

Since its creation in 2001, the Company has recorded operating losses every year. The net loss for the year ended December 31, 2016 amounted to €12.7 million, mainly due to the following expenditures:

- Ovasave® production technology transfer to the MaSTherCell CMO (Contract Manufacturing Organization);
- efforts deployed on the development and industrialization program for the manufacturing process for ASTrIA platform products, by creating the laboratory specialized in the development of manufacturing process and technology transfer;
- accelerating development and protection of the ENTrIA platform, notably via research and development agreements signed with OSR, LIED or UBC or the exclusive worldwide license covering the use of CAR-Tregs with Yeda or of CD8+ Tregs with INSERM Transfert.

The Company is expected to sustain major operating losses in the near future due to:

- the need to conduct new research programs and preclinical trials in order to address new market segments;
- the resultant clinical programs;
- all of the procedures that need to be followed in order to obtain marketing authorizations and the files required to apply for products to be admitted for reimbursement;
- additional regulatory requirements governing the manufacture of its products;
- sales and marketing expenses which may be incurred depending on the stage of completion of product development;
- the pursuit of an active research and development policy that may, where applicable, require the acquisition of new technologies, products or licenses.

Moreover, as part of its development and its strategy of signing R&D agreements with pharmaceutical and biotechnology companies, the Company cannot guarantee that the financial conditions proposed by a new partner will be financially acceptable.

4.6.2 Risks relating to the business model

Owing to the autologous nature of T cell immunotherapies developed by the Company (product intended for the donor himself), the duration of treatment will vary depending on each patient and according to their response to the treatment (lack of response after the first injection/gradual loss of response/sustained tolerance). Depending on the duration of treatment, the Company's revenues and margins could therefore vary from patient to patient, given that production costs are concentrated on the manufacturing phase of the personalized product, regardless of the length of the treatment (please refer to paragraph 6.5.3 of the *Document de Référence*). A large gap between the Company's expectations and the average length of treatment could have a negative impact on its development, strategy, prospects and financial position.

4.6.3 Risk associated with research tax credit

To finance its activities, the Company has also opted since 2001 for the *Crédit d'Impôt Recherche* (research tax credit - "CIR"), which involves the State granting a tax credit to companies that invest significantly in research and development. The research expenditure eligible for the CIR includes, in particular, wages and salaries, depreciation expense on research equipment, the supply of services outsourced to approved research organizations (public or private) and intellectual property expenses.

On October 2, 2015, the *Direction Générale des Finances Publiques* (General Directorate of Public Finances) notified the Company of an accounting audit regarding the CIR accounted for in the years ended December 31, 2011, 2012, 2013 and 2014. This procedure ended without any adjustments imposed.

However, the Company cannot exclude the possibility that the tax authorities may challenge the methods used by the Company for calculating research and development expenditure or of the CIR being called into question (for past or future financial years) pursuant to a regulatory change, or of it being challenged by the tax authorities even though the Company complies with the requirements in respect of documentation and eligibility of expenditures. If such a situation arose, it could have an adverse effect on the Company's results, financial position and prospects.

4.6.4 Risks associated with loss carryforwards in the future

At December 31, 2016, taking into account the net loss recorded during the year, the Company had a loss carryforward of € 82.7 million. As of today, this loss can be carried forward indefinitely and applied to future profits.

In France, allocation of these losses is capped at 50% of taxable profits for the year, and this limit applies to any profits in excess of €1 million. The unused balance of losses can be carried forward to following financial years, and allocated under the same conditions with no time limit.

The Company cannot rule out the possibility that regulatory or legislative developments regarding corporation tax will call into question, in whole or in part, the possible offsetting of these prior losses against future profits, or impose a time limit on such offsetting.

4.6.5 Risks related to access to public grants and advances

The Company has received and continues to receive various grants, particularly in the context of:

- the development of autologous cell therapy to treat juvenile idiopathic arthritis and rheumatoid polyarthritis (project entitled "CellArthrix");
- the search for Ovasave® efficacy biomarkers (project entitled "Femtokine");
- the development and the implementation of a procedure to automate the first step of the manufacture process of Ovasave® (project entitled "POSITIVE");
- the clinical development of Ovasave® for refractory Crohn's disease (project entitled "CATS");
- the development of the manufacturing and clinical development process of Col-Treg for the treatment of autoimmune uveitis (project entitled "TRUST");
- aid for the recruitment of young PhD candidates;
- supporting economic development in the priority areas.

In the future, the Company intends to continue to seek grants in order to accelerate its development.

If it does not comply with the contractual conditions set out in the innovation grant agreements it has entered into (or if any of the early repayment conditions were triggered on the zero-interest loan for innovation granted by Bpifrance Financement (the French public investment bank) on November 28, 2014), the Company may be required to repay advances early. The Company has notified Bpifrance Financement of the stoppage of Phase IIb of the Ovasave® clinical study; at the date of the *Document de Référence*, the Company was not aware of any early repayment request. This could deprive the Company of some of the financial resources needed to successfully carry out its research and development projects.

Although at present, obtaining grants is not essential to the Company's development, it cannot guarantee that it will have the necessary additional financial resources, nor the time or opportunity to replace these financial resources with other financial resources.

4.6.6 Dilution risk

As part of its policy to motivate its executive officers, employees and Scientific (SAB) and clinical Advisory Boards, and to attract further talent, the Company has allocated free shares and granted stock options and warrants (notably on March 8, 2017 – see paragraph 21.1.4 of the *Document de Référence*) which, if vested and fully exercised, would give rise to the issue of 1,974,609 new shares (i.e. 6.70% of

the Company's share capital on a fully-diluted basis), and may in the future issue or assign new capital instruments or instruments convertible to equity.

Furthermore, following the capital increase in February 2017 via a public offering of new shares with warrants (ABSA), 5,549,300 listed share warrants were detached from the ABSAs, maturing in one year, i.e. on February 26, 2018. If all these share warrants were to be exercised, it would create 10.8 million euros of new share capital through the issue of 4,161,975 new shares (i.e. 14.13% of the Company's share capital on a fully-diluted basis) at a price of €2.60 including the issue premium (see paragraph 21.1.4.4.3 of the *Document de Référence*).

Moreover, acting on powers delegated at the general shareholders' meeting of August 1, 2016, the board of directors, at its meeting of August 3, 2016, arranged a line of optional bond finance by a reserved issue of warrants (known as the "Tranche Warrants" or "*Bons d'Emission*") for notes convertible into shares (the "Notes" or "OCAs"), accompanied by share warrants (the "Warrants" or "BSAs") and, together with the Notes, the "Notes with Warrants" or "OCABSAs"). The issue of Tranche Warrants was reserved for YA II CD, LTD, an investment fund managed by the US management company Yorkville Advisors Global LP, which fully subscribed them (see press release dated August 3, 2016, reproduced in section 3.10 of the *Document de Référence*).

The Tranche Warrants, which can be exercised until August 3, 2019, require the bearer, on the request of the Company and provided that certain conditions are met, to subscribe for up to 200 Notes with a par value of €100,000 each, making a total of €20 million, plus an additional €10 million if all of the attached Warrants are exercised. In consideration, the Company will issue new ordinary shares to YA II CD, LTD, representing 5% of the principal amount of the Notes issued on exercise of the Tranche Warrants.

The subscription price for the new shares issued under the Notes with Warrants (and as such their total number) will depend on the lowest daily average volume-weighted TxCell share price over the last ten trading days prior to the date the Company requires exercise of the Tranche Warrants, the exercise date of the Warrants or the conversion date the Notes, as applicable. This price cannot be lower than the par value of a Company share, i.e. €0.20 at the date of the *Document de Référence.*

On the date of the *Document de Référence*, the Company had issued 50 Notes (of which 17 had been converted) for an overall gross amount of €5 million. For information, on the basis of 93% of the lowest volume-weighted average price over the ten trading days prior to March 8, 2017, i.e. €1.60, the conversion of all 33 Notes issued and not yet converted would represent a theoretical issue of 2,062,050 new shares (i.e. 7.00% of the Company's share capital on a fully-diluted basis). This Notes issue was accompanied by the detachment of 686,350 Warrants which, if fully exercised, would represent an issue of 691,153 new shares (i.e. 2.35% of the Company's share capital on a fully-diluted basis), generating additional equity for the Company of €2.5 million.

Likewise, the Company has PACEO® optional equity line financing with Société Générale (see paragraph 21.1.4.4.1 of the *Document de Référence*) which has not been drawn down and which the Company has agreed not to draw down until all the Notes with Warrants already issued have been converted or redeemed. The Company has also committed not to make any new drawdowns in 2017.

At the date of the *Document de Référence*, the full exercise or, if applicable, redemption of all instruments convertible to equity allotted and outstanding would allow the subscription of 10,040,237 new shares (see paragraph 21.1.4 of the *Document de Référence*), representing 34,08% of the fully diluted share capital. This theoretical calculation takes into account (although they are exclusive of one another) the exercise or conversion, based on prices at March 8, 2017, of all financing instruments issued under the PACEO® and all the Notes with Warrants.

Exercise of all instruments giving access to the outstanding capital as well as all new issuances or allotments would lead to a potentially significant dilution for the current and future shareholders of the Company.

Therefore, at the date of the *Document de Référence*, there were 150 unexercised Tranche Warrants outstanding under the Notes with Warrants financing line. The Company is under no obligation to make any additional issues and has committed not to make any further drawdowns in 2017. On the basis of

93% of the lowest volume-weighted average price over the ten trading days prior to March 8, 2017, i.e. €1.60, the exercising of all 150 outstanding Tranche Warrants, the conversion of the 150 Notes issued as a result of the exercise of the Tranche Warrants and the exercise of the attached Warrants would give rise to the issue of 468,750, 9,375,000 and 3,787,878 new shares respectively (i.e. a total of 13,631,628 new shares).

Consequently, as at the date of the *Document de Référence*, in the event of (i) the full exercise and, as the case may be, the full acquisition of instruments giving access to the capital of the Company issued and outstanding, and (ii) the exercise of the 150 remaining Tranche Warrants, the conversion of the 150 notes issued as a result of the exercise of the Tranche Warrants and the exercise of the attached Warrants, on the basis of the price mentioned in the previous paragraph, the total number of shares would then amount to 23,671,865 new shares representing 54.93% of the fully diluted share capital.

4.7 Market risk

4.7.1 Liquidity risk

The Company may need to strengthen its capital base or seek additional funding to ensure its development

Since its creation, the Company has financed its growth by strengthening its equity through successive capital increases, and by obtaining public grants for innovation and research tax credit payments.

The Company has never resorted to bank loans, but has received a zero-interest innovation loan from Bpifrance Financement. The Company has also placed an issue of convertible notes with warrants (Notes with Warrants) reserved for YA II CD, LTD (see paragraph 21.1.4.4.2 of the *Document de Référence*). The Notes have a maturity of 14 months as of their issue. Once matured, non-converted Notes must be redeemed by the Company. They must also be redeemed at the request of the Note bearer in the event that the Note terms are not adhered to, or in the event of default.

The Company has completed a specific review of its liquidity risk and considers at the date of the *Document de Référence* that it is not in a position to meet its upcoming commitments for the twelve next months without changing its current business plan.

As at March 31, 2017, the Company's cash and cash equivalents amounted to €11.3 million. This amount includes the gross income of €11.1 million from the capital increase through the issue of new shares with share warrants (ABSA) with preferential shareholder subscription rights which took place in February 2017. Given the growth plan and the operational spending incurred, this cash position will enable the Company to continue in business until January 2018. Additional financial resources will therefore be necessary.

5,549,300 share warrants with a one year maturity, i.e. until February 26, 2018, were issued through an ABSA public offering in February 2017.

The proceeds from the exercising of all warrants, i.e. a total of 10,821,135 euros, would enable the Company to finance its operations until it obtained regulatory authorization, expected by the end of 2018, for a first CAR-Treg clinical study on humans.

Otherwise, the Company can call on, provided it meets the contractual terms and conditions (please refer to the prospectus corresponding to each case):

- an optional convertible-bond financing line with YA II CD, Ltd giving the Company the option to issue to YA II CD, Ltd, over a period of 36 months from August 3, 2016 and subject to contractual terms and conditions, notes convertible into shares for a maximum nominal amount of €20 million plus up to an additional €10 million if all attached share warrants are exercised. A prospectus regarding this operation was made available to the public and was approved by the AMF on July 27, 2016 (approval number 16-356). On August 3, 2016 and November 3, 2016, the Company issued (i) a total of 50 Notes (of which 17 have been converted) for a total nominal amount of €5 million gross and (ii) 686,350 Warrants attached to the Notes for a potential amount of €2.5 million if the Warrants are exercised. At the date of the *Document de*

Référence, there thus remained 150 bonds corresponding to a nominal amount of €15 million, to which €7.5 million are likely to be added if all of the attached Warrants are exercised. The Company has committed not to make any drawdowns in 2017;

- a PACEO optional equity financing line with Société Générale relating to 1,150,000 new shares to be issued over a period of 24 months as of January 27, 2016, on exercise of share warrants subject to a certain number of contractual conditions set in advance. The operation was the subject of a prospectus rendered available to the public and approved by the AMF under number 16-036 dated January 25, 2016. At the date of the *Document de Référence*, no drawdown on this PACEO optional equity line had been made, and the Company has no immediate plans to request a drawdown. The Company has committed not to draw down any funds for as long as any of the convertible Notes already issued remain unconverted or unredeemed. The Company has also committed not to make any new drawdowns in 2017.

The Company is also assessing various additional funding sources, in particular by existing shareholders and/or new investors in the prospect, among others, of capital increases, or via potential business partners by entering into development agreements regarding products developed by the Company.

Significant research and development efforts and expense relating to preclinical and clinical studies have been made and incurred since the Company started to operate, which has generated a negative operating cash flow up to this date. Net cash used by the Company's operating activities amounted respectively to €-10.4 million and €-10.1 million for the financial years ended December 31, 2016 and 2015, respectively.

In the future, the Company will continue to have substantial financing requirements for developing its technology, continuing its preclinical and clinical development programs, equipping its R&D facilities and, eventually, producing and marketing its products. It is therefore possible that the Company will be unable to finance its growth from operating cash flows, which would lead it to seek other sources of funding, particularly through new capital increases.

The Company's funding requirements and their future timing depend on factors partly outside the Company's control, such as:

- higher costs and slower progress than anticipated for its research and development programs and clinical studies;
- the cost of preparing, filing, defending and maintaining patents and other intellectual property rights;
- higher costs and longer times than anticipated to obtain regulatory approvals for the marketing of its products, as well as their eligibility for reimbursement, including the time required to prepare application files for the competent authorities;
- the cost of responding to changes in the technology developed by the Company for the manufacture and marketing of all or some of its products; and
- new opportunities for developing new products or for the acquisition of technologies, products or companies.

It is possible that the Company may not be able to raise additional capital when it needs to, or that capital may not be available on financial terms acceptable to the Company. If funds were not available, the Company may need to:

- delay, reduce or eliminate the number or the scope of its preclinical and clinical trials;
- license its technology to partners or third parties; or
- enter into new collaboration agreements on less favorable terms than it would have obtained in a different context.

In addition, if the Company raises capital by issuing new shares, the holdings of its shareholders could be diluted. Debt financing, insofar as it might be available, could also include restrictive conditions for the Company and its shareholders.

Any one or more of these risks could have a material adverse effect on the Company, its business, financial position, results, development and prospects.

4.7.2 Foreign exchange rate risk

At the date of the *Document de Référence*, the Company considers that it is not exposed to foreign currency exchange risks because only a small portion of its supplies are obtained outside the euro zone and invoiced in foreign currencies, mainly in U.S. Dollars, Canadian Dollars, in G.B. Pounds Sterling and in Swiss Francs.

In view of these insignificant amounts in currency positions, at this stage of development of its business, the Company has not made any hedging arrangements to protect its business against fluctuations in exchange rates.

4.7.3 Credit risk

The Company manages its liquid assets in a conservative manner. Liquid assets and equivalents include cash and short-term financial instruments held by the Company (only UCITS classified as "short-term money market").

In addition, credit risk relating to liquid assets, equivalents and short-term financial instruments is not significant in view of the quality of the financial institution counterparties.

4.7.4 Interest rate risk

The only exposure to interest rate risk as regards the asset side of its balance sheet relates to cash investments as cash equivalents (see paragraph 4.7.3 of the *Document de Référence*). Given the current low rate of return on this type of investment, the Company believes that any 1% increase or decrease would have no material effect on its net income in light of the losses generated by its operating activities.

The Company has not used bank loans to finance its growth and has no floating-rate liabilities. Loans and borrowings contracted by the Company were as follows:

- Zero-interest innovation loan taken out on November 28, 2014 for €1.7 million with Bpifrance Financement. This loan bears no interest (see paragraph 10.1.4 of the *Document de Référence*).
- Optional convertible-bond financing line with YA II CD, LTD, an investment fund managed by the US management company Yorkville Advisors Global LP (see paragraph 21.1.4.4.2 of the *Document de Référence*. At the date of the *Document de Référence*, the Company has drawn down two tranches by issuing 30 Notes for €3 million on August 3, 2016 and 20 Notes for €2 million on November 3, 2016. The Notes convertible into shares do not pay interest (except in cases of default) and have a maturity of 14 months as of their issue date. At the date of the *Document de Référence*, the principal amount was €3.3 million.

Therefore, the Company does not believe that it is exposed to any significant interest rate risk.

4.7.5 Equity risk

The Company considers that it is not exposed to any risk associated with equities or other financial instruments, given that it does not hold any interest or securities in listed companies.

4.8 Insurance and risk cover

The Company has implemented a policy to cover the main insurable risks for amounts that it considers compatible with the nature of its business.

Given the specific nature of its business, which at this stage is focused on research and development of innovative technology in the field of cell therapy, in the absence of a direct loss or loss indicators for its industry, the quantification of potential risks makes it difficult to determine an insurable amount, particularly with regard to civil liability, but the Company believes that the insurance policies described below adequately cover the risks inherent in its activities and that its insurance policy is consistent with

industry practices. The Company does not foresee any particular difficulties in maintaining adequate insurance levels in the future, subject to market conditions and capacity.

The main policies subscribed to by the Company are the following:

- "Property damage – operating and financial losses" policy, which covers risks of fire, water, theft, electrical damages, breakdown machinery damages, loss of goods and any damage other than those named that are not excluded. It also covers within the same limits, losses in research and development incomes as well as financial losses following a change in the controlled environment. Given the lack of significant gross sales of the Company, this guarantee aims at enabling it to resume on-going work which would have been destroyed by an accident and to bear the general and operating expenses for this period. The policy covers all sites of the Company with a maximum coverage of € 10 million.
- "Civil liability" policy, which covers on the one hand the operating risks for a maximum coverage of € 5 million per accident with a sub-limit of € 2 million per accident for successive material and intangible damages caused by third-parties, and on the other hand professional civil liability for a coverage amount of € 1 million per year insured.

The liability of the Company because of clinical trials is covered by specific policies which are connected to the "civil liability" policy and for which the pricing system and the covered amounts depend on the domestic regulation applicable to the clinical investigation center involved, as it is the case for France, where the Public Health Code provides for mandatory insurance of clinical trial sponsors as well as the terms of this insurance. The global amount of insurance premiums and subscribed guarantees for the trials therefore depends on the number of trials, of their geographical localization and of the projected number of patients to include in the trial.

The Company has also subscribed a policy to cover its executive officers' civil liability when it might be engaged while performing their duties, with a global annual cap coverage of € 5 million.

The occurrence of one or all of the risks covered by the aforementioned policies could, inspite of the policies subscribed, have a material adverse effete on its business, results, financial position and development of the Company.

4.9 Significant events and legal action

As at the date of the *Document* de Référence, there are no governmental, judicial or arbitration proceedings, including any that the Company is aware of, pending or possible, and likely to have, or which have had, a material impact on the Company's financial position or profitability during the last 12 months.

5. COMPANY INFORMATION

5.1 Company history and development

5.1.1 Company name and trade name

The name of the Company is TxCell.

5.1.2 Place of registration and registration number of the Company

The Company is registered with the Grasse trade and companies register under SIREN number 435 361 209.

Its French classification of activities' code (*code NAF*) is 7211 Z, which corresponds to biotechnology research and development.

5.1.3 Date of incorporation and company term

The Company was incorporated on April 12, 2001 for a 99-year period from the date of registration with the trade and companies register, i.e. until April 11, 2100, except in the event of extension or early dissolution.

5.1.4 Head office of the Company, legal form and laws governing its activities

The Company is a limited liability company (*société anonyme*) governed by French law, whose operation is primarily subject to Articles L. 225-1 et seq. of the French commercial code.

The Company's head office is located at Les Cardoulines, Allée de la Nertière, 06560 Valbonne-Sophia Antipolis, France.

The Company's contact details are as follows:

Telephone: +33 (0) 497 218 300

Email: contact@txcell.com

Website: www.txcell.com

The Company is a French limited liability company (*société anonyme*) with a board of directors (*conseil d'administration*) incorporated under French law, governed by the rules and regulations in force in France (and, in particular, the provisions of Book II of the French commercial code) and by its own bylaws.

The Company also had a second establishment located in Besançon: Bâtiment IBFC - 6, rue Docteur Jean-François-Xavier Girod - 25000 Besançon, removed from the trade and companies register in 2016, as part of the revision of the production strategy of the Company announced on October 14, 2015.

5.1.5 Significant events in the development of the Company's activities

Hervé Groux and Françoise Cottrez founded the Company, but they no longer hold any executive office within the Company and are no longer shareholders.

Significant events in the development of the Company's activities:

2001	Creation of the Company through a spin-off from the National Institute of Health and Medical Research (*Institut National de la Santé et de la Recherche Médicale* – "INSERM").
2003	First preclinical proof of concept of the antigen-specific type 1 regulatory T lymphocyte (Ag-Tregs) based on the ovalbumin antigen, on inflammatory colitis on animals.
2004	Fund raising of €10.5 million in several tranches from financial investors: Auriga Partners, AXA Private Equity, Bioam Gestion, CDC Innovation and Seventure.

2007 Authorization from the French Agency for the Safety of Healthcare Products (*Agence Française pour la Sécurité Sanitaire des Produits de la Santé* – "AFSSAPS") to initiate clinical testing of Ovasave® in Crohn's disease.

2008 Raising of €9.8 million in several tranches from past investors.

Launch of the Phase I/IIa clinical study of refractory Crohn's disease (CATS1) with Ovasave®.

2010 Positive preliminary results of the Phase I/IIa (CATS1) clinical study with Ovasave®.

Positive preclinical results for TX-RAD in inflammatory arthritis.

Fund raising of €3.5 million from existing financial investors.

2011 Authorization from the AFSSAPS to extend CATS1.

Presentation of positive CATS1 results at the European Gastroenterology Conference in Stockholm.

2012 Presentation of the positive CATS1 results at the 7th Congress of the European Crohn's and Colitis Organisation.

Fund raising of €12.4 million[1] in several tranches from past investors (such as Auriga Partners and Seventure) and an initial equity investment by Innobio.

2013 Obtaining of the pharmaceutical establishment status from the National Health Products Safety Agency (*Agence Nationale de la Sécurité du Médicament* – "ANSM") for the Besançon manufacturing site.

Signing of a partnership agreement with Ferring/Trizell regarding Ovasave®.

2014 Initial public offering on Euronext Paris for a gross amount of €17.7 million (including additional fund raising), and conversion of bonds for €3.5 million.

Obtaining of the Good Manufacturing Practice (GMP) compliance certificate from ANSM for the Besançon manufacturing site.

Obtaining of the Advance Therapy Medicinal Products (ATMP) classification from the European Medications Agency (EMA) and, then the orphan drug designation for Col-Treg in Europe.

Positive preclinical results with Col-Treg in autoimmune uveitis.

Launch of the Phase IIb (CATS29) study of refractory Crohn's disease (CATS-1) with Ovasave®.

2015 Besançon manufacturing site administrative close by ANSM and patient recruiting suspended for CATS29.

Capital increase by way of private placement of €7.9 million gross mostly from international and healthcare investors.

Review of the Company's production strategy: decision to permanently close the production site and to outsource all existing and future production activities to CMOs.

Obtaining Investigational New Drug (IND) and "fast track" designation for Ovasave® from the US Food and Drug Administration (FDA).

Obtaining of the orphan drug designation for Col-Treg in the United States.

Termination of the partnership agreement and waiver by Trizell of its option to obtain an exclusive worldwide license covering the developing, the manufacturing and the commercialization of Ovasave®.

2016 Launch of a new laboratory specializing in the development of manufacturing processes and technology transfers.

[1] This round of fund-raising included a capital increase for €6.5 million, the conversion of convertible bonds for €2.9 million and the exercise of Tranche 2 warrants for €3 million.

Singing of two licence agreements covering genetically modified Treg cells CAR-Treg (Yeda) and CD8+ Treg cells (INSERM Transfert) and their use for the treatment of autoimmune and inflammatory diseases.

Signing of several strategic collaboration agreements with academic institutions (OSR, LIED, UBC) dedicated to research and development of CAR-Tregs.

Effective implementation of financing through the issuance of bonds convertible into shares with warrants attached and drawing of two first tranches for € 5 million in nominal value, which may be increased to €7.5 million in the event of exercise of the attached warrants.

Revision of the development strategy: decision to suspend development of any ASTrIA product (Ag-Tregs) up to optimization of the manufacturing process and to focus research efforts on ENTrIA programs (CAR-Tregs)

2017 Capital increase by public offer through the issue of new shares with warrants attached with shareholder's preferential rights, for a gross amount of €11.1 million, which can be increased to €21.9 million in the event of exercise of the attached warrants.

5.2 Investments

Investments made in the last two financial years:

In thousand of euros	12/31/2016	12/31/2015
Intangible assets		
Acquisition	(7)	(5,902)
Sale	0	0
Change in intangible assets supplier account	39	3,905
Other eliminations of intangible items with no impact on cash and cash equivalents	(39)	(3)
Net cash from intangible assets	**(7)**	**(2,000)**
Property, plant and equipment		
Acquisition	(330)	(214)
Sale	97	23
Change in property, plant and equipment supplier account	(4)	(83)
Net cash from property, plant and equipment	**(236)**	**(274)**
Financial assets		
Acquisition	(225)	(3)
Sale	8	3
Net cash from financial assets	**(217)**	**(0)**
Net cash from investing activities	**(460)**	**(2,274)**

The financial year ended December 31, 2015 includes net cash flow from investment in intangible assets of €2 million, corresponding to the first payment made to Trizell on signing the agreement that terminated their collaboration, development, option and license agreement on December 2, 2015. Under this agreement the Company recovered all Trizell's rights over Ovasave® in return for paying amounts which could reach €15 million, €6 million of which is fixed and €9 million of which is conditional by the future revenues generated by Ovasave® (see section 22.2 of the *Document de Référence*).

For the financial year 2016 capital expenditures mainly concerned the purchase of laboratory equipment for the equipment of the new laboratories specialized in the development of manufacturing processes and technology transfer. In 2015, capital expenditures mainly concerned the purchase of laboratory equipment as part of the program to develop and industrialize the Ovasave® production process.

5.2.1 Main investments in progress

Since the start of the financial year 2017 the Company has acquired laboratory equipment for the improvement and automation of the the manufacturing process for the ASTrlA platform and for developing the manufacturing process for the ENTrIA platform.

5.2.2 Main future investments

The capital expenditures planned for 2017 and 2018 will mainly aim to supplement the laboratory equipment, with a view to improving and automating the manufacturing process for the ASTrlA platform and for developing the manufacturing process for the ENTrIA platform.

6. BUSINESS OVERVIEW

6.1 General presentation

6.1.1 Generalities

Cellular immunotherapy can be defined as a treatment based on immune cell administration to patients with the goal of stimulating their immune system to kill off cancer cells, or inhibiting their immune system as a way to suppress inflammation. These cellular immunotherapy treatments can be personalized by the use of patient's own cells, strengthening the treatment tolerability due to their autologous nature while targeting the patient's disease.

The development of cellular immunotherapy is identified today as a major breakthrough in medical research and personalized treatments. This innovative technological approach represents a real opportunity for patients in therapeutic failure who require novel treatments with an action that is more targeted.

The large majority of the cellular immunotherapy treatments under development are based on "effector" T cells, which stimulate the immune system to fight pathogens. These effector T cell-based immunotherapies are used to fight cancers or infectious diseases. In this booming sector, TxCell (the "Company") is positioned in a radically different way, developing immunotherapies based on "regulatory" T cells. TxCell believes that it is the only biotech company in the world that focuses exclusively on this type of approach.

The regulatory T lymphocytes, or regulatory T cells (Treg), play an important role in the immune system by suppressing undesired immune responses to environmental antigens that are normally tolerated (ingested, contact, inhaled, etc.) and several tissue-specific self-antigens. In this respect, Treg cells have the potential to treat autoimmune and chronic inflammatory diseases and to treat organ transplant reactions.

TxCell was founded in 2001 as a spin-off from the INSERM. Up until 2015, the Company's technology was based exclusively on the pioneering work of the founding scientist who in 1997 co-discovered the naturally antigen specific type 1 Tregs (Tr1)[2] (Ag-Tregs). The Company's developments on these naturally antigen specific Tregs have been consolidated onto the Company's historic technological platform, called ASTrIA for Antigen-Specific Tregs for Inflammation and Autoimmunity.

In 2011, TxCell obtained a first clinical validation with a drug-candidate from the ASTrIA platform, Ovasave®. The Company successfully completed a Phase I/IIa clinical trial in which Ovasave® was administered to patients with moderate to severe Crohn's disease and refractory to all available treatments. This study, known as CATS1 (Crohn's And Treg Cells Study, study 1), showed promising safety and efficacy results.

In 2015, the Company diversified its technological base by developing a new platform of second-generation regulatory T cells called ENTrIA, for Engineered Tregs for Inflammation and Autoimmunity. This platform is based on genetically modified Treg cells, in which the antigen specificity is introduced through genetic engineering to add a Chimeric Antigen Receptor (CAR). These modified Treg cells are called CAR-Tregs, similarly to CAR-T cells developed in oncology, which are not based on regulatory T cells but on effector T cells. In doing so, TxCell has also begun working with other Treg cell populations, including FoxP3+ Tregs and CD8+ Tregs.

In 2016, the Company decided to focus its research efforts on its ENTrIA platform. Indeed, the possibilities offered by genetic cell engineering suggest superior prospects in terms of product functionality, and hence of markets. Moreover, despite genetic manipulation, industrial aspects should be simplified at least on the Foxp3+ subpopulation due to (i) the existence of surface markers on the cells to avoid one of the most restrictive steps of Tr1 cell production and (ii) the existence of numerous cases of production of Foxp3+ Tregs by academic or industrial third parties. Finally, the ENTrIA

[2] Groux H, O'Garra A, Bigler M, Rouleau M, Antonenko S, de Vries JE, Roncarolo MG. A CD4+ T-cell subset inhibits antigen-specific T-cell responses and prevents colitis. Nature. 1997 Oct 16;389(6652):737-42.

platform is perceived by (pharma and biotechs) manufacturers and specialized investors met by the Company as a new generation technology in view of the possibilities now offered by genetic engineering.

To leverage this novel scientific momentum, the Company decided to associate itself with prestigious academic laboratories in order to develop its ENTrIA programs. These partnerships, five of which have already been signed in 2016, aim to provide the Company with intellectual property (agreement with the Weizmann Institute of Sciences, Israel), new product ideas (agreement with the University of British Columbia in Canada), rights and data on a new Treg populations (agreement with the University of Nantes and INSERM), expertise in the biology of Treg subtypes other than Tr1 (agreement with *Ospedale San Raffaele*, Italy) and even control over animal models and an understanding of the relevant clinical problems (agreement with the Lübeck Institute of Experimental Dermatology, Germany).

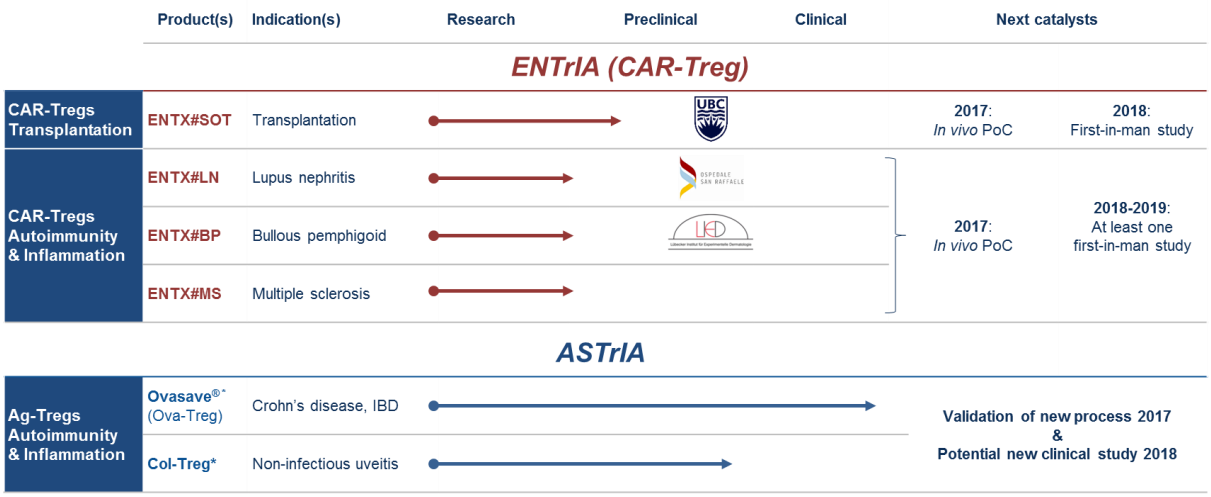
At the same time, in September 2016, the Company decided not to resume the clinical development of Ovasave®. Indeed, TxCell identified a significant improvement in the manufacturing process for the ASTrIA platform and decided to validate this improvement according to Good Manufacturing Practices (GMP) standards before resuming production, and thus using it in the clinical development of any ASTrIA platform-based product, including Ovasave®. A strategic review is planned by the end of 2017 to make a decision on the possible resumption of clinical development for ASTrIA. This decision will not only depend on demonstrating the viability of the new manufacturing process but also on the progress of the ENTrIA CAR-Treg programs.

The ASTrIA and ENTrIA platforms have the potential to produce an extensive portfolio of personalized cellular immunotherapy products based on different antigens. The Company can leverage these platforms to build up a sizable product pipeline for treating numerous chronic inflammatory and autoimmune diseases, as well as transplant rejection. The Company's strategy is to target diseases with high unmet medical needs and for which a therapeutic potential of regulatory T cells has been demonstrated. TxCell has set its sights on expanding these developments beyond its own walls by building strategic partnerships with bio-pharmaceutical groups.

Transplant rejection in organ transplants is now the most advanced indication among TxCell's CAR-Treg programs. For this program, TxCell relies on the very first preclinical proof of concept obtained with human CAR-Treg cells in a transplant model. This study was published in 2016 by TxCell's strategic academic partner, the University of British Columbia (UBC) in Canada[3]. TxCell also targets lupus nephritis, bullous pemphigoid and multiple sclerosis, either internally or with academic partners.

The following table provides an overview of the Company's drug-candidates:

Figure 1 : *Pipeline*



[3] MacDonald KG, Hoeppli RE, Huang Q, Gillies J, Luciani DS, Orban PC, Broady R, Levings MK. Alloantigen-specific regulatory T cells generated with a chimeric antigen receptor. J Clin Invest. 2016, 126(4):1413-1424.

* Development on hold pending (i) GMP validation of the improved manufacturing process; (ii) appropriate funding to finance the clinical development, and (iii) a strategic review.

There are encouraging signs for the technologies developed by TxCell, such as the clinical breakthroughs with CAR-T cells in hematology as well the significant investment inflows from the financial markets and industrial players to build up this sector. The Company expects that CAR-T stakeholders, investors and industrial players will embrace the use of regulatory T cells and CAR-Tregs in autoimmune and inflammatory diseases given the success of these approaches in cancer treatment. The total market could represent more than $100 billion per year with an annual growth of over 5% between 2016 and 2020[4].

TxCell aims to be the first company worldwide to start a clinical trial with a CAR-Treg, by end 2018. To achieve this, TxCell has set the following objectives for 2017:

- Generate new sets of preclinical proof-of-concept data in established and clinically relevant models, both for the CAR-Treg transplantation program and for the CAR-Treg autoimmunity programs (lupus nephritis, bullous pemphigoid and multiple sclerosis).
- Develop a manufacturing process for the ENTrIA CAR-Treg platform and start the transfer of this process to a CMO-type manufacturer (CMO: Contract Manufacturing Organization). As far as its first technology platform ASTrIA is concerned, TxCell plans to confirm the improvement of the development process identified in 2016 and take a decision as to the possible resumption of the clinical development of this platform.

Beyond these operational priorities mentioned above, all other programs and developments, are currently considered secondary priorities. Any meaningful investment in these programs will be subject to further *ad hoc* financing, and especially in the form of specific industry partnerships.

As announced in the February 2017 capital increase, the Company's current cash position will enable the Company to finance in 2017:

- The ENTrIA CAR-Treg research programs described in the pipeline;
- ASTrIA and ENTrIA manufacturing process development programs;
- Current and corporate expenses of the Company.

The proceeds from the exercise of all the warrants issued during the February 2017 capital increase, i.e. €10.8 million, would enable the Company to finance its activities until the IND approval to start a first-in-man study with a CAR-Treg (scheduled for the end of 2018), which would represent a major milestone for the Company.

The signing of a first "pharma" type strategic partnership in 2017 could allow the Company to finance its activities until a clinical proof-of-concept is acheived in 2020, without any new call on the market. In the absence of such a partnership, a new recourse to the market will take place as soon as the opportunity arises, and before mid-2018 to finance the first CAR-Treg clinical trial.

6.1.2 Products aimed at significant unmet medical needs

TxCell's first criteria in deciding to launch the development of a new drug-candidate is the existence of an unmet medical need. To date, the Company's development programs are targetting transplant rejection in the context of organ transplantation, lupus nephritis, bullous pemphigoid, multiple sclerosis, Crohn's disease and non-infectious uveitis.

Solid organ transplantation (SOT)

Solid organ transplantation involves moving an organ (graft) from one organism (donor) to another organism (recipient or host), replacing the organ that is damaged or missing in the recipient. More than

[4] Source: Company, based on the aggregation of market data of various addressable diseases.

30,000 organ transplants were carried out in the US in 2015[5] and more than 31,000 in Europe in 2013[6], with more than 160,000 patients on the waiting list[7]. Transplant rejection remains one of the major challenges in transplantation. In the case, for example, of kidney transplant, graft survival is only 50% at ten years[8]. In the case of lung transplant, the mortality rate remains high (40-55% at five years)[9].

In order to avoid such rejection, doctors aim for optimal donor-recipient compatibility and may use immunosuppressants. In 2014, the global market for immunosuppressants used for transplantation was estimated at $5.1 billion[10]. In the United States, an average of $10,000 to $14,000 per patient per year is required to cover the cost of oral immunosuppressants (and other prescription drugs) taken over the long term to maintain immune tolerance. This cost may even exceed $2,500 per month for some patients[11]. New strategies to induce or restore immune tolerance should be less toxic and more effective in the long term than conventional pharmacological approaches based on immunosuppression.

Lupus nephritis

Lupus nephritis is one of the most serious complications of lupus (also called systemic lupus erythematosus, SLE). Lupus is a chronic autoimmune disease involving many systems and organs in the body, including the joints, kidneys, central nervous system, heart and hematological system. The biological basis of lupus is a disorder in the immune system (defense system of the organism). This disorder leads to the production of auto-antibodies attacking normal organs and causing irreversible damage. We speak of lupus nephritis when systemic lupus causes inflammation in the kidney, especially due to the formation and deposit of immune complexes in the kidney. If this inflammation is not controlled, lupus nephritis can lead to renal insufficiency.

According to the Lupus Foundation of America, at least 5 million people worldwide suffer from lupus, with more than 16,000 new cases diagnosed each year in the United States. Most patients are women of reproductive age. It is estimated that up to 60% of patients with lupus will develop clinically significant forms of lupus nephritis at some point during their illness.

Bullous pemphigoid

Bullous pemphigoid is a rare and potentially fatal autoimmune disease of the skin that is characterized by large, fluid-filled blisterson the surface of the skin, also called bullaes. Bullous pemphigoid is caused by a disorder of the immune system which attacks a thin layer of tissue under the outer layer of the skin. The blisters usually develop on the abdomen, legs and arms and are accompanied by very strong itching. Sometimes, the internal mucous membranes of the mouth, nose or genitals may be affected.

Bullous pemphigoid mainly affects people over 60 years of age, with an estimated prevalence of 1/40,000. If left untreated, this pathology persists for years, alternating between periods of spontaneous remission and periods of relapse. The current management is based on the long-term use of corticosteroids such as prednisone. Bullous pemphigoid can be fatal, especially in the elderly who are already in poor health.

Multiple sclerosis

Multiple sclerosis is an inflammatory disease of the Central Nervous System (CNS). The target of the pathological process is myelin, a protective sheath that surrounds the nerve fibers (axons). Multiple sclerosis is an autoimmune disease as the individual's immune system becomes disrupted and treats the

---

[5] US Department of Health & Human Services. "More than 30,000 transplants performed annually for first time in United States" January 9, 2016.

[6] European Commission, Journalist workshop on organ donation and transplantation, November 26, 2014.

[7] UNOS, European Commission.

[8] Gondos A, Döhler B, Brenner H, Opelz G. Kidney graft survival in Europe and the United States: strikingly different long-term outcomes. Transplantation. 2013 Jan 27;95(2):267-74

[9] Hartert M, Senbaklavaci O, Gohrbandt B, Fischer BM, Buhl R, Vahl CF. Lung transplantation: a treatment option in end-stage lung disease. Dtsch Arztebl Int 2014; 111(7): 107–16.

[10] Organ Transplant Immunosuppressant Drugs Market, Transparency Market Research 2015

[11] James A, Mannon RB. The Cost of Transplant Immunosuppressant Therapy: Is This Sustainable? Curr. Transplant. Rep. 2015, 2(2):113-121.

myelin sheath as a foreign body. The inflammatory reaction will degrade the myelin sheath, which is called demyelination. The transmission of nerve impulses is then altered, which can show up as extremely variable symptoms: numbness of a limb, vision problems, sensations of electric shock in a limb or in the back, movement disorders, etc. At the same time, this demyelination will lead to neurodegeneration.

Most commonly, multiple sclerosis evolves with relapses, during which symptoms recur or new symptoms occur. After a few years, permanent sequelae can affect many functions (motion control, sensory perception, memory, speech etc.) and become very debilitating.

An estimated 2.3 million people are affected by multiple sclerosis worldwide, including 400,000 in Europe[12]. The disease generally manifests between the age of 25 and 35 years, and three out of four patients are women. To this day there is no curative treatment for this disease. Patient management is usually symptomatic and involves corticosteroids to reduce inflammation and decrease the intensity and duration of the symptoms.

Crohn's disease

Crohn's disease is a chronic disease, which is often characterized by chronic diarrhea, abdominal pain, anorexia, fever and musculoskeletal abnormalities. Patients frequently have flares with varying degree of remission. Crohn's disease is extremely debilitating and severely disables patients who are often in the prime of their lives. The disease significantly hinders these young people's social and professional lives.

Conventional therapies for Crohn's disease include amino salicylates, corticosteroids, thiopurines, methotrexate, anti–tumor necrosis factor agents, and anti-integrins[13]. Traditional step-up therapies have been, to a certain degree, replaced by potent top-down therapeutic approaches, in which patients are given aggressive therapy early in the disease course. In any circumstances the therapeutic objective is to induce and maintain remission of the disease by rendering the patient asymptomatic and improving quality of life.

However, a significant proportion of patients become intolerant or resistant to third-line biologics (anti-TNF or anti-integrin), and eventually develop refractory Crohn's not manageable by medication currently available on the market, therefore requiring a switch of biologics. Eventually, after two years, it is estimated that only one-third of treated patients remain responsive to ongoing, first line or subsequent, biologic treatment.

There are therefore still significant unmet medical needs for treating Crohn's disease. TxCell estimates that there are approximately 74,000 to 100,000 patients refractory to treatment in the eight major pharmaceutical markets (United States, Canada, United Kingdom, France, Germany, Spain, Italy and Japan) in 2016. TxCell considers that this number will probably not decrease even with the emergence of new products such as Vedolizumab (approved in Europe and the United States for treating Crohn's disease) or other integrin or chemokine inhibitors or cytokine inhibitors in addition to the ones already on the market. While these products may offer alternatives in the short term to the existing approved products, it is expected that the same number of patients as today will eventually become refractory. This is mostly due to the fact that the majority of treatments developed represent the same single target and systemic approach. They have the same mechanism of action of the already-available treatments.

Non Infectious Uveitis

Uveitis is classified as a rare disease and an orphan indication. It is one of the leading causes of blindness in the developed world. The disease affects about 35-50 out of 100,000 people[14]. Autoimmune uveitis (or non-infectious uveitis) refers to uveitis without an infectious cause and includes idiopathic uveitis.

To date, all approved treatments for non-infectious uveitis are based on steroid compounds. While steroid therapy normally provides fast initial relief of the symptoms of uveitis, the effect is limited and

[12] Multiple Sclerosis Research Foundation (arsep foundation).

[13] Burger D, Travis S. Conventional medical management of inflammatory bowel disease. 2011 Gastroenterology 2011;140:1827–1837.

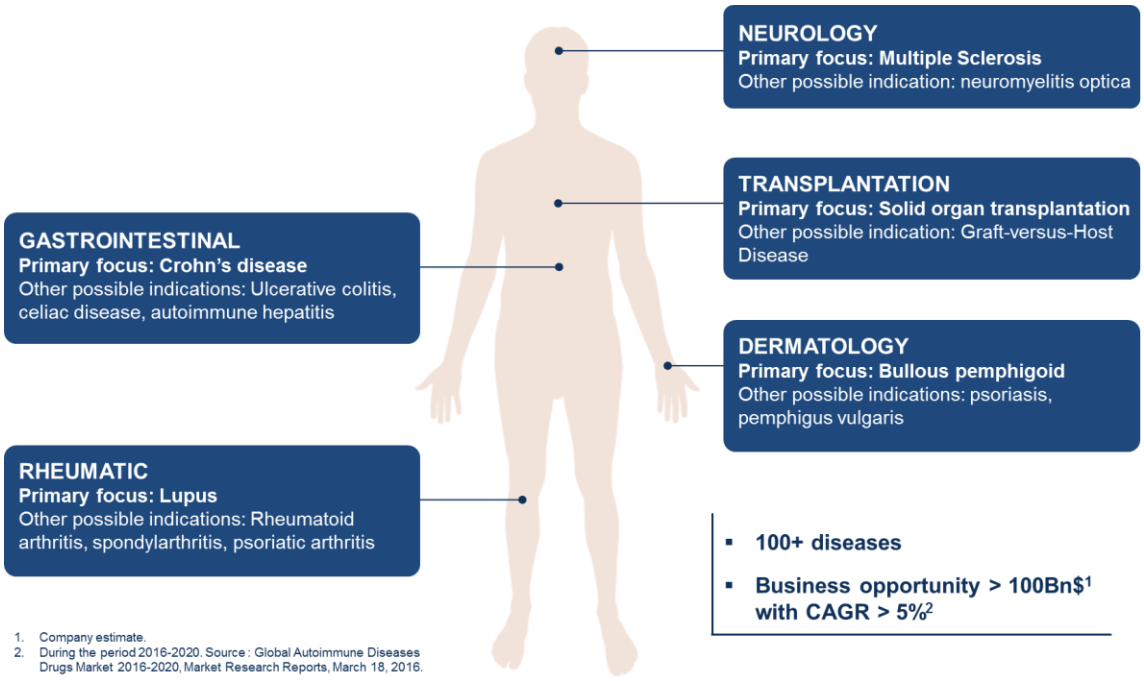
[14] January 21, 2013. EMA/COMP/450332/2012. Committee for Orphan Medicinal Products.

insufficient for the more severe cases. Moreover, this therapy is associated with significant local and systemic side effects. Autoimmune uveitis therefore has significant unmet medical needs.

6.1.3 A platform strategy

The Company is developing two complementary technological platforms: ENTrIA, composed of genetically engineered Treg cells, and ASTrIA, composed of non-modified, naturally antigen-specific Treg cells. These two platforms could target many autoimmune and inflammatory diseases. As shown in the figure below, the field of autoimmune and inflammatory diseases accounts for more than 100 diseases for a potentially addressable market of more than $100 billion per year[15]. For comparison, the oncology market represents approximately $100 billion[16]. These autoimmune and inflammatory diseases are found in various fields of medicine, such as Crohn's disease in gastroenterology and multiple sclerosis in neurology.

Figure 2 : *Significant market opportunities*



The Company has developed a pragmatic approach to select the most relevant pathologies to target from all these potentially addressable autoimmune and inflammatory diseases. This approach can be summarized in 3 main steps listed below and shown in the figure below:

1. *Existence of a medical need*

   The existence of an unmet medical need is paramount in the choice of a pathology to be targeted. The Company mainly targets the following medical needs:

   - widespread diseases with existing treatments, but with a subpopulation of refractory patients for whom none of the currently available treatments is satisfactory (e.g. Crohn's disease);
   - rare diseases (e.g. bullous pemphigoid);
   - diseases for which there is no truly innovative treatment in the market or under development (e.g. lupus nephritis).

2. *The scientific relevance of the use of Tregs in this pathology*

[15] Source: Company, based on the aggregation of market data of various addressable pathologies.

[16] Developments in Cancer Treatments, Market Dynamics, Patient Access and Value: Global Oncology Trend Report 2015. IMS Health 2015.

Once the existence of an unmet medical need has been established, it must be verified whether a Treg-based cell therapy makes sense in this pathology. This is particularly the case when the pathology has a strong inflammatory component or when the mechanism of action of regulatory T cells is particularly relevant given the etiology of the targeted disease.

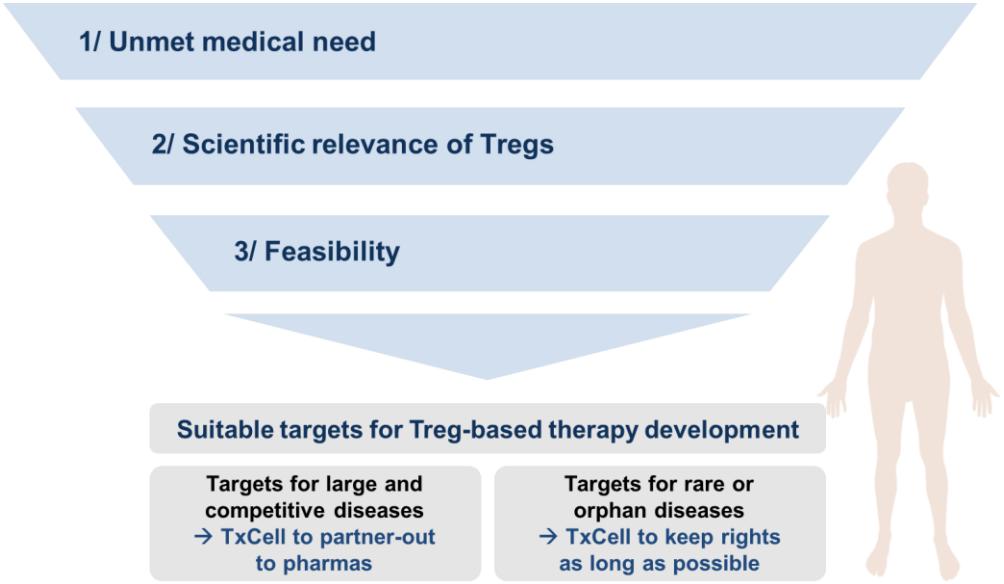
3. *Feasibility study*

   It is necessary to check the feasibility of a Treg-based cellular immunotherapy approach before any development. The main stages of this feasibility study are as follows:

   - identification of potential antigens to direct Treg specificity. The chosen antigen may be either local (located specifically in the inflamed tissue to be treated, but not necessarily linked to the pathology) or it may be specifically linked to the disease to be treated;
   - the existence of relevant preclinical models. It may be useful, for example, to collaborate with academic laboratories that have already set up specific preclinical models in order to benefit from their expertise and to save time;
   - verification of the freedom to operate.

Among the various targeted pathologies, the Company expects to retain the rights on products targeting rare and orphan diseases in order to continue developing them internally for as long as possible. On the other hand, for the most extensive or very competitive pathologies, such as multiple sclerosis, the Company wishes to establish partnerships with pharmaceutical or biotechnology companies.

Figure 3 : *A pragmatic strategy to target the most relevant pathologies*



6.1.4 TxCell's leading advantages

6.1.4.1 Intellectual property

Since its foundation, the Company has invested considerable financial and human resources in building its patent portfolio. It will forge ahead with these efforts to ensure that its technology is well protected and that barriers to any new entrants are very high. TxCell's intellectual property strategy rests on two pillars: on the one hand, protection of internal innovation through a dynamic patent policy and, on the other hand, careful global scrutiny of all work related to Tregs, in order to identify relevant licensing opportunities. Through this proactive strategy, the Company expects to maintain its competitive edge as a leading entry into therapeutic Tregs. The Company believes that its intellectual property portfolio is a major asset, inter alia to attract future industrial partners such as pharmaceutical or biotechnology companies.

As at the date of this *Document de Référence*, TxCell's patent portfolio consists of 13 families owned or co-owned by TxCell, with more than 200 patents granted. It also includes licensed (or optional) patent families from Yeda Research and Development Co. Ltd (Weizmann Institute of Science, Rehovot, Israel), *Ospedale San Raffaele* (OSR) Milan, and the Center for Research in Transplantation and Immunology (CRTI), Nantes.

Overall, TxCell's patents provide broad protection in the field of therapeutic Tregs. They cover different populations of Tregs (Tr1, FoxP3+ and CD8+), different production methods for non-modified and genetically modified Tregs, and a wide range of therapeutic applications in autoimmunity, inflammation and transplantation.

For the ENTrIA platform, TxCell signed an exclusive worldwide licensing agreement in June 2016 covering a broad range of "umbrella" patents, covering all genetically modified Tregs and their use for the treatment of autoimmune and inflammatory diseases. This patent comes from Professor Zelig Eshhar's laboratory in the Weizmann Institute of Science. Professor Eshhar was pioneer of the CAR approach. This patent has been issued in Europe and is subject to review in the United States.

In addition to this patent family protecting all of the CAR-Treg technology, the Company's strategy seeks to protect under patent families the various products generated on the ENTrIA platform ("product" patents) and certain stages of the manufacturing process ("process" patents). The Company has set its sights on building up its patent portfolio on this new platform to position itself as the leader in CAR-Treg technology.

The description of the Company's portfolio and its intellectual property strategy is presented in chapter 11 of the *Document de Référence*.

6.1.4.2 Industrial know-how

The Company has a rare expertise in the design and optimization of processes for manufacturing cellular therapies using regulatory T cells. In February 2016, TxCell opened a new laboratory specializing in the development of manufacturing processes and transfer of technology. The main objectives of this unit in terms of process development are as follows:

- Improve the production process for TxCell's first platform, ASTrIA:

  Less than nine months after the launch of its laboratory, TxCell identified a new isolation method for its non-modified Treg cells (ASTrIA). This new method is expected to reduce production costs and the overall production time of the products by approximately 50%, as well as reduced risks of non-compliance in future productions for clinical trials and potential commercial launch.

- Develop a new production process for its second platform, ENTrIA:

  The Company believes that it should be able to initiate the transfer of this process to an external CMO (Contract Manufacturing Organization) in 2017, and this with the view of being able to start an initial clinical trial with CAR-Treg in 2018.

6.1.4.3 The teams

In the second half of 2016, following the decision to focus on ENTrIA CAR-Treg platform, the Company adapted its operating structure to meet its new strategic priorities.

Executive committee

TxCell’s executive committee now consists of three members: Stéphane Boissel, Raphaël Flipo and François Meyer. Miguel Forte and Arnaud Foussat left the Company in November 2016 and March 2017, respectively.

Stéphane Boissel, Chief Executive Officer (CEO), has a proven track record in both investment banking and immunotherapy. He has steered several public offerings and private placements and negotiated many global strategic partnerships during his tenures at Transgene and Innate Pharma. Stéphane Boissel has been a driving force behind TxCell's strategic, technological and organizational shift since 2015.

Raphaël Flipo, Chief Financial Officer (CFO), has worked as a financial auditor for a global audit firm and subsequently as a finance manager for a Nasdaq-listed company. He has both legal and financial expertise.

François Meyer, PhD, Research Head and Chairman of the board of directors, brings 35 years of experience, notably as Research Director of Rhône-Poulenc Rorer and Aventis Pharma (Sanofi), with a particularly significant expertise in molecular biology and gene and cellular therapy.

Organization

As at the date of this *Document de Référence*, the Company employs 45 employees, including 37 in its Research Group. Overall, 74% of TxCell's employees hold Master's and higher degrees, covering all the sectors and skills necessary to give them the means to accomplish their mission.

The Company's research group now comprises three units: Cellular Engineering, Pharmacology and Industrial Process Development. The three units were strengthened and organized to achieve TxCell's objectives in the following areas:

- Cellular Engineering: This unit is in charge of designing and optimizing CAR-Treg cells from the ENTrIA platform. During the second half of 2016 and the first quarter of 2017, TxCell has significantly strengthened this unit through various recruitments abroad. Key skills have been acquired through these recruitments, particularly in the following sectors:
    - cellular biology;
    - design and optimization of each part of the chimeric receptors CAR, in particular the scFv part responsible for the recognition of the antigen;
    - engineering and optimization of vectors used for the transfer of genes encoding a CAR receptor in Treg cells; and
    - implementation of *ad hoc* analytical methods to characterize the CAR-Treg cells obtained.
- Pharmacology: This unit has been designed to focus on the biology of regulatory T cells (Tregs) and the mechanism of the action of cellular therapy products. It will also focus on all pharmacological aspects, from proof of concept in experimental models to preclinical regulatory records in order to initiate clinical studies.
- Industrial Process Development: this unit is now focused on two priorities: the finalization of the improved manufacturing process for the ASTrIA platform and the development of a new manufacturing process for the CAR-Treg ENTrIA platform to allow it to enter clinics for the first time in 2018.

Board of directors

Among these first level directors of the Company, are François Meyer, Chairman of the board of directors (a doctor in molecular biology with in-depth knowledge of the pharmaceutical industry, notably gene and cellular therapies), and two independent directors, namely David Horn Solomon (a doctor in medical sciences with extensive experience in listed biotech companies, healthcare investing and pharmacology research) or Marie-Yvonne Landel-Meunier (a French CPA specialized in setting up subsidiaries in the United States). These directors provide the management team with ongoing critical counsel in a number of domains such as development, finance and corporate governance.

The members of the Company's board of directors, their biographies and areas of expertise are set forth in chapter 14 of the *Document de Référence*.

Scientific Advisory Board

The Company has surrounded itself with leading scientific experts for the development of its portfolio with the creation of a new international Scientific Advisory Board (SAB). As of December 31, 2016, the SAB had four members: Professor Zelig Eshhar (Chairman) of the Weizmann Institute of Science, in Rehovot, Israel, and the scientific inventor of CAR-T cells; Professor Chiara Bonini of the *Ospedale San Raffaele*, in Milan, Italy, a pioneer in gene and cell therapy; Doctor Olivier Danos, Senior Vice President

of Cell and Gene Therapy in Biogen, a global expert recognized in the field of gene therapy applied to hematological and neurological diseases, and Doctor Bernard Malissen of the *Centre d'Immunologie de Marseille Luminy* in Marseille, France, a member of the French Académie des Sciences and an opinion leader in immunology.

This SAB will provide TxCell with global expertise to promote the Company's scientific research and the ASTrIA and ENTrIA platforms. The SAB's expertise in genetic engineering is also a major advantage in developing new genetically engineered products in cellular immunotherapy that are more efficient and better tolerated.

6.2 Cellular immunotherapy market

6.2.1 Immune system and immunotherapy

The immune system is composed of a variety of specialized cells. These cells recognize specific chemical structures called antigens. Foreign antigens trigger an immune response that typically results in resistance to disease-causing agents from the body. The immune system recognizes and generates a strong response to hundreds of thousands of different foreign antigens.

An immune response is triggered by a specialized class of immune system cells called antigen-presenting cells. Antigen-presenting cells take up antigen from their surroundings and process the antigen into fragments that are then displayed on the surface of the antigen-presenting cell. Once displayed, these antigens can be recognized by immune cells called lymphocytes. Among these lymphocytes, T lymphocytes ("T cells") are the main actors of this specific immune response (also called adaptive immune response). There are two main categories of T cells:

- Cytotoxic T lymphocytes (or effector T lymphocytes) combat the disease by directly killing antigen-bearing cells;
- Regulatory T lymphocytes regulate the immune system and inhibit unwanted inflammatory responses.

Another category of lymphocytes, B lymphocytes ("B cells"), produce specific antibodies when activated. Each antibody binds to and attacks one particular type of antigen expressed on a cell.

Immunotherapy is intended to stimulate and enhance the body's natural mechanism. Many of the first-generation products were based on interleukins, cytokines, chemokines, etc., but an emerging, more sophisticated class is primarily based on cells such as T lymphocytes, macrophages, dendritic cells, and Natural Killer) (NK) cells. This is called cellular immunotherapy. Some cellular immunotherapy products are autologous, some are allogeneic, and some are both. Some products are not genetically modified, some are genetically modified.

More generally, immunotherapeutic approaches to treat disease can be separated into two broad classes based on their mechanism of action:

- *Passive immunotherapy.* Passive immunotherapies do not rely on or actively stimulate the body's immune system to initiate the attack on the disease. Instead, the attack is made by the therapy which is manufactured *ex vivo*, or outside of the body. These therapies are not considered to be personalized and consist mainly of monoclonal antibodies directed at a single disease-specific enzyme or protein on the surface of targeted cells. The goal of these passive immunotherapies is to prevent targeted cells from dividing or to cause their death.
- *Active immunotherapy.* Active immunotherapies, on the other hand, are designed to trigger or stimulate the body's own immune system to fight the disease. Active immunotherapies combine classical approaches of T cell stimulation with an antigen and cellular immunotherapies. Active immunotherapy is a more specific approach to immunotherapy than passive immunotherapy because active immunotherapies contain a particular antigen or set of antigens that are designed to activate the patient's own immune system to seek out and kill cells that carry the same antigen. Active immunotherapies have no direct therapeutic action, but rather rely on the patient's immune system to recognize and kill the intended target. Most active immunotherapies utilize off-the-shelf antigens, also referred to as defined antigens, rather than antigens that are patient specific, and are frequently

paired with adjuvants, which are agents that non-specifically activate the cells of the immune system to enhance tumor-specific immune responses.

Recent years have seen the long held promise of immunotherapy turned into reality. A number of products now on the market or in late development have shown excellent results, notably in oncology but also in other areas. The first wave of products consists of antibodies directed at key checkpoints in the cellular immune system or at specific antigens expressed on certain types of tumors to have the body's own immune system recognize and attack the tumors. These include anti-CTLA-4 and anti-PD-1 specific monoclonal antibodies and breast cancer specific antigen vaccines.

Cell-based immunotherapies have also shown great promise. Provenge® from Dendreon, consisting of a dendritic T cell vaccine prepared from the patient's own cells, was the first cellular immunotherapy to be approved by the US FDA in 2010 for the treatment of refractory prostate cancer and more recently, in 2013, by the European Medicines Agency (EMA). The Swiss-based Novartis group and the US-based Kite Pharma Inc. (Kite) recently published highly-promising findings on responses to treatment using T lymphocytes expressing chimeric antigen receptors (CAR-T) in patients with acute lymphocytic leukemia (ALL) for Novartis or an aggressive form of lymphoma (NHL) for Kite. In both cases, it involved patients who had no second-line treatment alternative or a very short life expectancy when they first received this new treatment. Introducing a CAR receptor by genetically modifying the patient's own T cells implies that these cells can recognize a tumor antigen expressed in the lymphomas and leukemia.

First marketing approval for such cellular immunotherapy products are expected to be granted in the United States in 2017 (Kite's KTE-C19 and Novartis' CTL019). These new products could be a major paradigm shift in how certain hematological tumors are treated. Furthermore, the last few years has seen an increasing number of partnerships in cell therapy including major pharmaceuticals companies (such as Novartis, Pfizer and Merck) and top biotech companies (such as Celgene).

6.2.2 Regenerative medicine[17]

Regenerative medicine encompasses a range of therapeutic technologies and approaches designed to improve, repair, replace or regenerate organs and tissues, thereby targeting the cause of a disease. Regenerative medicine combines different categories:

- **Cell therapy:** Therapy based on living cells which allow:
  - replacing damaged or diseased cells and/or tissues;
  - stimulating an endogenous response to promote healing from the body itself (such as an immune response or regeneration of diseased tissue); or
  - delivering genetic or molecular therapies to predefined targets.
- **Gene therapy:** therapy to treat defective or mutated genes by inserting properly functioning genes into a patient's cells to correct or improve the regulation of the defective gene. Most gene therapies target cancer. However, gene therapies are also developed for the treatment of certain monogenic diseases such as cystic fibrosis, hemophilia, muscular dystrophy, thalassemia and sickle cell anemia. In addition, there will be an important effort to develop gene therapies to induce cellular and tissue regeneration in certain cardiovascular, neurological and ocular diseases.
- **Tissue engineering:** Tissue engineering encompasses synthetic material, biomaterial and scaffolds type supports that are implanted in the body for reconstruction purposes, such as joint replacements, bone repair, artificial ligaments and tendons, dental implants, heart valves and wound healing. These artificial tissues work together with native cells to promote reconstruction and healing.
- **Biological products and small molecules:** it involves the use of known chemicals and cellular components to induce cell regeneration.
- **Stem cells used for the discovery of new drugs:** stem cells and/or living tissues are used increasingly to create *in vitro* models for studying the mechanism of a disease in humans and the

[17] Alliance for Regenerative Medicine (ARM), website: alliancerm.org (consulted on March 27, 2017)

effects of different drugs on cells and tissues such as human heart cells, liver and brain. These models are constructed primarily using pluripotent stem cells and enable quicker and safer drug development.

- **Biobanks:** Cell and tissue banks organize the collection, storage and distribution of biological materials used in regenerative medicine, including adipose tissue, cord blood, musculoskeletal tissues and other biological samples.

6.2.3 A growing number of regenerative medicine products on the market

The first products of regenerative medicine came on the market in early 2000, including Apligraf, a living cell-based skin substitute (fibroblasts and keranocytes) approved in the United States as early as 2000 for the treatment of diabetic foot ulcers. Since then, there have been more than 40 products marketed on regulated markets, mostly tissue engineering products[18].

The year 2016 was particularly marked by the marketing authorization in Europe of Strimvelis for the treatment of SCID-ADA, one of the forms of the so-called "bubble baby" disease. Strimvelis consists of genetically engineered autologous CD34+ cells. This product was developed by Italian researchers at the *Ospedale San Raffaele* in Milan and marketed by GSK. It is the first gene therapy product approved in Europe and the first example of successful development of a gene or cell therapy licensed by a major pharmaceutical company to an academic laboratory.

The number of regenerative medicine products available on the market will continue to grow. The Alliance for Regenerative Medicine (ARM) counts 804 clinical trials in this sector worldwide, including 45% in oncology and 11% in the cardiovascular field. Of these 804 clinical trials, 425 involve gene therapies or cell therapies based on genetically engineered cells (including 31 in Phase III), and 533 involve cell therapy products (including 43 in Phase III). It should be noted that ARM counts cellular immunotherapy products both in the category of gene therapies or cell therapies based on genetically engineered cells and in the category of cell therapies, which explains why the sum of the two categories is higher than the total number of clinical trials in the more general sector of regenerative medicine[19].

6.2.4 Cell therapy

Cell therapy products vary with respect to characteristics such as formulation (including combination with a scaffold or other non-cellular component), the genetic relationship of the injected cells to the patient (autologous, allogeneic, xenogeneic), and the cell source.

In general, cell therapy products are classified into two categories: products derived from stem cells or from mature, functionally differentiated cells.

- *Products derived from stem cells*. Tissue sources of stem cells include:
    - adult tissue (e.g. hematopoietic, neural, mesenchymal, cardiac, adipose, cutaneous stem cells);
    - perinatal tissue (e.g. placental, umbilical cord blood);
    - fetal tissue (e.g. amniotic fluid, neural);
    - embryonic tissue.

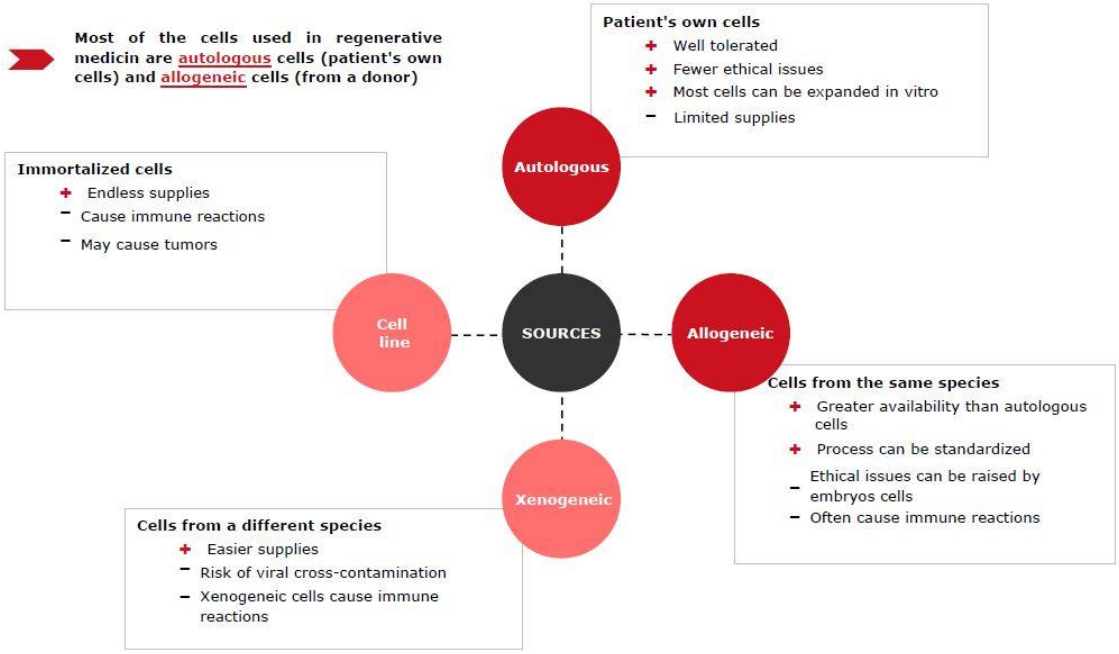
  Stem cell-derived products are characterized by a variable capacity for self-renewing replication through cycles of cell division and the capacity for differentiation into a variety of cell types with specialized properties/functions. Such differentiation and replication are primarily controlled by the physiologic milieu of the host in which the cells reside following *in vivo* administration.
- *Products derived from mature cells.* Functionally differentiated tissue-derived cell therapy products may be obtained from adult human donors (autologous or allogeneic) or from animal sources

[18] ARM Annual Report 2012-2013.

[19] ARM Annual Report 2016.

(xenogeneic) as shown on the next chart. Source cells can include chondrocytes, pancreatic islet cells, hepatocytes, neuronal cells, and various immune cells. Cell therapy products derived from functionally mature tissues typically do not possess the property of self-renewing proliferation and the capacity to differentiate into multiple cell types; however, they may retain some cellular characteristics of their tissue of origin. Additionally, their characteristics may change after *in vivo* administration, based on specific extracellular cues.

Figure 4 : *Different sources of cells for cellular therapy*[20]



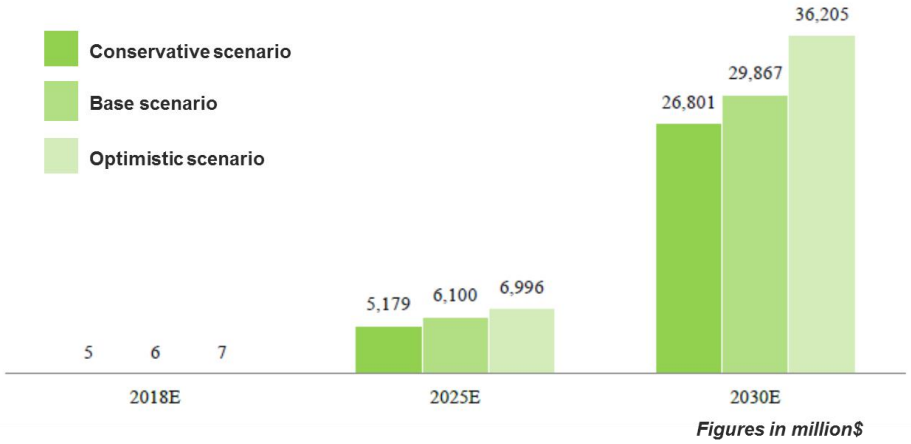
6.2.5 Strong growth on the global T-cell based cell therapy market

Within cell therapy, the segment of T cell-based immunotherapy is one of the most active, and this in large part due to the buzz surrounding the CAR-T cells developed in oncology. It was the academic laboratories that were the driving force in this area, until the pharmaceutical companies began to take an interest in it and entered it through collaborative and licensing agreements.

Roots Analysis estimates that the global market for T-cell-based cell therapies will reach $6.1 billion by 2025 and $30 billion by 2030. Of the $30 billion in 2030, almost half ($14.6 billion) would relate to the CAR-Ts.

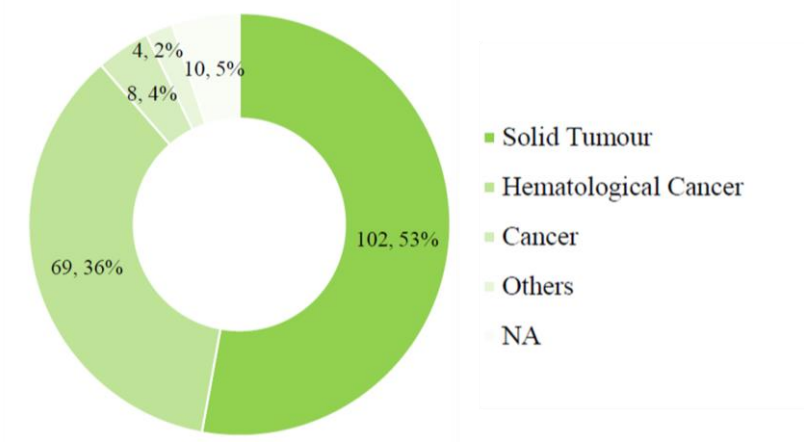
[20] Cell Therapy Study, Bionest Partners/LEEM, February 2010.

Figure 5 : *Strong growth on the global T-cell based cell therapy market*[21]



The majority of T cell-based immunotherapies are now being developed in the field of oncology, as shown in the following figure. TxCell offers a radically different positioning by targeting auto-immune and inflammatory diseases as well as transplant rejections.

Figure 6 : *T-cell-based immunotherapy - Distribution of therapeutic targets*[22]



6.2.6 The increasing strategic interest of the bio-pharmaceutical industry

The pharmaceutical industry, which was not really involved in cell therapy a few years ago, is becoming increasingly interested in this sector. Some have invested in cell therapy by creating their own individual departments (e.g. Pfizer), whereas others have invested in biotech companies or research centers (e.g. GSK, Roche, AstraZeneca, Johnson & Johnson).

Provenge®'s success in the final clinical stages and its approval have triggered a significant resurgence in the field of immunotherapy and bolstered support for both cell-based therapies and autologous cell therapies in particular. Prominent pharmaceutical companies became even more enthusiastic about cell immunotherapy when in 2011 Novartis and the University of Pennsylvania obtained outstanding initial clinical data for the treatment of acute lymphocytic leukemia (ALL) with a CAR-T. Amgen, Pfizer and GSK have gained a foothold in the cell immunotherapy sector by signing R&D contracts with biotech companies or universities working on cancer treatments based on genetically-modified T lymphocytes.

Genzyme, a member of the Sanofi Group, has been active on this market as it has been selling cell therapy products (Epicel and Carticel) for more than ten years. It has also invested in a wide range of biotech companies. Celgene, another leading biotech company, also ventured into cell therapy ten years

[21] T-Cell Immunotherapy Market 2015-2030, Roots Analysis 2015.

[22] T-Cell Immunotherapy Market 2015-2030, Roots Analysis 2015.

ago and has considerably built up its influence in this sector through strategic agreements with BlueBird Bio, Inc. (BlueBird) and Juno signed in 2013 and 2015, respectively. The agreement with Juno in 2015 is particularly meaningful as it provides insight into the sector's new growth trajectory: Celgene paid Juno $1 billion to secure a ten-year R&D collaboration with this biotech startup, founded as recently as 2013. This collaboration will initially focus on CAR-T cells in the treatment of cancer and autoimmune diseases.

Figure 7 : *A sample of recently-signed partnerships in cell therapy*

Date	Seller		Buyer		Object
Mar-17	US	Editas	IR	Allergan	Option to license up to five candidates in the field of ophthalmology
Dec-16	DE	Evotec	US	Celgene	Research and development collaboration with exclusive license option
Dec-16	US	Selecta	US	Spark Therapeutics	Exclusive worldwide license on SVP™ platform and exclusive options on up to four other targets
Sept-16	DE	Medigene	US	BlueBird Bio	R&D agreement with exclusive worldwide license
Aug-16	US	Adicet	US	Regeneron	Research collaboration with option of license, potential co-development and co-commercialization
July-16	BE	TiGenix	JP	Takeda	License outside the United Stated on Cx601. Future stake.
Apr-16	US	Intellia	US	Regeneron	Research and selection of candidates (maximum five). Future stake.
Feb-16	US	Precision Biosciences	US	Baxalta (Shire)	Co-development option for up to six targets based on Precision's technology
Feb-16	UK	Adaptimmune Ltd	UK	GlaxoSmithKline Plc	Expansion of the 2014 agreement
Nov-15	FR	Servier	US	Pfizer	US License on UCART19
Nov-15	FR	Cellectis	US	Servier	Early opt-in on UCART19
June-15	US	Juno Therapeutics Inc	US	Celgene Corp	Collaboration for the development and commercialization for up to three targets of Juno
June-15	US	Kite Pharma Inc	US	Bluebird Bio Inc	Co-development collaboration on TCR programs in oncology directed against HPV
Mar-15	US	Intrexon	DE	Merck kGaA	Licensing of Intrexon's "Sleeping Beauty" technology for the development of up to two targets in oncology
Jan-15	US	Kite Pharma Inc	US	Amgen	Research collaboration with targets and technology share
Nov-14	US	Transposagen Biopharmaceuticals	US	Janssen Biotech Inc	Collaboration for allogeneic CAR-T targets based on Transposagen's technology
June-14	UK	Adaptimmune Ltd	UK	GlaxoSmithKline Plc	Exclusive license agreement on TCR programs in oncology
June-14	FR	Cellectis SA	US	Pfizer Inc	Collaboration for up to 15 allogeneic CAR-T targets
Feb-14	FR	Cellectis SA	FR	Servier	Collaboration for up to six allogeneic CAR-T targets, including UCART19

6.2.7 TxCell: a radically different positioning

Unlike effector T lymphocytes, the discovery that various sub-populations of regulatory T lymphocytes play a key role in preventing autoimmunity (when the body turns against itself) and maintaining immune tolerance is relatively recent. In the 1990s, first Shimon Sakaguchi[23] followed by Hervé Groux[24] respectively identified and characterized the FoxP3+ Tregs and Type 1 Tregs. This Treg subpopulation displays anti-inflammatory properties upon *in-vivo* administration in animal models of chronic colitis.

[23] Takahashi T, Kuniyasu Y, Toda M, Sakaguchi N, Itoh M, Iwata M, Shimizu J, Sakaguchi S. Immunologic self-tolerance maintained by CD25+CD4+ naturally anergic and suppressive T cells: induction of autoimmune disease by breaking their anergic/suppressive state. Int Immunol. 1998 Dec;10(12):1969-80.

[24] Groux H, O'Garra A, Bigler M, Rouleau M, Antonenko S, de Vries JE, Roncarolo MG. A CD4+T-cell subset inhibits antigen-specific T-cell responses and prevents colitis. Nature. 1997 Oct 16;389(6652):737-42.

This therapeutic efficacy was the basis to develop cell therapy products based on the anti-inflammatory activity of this new Treg cell subpopulation. Over the past two decades, advances have been made in describing these cell types, their differences, their physiologic roles, but most of all in grasping their therapeutic potential, especially in numerous profiles of autoimmune and chronic inflammatory diseases in animals.

Other subtypes of Tregs have been described and used for therapeutic purposes. In the early 2000s, early-stage clinical trials were conducted with FoxP3+ Tregs primarily in the prevention of Graft-Versus-Host Disease (GVHD) in stem cell transplants in leukemia patients[25]. A few Phase I/II clinical trials were also conducted with FoxP3+ Tregs in type 1 diabetes[26]. These clinical trials validated not only the feasibility of the FoxP3+ Treg-based therapeutic approach, but also confirmed the appropriate tolerance profile of these cell therapy products after administering them in patients. Other early-stage clinical trials (Phase I-IIb) are ongoing such as on organ transplants using FoxP3+ Treg[27] cell products called polyclonal (non-specific to a given antigen). These clinical trials have been conducted for the most part by the academic world (hospitals or universities).

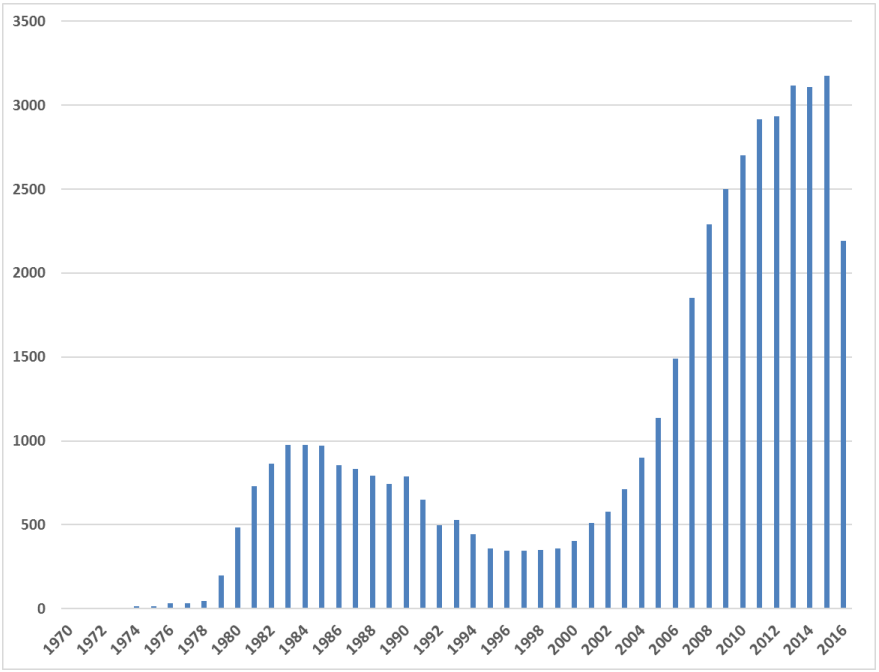
The growing interest in Treg cells is illustrated by the graph below depicting the number of publications on Tregs since 1970. In addition, at the beginning of 2017, Delinia was bought by the biotech company Celgene for $775 million. This is the first acquisition of a Tregs player by a large pharma/biotech company. Delinia does not develop cellular immunotherapy products but small molecules that will activate Tregs *in vivo*, an approach that the Company considers complementary to that developed by TxCell. Its products are in the preclinical development stage. TxCell believes that this acquisition confirms the enthusiasm of pharmaceutical or biotechnology companies for Tregs-related therapies, even at an early stage of development.

[25] Brunstein CG, Miller JS, Cao Q, McKenna DH, Hippen KL, Curtsinger J, Defor T, Levine BL, June CH, Rubinstein P, McGlave PB, Blazar BR, Wagner JE. Infusion of *ex vivo* expanded T regulatory cells in adults transplanted with umbilical cord blood: safety profile and detection kinetics. Blood. 2011 Jan 20; 117(3): 1061–1070.

[26] A Phase I Safety Trial of CD4+CD127lo/-CD25+ Polyclonal Treg Adoptive Immunotherapy for the Treatment of Type 1 Diabetes: T1DM Immunotherapy Using CD4+CD127lo/-CD25+ Polyclonal Tregs (Treg). NCT01210664.

[27] Trzonkowski P, Bacchetta R, Battaglia M, Berglund D, Bohnenkamp HR, ten Brinke A, Bushell A, Cools N, Geissler EK, Gregori S, Marieke van Ham S, Hilkens C, Hutchinson JA, Lombardi G, Madrigal JA, Marek-Trzonkowska N, Martinez-Caceres EM, Roncarolo MG, Sanchez-Ramon S, Saudemont A, Sawitzki B19 Hurdles in therapy with regulatory T cells. Sci Transl Med. 2015 Sep 9;7(304):304ps18.

Figure 8 : *Publications on Treg cells*[28]



To date, TxCell is the only industrial player who has led clinical trials on Type 1 Tregs. The Company also believes that it is the only player that develops only Tregs-based cellular products. Moreover, contrary to the previous and ongoing polyclonal approaches with Tregs, TxCell develops only Tregs directed specifically to recognize a given antigen, a more targeted approach to the treated pathologies. The Company's autologous antigen-specific products reflect a unique approach in immunotherapy for treating autoimmune and inflammatory diseases as well as transplant rejections.

6.3 TxCell cellular immunotherapy technology platforms

6.3.1 Scientific foundations

6.3.1.1 General information on regulatory T cells (Tregs)

Regulatory T cells (Tregs) are naturally occurring circulating lymphocytes. They can modulate immune responses and inhibit inflammatory processes *in vivo*. The natural role of Treg cells is to maintain homeostasis of the immune system, preventing unwanted immune activation to self-antigens (autoimmunity) or to antigens that are normally tolerated (food antigens, inhaled antigens, contact antigens and bacterial flora antigens). A strong relationship exists between alteration of the Treg compartment and the development of uncontrolled inflammation. Such alterations of their function or in their numbers have been widely associated with the development of autoimmune diseases and chronic inflammation. Individuals lacking Tregs or molecules implicated in Treg functions suffer from major inflammatory diseases[29].

TxCell's core expertise is developing cellular immunotherapy products based on the anti-inflammatory properties of regulatory T lymphocytes, first with regulatory Type 1 Treg cells and more recently with FoxP3+ Tregs CD8+. TxCell has the first-mover advantage in this field and has gained a competitive advantage by leveraging its expertise and robust intellectual property portfolio.

[28] "Treg cell" research on PubMed, Medline extraction.

[29] Torgerson TR, Ochs HD. Immune dysregulation, polyendocrinopathy, enteropathy, X-linked: forkhead box protein 3 mutations and lack of regulatory T cells. J Allergy Clin Immunol. 2007 Oct;120(4):744-50; 751-2.

6.3.1.2 Type 1 Tregs

Type 1 regulatory T cells were first described in 1997 by one of TxCell's founders. In this first report, murine Type 1 Treg cells were educated *in vitro* to recognize a food antigen, ovalbumin, giving rise to an ovalbumin-specific Treg (Ova-Treg) cell population, displaying the capacity to secrete high amounts of the anti-inflammatory cytokine IL-10, and low amounts of pro-inflammatory cytokines. *In vivo* transfer of murine Ova-Treg inhibited the development of chronic inflammatory colitis in mice. In this first report, authors also described the potential to generate cells with Type 1 Treg cell properties from human peripheral blood lymphocytes. Between 2000 and 2003, several publications described the potential of antigen-specific Type 1 Treg lymphocytes in inhibiting the development of allergies[30], vascular inflammation[31] and skin inflammation[32].

The first preclinical proof-of-concept of the therapeutic efficacy of Type 1 Treg was obtained in 2003[33] using murine Ova-Treg cells in animal models of inflammatory colitis. Instead of injecting Ova-Treg cells at the start of the inflammatory process to inhibit disease evolution, the cell administration was performed at a time when mice already developed inflammation of the colon. Ova-Treg therapeutic administration was shown to be effective and allowed inhibition of gut tissue inflammation, local infiltration of proinflammatory cells and restoration of tissue integrity only three weeks after the treatment. Ova-Treg cells were efficient only when mice were given ovalbumin in their drinking water, confirming that both the cellular administration of Ag-Treg cells and the presence of the specific antigen in the inflamed tissue are required for Ova-Treg therapeutic efficacy.

Type 1 Treg cells are recognized as a key regulatory population for the control of chronic inflammation. Dysfunction of Type 1 Treg cells has been implicated in human inflammatory diseases such as multiple sclerosis, pemphigus vulgaris and allergies in general. Preclinical proof of efficacy of Type 1 Treg administration has been obtained in a large panel of chronic inflammatory diseases in animal models (please see above). The therapeutic potential of Type 1 Treg cells is widely recognized for the treatment of human inflammatory conditions related to autoimmunity and transplantation (notably for the prevention of Graft-Versus-Host Disease in patients who have received a bone marrow transplant). Results obtained by TxCell and others have elucidated certain important anti-inflammatory mechanisms of action that add to IL-10 secretion, further increasing the therapeutic potential of Type 1 Tregs.

6.3.1.3 FoxP3+ Tregs

FoxP3+ Treg cells constitutively express several surface markers (CD25, CD62L, CTLA-4), as well as the FoxP3 transcription factor. This intercellular factor is absolutely necessary for the differentiation and function of this cell type and therefore for its role in the body. A mutation of FoxP3 in humans actually leads to a fatal autoimmune disorder known as IPEX (Immune dysregulation, Polyendocrinopathy, and Enteropathy, X-linked). This clinical observation has demonstrated the key role of FoxP3+ Tregs in the maintenance of the immune system's homeostasis and in the induction of immune tolerance[34].

---

[30] Cottrez F, Hurst SD, Coffman RL, Groux H. T regulatory cells 1 inhibit a Th2-specific response in vivo. J Immunol. 2000 Nov 1;165(9):4848-53.

[31] Mallat Z, Gojova A, Brun V, Esposito B, Fournier N, Cottrez F, Tedgui A, Groux H. Induction of a regulatory T cell type 1 response reduces the development of atherosclerosis in apolipoprotein E-knockout mice. Circulation. 2003 Sep 9;108(10):1232-7.

[32] Foussat A, Cottrez F, Brun V, Fournier N, Breittmayer JP, Groux H. A comparative study between T regulatory type 1 and CD4+CD25+ T cells in the control of inflammation. J Immunol. 2003 Nov 15;171(10):5018-26.

[33] Foussat A, Cottrez F, Brun V, Fournier N, Breittmayer JP, Groux H. A comparative study between T regulatory type 1 and CD4+CD25+ T cells in the control of inflammation. J Immunol. 2003 Nov 15;171(10):5018-26.

[34] Piccirillo CA, d'Hennezel E, Sgouroudis E, Yurchenko E. CD4+Foxp3+ regulatory T cells in the control of autoimmunity: in vivo veritas. Curr Opin Immunol. 2008 Dec;20(6):655-62.

Since FoxP3+ Tregs were discovered in the 1990s[35], numerous studies have indicated that mutations in this cell population, either in number, antigenic specificity or immunomodulatory function, are present in the majority of autoimmune and chronic inflammatory diseases. A corollary to these observations is that FoxP3+ Tregs demonstrate therapeutic activity in numerous animal models for chronic inflammation. The published data clearly shows that this population is at the core of the pathophysiology of many chronic inflammatory diseases. It also demonstrates that a therapeutic approach to restore an effective FoxP3+ Tregs population in patients is justifiable from both a scientific and clinical standpoint[36].

The first clinical tests on the therapeutic activity of FoxP3+ Tregs were performed within the context of preventing Graft-Versus-Host Disease (GvHD) in stem cell transplants in leukemia patients. A few Phase I/II clinical trials were also conducted with FoxP3+ Tregs in Type 1 diabetes[37]. These clinical trials validated not only the feasibility of the FoxP3+ Treg-based therapeutic approach, but also confirmed the excellent tolerance profile of these cell therapy products after administering them in patients. Other early-stage clinical trials (Phase I-IIb) are ongoing such as on organ transplants but still using FoxP3+ Tregs cell products called polyclonal (non-specific to a given antigen). These clinical trials have always been conducted for the most part by academic hospitals and universities.

The mode of action of the FoxP3+ Treg cells is extensively documented in scientific studies. Similar to Type 1 Tregs, this mode of action breaks down into several immune-regulatory activities.

The ability of FoxP3+ Tregs in inhibiting pro-inflammatory processes is based on several mechanisms working together on cell and molecule targets. Certain mechanisms of action also express CTLA-4 and membrane-bound TGFbeta and are not found in Type 1 Tregs. Other mechanisms of action on top of the FoxP3+ Tregs extensive immune-regulatory range have also been documented. This makes them a forerunner therapeutic approach in treating chronic inflammatory diseases.

6.3.1.4 CD8+ Tregs

In December 2016, TxCell obtained an exclusive worldwide license for two families of patents filed by the transplantation and immunology research center (CRTI)[38], a center of excellence in the field of transplantation and immunology. The CRTI is a research unit (UMR 1064) affiliated to the National Institute of Health and Medical Research (*Institut National de la Santé et de la Recherche Médicale* - INSERM) and the University of Nantes. These patents cover a new type of regulatory T cells (Tregs) that express the CD8 marker. This is opposed to traditionally known Tregs that express CD4 such as the Type 1 Tregs and FoxP3+ Tregs. In particular, these CD8+ Tregs are non-cytotoxic and have a unique and highly immunosuppressive action mechanism. This mechanism is mediated by the release of anti-

[35] Sakaguchi S1, Sakaguchi N, Asano M, Itoh M, Toda M. Immunologic self-tolerance maintained by activated T cells expressing IL-2 receptor alpha-chains (CD25). Breakdown of a single mechanism of self-tolerance causes various autoimmune diseases. J Immunol. 1995 Aug 1;155(3):1151-64.

[36] Spence A, Klementowicz JE, Bluestone JA, Tang Q. Targeting Treg signaling for the treatment of autoimmune diseases. Curr Opin Immunol. 2015 Dec;37:11-20.

[37] Trzonkowski P, Bacchetta R, Battaglia M, Berglund D, Bohnenkamp HR, ten Brinke A, Bushell A, Cools N, Geissler EK, Gregori S, Marieke van Ham S, Hilkens C, Hutchinson JA, Lombardi G, Madrigal JA, Marek-Trzonkowska N, Martinez-Caceres EM, Roncarolo MG, Sanchez-Ramon S, Saudemont A, Sawitzki B19 Hurdles in therapy with regulatory T cells. Sci Transl Med. 2015 Sep 9;7(304):304ps18.

[38] CRTI is a center of excellence in the field of transplantation and immunology. It is a research unit (UMR 1064) affiliated to the National Institute of Health and Medical Research (*Institut National de la Santé et de la Recherche Médicale* - INSERM) and the University of Nantes.

inflammatory and tolerogenic cytokines (inducing immune tolerance)[39,40,41,42]. These CD8+ Tregs could therefore offer a different and complementary approach to treating inflammatory disorders, including autoimmunity and transplant rejection. In addition, these patents also cover CAR Treg cells made from these CD8+ Tregs.

As per the terms of the agreement signed in December 2016, TxCell has exclusive worldwide rights to both these patent families for all autoimmune diseases and transplantation-related disorders.

The CRTI team, which is led by Ignacio Anegon and Carole Guillonneau, has already demonstrated the efficacy of these CD8+ Treg cell population in several preclinical models of inflammation including heart allograft, human skin transplant rejection and graft-versus-host disease (GvHD) in mice with humanized immune systems. In these models, the administration of CD8+ Treg cells has been shown to prevent the occurrence of skin graft rejection and GvHD, respectively.

6.3.1.5 Cellular immunotherapies developed by TxCell

TxCell develops Treg cell-based cell therapies. The drug candidates developed by the Company are currently generated *ex vivo* from the patient's own peripheral blood. This is known as "autologous" therapy. It is a personalized, multi-mechanism approach using the natural properties of the patient's own Treg cells. Each patient will receive his or her own genetically engineered cells (in the case of ENTrIA) or "educated" (in the case of ASTrIA) to treat their own disease. The autologous nature of the products implies that both during the administration of the cells themselves and during the secretion of anti-inflammatory molecules by those cells, there will be no rejection by the patient's immune system.

All Treg cells developed by TxCell are designed to have the ability to specifically recognize a predetermined antigen. This antigenic specificity may either come from genetic modifications to add a Chimeric Antigen Receptor (CAR), in the case of the ENTrIA platform, or from the T cell receptor (TCR) which is naturally present on the Treg cell surface, in the case of the ASTrIA platform. This antigen recognition leads to *in vivo* Treg cell activation and triggering of the anti-inflammatory activity. The chosen antigen may be related to the targeted disease or may be located in an inflamed tissue. As an example, ovalbumin, a food antigen, has been chosen as the specific antigen for Ovasave® (developed for the treatment of Crohn's disease), due to its localization in the inflamed intestine after ingestion.

The proposed mechanism of action of TxCell's Treg cells largely differs from that of conventional "small molecules" type drugs. Indeed, Tregs are living cells and by definition have multiple mechanisms of action as well as multiple targets. Tregs actually have a specific tropism for the tissue to treat and impact multiple molecular and cellular targets. The TxCell Treg cells' putative action mechanism can be summarized in four different steps, shown in the figure below.

---

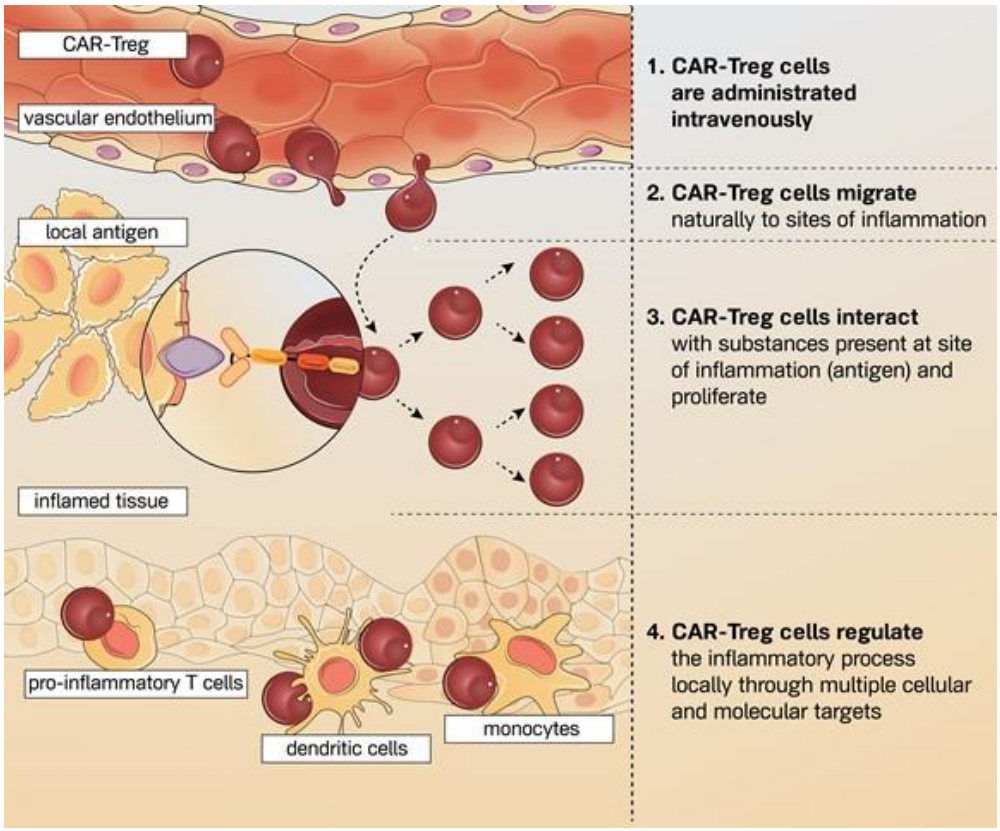
[39] Picarda E, Bézie S, Venturi V, Echasserieau K, Mérieau E, Delhumeau A, Renaudin K, Brouard S, Bernardeau K, Anegon I, Guillonneau C. MHC-derived allopeptide activates TCR-biased CD8+ Tregs and suppresses organ rejection. J Clin Invest. 2014 Jun;124(6):2497-512.

[40] Guillonneau C, Hill M, Hubert FX, Chiffoleau E, Hervé C, Li XL, Heslan M, Usal C, Tesson L, Ménoret S, Saoudi A, Le Mauff B, Josien R, Cuturi MC, Anegon I. CD40Ig treatment results in allograft acceptance mediated by CD8CD45RC T cells, IFN-gamma, and indoleamine 2,3-dioxygenase. J Clin Invest. 2007 Apr;117(4):1096-106.

[41] Bézie S, Picarda E, Ossart J, Tesson L, Usal C, Renaudin K, Anegon I, Guillonneau C. IL-34 is a Treg-specific cytokine and mediates transplant tolerance. J. Clin. Invest. 2015 Oct 1;125(10):3952-64.

[42] Bézie S, Picarda E, Tesson L, Renaudin K, Durand J, Ménoret S, Mérieau E, Chiffoleau E, Guillonneau C, Caron L, Anegon I. Fibrinogen-like protein 2/fibroleukin induces long-term allograft survival in a rat model through regulatory B cells. PLoS One 2015 Mar 12;10(3):e0119686.

Figure 9 : *Proposed mechanism of action of TxCell's Treg cells (in this case CAR-Tregs)*



1. *TxCell Tregs (Ag-Tregs/ASTrIA or CAR-Tregs/ENTrIA) are injected intravenously*

TxCell Tregs are administered systemically, regardless of the disease being treated and the targeted tissue. The Tregs' ability to migrate toward inflamed tissues (known as "homing") enables this mode of administration which is minimally invasive compared to local injections.

2. *Preferential migration of Treg cells to inflamed tissues after intravenous administration*

Treg cells express homing molecules, known as integrins, as well as chemokine receptors on their cell membrane. Those are involved in the preferential migration of Treg cells to inflamed tissues.

3. *Local activation of Treg cells*

Local antigen presentation is a crucial step of the therapeutic efficacy of Treg cells. After Treg infiltration of inflamed tissues, Tregs must encounter their specific antigen to deliver their therapeutic effect. Upon contact of the Treg cells and the antigen, its recognition by the specific membrane receptor leads to Treg cell activation. Local antigen-specific activation restricts the anti-inflammatory activity of Treg cells to the desired area to be treated.

4. *Suppression of local inflammation*

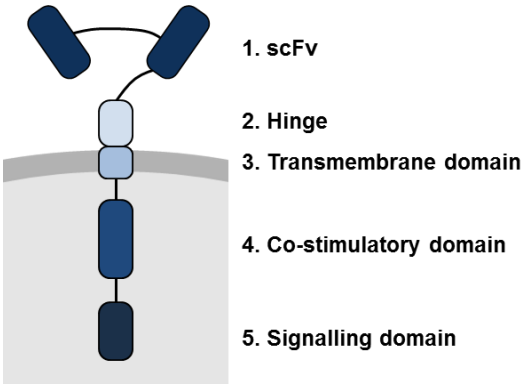
The activation of Treg cells leads to new gene expression showing suppressive activities. The anti-inflammatory and immuno-suppressive activities confer to Treg cells a synergistic effect, acting on the one side on the cellular components of the pro-inflammatory immune response and on the other side on the extracellular milieu.

6.3.2 ENTrIA platform

The ENTrIA platform is composed of genetically modified regulatory T cells expressing artificial receptors on their surface, known as Chimeric Antigen Receptors (CAR). These cells are called CAR-Tregs.

The CAR-Treg approach was initated in 2008 by Professor Zelig Eshhar of the Weizmann Institute of Sciences in Rehovot, Israel, on FoxP3+ Treg cells[43]. The CAR receptor allows these cells to target specifically a given antigen (which depends on the CAR structure), and therefore to target a disease in which the antigen recognized by the CAR is expressed in the inflamed tissue.

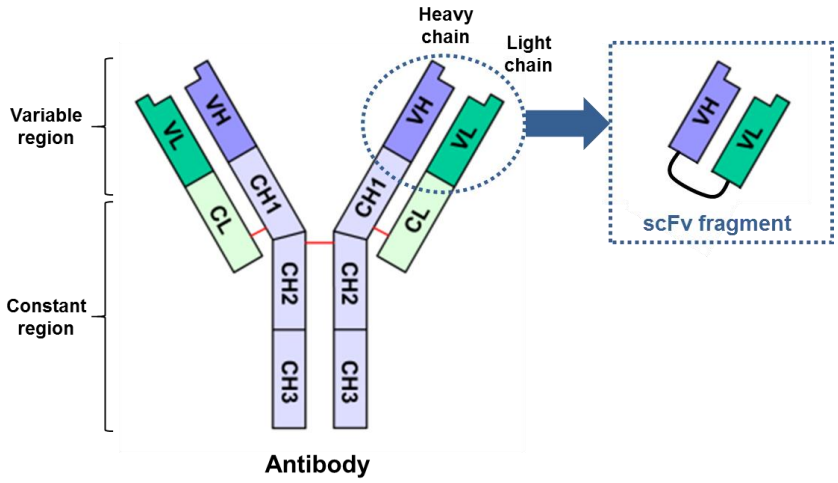
Figure 10 : *Structure of a Chimeric Antigen Receptor (CAR)*



The CAR receptor essentially includes the following five parts (see figure above):

1. **scFv (single chain variable fragment):** This is the portion the CAR that ensures the antigen recognition and the specific targeting of the CAR-Treg cells. The scFv is typically derived from a monoclonal antibody: the heavy region and the light region of the variable fragment (Fv) of an antibody are artificially linked to one another by a peptide to give a single chain, or simple chain, allowing the recognition of the antigen (see figure below):

Figure 11 : *Design of an scFv fragment*



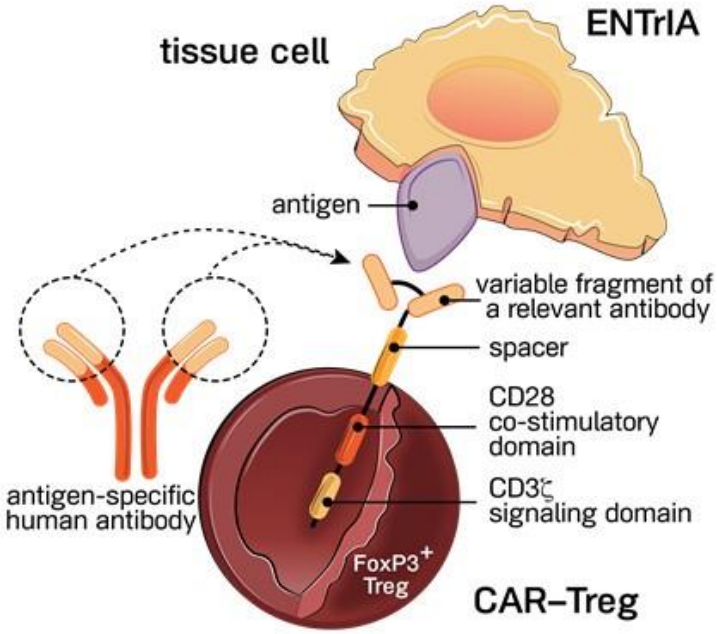
2. **Spacer or hinge:** this extracellular part allows detaching the scFv from the membrane. The spacer/hinge provides the scFv with spatial flexibility to facilitate its binding to the antigen in an environment that is changing or in motion.
3. **Transmembrane section:** this part is generally hydrophobic and is necessary to allow the CAR to anchor in the plasma membrane.
4. **Co-stimulatory domain (CD28 or 4 -1BB):** This first intracellular part makes it possible to improve the translation of the signal and thus the efficacy of the CAR. First-generation CAR receptors did not have a co-stimulatory domain and proved to be ineffective in terms of cell proliferation, hence the introduction of this complementary domain.

[43] Elinav E, Waks T, Eshhar Z. Redirection of regulatory T cells with predetermined specificity for the treatment of experimental colitis in mice. Gastroenterology. 2008 Jun;134(7):2014-24.

5. **Signaling domains (CD3ζ):** this second intracellular part corresponds to the natural signaling domain of T cell receptors (TCR).

The recognition of the antigen by the CAR triggers cell activation through the transmission of an intracellular signal through these signaling and co-stimulation domains. Unlike natural TCR receptors, which recognizes MHC-peptide complexes, the CAR receptors recognize peptides directly on the cell surface without the need for MHC presentation (see figure below).

Figure 12 : *ENTrIA platform – CAR-Treg cells*



The CAR is chosen in relation to the disease targeted. If the CAR recognizes an antigen whose expression is limited to the inflamed tissue (for example, a specific skin antigen within the context of skin diseases), the activation of the regulatory T cells transduced with the CAR (CAR-Tregs) will therefore also be limited to the inflamed tissue, thereby allowing specific and selective action.

In particular, Professor Eshhar's team demonstrated the therapeutic efficacy of a CAR-Treg product for which the CAR specifically recognizes an antigen present in the colon of an animal with inflammatory colitis. In this model, although inducing an inhibition of the disease, a polyclonal FoxP3+ Treg population (without CAR) demonstrates a significantly lower therapeutic potential than the injected CAR-Tregs[44]. The same approach was taken by Professor A. Loskog's team[45] and revealed therapeutic activity of the myelin antigen-specific CAR-Tregs in a model of multiple sclerosis in mice. In this study, the expression of the myelin (antigen recognized by the CAR) is restricted to the brains of the sick mice. As a final example, Dr. Levings's team established proof of the therapeutic activity of CAR-Tregs in which the CAR is specifically targeted against the graft's antigen in connection with the prevention of Graft-Versus-Host Disease. This approach was the first to use human Tregs and proved to be much more efficient than using non-antigen-specific Tregs[46]. Since October 2016, TxCell develops a CAR-Treg program in transplant rejection with Dr. Levings' team (see product candidate ENTX#SOT in section 6.4.2 of the *Document de Référence*).

---

[44] Blat D, Zigmond E, Alteber Z, Waks T, Eshhar Z. Suppression of murine colitis and its associated cancer by carcinoembryonic antigen-specific regulatory T cells.Mol Ther. 2014 May;22(5):1018-28.

[45] Fransson M1, Piras E, Burman J, Nilsson B, Essand M, Lu B, Harris RA, Magnusson PU, Brittebo E, Loskog AS. CAR/FoxP3-engineered T regulatory cells target the CNS and suppress EAE upon intranasal delivery. J Neuroinflammation. 2012 May 30;9:112.

[46] MacDonald KG, Hoeppli RE, Huang Q, Gillies J, Luciani DS, Orban PC, Broady R, Levings MK. Alloantigen-specific regulatory T cells generated with a chimeric antigen receptor. J Clin Invest. 2016, in press. http://dx.doi.org/10.1172/JCI82771.

The ENTrIA platform is capable of generating many drug candidates using a shared production method. As for the historical platform ASTrIA, the first generation of products generated on the ENTrIA platform are autologous. Their manufacturing process is described in section 6.5.2 of the *Document de Référence*.

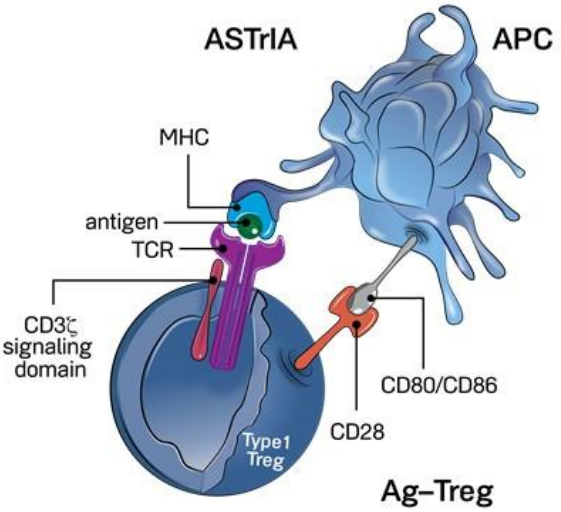
Beyond the CAR-coding genes, further genetic modifications could be added to TxCell's Treg products in the future. These future genes may for instance optimize the efficacy, the migratory properties and even the safety profile of the CAR-Treg products. For example, suicide genes (e.g. HSVTK, iCas9 and CD20) code for proteins which, acting with the pharmacological compounds ingested orally by the patient, become cytotoxic for the cells that produce them. Introducing a suicide gene in the CAR-Tregs would therefore increase the safety of these products as they can be quickly eliminated by the injected patients' bodies in the event of serious adverse effects from the injected cell product.

6.3.3 ASTrIA platform

The ASTrIA platform is composed of non-genetically modified Treg cells. These cells are antigen specific, but their antigenic specificity is provided by the natural T-cell receptor (TCR). Historically, the ASTrIA platform has been developed based on the regulatory properties of type 1 Treg cells co-discovered by the scientific founder of TxCell.

Their manufacturing process is described in section 6.5.3 of the *Document de Référence*.

Figure 13 : *ASTrIA platform – Ag-Treg cells*

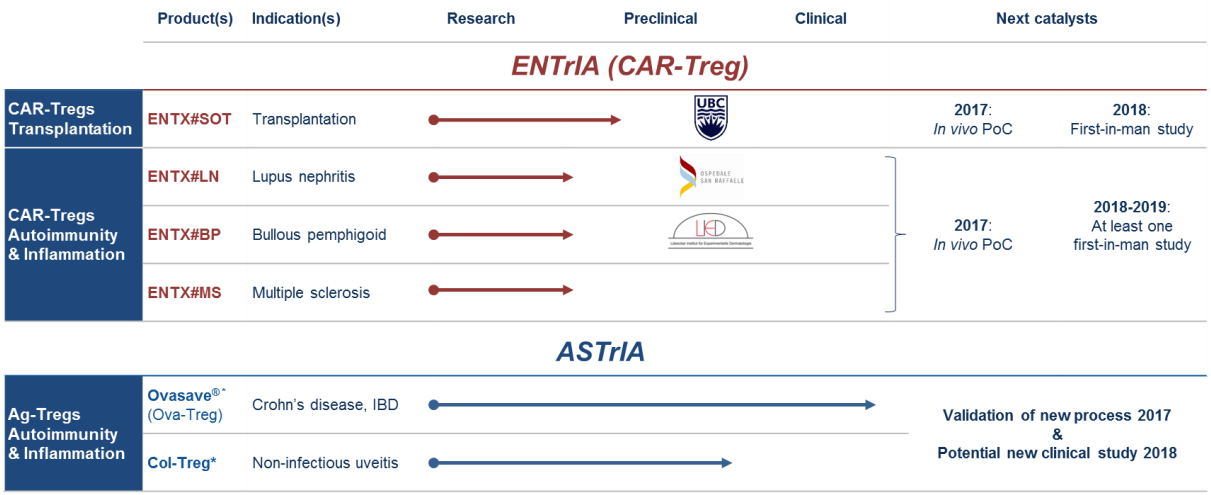


6.4 TxCell's cellular immunotherapy pipeline

6.4.1 Pipeline overview

The following table provides an overview of the Company's drug-candidates:

Figure 14 : *Pipeline*



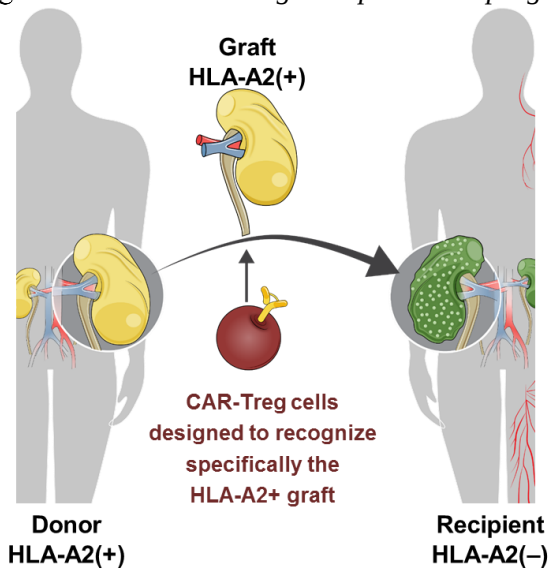
* Development on hold pending (i) GMP validation of the improved manufacturing process; (ii) appropriate funding to finance the clinical development, and (iii) a strategic review.

6.4.2 CAR-Treg transplantation program (ENTX#SOT)

On October 2016, the Company signed a strategic research and development agreement with the University of British Columbia (UBC), based in Vancouver, Canada, an internationally-renowned multidisciplinary research and teaching center. This partnership agreement relates to the development of a cellular immunotherapy product based on CAR-Tregs to prevent graft rejection in the context of solid organ transplantation. Activities relating to this program are conducted in collaboration with Professor Megan Levings of UBC.

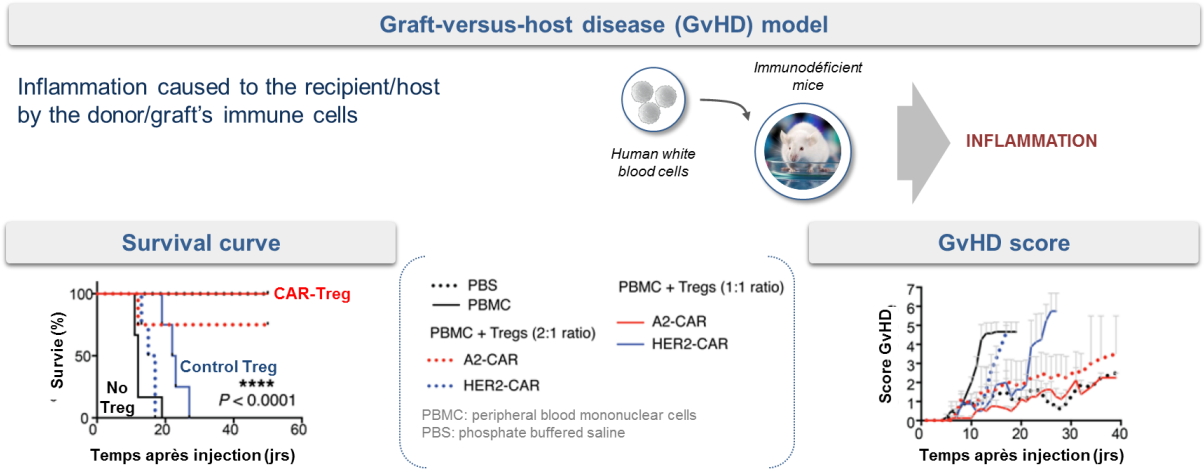
The purpose of this program is to develop HLA-A2-specific CAR-Treg cells. HLA-A2 is one of the forms of the HLA system, also called histocompatibility system. In transplantation, incompatibility between the donor and recipient HLA systems is one of the main causes of transplant rejection. The idea of this program is to inject a transplanted patient with CAR-Treg cells designed to specifically recognize the graft. The figure below shows a kidney transplant in which the donor is HLA-A2(+) while the recipient is HLA-A2(-) (the choice of the kidney as a graft organ is only used as an example). In this case, the graft kidney (the graft below in yellow) carries the HLA-A2 antigen, which is incompatible with the HLA system of the recipient patient which is HLA-A2(-). There is therefore a risk of graft rejection. HLA-A2-specific CAR-Treg cells are expected to specifically recognize the graft and be activated locally at the graft level. By nature, these CAR-Tregs could trigger local inhibition of the inflammation in the graft and induce tolerance of the recipient's immune system towards the graft, thereby reducing the phenomenon of graft rejection.

Figure 15 : *CAR-Treg transplantation program*



In March 2016, Professor Levings' team established the first preclinical proof-of-concept with human CAR-Treg cells whose CAR receptor was specific for the HLA-A2 molecule in a transplant model. In a xenogeneic model of graft-versus-host disease (GvHD), the UBC team demonstrated that HLA-A2 molecule specific human CAR-Treg cells were more effective than polyclonal Treg cells in reducing GvHD-related inflammation[47]. The main results are presented in the figure below.

Figure 16 : *Proof-of-concept with CAR-Tregs in a transplantation model published by UBC in March 2016*



Dr. Levings' team used an xenogeneic GvHD model induced by the injection of human HLA-A2(+) white blood cells in immunodeficient mice. These human white blood cells (graft) attack the tissues of the immunodeficient mouse (host), resulting in an inflammatory reaction (graft-versus-host disease, GvHD). The CAR used in this study was designed to specifically recognize the HLA-A2 molecule present only on the surface of the graft cells. The first product development carried out as part of the collaboration between TxCell and UBC is based on these key data.

Researchers at TxCell and UBC are currently working on a humanized version of this product to obtain proof-of-concept in different transplant models around mid-2017. At the same time, TxCell's Process Development team is developing a manufacturing process for CAR-Treg cells. In the second half of 2017, the Company plans to start the technology transfer of its ENTrIA manufacturing process to a

[47] MacDonald KG, Hoeppli RE, Huang Q, Gillies J, Luciani DS, Orban PC, Broady R, Levings MK. Alloantigen-specific regulatory T cells generated with a chimeric antigen receptor. J Clin Invest. 2016, 126(4):1413-1424.

CMO specialized in the production of cell therapies and to file an Investigational New Drug (IND) application in order to start a first-in-man study by the end of 2018. The indication and characteristics of the study will be made public at a later stage.

Whilst the UBC team is focused on product development activities, it will in parallel perform research activities in the CAR-Treg field with the aim of optimizing and broadening the new product platform for transplantation.

6.4.3 CAR-Treg programs for autoimmune and inflammatory diseases

Beyond transplantation, TxCell also targets several autoimmune and chronic inflammatory diseases, including lupus nephritis, bullous pemphigoid and multiple sclerosis, either internally or with academic partners. TxCell has already initiated the development of "lead" candidates in these three indications and established *in vitro* validation of several CAR-Tregs. For these programs, the Company expects to generate new preclinical proof-of-concept data by the end of 2017 in order to start at least one first-in-man study in 2018 or 2019.

ENTX#LN - Lupus nephritis

In April 2016, the Company signed a strategic R&D agreement with the San Raffaele hospital in Milan, Italy (*Ospedale San Raffaele,* OSR), one of the most prestigious research institutes in Europe in the field of gene and cell therapy. The collaboration includes a development arm on CAR-Tregs focused on lupus nephritis, as well as a research program dedicated to CAR-Treg biology.

The development part of the collaboration focused on the non-clinical development of genetically engineered regulatory T cells to express a chimeric antigen receptor (CAR-Tregs) for the treatment of lupus nephritis.

As per the terms of the agreement, TxCell and OSR are conducting the non-clinical pharmacology and toxicology studies with CAR-Treg cells to prepare for a first-in-man study in Lupus Nephritis patients.

In parallel, the collaboration also includes a research arm, where OSR performs research for TxCell on the design and biology of other chimeric antigen receptors for use in Treg cell products addressing other autoimmune indications.

ENTX#BP - Bullous pemphigoid

In June 2016, the Company signed a strategic R&D agreement with the University Hospital of Schleswig-Holstein, Campus Lübeck. The Lübeck Institute of Experimental Dermatology (LIED), one of the most prestigious research centers in the world in the field of translational research on bullous diseases of the skin, depends from this University Hospital. LIED is one of the world's leading specialists in animal models of bullous pemphigoid.

This specific collaboration agreement covers the development of a CAR-Treg-based cellular immunotherapy for bullous pemphigoid, a rare, potentially fatal autoimmune disease characterized by tense inflammatory skin blisters and in some patients, erosions on mucous membranes.

ENTX#MS - Multiple sclerosis

The fourth CAR-Treg program is developed in multiple sclerosis. For this program, the Company currently has several antibodies sequences which are specific to autoantigens related to this pathology. These sequences are used to design the CAR antigen-binding domains. In addition, the Company recently implemented a multiple sclerosis model in rodents that will allow rapid testing of the behavior

of CAR-Tregs *in vivo*. A proof-of-concept obtained with CD4+ cells modified concomitantly with a specific MOG-CAR was published in 2012 by the team of A. Loskog[48].

6.4.4 Ovasave® - Crohn's disease

6.4.4.1 Overview and stage of development

Ovasave® is the first drug-candidate from TxCell's ASTrIA platform. Ovasave® is composed of autologous regulatory T cells specific of ovalbumin (Ova-Treg). Ovasave® is in development for the treatment of patients suffering from moderate to severe Crohn's disease, which was refractory to all available treatments.

In 2011, TxCell successfully concluded a first Phase I/IIa clinical trial with Ovasave® (CATS1 study – see results below). Following the positive results of this first Phase I/IIa clinical trial, a Phase IIb clinical trial was initiated in 2014, the CATS29 study. However, in June 2015, the ASTrIA platform ran into industrial difficulties, which led to the suspension of the CATS29 study. There were two reasons for these industrial difficulties: (i) a proprietary industrial site (based in Besançon, France) that was not adapated to the regulatory constraints of Good Manufacturing Practices (GMP); and (ii) a manufacturing process that is too complex and too expensive to be used on a large scale.

The issue of the production site was resolved by the Company's decision in 2015 to close its Besançon plant and to outsource its existing and future manufacturing activities to Contract Manufacturing Organizations (CMOs), such as MaSTherCell in Belgium and PCT in the United States.

To solve the problem of the manufacturing process, the Company also invested in a laboratory specialized in the development of manufacturing processes and technology transfer. In addition, the Company strengthened its skills in industrial process development with key recruitments.

The first results of this investment were obtained in mid-2016 with the identification of a new isolation method for type 1 Treg cells used in the ASTrIA platform, which could significantly reduce the manufacturing duration, cost and risks for the ASTrIA platform.

In September 2016, the Company decided to put on hold the development of products from the ASTrIA platform, pending confirmation and validation of this new process under GMP conditions. This confirmation is expected in 2017.

Regardless of the technical success of this process improvement, a strategic review is planned by the end of 2017 to take a decision on the possible resumption of clinical development for ASTrIA, including Ovasave®.

6.4.4.2 Results of the CATS1 clinical study

Characteristics of the study

The CATS1 study (Crohn's And Tr1 Study 1) was a multicenter, open, uncontrolled, dose ranging, Phase I/IIa clinical study to evaluate the safety and efficacy of Ovasave® in patients with Crohn's disease, refractory to standard and biologic treatments. The study was conducted on six sites in France between 2008 and 2011 according to GCP guidelines and followed by an independent Data Monitoring Committee (DMC). The results of this study were published in November 2012 in Gastroenterology[49].

20 patients were administered with Ovasave® while monitored for vital signs and were subsequently followed through six subsequent visits until week 12. Patients had a daily intake of ovalbumin as a food supplement in the form of a meringue cake to ensure high levels of ovalbumin in the gut. The study

[48] Fransson M, Piras E, Burman J, Nilsson B, Essand M, Lu B, Harris RA, Magnusson PU, Brittebo E, Loskog AS. CAR/FoxP3-engineered T regulatory cells target the CNS and suppress EAE upon intranasal delivery. J Neuroinflammation. 2012 May 30;9:112.

[49] Desreumaux P, Foussat A, Allez M, Beaugerie L, Hébuterne X, Bouhnik Y, Nachury M, Brun V, Bastian H, Belmonte N, Ticchioni M, Duchange A, Morel-Mandrino P, Neveu V, Clerget-Chossat N, Forte M, Colombel JF. Safety and efficacy of antigen-specific regulatory T-cell therapy for patients with refractory Crohn's disease. Gastroenterology. 2012 Nov;143(5):1207-17. e1-2.

planned for four cohorts of ascending doses of autologous Ova-Treg (10^6, 10^7, 10^8, or 10^9 cells). Progression from one dose to the next required DMC approval after assessment of safety data.

The study was subsequently amended and extended to allow for additional injections:

- One initial extension aimed at assessing the safety and tolerability of a second administration of Ova-Treg cells in patients. Seven patients were included in this extension (one patient received a second injection of 10^8 cells and six patients received a second injection of 10^6 cells).
- Another extension concerned multiple injections upon investigator request for patients who presented clinical benefit from the initial injections. Two patients received up to five injections, one every eight weeks.

Assessment methods

Although the assessment of the degree of disease activity can be made with different tools, the most common one is the Crohn's Disease Activity Index (CDAI). This index is based on a full week assessment on number of stools, abdominal pain, general well-being, extra-intestinal symptoms, use of antidiarrheal medication, and presence of abnormal mass, hematocrit and body weight. Higher scores correspond to more active disease while lower scores translate less symptomatic disease. Indeed, clinical active and symptomatic disease is normally grouped into mild, moderate or severe according mainly to CDAI (table below).

The CDAI score is frequently used in the context of clinical trials to assess the clinical evolution and the impact of the medication under study. In fact, the regulatory authorities require this score as the primary assessment tool, even though additional evidence, namely with inflammatory markers, are regularly used to contribute to this assessment. A clinical response corresponds to a decrease of 100 points of the CDAI score. The patient is in clinical remission if the CDAI is lower than or equal to 150 points.

Figure 17 : *Grading of disease activity in Crohn's disease*[50]

Mild	Moderate	Severe
Equivalent to a CDAI of 150-220	Equivalent to a CDAI of 220-450	Equivalent to a CDAI of > 450
E.g. ambulatory, eating and drinking < 10%	E.g. intermittent vomiting, or weight loss > 10%	E.g. cachexia (BMI < 18 kg m-2), or evidence of obstruction or abscess
No features of obstruction, fever, dehydration, abdominal mass, or tenderness	Treatment for mild disease ineffective, or tend mass. No overt obstruction	Persistent symptoms despite intensive treatment
CRP usually increased above the upper limit of normal	CRP elevated above the upper limit of normal	CPR increased

Results

Overall, the treatment was well tolerated regardless of the cell dose used. The safety profile of Ovasave®, in the limited human exposure of CATS1, is in line with the context of a first-in-man study in the recruited patient population of moderate-to-severe, refractory Crohn's disease with most of the events relating to the underlying pathology and conditions. In addition, *ex vivo* experiments using blood samples from CATS1 patients showed that Ovasave® administration does not alter the immune response of patients to infectious pathogens-derived antigens.

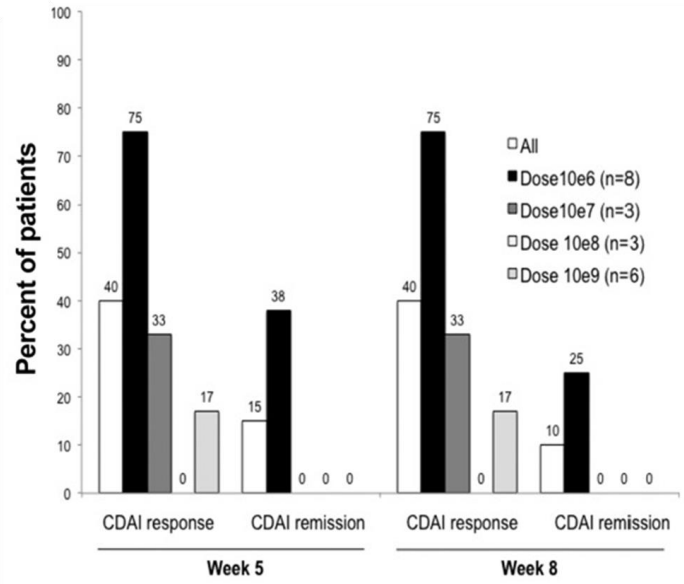
In terms of efficacy, 40% of the patients had a clinical response at both weeks 5 and 8 after treatment (see figure below). The 10^6 dose group had the highest percentage of patients in CDAI response (75%) and was the only group with patients in CDAI remission at both weeks 5 and 8 (38% and 25%, respectively). Two patients in the 10^6 dose group were in sustained remission at weeks 5 and 8 after

[50] ECCO guidelines.

treatment. The assessment of CDAI values as a continue variable (see figure below) shows that the patients were in a stable and active disease with high CDAI values before and at the injection point. Subsequent to the treatment with Ovasave®, the CDAI values dropped significantly. This evolution was observed both in the overall population (p=0.003) and in the patients that received the 10^6 cell dose (p=0.039) where the mean CDAI reduction was larger than the 100 point clinically significant reduction.

Using the IBDQ (Inflammatory Bowel Disease Questionnaire) relating to quality of life, the 10^6 dose group showed also the best results reaching statistical significance at week 5 for improvement of quality of life and 25% and 37.5% of remission according to IBDQ at week 5 and 8, respectively. A reduction of serum CRP (C-Reactive Protein), a serum surrogate marker of inflammation, was also observed particularly in the 10^6 dose group.

Figure 18 : *Percentage of patients in CDAI response (Δ CDAI ≥ 100) or remission at week 5 and week 8, per dose group*[51]



	CDAI Week -2	CDAI Week 0	CDAI Week 5	Delta CDAI W0 vs. W5	CDAI Week 8	Delta CDAI W0 vs. W8
All (n = 20)	377 ± 81.8	363.7 ± 80.5	281.5 ± 116.1	-82.2 ± 95.4 P = 0.003	292.0 ± 108.1	-63.0 ± 87.9 P = 0.006
10^6 (n = 8)	400.9 ± 101.2	395.1 ± 91.7	251.8 ± 157.9	-143.4 ± 105.0 P = 0.039	244.6 ± 130.1	-131.6 ± 65.4 P = 0.031

6.4.5 Col-Treg - autoimmune uveitis

Col-Treg is composed of a population of autologous collagen-II specific regulatory T lymphocytes for the treatment of patients suffering from autoimmune uveitis (or non-infectious uveitis) who have failed to respond to treatment or are intolerant to existing treatments. It is the second drug candidate from the ASTrIA platform.

As a reminder, in September 2016, the Company decided to put on hold the development of products from the ASTrIA platform pending confirmation and validation of the new improved production process under GMP conditions. This confirmation is expected in 2017. A strategic review is planned by the end

[51] Desreumaux P, Foussat A, Allez M, Beaugerie L, Hébuterne X, Bouhnik Y, Nachury M, Brun V, Bastian H, Belmonte N, Ticchioni M, Duchange A, Morel-Mandrino P, Neveu V, Clerget-Chossat N, Forte M, Colombel JF. Safety and efficacy of antigen-specific regulatory T-cell therapy for patients with refractory Crohn's disease. Gastroenterology. 2012 Nov;143(5):1207-17. e1-2

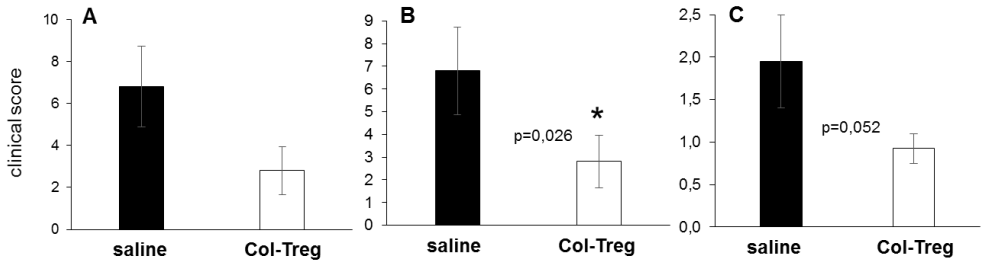
of 2017 to take a decision on the possible resumption of clinical development for ASTrIA, including Col-Treg.

Pre-clinical results of Col-Treg against autoimmune uveitis

Results from the preclinical studies conducted by TxCell were published in October 2015 in Investigative Ophthalmology and Visual Science (IOVS)[52].

The specific migration of Col-Treg cells to the inflammatory eye and not to a healthy eye was demonstrated *in vivo* using a murine model of autoimmune experimental uveitis. In this autoimmune experimental uveitis model, the Col-Treg cells injected intravenously enabled the inhibition of the eye inflammation. This inhibition was observed not only through ophthalmoscopic measurements (see figure below), but also through histology techniques.

Figure 19 : *Inhibition of clinical signs of autoimmune experimental uveitis by Col-Treg*



Col-Treg was administered intravenously to animals with autoimmune experimental uveitis. Panel A shows the inhibition of total clinical scores in comparison with untreated animals (saline). Panel B shows an inhibition of clinical scores of the anterior segment of the eye. Panel C shows an inhibition of clinical scores of the intermediate and posterior segments of the eye.

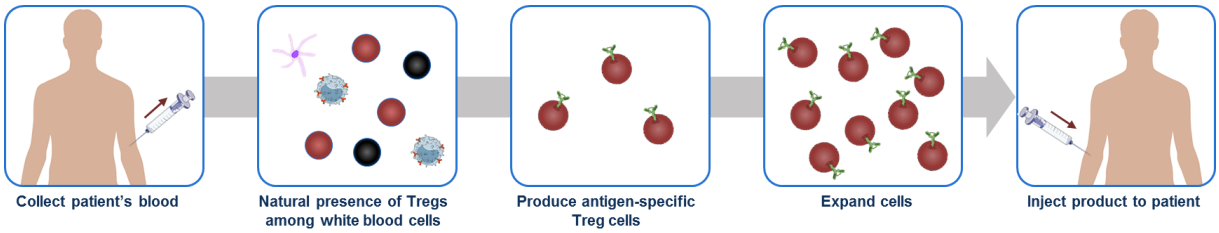
The follow-up studies of Col-Treg cells after injection in animals showed that there was no uncontrolled proliferation and tumorigenicity. These results were confirmed *in vitro* with human Col-Treg cells, which also showed that there was no tumorigenic potential. Furthermore, an *in vivo* toxicology study with Col-Treg conducted on animals according to Good Laboratory Practices (GLP) did not identify any signs of toxicity.

6.5 Manufacturing process

6.5.1 General information and strategy

To date, for both its ENTrIA and ASTrIA platforms, the Company is developing autologous cellular therapy products, i.e. each patient receives a personalized product made from his own cells. As shown in the figure below, the manufacturing process starts with a simple blood sample. From this blood sample, the Company produces Treg cells specific for the selected antigen. These specific Tregs are then expanded before being reinjected in the patient.

Figure 20 : *Manufacturing of TxCell's Treg cells*

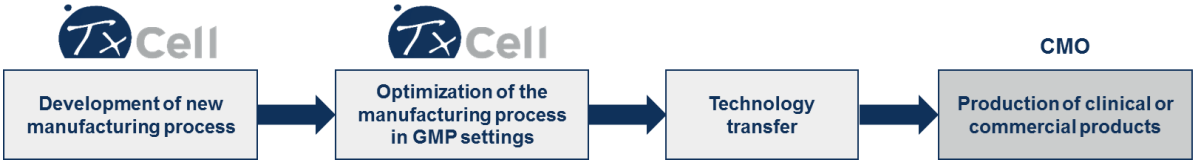


Since 2015, TxCell relies on CMOs for the production of its products. However, TxCell remains in charge of the development and optimization of manufacturing processes in its laboratory based in Sophia

[52] Asnagli H, Jacquin M, Belmonte N, Gertner-Dardenne J, Hubert MF, Sales A, Fall PB, Ginet C, Marchetti I, Ménard F, Lara G, Bobak N, Foussat A. Inhibition of Non-infectious Uveitis Using Intravenous Administration of Collagen II-Specific Type 1 Regulatory T Cells. Invest Ophthalmol Vis Sci. 2015 Oct 1;56(11):6456-66.

Antipolis. Subsequently, these processes are transferred to the CMOs chosen by the Company, which will manufacture the products under the conditions defined by the Company. This technology transfer stage is expected to last between 9 and 12 months.

Figure 21 : *TxCell develops its production processes internally before transferring them to CMOs for the production of clinical or commercial batches.*



TxCell has already selected MaSTherCell, a CMO based in Belgium, as its exclusive supplier for the manufacturing of its ASTrIA products in Europe. The transfer of the Ovasave® manufacturing process took place between September 2015 and June 2016.

In March 2016, TxCell signed an agreement with PCT in the United States. The initial relationship could transition to a technology transfer, and to PCT having responsibility for the future manufacturing of TxCell's clinical supply in the US.

Optimization of manufacturing processes is a major objective for the Company. The Company is closely examining the work carried out on Tregs around the world in order to identify potential methods to improve its production process.

One of the Company's priorities in this area is the automation and industrialization of production processes, which should improve the potential future commercialization if its products. Robots are already used for cell handling and cell characterization purposes. With the help of specialized engineering companies, TxCell intends to develop automation and closed systems for the manufacturing process in view of advanced clinical trials and further potential commercial launch.

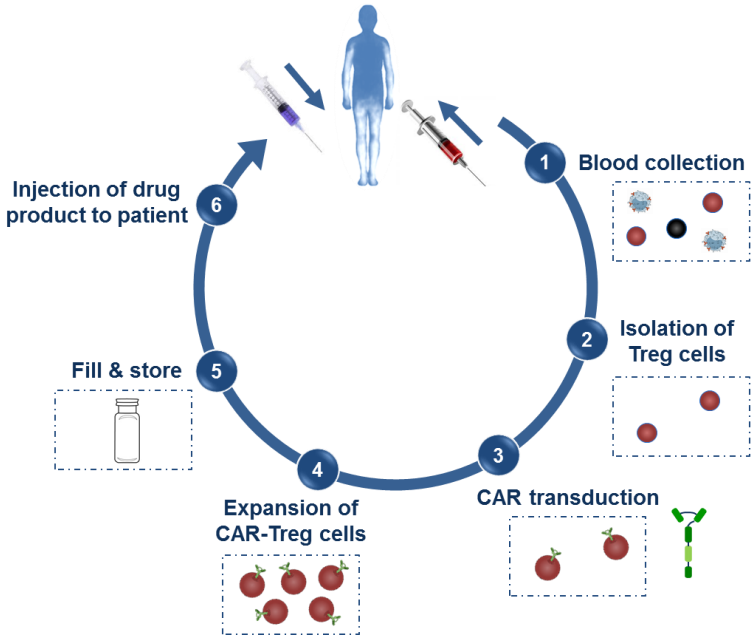
6.5.2 Manufacturing process for the ENTrIA platform

In 2016, TxCell started the development of a production process for its ENTrIA platform. The Company plans to finalize the development of this process in 2017 and start the transfer of technology to a CMO by the end of 2017. The objective is to be able to start a first-in-man study with this new process in 2018. The development of this new manufacturing process will benefit from the knowledge acquired by the Company from the ASTrIA process, on the one hand, and from the support provided by the use of the latest technological innovations, on the other.

TxCell's CAR-Treg cells manufacturing process can be summarized in the following six-steps and is shown in the figure below:

1. Collection of patient's blood.
2. Isolation of Treg cells within peripheral blood mononuclear cells (PBMC).
3. Transduction of genes coding for the CAR receptor to obtain CAR-Tregs.
4. Expansion of CAR-Treg cells.
5. Fill and store.
6. Intravenous injection of drug product to patient.

Figure 22 : *Manufacturing process for CAR-Treg cells (ENTrIA)*



For each of these steps, the Company evaluates different alternatives to determine the optimal method. The Company expects the total duration of the manufacturing process for CAR-Tregs to be approximately three to five weeks for the first clinical trials planned to start by end 2018.

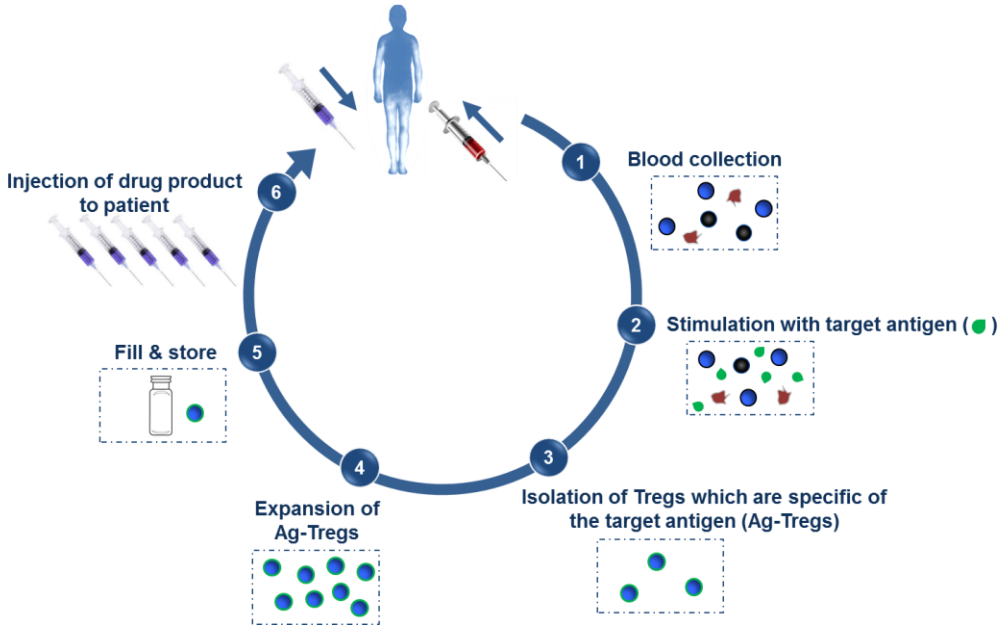
The gene transfer (transduction) of the chimeric antigen receptor CAR is carried out using a viral vector (e.g. lentivirus) carrying specific transgenes. This transfer technology has been widely used to produce CAR-T cells in immuno-oncology. This well-established method makes it possible to insert the genes of interest without significantly altering the viability and characteristics of the patient's Treg cells.

6.5.3 Manufacturing process for the ASTrIA platform

TxCell's Ag-Treg cells manufacturing process can be summarized in the following six steps and is shown in the figure below:

1. Collection of patient’s blood.
2. Stimulation of white blood cells with the target antigen.
3. Isolation of the desired antigen-specific Treg cells.
4. Expansion of Ag-Treg cells.
5. Fill and store. The Company demonstrated that Ag-Treg cells are stable for at least five years if stored at a low temperature (-150°C).
6. Intravenous injection of drug product to patient.

Figure 23 : *Manufacturing process for non-modified Ag-Treg cells (ASTrIA)*



This process has been invented and developed by TxCell over the years with a first version used in the Phase I/IIa CATS1 clinical study and a new version that was already improved for the CATS29 study. In 2016, the Company identified a new isolation method for its non-modified Treg cells. This innovative procedure should enable a reduction of approximately 50% of both the production costs and the overall manufacturing leadtime. The new process should thus provide better economic viability, greater flexibility and a significantly reduced risk of non-compliant manufacturing for future clinical trials and a potential commercial launch. In 2017, the Company plans to finalize and GMP-prove this new manufacturing process.

6.6 Regulatory environment

In the early 1990s, the development of medicinal products evolved from small molecules to more complex molecules or biological products. Despite significant challenges and hurdles in the beginning, particularly in relation to product characterization and manufacturing, these novel products significantly contributed to address major unmet medical needs. Currently, biologics are well established in standard clinical practice and in recent years, the first non-IP-protected biosimilars were developed, approved and launched.

More recently, similar challenges have been identified for a new group of medicinal products, known as Advanced Therapy Medicinal Products (ATMP) in Europe or Regenerative Medicines in the USA and Japan. These include:

1. somatic cell therapy drugs;
2. drugs "obtained by tissue or cell engineering";
3. gene therapy drugs (including genetically modified cells);
4. and "novel therapy combined" products (where ATMP is associated with a medical device).

Products fulfilling definitions of the first two categories of ATMP are those in which the cells or tissues constituting them undergo considerable manipulation *in vitro* changing their biological characteristics, physiological functions or structural properties and/or that are not intended to perform the same essential functions for the receiver and the donor. The products developed by TxCell on the ASTrIA platform are somatic cell therapy drugs, known as ATMP.

Gene therapy medicinal products are drugs containing or consisting of a recombinant nucleic acid administered in order to regulate, repair, replace, add or remove a genetic sequence. Due to the genetic modifications made to the cells, the products developed by TxCell on the ENTrIA platform are ATMPs that belong to the category of gene therapy drugs.

The scientific, technical and regulatory challenges linked to these products (advice, assessment, compliance and marketing authorization) have been recognized by health authorities worldwide. In particular, the European Medicines Agency (EMA), US Food and Drug Administration (FDA) and the Japanese agency (Pharmaceuticals and Medical Devices Agency - PMDA) evolved their regulatory framework and established procedures specifically dedicated to this new category of advanced therapy medicinal products.

In 2007, the European Union decided that it was necessary to publish a specific regulation on ATMPs defining the main rules for their development. Guidelines have also been published specifying the technical requirements relating to the development of ATMPs. To reinforce its expertise, the EMA has created a Committee for Advanced Therapies (CAT) with the mandate to support, advise and prepare the decisions of the Committee for Medicinal Products for Human Use (CHMP) concerning ATMPs. The CHMP is the committee that assesses and authorizes the marketing authorization request, which is then validated by the European Commission. In the case of ATMPs, the Committee for Advanced Therapies covers technical issues on behalf of the CHMP. Moreover, ATMPs are authorized by a so-called "centralized" procedure, which means that the application for marketing authorization is examined at the European and not national level and the authorization obtained is valid in all European countries.

In addition to the scientific advice provided concerning market authorization requests, the CAT also assesses the classification of medicines as ATMP and participates in the scientific opinions on these ATMPs. The CAT also gives a scientific opinion for certification requests. In this context, It assesses and certifies the quality and non-clinical data of ATMP products that small and medium-sized enterprises (SMEs) have generated at all the development stages. This enables SMEs to validate the quality of the data obtained upstream of the marketing authorization request and to identify, at an early stage, the potential risks related to the development of the ATMP and to make the right decisions to ensure compliance with the requirements of the marketing authorization.

In the USA, the description of Regenerative Medicine Advanced Therapy (RMAT) was specifically implemented in January 2017 for Advanced Therapy Medicinal Products. The purpose of this designation is to facilitate and accelerate the development of such products when they are intended to treat serious or potentially life-threatening conditions of unmet medical need.

Recognizing the difficulty in collecting and evaluating data for the effectiveness of advanced therapy medicinal products (e.g. due to cell heterogeneity), Japan introduced a new regulatory framework to ensure the timely provision of this type of medication in 2014. This system allows a limited period conditional marketing authorization to be obtained. Once the product has been confirmed to be safe to use and its efficacy is foreseeable, i.e. the product has an effect on a substitution criterion (surrogate endpoint) that is reasonably likely to predict clinical benefit. Following this conditional authorization, a clinical study must be conducted to confirm the safety and efficacy of the advanced therapy medicinal product, which may then obtain full marketing authorization.

6.7 Intellectual property

6.7.1 Patents and patent applications

See paragraph 11.2 of the *Document de Référence*.

6.7.2 Freedom to operate

The Company has carried out Freedom to Operate (FTO) searches to determine whether a particular business activity, such as the licensing, testing or marketing of its products or processes, was feasible without infringing valid third-party intellectual property rights.

In 2007, the Company commissioned the patent and trademark attorneys Plasseraud (France) to perform FTO searches for pharmaceutical compositions containing type-1 regulatory T cells. Searches were performed in respect of published patent applications (PCT, EP, US, FR, GB, DE). One document was identified as being relevant. The results of this study were taken into account and were rigorously

followed up in order to monitor the examination procedure for this patent application. This application was abandoned in April 2011.

In 2012, the Company commissioned the patent and trademark attorneys Icosa (France) and Young & Thompson (USA) to perform FTO searches regarding the use, in Europe and the United States, of pharmaceutical compositions containing type-1 regulatory T cells to treat inflammatory bowel disease, in particular Crohn's disease. No document identified was considered relevant and likely to restrict TxCell's FTO and use its pharmaceutical compositions for treating Crohn's disease.

To date, no suit for patent infringement has been filed against TxCell, nor has TxCell filed a suit for patent infringement against any third party. It is the Company's policy to commission FTO searches taking into account the stage of development of its drug candidates. No other full, official, FTO searches have been performed. To the best of its knowledge, the Company has not wrongfully used know-how or privileged information relating to its pharmaceutical technologies in a way likely to lead to a breach of contract or other intellectual property rights. The Company will initiate proceedings against any third-party product or process, whether patented or not, likely to be deemed an infringement, and will do everything possible to protect its intellectual property rights.

6.7.3 Trademarks

See paragraph 11.4 of the *Document de Référence*.

6.7.4 Trade secrets

The inventions developed and owned by the Company are based on its know-how in the field of regulatory T cells. They involve the use of cell isolation and culture techniques that in some cases make use of only ordinary tools and methods, such as isolation by immuno-affinity or by cell sorting, as well as the culture of T regulatory cells in the presence of growth factors and antibody activators. The Company has developed isolation protocols, culture conditions, and expansion protocols, specific to the products, which constitute proprietary know-how. It may not be desirable to file a patent application (which would be published) for some of these techniques. Procedures to protect the confidentiality of this know-how are in place. Thus, the Company ensures that all researchers and partners must enter into a confidentiality agreement with the Company. In addition, the know-how in question is fragmented among different people in order to optimize the protection of secrets.

7. ORGANIZATIONAL CHART

7.1 Company organization

As at December 31, 2016, the Company has no subsidiaries.

7.2 List of subsidiaries, branches and secondary establishments

TxCell's main place of business and head office are located in Valbonne, at Les Cardoulines – Allée de la Nertière – 06560 Valbonne Sophia Antipolis - France. The Company is registered with the Grasse trade and companies register under number 435 361 209.

At the date of the *Document de Référence*, the Company as no branches or secondary establishments.

8. REAL ESTATE PROPERTIES, PLANTS AND EQUIPMENTS

8.1 Description of real estate properties

- Head office in Sophia Antipolis

The Company entered into a lease agreement on July 1, 2007 with S.C.P.I. INVESTIPIERRE in respect of premises located in Valbonne – Sophia Antipolis, ZAC des Bouillides, locality Les Cardoulines, consisting of the entire HT1 building (constructed on enclosed private land), for use as the Company's head office. The building has a total surface area of approximately 1,304 m^2, and has 30 outside parking spaces. The premises are rented for mixed use as offices and for company operations. This lease was entered into for a nine-year period (i.e. until June 30, 2016) for an annual rent of €125 thousand net of taxes (adjusted annually according to the national construction costs index).

SCI WENGEN purchased the premises on June 30, 2014. Under the lease contract, the sale of the property by S.C.P.I. INVESTIPIERRE did not lead to the novation of the lease.

On December 22, 2015, the Company entered into an addendum in order to renew the commercial lease with SCI WENGEN for a nine–year period from July 1, 2016 (i.e. until June 30, 2025) for an annual rent of €147 thousand (such amount corresponding to the initial index-linked rent, which is now indexed annually to the service business rental index, "*l'indice des loyers des activités tertiaires*"). The Company can only give an early termination notice every three years, as well as, in exceptional circumstances, at the end of each of the first two years of the renewed lease.

- Development and transfer of manufacturing processes facility in Sophia Antipolis

The Company entered into a lease agreement with SAS Genbiotech, that is an exception under the commercial lease regime (pursuant to article L. 145-5 of the French commercial code), effective February 1, 2016 for premises located at 280, rue de Goa, 06901 Sophia Antipolis. The rented premises, with a surface area of approximately 188 m^2 are for a mixed use as offices, research and development activities and warehousing.

The lease was entered into for a two-year period (i.e. from February 1, 2016 to January 31, 2018) renewable once for a one-year period. The annual rent is €209 thousand net of taxes the first year and €198 thousand net of taxes the second year. This rent is not indexed. In case of early termination of the lease, the Company will continue to be liable to SAS Genbiotech for the remaining rents due from the termination date to the end of the lease with a monthly 5% discount as of January 31, 2017.

8.2 Environmental issues

The nature of the Company's activities does not entail any significant risk to the environment.

9. REVIEW OF RESULTS AND FINANCIAL POSITION

This analysis of the results and financial position is based on the financial statements for the financial year ended December 31, 2016 prepared in accordance with IFRS, as adopted by the European Union, the notes to which appear in paragraph 20.1 "Financial information on the issuer's assets/liabilities, financial position and results" of the *Document de Référence*.

9.1 General presentation

9.1.1 Introduction

Created in 2001 through a spin-off from the National Institute of Health and Medical Research (*Institut National de la Santé et de la Recherche Médicale* - INSERM), the Company develops innovative personalized cellular immunotherapy platforms from regulatory T cells for the treatment of chronic and severe autoimmune and inflammatory diseases with a high unmet medical need. TxCell targets various autoimmune diseases (T-cell or B-cell), including Crohn's disease, renal lupus, bullous pemphigoid and multiple sclerosis, as well as transplantation-related inflammatory disorders.

TxCell is developing two technology platforms, ASTrIA, composed of non-modified naturally antigen-specific Treg cells, and ENTrIA, composed of genetically-engineered Treg cells.

Over the past 18 months, the Company has undertaken a major reorganization of its operations and strategy.

In June 2015, the ASTrIA platform, based on naturally-specific regulatory T-cells (Ag-Tregs), experienced industrial difficulties which led to the suspension of the Phase IIb clinical study started in December 2014 with Ovasave® in refractory Crohn's Disease (CATS29). These industrial difficulties had two origins: a proprietary industrial site (based in Besançon, France) which was unsuited to the regulatory constraints of good manufacturing practices and a production process that was too complex and costly to be used on a large scale.

The issue of the production site was resolved by the decision of the Company in 2015 to close its Besançon plant and to outsource alls existing and future production activities to Contract Manufacturing Organizations (CMOs), such as MaSTherCell in Belgium or PCT in the United States.

To solve the problem of the production process, the Company also invested in a laboratory specialized in manufacturing process development and technology transfer. In this context, the Company has strengthened its skills in industrial process development with key recruitment.

The first results of this investment were obtained in mid-2016 by the identification of a new isolation method for type 1 Treg cells used in the ASTrIA platform, which could significantly reduce the manufacturing leadtime, cost and risk of non-compliant manufacturing for the products of the ASTrIA platform.

In September 2016, the Company decided to suspend all clinical development on ASTrIA platform-based products, until the approval of a new optimized manufacturing process validated under GMP conditions, expected in 2017.

Simultaneously, in 2015, the Company began to develop a new platform called ENTrIA. Like the ASTrIA platform, the ENTrIA platform is made up of antigen-specific regulatory T cells (Tregs), but its main innovation comes from the fact that the antigen specificity, instead of being natural, is introduced by genetic engineering using a chimeric antigen receptor (CAR-Tregs). This genetic engineering stage makes the ENTrIA production procedure different to the ASTrIA production procedure, although some of the stages are the same, allowing for industrial synergies. In addition, this second platform extends the biological field to other Tregs subtypes using different mechanisms of action. Where ASTrIA exclusively uses typr 1 Treg (Tr1) cells, discovered in the late 1990s, the ENTrIA platform is also open to other Tregs subtypes, including Foxp3 + Tregs, which are already widely used in industry and the academic world and which are thus the subject of an abundant scientific literature, or CD8 + Tregs, non-cytotoxic and possessing a unique mechanism of action and highly immunosuppressive.

The Company has decided to focus its resources on the development of this ENTrIA platform. Indeed, the possibilities offered by the genetic manipulation of the cells suggest new prospects in terms of functionality of the products, and therefore markets. In addition, the industrial aspects should, in spite of the genetic manipulation, be greatly simplified at least on the Foxp3 + subpopulation due to (i) the existence of surface markers on the cells allowing to avoid one of the steps More stringent production of Tr1 cells and (ii) the existence of numerous cases of Tregs Foxp3 + production by academic or industrial third parties.

To promote its new scientific momentum, the Company decided to associate itself with prestigious academic laboratories in order to develop its ENTrIA programs. These partnerships, five of which have already been signed in 2016, aim to provide the Company with intellectual property (agreement with the Weizmann Institute of Sciences, Israel), new product ideas (agreement with the University of British Columbia in Canada), rights and data on a new Tregs population (agreement with the University of Nantes and INSERM), expertise in biology of Treg cells other than Tr1 (agreement with *Ospedale San Raffaele*, Italy) and even a control over animal models and an understanding of the relevant clinical problems (agreement with the Lübeck Institute of Experimental Dermatology, Germany).

9.1.2 Main factors affecting business and results

The absence of revenue and the decrease in other income, mainly comprised of the research tax credit, are linked to the termination on December 2, 2015 of the pharmaceutical partnership with Trizell on Ovasave®.

The absence of revenue and the decrease in other income, mainly comprised of the research tax credit, are linked to the termination on December 2, 2015 of the pharmaceutical partnership with Trizell on Ovasave®.

9.2 Presentation and analysis of annual financial statements

The financial statements presented and commented in this chapter are the IFRS restated financial statements. The statutory financial statements prepared in accordance with French GAAP for the 2016 financial year are also included in APPENDIX 1 of paragraph 26 of the *Document de Référence*.

9.2.1 Revenue and other income

En K€	12/31/2016	12/31/2015
Business revenue	0	920
Revenue	**0**	**920**
Grants	153	89
Research tax credit	2,794	3,023
Other income	0	605
Other income	**2,948**	**3,718**
Revenue and other income	**2,948**	**4,637**

As expected, the Company did not generate any revenues in 2016. The revenue in 2015 of €920 thousand came exclusively from the revenue generated by progress in the collaboration, development, option and license agreement with Ferring/Trizell for Ovasave®, which was terminated on December 2, 2015. On this date, the remaining proceeds generated by this agreement and not yet recognized under revenue were recognized under other income for €605 thousand.

Other income mainly comprises:

- grants in the amount of €153 thousand;
- a 2016 research tax credit receivable of €2,794 thousand, compared to €3,023 thousand as at December 31, 2015.

The Company considers it operates in a single aggregate segment: the conduct of research and development for pharmaceutical products with a view to future commercialization.

Furthermore, the totality of the Company's research and development activity is located in France. All the Company's tangible assets are located in France. For these reasons the Company's management does not believe it appropriate to break its activity into separate business geographies.

9.2.2 Operating expense by function and operational result

9.2.2.1 Cost of sales

As the Company is still in the research and development phase, the purchases necessary to the manufacture of its products are considered as research and development costs, therefore they do not figure in the cost of sales.

Raw materials costs are mainly denominated in euros. The risks applicable to purchases associated with foreign exchange rates applicable to purchases are therefore considered as insignificant (see Note 25.2 in paragraph 20.1 of the *Document de Référence*).

9.2.2.2 Research and development costs

The Company carries out research and development activities in order to develop treatments for chronic and severe inflammatory and autoimmune diseases.

Research costs are recorded as expenses. In accordance with IAS 38, development costs are recorded as intangible assets if all of the following criteria are met:

- the technical feasibility study required to complete the development project is done;
- the Company intends to complete the project and launch it;
- ability to put the intangible asset into service;
- demonstration of the probability of future economic benefits associated with the asset;
- availability of adequate technical, financial and other resources to complete the project; and
- reliable assessment of development expenditure.

Pursuant to this standard, to date the Company has not capitalized research and development costs. All development costs have therefore been recorded as expenses.

Spending on research and development over the past two financial years is as follows:

In thousands of euros	12/31/2016	12/31/2015
Purchase of raw materials	1,114	1,942
Scientific fees, studies and other expenses	5,515	5,097
Salaries and social security expenses	3,484	3,666
Depreciation, amortization and provisions	372	153
Retirement benefits	1	(19)
Total research and development expenses	**10,486**	**10,839**

The 42.7% decrease in purchase of raw materials in 2016 compared to 2015 is mainly due to the stoppage of production activities since June 2015.

The 8.2% increase in studies, scientific fees and other expenses is mainly due to:

- the costs of the CAR-Treg patent of the Weizmann Institute of Science, issued in Europe in the first half of 2016, for which the Company has signed an exclusive worldwide license agreement and costs linked to the issue in 2016 of several Treg patents;
- the costs linked to technology transfer for the production of Ovasave® which began in September 2015 to the CMO MaSTherCell and the research and development agreements

signed in 2016. These costs were partially offset by the decrease in subcontracting expenses generated by the stoppage of the production activities of the Besançon site (closed since) and the suspension of the recruitment for Phase IIb of the Ovasave® clinical study since June 2015.

The 5% decrease in Salaries and social security expenses in 2016 compared to 2015 is principally explained by the closure of the Besançon site and partly offset by reinforcements to the management team (notably in process development and cell engineering).

The 142;6% increase in depreciation, amortization and provisions in 2016 compared to 2015 is notably explained by the reversal of provisions for risks associated with subsidies, which amounted to €313 thousand on December 31, 2014, offset by a decrease in depreciation over 2016 following the disposal of laboratory equipment at the end of 2015 and the beginning of 2016 in connection with the closure of the Besançon site.

The decrease in the 2016 retirements benefits versus 2015 is mainly due to the change in the assumptions used in the calculation of these commitments.

9.2.2.3 Sales, distribution and marketing expenses

As its products are at the research and development stage, the Company has not incurred any sales, distribution and marketing expenses over the last two financial years.

9.2.2.4 General and administrative expenses

General and administrative expenses over the past two financial years are as follows:

In thousands of euros	12/31/2016	12/31/2015
Rent, fees and other expenses	3,133	2,158
Salaries and social security expenses	1,332	1,249
Depreciation, amortization and provisions	43	55
Retirement benefits	1	(2)
Total general and administrative expenses	**4,509**	**3,460**

The 45.2% increase in rents, fees and other expenses in 2016 versus 2015 is mainly due to:

- the launch of the laboratory specialized in the development of manufacturing processes and technology transfer;
- the increase in legal fees notably for contract matters for the partnership, research, development and license agreements signed over the period.

The 6.6% increase in salaries and social security expenses is mainly due to reinforcements to the G&A team (notably in business development), partly offset by the presence of non-recurring expenses in the first half of 2015 (employee contributions on issues of stock option subscription plans and severance pay for Damian Marron).

9.2.2.1 Other operating income and expense

Other operating income and expenses correspond to the expenses relating to the restructuring of the Company's operations for 2016; these consist of:

- a €160 thousand expense for the restructuring of the Valbonne site in 2016 following the change to the Company's clinical development strategy;
- proceeds of €73 thousand as a result of the restructuring of the Besançon site in 2015 following the change to the Company's clinical development strategy and explained by (i) the reevaluation at December 31, 2016 of the related provisions and (ii) the gains made from disposals in 2016 from the assets of the Besançon site.

9.2.3 Composition of net earnings

9.2.3.1 Financial income and expense

Financial income and expense (in thousands of euros)	12/31/2016	12/31/2015
Foreign exchange gains	23	10
Other financial income	0	(0)
Sub-total other financial income	**23**	**10**
Gains on cash and cash equivalents	0	1
Interest on cash and cash equivalents	3	41
Sub-total income from cash and cash equivalents	**3**	**42**
Total financial income	**26**	**52**
Financial interests on leases	(0)	0
Contractual interest on bonds	(21)	0
Financial interests	0	0
Sub-total cost of gross financial debt	**(21)**	**0**
Foreign exchange losses	(8)	(20)
Other financial expense	(784)	(17)
Sub-total other financial expense	**(792)**	**(37)**
Total financial expense	**(813)**	**(37)**
Total financial income and expense	**(787)**	**15**

Income from cash and cash equivalents corresponds to accrued interest and short-term gains on investment securities.

Other financial expenses amounted to €784 thousand and corresponded to:

- €14 thousand in accretion of finance flows linked to the zero-interest innovation loan (see Note 11 of paragraph 20.1.5 of the *Document de Référence*);
- €39 thousand in accretion of the trade payable assets (see Note 14.2 of paragraph 20.1.5 of the *Document de Référence*); and
- €732 thousand from the fair value recognition through profit and loss of the bond issues (see Note 11.3 of paragraph 20.1.5 of the *Document de Référence*).

Cash and cash equivalents consist of immediately available cash and short-term available-for-sale securities. They can be readily converted to known amounts of cash and are not exposed to any material risk of impairment. These consist of open-ended money market funds (*SICAV monétaires*) and negotiable medium-term notes (*Bons à Moyen Terme Négociables*).

Cash equivalents are held for the purpose of covering short-term liquidity requirements rather than for investment or other purposes.. It is the Company's policy not to use financial instruments for speculative purposes. The Company does not use derivative financial instruments.

The Company has not taken out any loans with credit institutions,nor did it have any variable rate debt. Loans and borrowings contracted by the Company are described on paragraph 10.1.4 of the *Document de Référence*.

9.2.3.2 Corporation tax

The Company has not recorded any corporation tax expense since its formation.

As at 31 December 2016, the Company had tax losses which can be carried forward indefinitely in France for a total amount of €82.7 million.

The booking of this loss is capped at €1 million plus 50% of the amount of taxable profit for the year in excess of €1 million. The unused balance of losses may be carried forward to the following financial years, and can be booked under the same conditions with no time limit.

9.2.3.3 Basic earnings per share

The basic earnings per share is calculated by dividing the net profit attributable to the shareholders of the Company by the weighted average number of shares outstanding during the financial year.

Net earnings par share	12/31/2016	12/31/2015
Net profit / (loss) (in thousands of euros)	(13,570)	(11,297)
Weighted average number of shares in circulation	13,062,729	12,201,594
Basic earnings par share (in euros)	**(1.04)**	**(0.93)**

Diluted earnings per share are calculated by dividing the net profit (loss) attributable to the Company's shareholders by the following sum:

- the weighted average number of shares outstanding during the financial year;
- plus the number of shares that may result from the conversion of instruments giving deferred access to the share capital, as soon as such instruments have been issued.

The instruments giving deferred access to the share capital are considered to be anti-dilutive as they result in a decrease in the loss per share. As a result, diluted and basic earnings per share are identical.

9.3 Presentation and analysis of the statement of financial position

9.3.1 Non-current assets

Assets (in thousands of euros)	12/31/2016	12/31/2015
Intangible assets	5,911	5,907
Property, plant and equipment	736	876
Other property, plant and equipment under lease purchase agr	63	0
Financial assets	322	155
Total non-current assets	**7,031**	**6,939**

The costs of research and development and of patent registration have so far been entirely recorded as expenses (see Note 2.3 of paragraph 20.1 of the *Document de Référence*).

On December 2, 2015, the Company and Trizell concluded an agreement terminating their collaboration, development, option and license agreement on Ovasave®. Under this agreement the Company recovered all of Trizell's rights over Ovasave® in return for paying amounts which could reach €15 million, €6 million of which is fixed and €9 million of which is conditional upon the future revenues generated by Ovasave®. In 2015, the acquisition costs, i.e. €6 million, for these rights, the amount and maturity of which can be fixed definitely, were recognized as an asset. The initial debt of €6 million was partially paid by a €2 million payment upon termination agreement signature on December 2, 2015. The balance is due for €2 million on December 2, 2017 and €2 million on December 2, 2018. These acquisition costs were discounted in accordance with IAS 38. The 10-year French Government bond rate (*taux OAT*) as at December 31, 2015 of 0.995% was used as the discount rate. The repurchase of these rights after discounting therefore totaled €5.9 million. This intangible asset is recognized as in progress insofar as it has not satisfied the conditions for being put into service.

The annual impairment test was performed on this asset on December 31, 2016, and found no impairment loss.

Property, plant and equipment consist mainly of fixtures and fittings, technical plant, machinery and equipment, furniture, and office and IT equipment. The net value was €736 thousand as at December 31, 2016 versus €876 thousand at December 31, 2015.

The Company signed several leases during the 2016 financial year. These apply solely to laboratory equipment. These leases are entered into for a period of five years.

Non-current financial assets consist mainly of:

- a €5 thousand tax free construction loan in 2011;
- security deposits for €89 thousand, mainly corresponding to commercial leases, for which the increases are linked to the lease entered into in early 2016 for the new laboratories specializing in developing manufacturing and technology transfer processes;
- other long-term receivables for €172 thousand, corresponding to the guarantee deductions in 2016 relating to pre-financing of the Company's 2016 Research Tax Credit (see Note 7). The guarantee deductions are made up of the following:
    - an individual portion to cover the individual risk specific to the sum owed to the Company, returnable after the occurrence of one of these events, whichever happens first: (i) after repayment of the research tax credit by the French government (ii) after the tax inspection on said credit, after any adjustments are allocated, or (iii) at the end of the taxation limitation period for the credit concerned (December 31 of the third year following the date the CIR declaration is filed),
    - a collective portion to cover the collective risk of the receivables recorded in the portfolio of the pre-financing fund, returnable upon closure of the pre-financing fund, after any allocation shared between the sellers from any adjustments in excess of the individual deductions from the companies subject to adjustment;
- the cash balance of the liquidities contract in place with Kepler Cheuvreux since August 2016, for €55 thousand. Under this liquidity contract, 27,943 treasury shares were recognized as a reduction in shareholders' equity at December 31, 2016 compared to 16,280 shares at December 31, 2015.

9.3.2 Current assets

Assets (in thousands of euros)	12/31/2016	12/31/2015
Trade receivables	4	4
Other current assets	2,277	4,570
Cash and cash equivalents	3,482	9,208
Total current assets	**5,763**	**13,781**

Since the Company's operations exclusively involve research and development programs, the purchases relating to its operation are charged as expenses and have no impact on inventories or work in progress.

Trade receivables at December 31, 2016 and December 31, 2015 have been collected to date.

Other current assets include:

- At December 31, 2016, the 2016 research tax credit (RTC) was €2.8 million, compared with €3.0 million at December 31, 2015. In the course of 2016, the Company sold its 2016 and 2017 research tax credits (RTC) to Predirec Innovation 2020, a mutual securitization fund. In exchange, the Company benefits, subject to it meeting prior contractual conditions, from pre-financing lines for its 2016 and 2017 RTC. In 2016, the Company received €1.6 million in partial pre-financing of its 2016 RTC following allocation of legal costs, financial costs and guarantee deductions (see Note 5 of paragraph 20.1.5 of the *Document de Référence*). The 2016 RTC thus sold therefore appears under other miscellaneous receivables for its amount net of the completed pre-financing operations, i.e. €0.9 million.
- The balance of other receivables mainly corresponds to credits receivable from contracts with CROs (Contract Research Organizations) for the Ovasave® Phase IIb clinical study, which is being shut down following the decision to stop this clinical study. Under these contracts, the

Company has made downpayments or paid advances upon the completion of milestones, which had not been fully used at December 31, 2016.

- Grants receivable correspond to the proportional measurement of grants for collaborative research projects as they are received.
- Prepaid expenses are mostly operating expenses. They are mainly due to the staggering in line with the progress of research and development agreements signed in 2016, for €495 thousand. At December 31, 2015, prepaid expenses were mainly linked to the staggering in line with the progress of subcontracting agreements with the CROs for Phase IIb of the Ovasave® clinical study. Some of these items were recognized under expenses during the financial year; the balance was recognized under credits receivable at December 31, 2016 following the ongoing termination of the contracts concerned.

Cash and cash equivalents consist of immediately available cash and short-term available-for-sale securities. The increase in this item is detailed in paragraph 10.2 of the *Document de Référence*.

9.3.3 Equity

Liabilities (in thousands of euros)	12/31/2016	12/31/2015
Share capital	2,775	2,577
Issue premiums	32,724	29,885
Reserves	(20,737)	(9,576)
Net profit / (loss) for the year	(13,570)	(11,297)
Total shareholders' equity	**1,192**	**11,589**

As at December 31, 2016, the share capital was €2,774,650.40. It is divided into 13,873,252 shares, subscribed and fully paid up, with a par value of €0.20.

This amount excludes share warrants and stock options granted to executives and employees, which have not yet been exercised.

9.3.4 Non-current liabilities

Liabilities (in thousands of euros)	12/31/2016	12/31/2015
Financial debt - non current	3,650	1,641
Debts related to finance leases - non-current	51	0
Other non-current liabilities	9	23
Total non-current liabilities	**3,709**	**1,664**

The non current financial debt correspond to the over one-year portion of :

- a zero-interest innovation loan (*Prêt à Taux Zéro innovation* - PTZI) obtained from Bpifrance Financement in 2014 in the gross amount of €1.7 million. This sum was paid within the scope of the Phase IIb clinical trial for Ovasave®, which started in December 2014. The zero-interest innovation loan is repayable over a period of eight years, with a deferred repayment of three years. The repayment flows for the zero-interest innovation loan are discounted on the closing date (see Note 11.2 of paragraph 20.1.5 of the *Document de Référence*);
- bonds convertible into shares (OCA), issued to YA II CD, Ltd. not converted at December 31, 2016, with a maturity date exceeding one year, and valued at fair value as at December 31, 2016 (see Note 11.3 of paragraph 20.1. 5 of the *Document de Référence*).

The Company signed several leases during the 2016 financial year. These apply solely to laboratory equipment. These leases are entered into for a period of five years. The over one-year portion of these financial leases debt are recognized in non current.

Other non-current liabilities total €9 thousand, and correspond to the over-one-year portion of the staggering of the zero-interest innovation loan grant.

The following table shows the breakdown of financial liabilities by nature and maturity:

In thousands of euros	Gross amount	one year at most	Over one year and 5 year at most	Over 5 years
Zero Interest Innovation Loan	1,655	169	1,324	162
Convertible bonds	3,570	1,406	2,164	0
Total loans and financial payables	**5,225**	**1,575**	**3,487**	**162**
Finance leases	63	12	51	0
Debts related to finance leases	**63**	**12**	**51**	**0**

9.3.5 Current liabilities

Liabilities (in thousands of euros)	12/31/2016	12/31/2015
Financial debt - current	1,575	0
Trade and other payables	893	1,608
Other current liabilities	5,358	5,087
Debts related to finance leases - current	12	0
Provisions - current	55	772
Total current liabilities	**7,893**	**7,467**

Current financial debts correspond to the portion of the PTZI and OCA referred to in paragraph 9.3.4 with a maturity of less than one year.

The change in the Trade and other payables item is mainly due to the stoppage of the Ovasave® Phase IIb clinical trial, and more specifically to subcontracted activities to CROs and CMOs.

Current provisions as at December 31, 2015 included a provision for restructuring of € 750 thousand, corresponding to expenses expected in 2016 as part of the closure of the Besançon site. This provision was reversed for €745 thousand over the year, including € 66 thousand of unused reversal.

9.4 Alternative performance indicators

The Company does not consider using alternative performance indicators (APIs) as defined in the AMF's position DOC-2015-12.

10. LIQUIDITY AND CAPITAL RESOURCES

See also Notes 9 and 10 to the financial statements prepared in accordance with IFRS, in paragraph 20.1 of the *Document de Référence*.

10.1 Information on equity, liquidity and sources of funding

As at December 31, 2016, cash and cash equivalents held by the Company were €9.2 million versus €13.9 million as at December 31, 2014. Cash and cash equivalents include cash and short-term financial instruments held by the Company, which consist of open-ended money market funds (*SICAV monétaire*) and negotiable medium-term notes (*Bons à Moyen Terme Négociables*). This cash and these marketable securities are used to finance the Company's activities.

The board of directors of January 20, 2017 decided to increase the share capital for a nominal amount of 1,109,860.00 euros, through the issuance of 5,549,300 new shares with warrants attached, at a price of €2.00 including issue premium, through a capital increase with shareholders' preferential subscription rights for a gross amount of €11,098,600 euros, including issue premium. This capital increase was subscribed at 100% and recognized by decision of the CEO, Mr. Stéphane Boissel, on February 24, 2017, the day of settlement and delivery of the new shares (see section 10.1.1 and Note 26 of section 20.1.5 of the *Document de Référenc*.).Since its creation, the Company has financed its growth by strengthening its equity capital through successive capital increases, and by obtaining public grants for innovation and research tax credit payments.

The breakdown of net financial debt is as follows:

In thousands of euros		31/12/2016	31/12/2015
	Short-term bank deposits	474	3,201
	Open-ended money market funds (SI	3,008	6,007
Total cash and cash equivalents		**3,482**	**9,208**
	Current financial liabilities	(1,587)	0
	Non-current financial liabilities	(3,700)	(1,641)
Total financial debt		**(5,288)**	**(1,641)**
Net financial cash / (debt)		**(1,805)**	**7,567**

10.1.1 Equity financing

The table below summarizes the capital increases by value until the date of the *Document de Référence*.

Period	Gross amount raised (in millionof euros)	Operations
2001-2004	0.3	Incorporation of the Company and fundraising from the founders, minority shareholders and INSERM
2004-2007	10.6	Successive share issues marking equity investments by financial investors in 2004 (Auriga Partners, Seventure, CDC Entreprises, CDC Innovation and AXA Private Equity) for €10.5 million and the raising of €0.1 million from minority shareholders and INSERM
2008-2009	10.0	Successive share issues (Auriga Partners, Seventure, CDC Entreprises, CDC Innovation and AXA Private Equity) whose second tranche was only 87% subscribed, that is, €9.8 million, and the raising of €0.2 million from minority shareholders
2010	3.5	Funds raised from existing financial investors (Auriga Partners, Seventure andt CDC Entreprises)
2012-2013	12.4	Conversion of the bonds issued in 2011 and 2012 (see Note 5.11.2 of paragraph 20.1) for a total of €2.9 million, share issue for a total amount of €6.5 million (Auriga Partners, Seventure et CDC Entreprises) in 2012 and exercise of BSA Tranche 2 warrants for a total amount of €3 million in 2013
2014	21.2	Issue and conversion of €3.5 million bond; Initial public offering for €16.2 million gross; Additional equity round of €1.5 million gross.
2015	7.9	Funds raised by private placement of €7.9 million gross from mostly internationaland healthcare investors.
2016	1.7	Issue of €5.0 million bond, and conversion of €1.7 million bond (see Note 11.3 of section 20.1.5 of the *Document de Référenc*)
2017	11.1	Funds raised by capital increase with shareholders' preferential subscription rights, by issuance of shares with warrants attached
Total	**78.7**	

10.1.2 Government grants for innovation

The Company receives or has received a variety of grants and subsidies to finance some of its projects and accelerate its development.

In 2015, France's Joint Inter-Ministerial Fund (*Fonds Unique Interministériel*, FUI) awarded a subsidy of €1.3 million to the TRUST project (TRegs in Uveitis STudy), overseen by a consortium led by the Company and dedicated to the process development and clinical development of Col-Treg, the Company's second drug candidate for the treatment of autoimmune uveitis. The portion of the subsidy granted to the Company amounts to €0.8 million. The Company received €253 thousands in 2016 in connection with this subsidy, of which €96 thousands were recognized as income in 2016.

The Company did not receive other significant cash in 2016 in connection with government grants for innovation.

10.1.3 Financing from research tax credits

The Company has received research tax credits since its incorporation.

The 2015 research tax credit was received on June 2016 in the amount of €3,023 thousand.

The receivable for the 2016 research tax credit amounts to € 2,794 thousand and is expected to be reimbursed in 2017. During 2016, the Company sold to Predirec Innovation 2020, a mutual securitization fund, its receivables of research tax credit for 2016 and 2017. In exchange, the Company benefits, subject to it meeting prior contractual conditions, from pre-financing lines for its 2016 and 2017 RTC.

In 2016, the Company received €1.6 million in partial pre-financing of its 2016 RTC, following allocation of legal costs, financial costs and guarantee deductions (see Note 5 of paragraph 20.1.5 of the *Document de Référence*).

10.1.4 Debt financing

The Company did not contract any bank loans for its financing, nor did it have any variable rate debt . During the financial year 2014 the Company obtained a zero-interest innovation loan (*Prêt à Taux Zéro Innovation*) of €1.7 million gross as part of the clinical development of the product Ovasave®. This loan is repayable over eight years, with a repayment deferral of three years.

The Company did not use bank loans for its financing nor did it have any floating rate debt. Borrowings and loans contracted by the Company are as follows:

- Zero Innovation Rate loan (*Prêt à Taux Zéro Innovation* - PTZI) of €1.7 million gross obtained as part of the clinical development of the product Ovasave® product. This loan is repayable over eight years, with a repayment deferral of three years. The repayments on the zero-interest innovation loan were discounted to the reporting date. The discounted value is treated as a subsidy within the meaning of IAS 20 and amortized on a straight line basis over the duration of the project to which the advance is attached (see Note 11.2 of paragraph 20.1.5 of the *Document de Référence*).
- Optional convertible bond financing line with YA II CD, LTD, an investment fund managed by the US company Yorkville Advisors Global LP. During the fiscal year 2016, the Company drawn two tranches by issuing 30 notes on August 3, 2016 and 20 notes on November 3, 2016 for a respective amount of €3M and €2M. The notes are non-interest bearing (except in the event of default) and have a maturity of 14 months from the date of issuance. As of December 31, 2016, the principal amount is €3.3 million (see Note 10.3.4.2 and Note 11.3 of paragraph 20.1.5 of the *Document de Référence*).

The following table shows the simplified schedule of repayments as at December 31, 2016 after discounting the liability.

In thousands of euros	Gross amount	one year at most	Over one year and 5 year at most	Over 5 years
Zero Interest Innovation Loan	1 655	169	1 324	162
Convertible bonds	3 570	1 406	2 164	0
Total loans and financial payables	**5 225**	**1 575**	**3 487**	**162**

10.1.5 Lease financing

The Company subsribed several leasing contracts in 2016, concerning exclusively laboratory equipment. These contracts are concluded for a period of 5 years. The accounting methods of these contracts are described in Note 2.4.1 of paragraph 20.1.5 of the *Document de Référence*.

10.1.6 Off-balance sheet commitments

Off-balance sheet commitments are described in Note 21 of paragraph 20.1 of the *Document de Référence*.

10.2 Cash flows

The cash flow statement for the past two financial years is as follows:

In thousands of euros	12/31/2016	12/31/2015
Net profit / (loss)	**(13 570)**	**(11 297)**
Eliminations of items with no impact on cash and cash equivalents		
Elimination of depreciation, amortization and provisions	(326)	1 135
Share-based payment	649	483
Financial expenses arising from bonds	732	
Other eliminations with no impact on cash and cash equivalents	36	(7)
OPERATING CASH FLOW	**(12 479)**	**(9 687)**
Change - non-current	**230**	**(313)**
Other eliminations of non-current items with no impact on cash and cash equivalents	244	27
Change in other non-current liabilities	(14)	(340)
Change - current	**1 815**	**(66)**
Change in trade receivables		997
Change in other current assets	2 294	(987)
Change in trade payables	(714)	213
Change in other current liabilities (excluding fixed asset suppliers)	235	(288)
CHANGE IN WORKING CAPITAL REQUIREMENTS	**2 044**	**(379)**
Net cash from operating activities	**(10 435)**	**(10 066)**
Acquisition of intangible assets	(7)	(5 902)
Change in intangible assets supplier account	39	3 905
Other eliminations of intangible items with no impact on cash and cash equivalents	(39)	(3)
Acquisition of property, plant and equipment	(330)	(214)
Sale of property, plant and equipment	97	23
Change in property, plant and equipment supplier account	(4)	(83)
Acquisition of non-current financial assets	(225)	(3)
Sale of non-current financial assets	8	3
Net cash from investing activities	**(460)**	**(2 274)**
Capital increases or contributions	270	7 631
Receipts from loans	4 900	
Net cash from financing activities	**5 170**	**7 631**
NET CASH FLOWS	**(5 725)**	**(4 710)**
OPENING CASH	**9 208**	**13 917**
CLOSING CASH	**3 482**	**9 208**

10.2.1 Cash flows from operating activities

Cash flow used in operating activities for the financial years ended December 31, 2016 and December 31, 2015 amounted to respectively €10.4 million and €10.1 million.

The net cash flows from operating activities of the Company relate primarily to:

- the net loss of €13.6 million in 2016, which increased mainly due to:

- the costs related to the technology transfer to the CMO MaSTherCell for producing Ovasave®, launched in September 2015, and the research and development agreements signed in 2016, partially offset by the stoppage of the production activities since June 2015 in Besançon, the the suspension of the recruitment for Phase IIb of the Ovasave® clinical study and the closure of the Besançon site in 2016.
- the launch of the laboratory specialized in the development of manufacturing processes and technology transfer at Sophia Antipolis;
- the increase in legal fees, notably for contract matters for the partnership, research, development and license agreements signed over the period, and the increase of investor relations and communication costs, partially offset by the decrease in fees linked to capital increases.

- Other non-cash items restated in net income:
  - depreciation, amortization and reversals of provisions for 2016 in the amount of -€326 thousand, including notably provision reversals for the restructuring of the Company's activities;
  - the expense for share-based payments as per IFRS 2 of €649 thousand in 2016.
  - The recognition at fair value through profit or loss of bonds convertible into shares, for €732 thousand in 2016 (see Note 11.3 of paragraph 20.1.5 of the *Document de Référence*).
- The change in working capital requirements, which resulted primarily from:
  - The pre-financing of the RTC. The receivable of the 2016 RTC amounts to €2,8 million, including €1.6 million already pre-financed during the financial year 2016, i.e. a remaining receivable of €0.9 million, against a receivable of €3.0 million as at December 31, 2015;
  - the decrease in trade receivables, mainly related to the stoppage of CATS29 clinical study, and more particularly the operations subcontracted to the CROs and CMOs.

10.2.2 Cash flows from investing activities

Cash flows used in investing activities amounted, for the years ended December 31, 2016 and 2015, to respectively €0.5 million and €2.3 million.

The period ended December 31, 2015 included €2 million of net cash flow from investment in intangible assets. This amount corresponds to the first payment made to Trizell on signing the agreement terminating the collaboration, development, option and license agreement dated December 2, 2015. Under this agreement the Company recovered all Trizell's rights over Ovasave® in return for paying amounts which could reach €15 million, €6 million of which is fixed and €9 million of which is conditional on the future revenues generated by Ovasave® (see paragraph 22.2 of the *Document de Référence*).

For the financial year 2016 capital expenditures mainly involved purchasing of laboratory equipment for the equipment of the new laboratories specialized in the development of manufacturing processes and the transfer of technology. In 2015, capital expenditures mainly concerned the purchase of laboratory equipment as part of the program to develop and industrialize the Ovasave® production process.

10.2.3 Cash flows from financing activities

Cash flows for financing activities were €5.2 million as at December 31, 2016 after allocating the costs of the capital increase, amounting to €0.1 million. These cash flows correspond to the exercise in 2016 of 576,255 BSA 04-11 warrants for an aggregate amount of € 0.3 million and the receipt for € 4.9 million of the bonds convertible into shares issued in 2016 to YA II CD.

10.3 Information on borrowing terms and the funding structure

See Note 11 of the notes to the financial statements prepared in accordance with IFRS, in paragraph 20.1.5 of the *Document de Référence*.

10.4 Restriction on the use of capital

None.

10.5 Future sources of financing required

Since its creation, the Company has financed its growth by strengthening its equity through successive capital increases, and by obtaining public grants for innovation and research tax credit payments.

As at March 31, 2017, the Company's cash and cash equivalents amounted to €11.3 million. This amount includes the gross income of €11.1 million from the capital increase through the issue of new shares with share warrants (ABSA) with preferential shareholder subscription rights which took place in February 2017. Given the growth plan and the operational spending incurred, this cash position will enable the Company to continue in business until January 2018. Additional financial resources will therefore be necessary.

To meet its future cash requirements, the Company issued, through an ABSA public offering in February 2017, 5,549,300 share warrants with a one year maturity, i.e. until February 26, 2018. The proceeds from the exercising of all warrants, i.e. a total of €10.8 million, would enable the Company to finance its operations until it obtained regulatory authorization, expected by the end of 2018, for a first CAR-Treg clinical study on humans.

Otherwise, the Company can call on, provided it meets the contractual terms and conditions (please refer to the prospectus corresponding to each case):

- an optional convertible-bond financing line with YA II CD, Ltd giving the Company the option to issue to YA II CD, Ltd, over a period of 36 months from August 3, 2016, notes convertible into shares for a maximum nominal amount of €20 million plus up to an additional €10 million if all attached share warrants are exercised, and there thus remained 150 bonds corresponding to a nominal amount of €15 million, to which €7.5 million are likely to be added if all of the attached Warrants are exercised;

- a PACEO optional equity financing line with Société Générale relating to 1,150,000 new shares to be issued over a period of 24 months as of January 27, 2016 on exercise of share warrants, on which no drawdown has been made at the date of the *Document de Référence* (it being specified that the Company has committed not to draw down any funds for as long as any of the convertible Notes already issued remain unconverted or unredeemed.

In the future, the Company will continue to have substantial financing requirements for developing its technology, continuing its preclinical and clinical development programs, equipping its R&D facilities and, eventually, producing and marketing its products. It is therefore possible that the Company will be unable to finance its growth from operating cash flows, which would lead it to seek other sources of funding, particularly through new capital increases.

11. RESEARCH AND DEVELOPMENT, PATENTS, LICENSES, TRADE NAMES AND DOMAIN NAMES

11.1 Innovation policy

The Company carries out its work in the "biotech" field (therapeutic research), where it focuses its innovation policy.

Since its creation, the vast majority of Company resources have been devoted to research and development ("R&D") permitting it to have its own products platform, called ASTrIA (Antigen-Specific Tregs for Inflammation and Autoimmunity*)*, which offers a novel approach to customized cellular immunotherapy for the treatment of Crohn's disease and other inflammatory pathologies, such as autoimmune uveitis. The candidate products which the Company has developed with this platform are suspensions of competent antigen-specific type 1 regulatory T lymphocytes (Ag-Tregs), not genetically modified and generated ex-vivo from the patient's blood.

In addition to its ASTrIA platform, the Company is developing a second platform of products called ENTrIA (Engineered Tregs for Inflammation and Autoimmunity*)* based on redirected Chimeric Antigen Receptor engineered regulatory T lymphocytes (CAR-Treg) and their use for the treatment of autoimmune and inflammatory pathologies as well as transplantation-related inflammatory disorders. This new platform is in line with the Company's goal of developing a new products able to deliver their immunomodulant action independently of the antigenic presentation via the molecules of the major histocompatibility complex ("MHC") and to express, on their surface, chimeric antigenic receptors ("CAR").

The inventions developed and owned by the Company are based on its know-how in the field of type-1 regulatory T cells. They involve the use of cell isolation and culture techniques that in some cases make use of only ordinary tools and methods, such as isolation by immuno-affinity or by cell sorting, as well as the culture of T regulatory cells in the presence of growth factors and antibody activators. The Company has developed isolation protocols, culture conditions, and expansion protocols, specific to the products, which constitute proprietary know-how. It may not be desirable to file a patent application (which would be published) for some of these techniques. Procedures to protect the confidentiality of this know-how are in place. Thus, the Company ensures that all researchers and partners must enter into a confidentiality agreement with the Company. In addition, the know-how in question is fragmented among different people in order to optimize the protection of secrets.

In the years to come, the Company will continue its R&D work on the protocol of identifying, obtaining and expanding regulatory T cells, as well as on the mechanisms of action in order to broaden the scope of its industrial property portfolio.

The Company has for several months accelerated its policy of collaborative innovation by contractually securing access to existing and future intellectual property related to regulatory T lymphocytes and resulting from several academic institutes.

Before marketing authorizations are granted, the Company writes off R&D costs in compliance with existing accounting rules (IAS 38). These expenses mainly comprise salaries and fees paid to partners working on R&D for the Company

11.2 Patents and patent applications

11.2.1 Policy of protection of intellectual property

The Company considers that patents, patent applications and other intellectual property rights are of crucial importance in the Company's sector of activity. The Company conducts case-by-case examinations of the necessity of submitting patent applications to protect certain technical processes, innovative candidate products and certain medical treatment methods. It can also be authorized to use rights (under the terms of the license agreement) or acquire rights over patents, patent applications or other intellectual property rights which are of interest to it and/or its sectors of activity such as the Treg

cells sector or the sector for treating inflammatory diseases, which belong to third parties, partner universities or commercial companies.

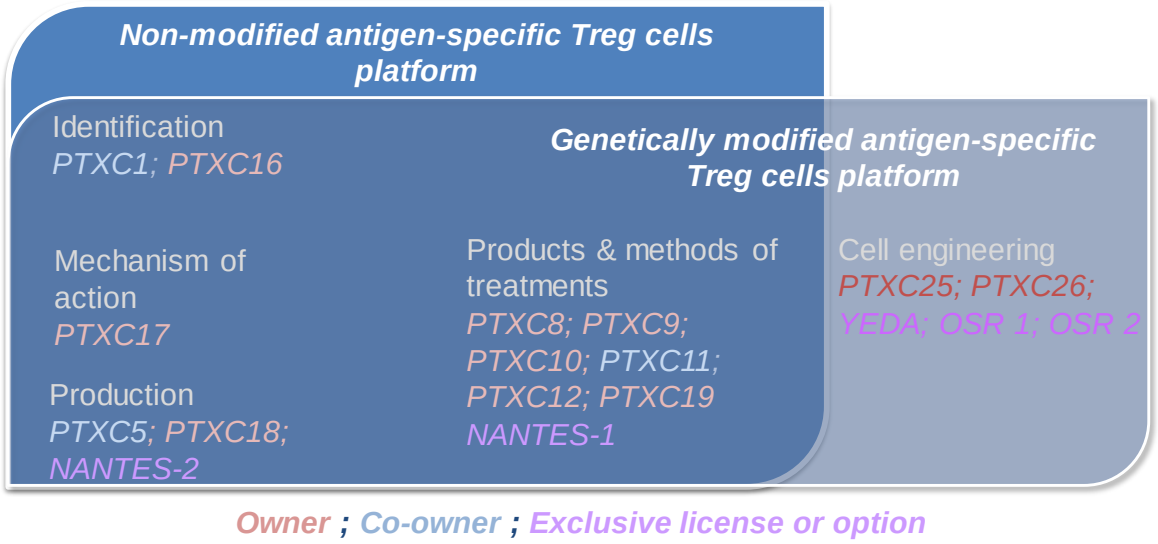
The Company has had a policy of protection of intellectual property since 2007 under which any research result is examined from the patentability and innovation point of view, in partnership with a firm of industrial intellectual property lawyers, to determine the benefit or otherwise of a patent application to protect this result.

Other than the exclusive licensing rights to intellectual property resulting from its work with the INSERM, pursuant to the license agreement provisions described in paragraph 11.3, the Company has decided to protect its basic technologies and candidate products by numerous patent applications, while looking to protect some of its key products used for the production of cells and in proprietary research programs by placing them in the category of exclusive know-how. The Company has significantly reinforced and repositioned its portfolio (see table 11.2.3 of the *Document de Référence*) since its industrial property protection policy was set up.

The Company's portfolio of patents, patent applications, trademarks and trademark applications are managed in-house with the help of outside intellectual property lawyers.

As at the date of the *Document de Référence*, the portfolio of patents and patent applications of which the Company is the owner, co-owner, exclusive licensee or for which it has an exclusive license option comprises 18 families of patents and patent applications and more than 200 registered patents, which can be divided into five distinct fields, as stated below:

- "Production" field: PTXC5, PTXC18 and NANTES-2 families concerning production processes of regulatory T cells;
- "Identification" field: PTXC1 and PTXC16 families concerning cell markers of type 1 regulatory T cells;
- "Products & methods of treatments" field: PTXC8, PTXC9, PTXC10, PTXC11, PTXC12, PTXC19 and NANTES-1 families concerning the clinical use of regulatory T cells;
- "Mechanism of action" field: PTXC17 family concerning the mechanism of action of regulatory T cells;
- “Cell engineering” field: PTXC25, PTXC26, Yeda, OSR-1 and OSR-2 families concerning specifically the ENTrIA platform based on genetically modified regulatory T lymphocytes of the Company.



-

11.2.2 Ownership of rights over patents and patent applications comprising the Company's portfolio

The patents and patent applications of the YEDA, NANTES-1, NANTES-2, OSR-1 and OSR-2 families are licenses or exclusive worldwide licensing options described in paragraph 11.3 of the *Document de Référence*.

Patents and patent applications of the PTXC1 and PTXC5 families have resulted from work with the INSERM and are jointly owned with this research institute.

Patents or patent applications of the PTXC11 family have resulted from work with the University of Montpellier and the Regional University Hospital Center of Montpellier, and are jointly owned with these bodies.

The other eleve, patent families of the portfolio have been deposited in the Company's name alone.

11.2.3 Nature and scope of patents filed on behalf of the Company alone or in co-ownership with another entity

Through its development, the Company is continuing to create new technological inventions and to protect these innovations by filing new patent applications in Europe, in the United-States and in many countries abroad. The Company regularly assesses its portfolio of patents to ensure that the Company's projects are protected in the best possible way and to continue a policy of abandoning patents and patent applications so that no resources are allotted to patent applications and patents which no longer protect the Company's products or processes.

11.2.3.1 "Production" field:

This field comprises two families of patents dealing with production processes of type 1 regulatory T cells and methods for monitoring the efficacy of the Company's products.

The PTXC2 family (WO2002/092793*)* entitled *"Method for obtaining antigen-specific Tr1 regulatory lymphocytes",* describes a method for preparing antigen-specific Tr1 regulatory lymphocytes. The inventive method involves the use of artificial antigen-presenting cells, expressing a molecule from the HLA class II system and a human LFA-3 molecule and expressing none of the B7-1, B7-2, B7-H1, CD40, CD23 or ICAM-1 co-stimulation molecules.

The PTXC5 family (WO2007/010406) entitled *"Obtention of food or auto-antigen specific Tr1 cells from a leukocyte or PBMC population"* deals with a method for obtaining type 1 regulatory T cells *in vitro* that are specific to one dietary allergen or an auto-antigen. This method enables the production of type 1 Treg cells specific to an antigen selected for the pathology to treat. This is the method currently used for the ASTrIA platform.

The PTXC18 family (WO2012/046139), entitled *"Method for determining the efficacy of a therapy using type 1 regulatory T cells in a subject*", describes a method to determine if a patient receiving therapy using type 1 regulatory T cells responds to the treatment. This involves the determination of proliferation of T cells specific for an antigen *in vitro*, the T cells being obtained from a sample of patient blood that is compared to a reference, for example antigen-specific proliferation determined before the patient was treated.

Family	Applicant	Priority date* [1]	Expiry date* [2]	Status* [3]
Production method				
PTXC5	TXCELL INSERM	07/01/2005	2026	**Granted** in the United States, Japan, Australia and in Europe (and validated in the following countries: Austria, Belgium, Bulgaria, Switzerland, Cyprus, Czechoslovakia, Germany, Denmark, Estonia, Spain, Finland, France, Greece, Hungary, England, Ireland, Iceland, Italy, Lithuania, Lichtenstein, Luxembourg, Latvia, Monaco, the Netherlands, Poland, Portugal, Romania, Sweden, Slovenia, Slovakia, Turkey)
PTXC18	TXCELL	08/10/2010	2031	**Granted** in the United-States and in Austalia **Granted** in Europe (and validated in the following countries: Austria, Belgium, Germany, Denmark, Spain, Finland, France, Greece, England, Ireland, Italy, the Netherlands, Norway, Portugal) **Notification of grant** in Japan **Being examined** in Canada

11.2.3.2 "Identification" field:

This field comprises two patent families concerning specific surface markers of type 1 regulatory T cells, and the use of these markers for the identification and isolation of type 1 regulatory T cells.

The PTXC1 family (WO2005/000344*)* entitled *"Method for identification of Tr1 lymphocytes regulators by the presence and over expression of specific molecules and application thereof"* concerns processes for the identification, quantification and enrichment of type 1 regulatory T cells by the presence of surface markers CD4, CD18 and/or CD11a, and CD49b, and possibly by the over-expression of genes coding for CD4, PSGL-1, PECAM-1 and alphaV/beta3 molecules.

The PTXC16 family (WO2011/128779) entitled "*New methods for isolating Tr1 cells"* describes methods to identify, enrich or eliminate activated or quiescent type 1 regulatory T cells from a preparation by the detection of a defined group of surface markers (in particular CD62L and CD127).

Family	Applicants	Priority Date	Expiry date	Status
Cell markers				
PTXC1	TXCELL INSERM	06/24/2003	2024	**Granted** in France, the United States, Europe (and validated in the following countries: Austria, Belgium, Switzerland, Germany, Denmark, Spain,

* Terms defined below are used in this table and subsequent tables in this section

[1] The patent's priority date is the date on which the first filing was made. Subject to being granted, patents are granted for a period of 20 years from their respective filing dates (i.e. the date of filing of the corresponding national, European or international application, it being noted that European patent applications and international patent applications must be made within a period of 12 months following the filing date of the priority patent application), it being noted that when products are registered (i.e. marketing authorizations have been obtained) the patent protection period can be prolonged by 6 months to 5 years, at most, depending on the case.

[2] The expiration date corresponds to the 20 years running from the date the granted patent was filed. This expiry date can be prolonged by obtaining an extension to the patent's term in the United States, for example, or by obtaining an additional patent certificate.

[3] Being examined: the patent application is currently being examined by the Patents Offices.
Notification of grant: the Patents Offices have given notice that they intend to grant a patent.
Granted: patent granted after examination of the company's application in a country/region by the competent authority in that country/region

				Finland, France, England, Ireland, Italy, the Netherlands, Sweden) Australia, Canada and Japan
PTXC16	TXCELL	04/15/2010	2031	**Granted** in Australia, South Africa, China, Mexico, Japan and New Zealand **Being examined** in Brazil, Canada, Korea, Europe, Japan, India, Indonesia, Russia and the United States

11.2.3.3 "Products & methods of treatments " field

This field comprises six families of patents and concerns the clinical use of type 1 regulatory T cells.

The PTXC8 family (WO2009/050283*),* entitled *"Compositions for treating multiple sclerosis*", describes type 1 regulatory T cells specific for an antigen involved in multiple sclerosis, e.g. MBP or MOG, as well as their use to treat this pathology.

The PTXC9 family (WO2009/068575*),* entitled *"Compositions for treating an intestinal inflammatory condition*", involves a composition including at least one population of type 1 regulatory T cells specific for a dietary antigen in many foods consumed by humans to treat inflammatory intestinal diseases such as Crohn's disease, ulcerative colitis, food allergies or food intolerances, for example to milk proteins or coeliac disease.

The PTXC10 family (WO2009/050282*)* entitled *"Tr1 cells, mesenchymal stem cells and uses thereof*", describes a composition of type 1 regulatory T cells and mesenchymal stem cells and the use of this composition to induce immunological tolerance (specific for an antigen), in particular to treat diseases involving an immune response with excessive, dysfunctional or uncontrolled T cell mediation.

The PTXC11 family (WO2009/132941), entitled *"Compositions for treating an arthritic condition*", describes a composition containing at least one population of type 1 regulatory T cells specific for a joint-related antigen, e.g. collagen II, and the use of this composition to treat arthritic disorders.

The PTXC12 family (WO2009/132939), entitled *"Compositions for treating an inflammatory autoimmune condition*", describes a composition containing at least one population of type 1 regulatory T cells specific for human heat shock protein (HSP), and the use of this composition to treat autoimmune inflammatory diseases such as intestinal inflammatory diseases, arthritic disorders, multiple sclerosis, vasculitis, etc.

The PTXC19 family (WO2012/131419), entitled *"Method for using regulatory T cells in therapy*", describes the dose of cells to administer to a patient with an inflammatory or autoimmune disease receiving cell therapy using regulatory T cells.

Family	Applicants	Priority Date	Expiry date	Status
Clinical Use				
PTXC8	TXCELL	10/17/2007	2028	**Granted** in Australia, China, Russia, the United-States and in Europe (and validated in the following countries: Austria, Belgium, Bulgaria, Switzerland, Cyprus, Czechoslovakia, Germany, Denmark, Estonia, Spain, Finland, France, England, Greece, Croatia, Hungary, Ireland, Iceland, Italy, Lichtenstein, Lithuania, Luxembourg, Latvia, Monaco, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Sweden, Slovenia, Slovakia, Turkey) **Notification of grant** in Canada **Being examined** in the United States and Japan

PTXC9	TXCELL	11/26/2007	2028	**Granted** in Australia, the United States, Russia and Japan **Notification of grant** in Canada **Being examined** in Europe (Austria, Belgium, Bulgaria, Switzerland, Cyprus, Czechoslovakia, Germany, Denmark, Estonia, Spain, Finland, France, England, Greece, Croatia, Hungary, Ireland, Iceland, Italy, Lichtenstein, Lithuania, Luxembourg, Latvia, Monaco, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Sweden, Slovenia, Slovakia, Turkey), the United States, Brazil, China and Korea
PTXC10	TXCELL	10/17/2007	2028	**Granted** in Australia, China, Japan, Russia and in Europe (and validated in the following countries: Austria, Belgium, Germany, Denmark, Spain, Finland, France, England, Greece, Ireland, Italy, the Netherlands, Norway, Portugal) **Being examined** in the United States, Canada and Korea
PTXC11	TXCELL University of Montpellier Regional University Hospital Center of Montpellier	04/28/2008	2029	**Granted** in Australia, Russia and in Europe (and validated in the following countries: Austria, Belgium, Bulgaria, Switzerland, Cyprus, Czechoslovakia, Germany, Denmark, Estonia, Spain, Finland, France, England, Greece, Croatia, Hungary, Ireland, Iceland, Italy, Lichtenstein, Lithuania, Luxembourg, Latvia, Monaco, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Sweden, Slovenia, Slovakia, Turkey) **Notification of grant** in Japan **Being examined** in the United States, Europe, Canada, China and Korea
PTXC12	TXCELL	04/28/2008	2029	**Granted** in Australia, Europe (and validated in the following countries: Austria, Belgium, Bulgaria, Switzerland, Cyprus, Czechoslovakia, Germany, Denmark, Estonia, Spain, Finland, France, England, Greece, Croatia, Hungary, Ireland, Iceland, Italy, Lichtenstein, Lithuania, Luxembourg, Latvia, Monaco, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Sweden, Slovenia, Slovakia, Turkey) and Japan **Being examined** in the United States and Canada
PTXC19	TXCELL	03/25/2011	2032	**Granted** in Japan **Notification of grant** in Australia **Being examined** in Europe (Albania, Austria, Belgium, Bulgaria, Switzerland, Cyprus, Czechoslovakia, Germany, Denmark, Estonia, Spain, Finland, France, England, Greece, Croatia, Former Yugoslav Republic of Macedonia, Hungary, Ireland, Iceland, Italy, Lichtenstein, Lithuania, Luxembourg, Latvia, Monaco, Malta,

				the Netherlands, Norway, Poland, Portugal, Romania, Serbia, San Marino, Sweden, Slovenia, Slovakia, Turkey), the United States, Australia, Brazil, Canada, China, Japan and Russia

11.2.3.4 "Mechanism of action" field

This field comprises one patent family and concerns the particular mechanisms of action of type 1 regulatory T cells.

The PTXC17 family (WO2012/001533), entitled *"IL-13 producing Tr1-like cells and uses thereof*", involves the isolation, identification and enrichment of a sub-population of type 1 regulatory T cells capable of producing interleukin 13 and having immunosuppressive actions. This new population can be used to diagnose or treat inflammatory and autoimmune diseases, allergies and disorders from organ transplants.

Family	Applicants	Priority Date	Expiry date	Status
Mechanism of action				
PTXC17	TXCELL	07/29/2010	2028	**Granted** in Australia**,** South Africa and New Zealand **Being examined** in Europe (Albania, Austria, Belgium, Bulgaria, Switzerland, Cyprus, Czechoslovakia, Germany, Denmark, Estonia, Spain, Finland, France, England, Greece, Croatia, Former Yugoslav Republic of Macedonia, Hungary, Ireland, Iceland, Italy, Lichtenstein, Lithuania, Luxembourg, Latvia, Monaco, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, San Marino, Sweden, Slovenia, Slovakia, Turkey), the United States, Brazil, Canada, Chile, China, Japan, Korea, Mexico and Russia

11.2.3.5"Cell engineering " field

The patent families PTXC25 and PTXC26 are not yet published. Their content can not be disclosed to date. T cells.

Family	Applicants	Priority Date	Expiry date	Status
Cell engineering				
PTXC25	TXCELL	07/10/2016	2037	**Interim deposits** in the United States and Europe
PTXC26	TXCELL	07/10/2016	2036	**Interim deposits** in the United States and Europe

11.2.3.6 New patent applications

During the period covered by the *Document de Référence*, the Company continued to create new technological inventions, which could result in the filing of new patent applications.

11.2.3.7 Abandoned patents and patent applications

During the period covered by the *Document de Référence*, certain patents and patent applications were abandoned by the Company because they were no longer of interest to the Company or covered technologies which at the time were no longer used by the Company.

11.2.4 Disputes

As at the date of the *Document de Référence* and to the best knowledge of the Company, its intellectual property was not subject to any litigation, nor had any infringement been reported.

11.2.5 Patents currently used

As at the date of the *Document de Référence*, no patent in the Company's patent portfolio is being used.

11.2.6 Scope of patent protection

Before 2005, priority filing (i.e. the first filing starting a 12 month priority period and confirmed by a subsequent application, generally an international patent application, within this 12 month period) was performed in the form of a French patent application. Since 2005, all priority applications are European and/or American.

The Company's patent applications are then extended internationally (international "PCT" application--Patent Cooperation Treaty) within a maximum period of 12 months.

The geographic coverage adopted for national or regional phases depends on corporate strategy. In general, patents systematically include Europe and the United States, and generally Australia, Canada and Japan. Entries into national or regional phases in China, Korea, Russia, Brazil, Chile, India, Indonesia, Mexico, New Zealand and South Africa are also considered, on a case-by-case basis, depending on the strategic importance of the patent family in question.

11.3 Contracts covering joint work, research, external services and licenses granted or conceded to the Company

11.3.1 License contract conceded by the INSERM to the Company

Following joint work between the INSERM and the Company between July 1999 and November 2004, patent applications were submitted for the PTXC1 and PTXC5 families. The PTXC1 and PTXC5 patent families are jointly owned by the Company and the INSERM.

In the license contract of January 30, 2006 (as amended on December 9, 2013), the INSERM granted the Company an exclusive worldwide license to use its share of property of these PTXC1 and PTXC5 patent families.

Information on the contract is provided in paragraph 22.1 of the *Document de Référence*.

11.3.2 Exclusive joint ownership and license agreement for the PTXC11 family

The Company is currently negotiating with the Regional University Hospital Center of Montpellier to sign the joint ownership and exclusive license agreement for the family of PTXC11 patent applications.

11.3.3 Agreement to terminate the collaboration, option, development and license agreement signed with Ferring International Center and transferred to Trizell Holding SA

On December 2, 2015, the Company and Trizell entered into an agreement terminating the *"Collaboration, option, development and license agreement"* and the "*Development agreement*" signed by them. In this agreement Trizell waived its option to obtain an exclusive worldwide license for the development, manufacture and marketing of Ovasave® to treat inflammatory bowel diseases (IBD), among which Crohn's disease. Trizell also transferred to the Company intellectual property rights which it and Ferring could hold over Ovasave®. In return, the Company undertook to pay Trizell, over several

years, certain sums either as fixed payments or as part of the revenues generated by the products initially covered by the collaboration, option, development and license agreement.

Information on the contract is provided in paragraph 22.2 of the *Document de Référence*.

11.3.4 Exclusive option agreement with Ospedale San Raffaele

On April 25, 2016, the Company signed a collaboration agreement with Ospedale San Raffaele in Milan, Italy, for the development of CAR-Tregs in Lupus Nephritis. The Company has been granted options for the licence of two existing patent families of OSR, covering specific engineering tools for CAR chimeric receptor in the field of immunity-mediated inflammatory diseases. In addition, the Company has an exclusive option on the rights to the programs and products that will be generated under this collaboration agreement.

The company mainly dedicated to research and development of chimeric antigen receptor engineered regulatory T cell (CAR-Treg) therapy products for the treatment of immune-mediated inflammatory diseases (excluding cancer and infectious disease).

The collaboration includes a development part focused on the non-clinical development of CAR-Treg cells for the treatment of Lupus Nephritis ("Development Program"), and a research part on the design and biology of other chimeric antigen receptors for use in Treg cell products addressing other autoimmune indications ("Research Program").

Information on the contract is provided in paragraph 22.7 of the *Document de Référence*.

11.3.5 Exclusive licence agreement with Yeda Research and Development Co. Ltd.

On June 21, 2016, the Company exercised its option, held under the exclusive option agreement of June 2015, and signed an exclusive worldwide license agreement for a broadly-based patent family covering all genetically modified Tregs (Tregs) and their use for the treatment of autoimmune and inflammatory diseases. This patent comes from the laboratory of Professor Zelig Eshhar at the Weizmann Institute of Science. Professor Eshhar was the pioneer of the CAR (Chimeric Antigen Receptor). Approach; This patent is issued in Europe (and validated in the following countries: Austria, Belgium, Bulgaria, Switzerland, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Croatia, Hungary, Iceland, Ireland , Italy, Lichtenstein, Lithuania, Luxembourg, Latvia, Monaco, Malta, Netherlands, Norway, Poland, Portugal, Romania, Sweden, Slovenia, Slovakia and Turkey). Four oppositions to this european patent were filed with the European Patent Office within the opposition period, which expired on April 6, 2017.

This patent application is furthermore under consideration in the United States.

Information on the contract is provided in paragraph 22.3 of the *Document de Référence*.

11.3.6 Collaboration agreement with the University Hospital of Schleswig-Holstein, Campus Lübeck

On May 30, 2016, the Company signed a strategic collaboration agreement with the University Hospital of Schleswig-Holstein, Campus Lübeck, (the « University »), on which depends the Lübeck Institute of Experimental Dermatology, « LIED »), for the development of CAR-Tregs in bullous pemphigoid, a rare skin disease. The Company has all rights to the programs and products that will be generated under this collaboration agreement.

Information on the contract is provided in paragraph 22.8 of the *Document de Référence*.

11.3.7 Collaboration agreement with University of British-Columbia

On October 17, 2016, the Company signed a strategic collaboration agreement with the University of British Columbia (UBC) in Vancouver, Canada, for the development of CAR-Tregs in solid organ transplantation. The Company has been granted an exclusive option on the rights to the programs and products that will be generated under this collaboration agreement.

Information on the contract is provided in paragraph 22.9 of the *Document de Référence*.

11.3.8 Exclusive licence agreement with the *Centre pour la Recherche en Transplantation et en Immunologie de Nantes*

On December 8, 2016, the Company announced the signing of an exclusive worldwide license agreement covering two patent families filed by the *Centre pour la Recherche en Transplantation et en Immunologie (*"Center for Transplantation and Immunology Research") (CRTI, Nantes, France). PCT filing for these two patent families were completed in 2016. These patents cover a new type of regulatory T lymphocytes bearing the CD8 marker, as opposed to traditional Tregs bearing the CD4 marker such as type 1 Tregs and FoxP3+ Tregs. In particular, these CD8+ Tregs are non-cytotoxic and possess a unique and highly immunosuppressive mechanism of action. This mechanism is mediated by the release of anti-inflammatory and tolerogenic cytokines. These CD8+ Tregs could thus offer a different and complementary approach to treat inflammatory disorders, including autoimmunity and transplant rejection. In addition, these patents also cover the use of CAR-Treg cells made from these CD8+ Tregs.

11.4 Other intellectual property aspects

The Company has protected its "Ovasave®" brand name by registering trademarks in France.

The Company also owns three domain names (www.txcell.fr; www.txcell.com; www.txcell-finance.com), to provide public access to its website.

12. TRENDS

12.1 Recent changes since closing of financial year 2016

On February 22, 2017, the Company announced the success of its capital increase through the issue of 5,549,300 new shares with warrants attached, for a gross amount of €11.1 million, which may be supplemented by a gross amount of € 10.8 million in the event of the exercise by February 26, 2018 of all the warrants so issued. These proceeds will cover TxCell's cash requirements for 2017, which include the costs of the CAR-Treg research and manufacturing process development programs as well as TxCell's ongoing expenses and overheads. The additional proceeds from the potential exercise of all the warrants which were attached to new shares issued in February 2017 would enable TxCell to further finance its activities through to the IND approval to initiate a first-in-man study with a CAR-Treg candidate. This is expected by the end of 2018. As a reminder, these warrants have a maturity of one year and are traded on a separate Euronext line (FR0013231792). At any time up to February 26, 2018 (included), 4 warrants will entitle holders to subscribe for 3 TxCell's new shares at a subscription price of €2.60 per new share.

On March 9, 2017, the Company announced its 2016 annual financial results, showing a cash and cash equivalent position of €3.5 million (before proceeds of the February 2017 capital increase) and a net loss of €13.6 million. On this occasion, the Company also reminded the main developments of the year 2016 and presented the main objectives for 2017.

On April 26, 2017, published its revenue for the 1st quarter of 2017 and its cash position as of March 31, 2017. As of March 31st, 2017, the cash and cash equivalents amounted to €11.3 million (including proceeds of the February 2017 capital increase). As expected, TxCell did not generate revenues during the first quarter 2017.

12.2 Perspectives

Priorities of the Company for 2017 are:

- Generation of pre-clinical proof of concept data on the ENTrIA platform, to start the first human clinical study with a CAR-Treg by the end of 2018;
- Improvements to TxCell's production process for the ASTrIA platform and development of a production process for the ENTrIA platform;
- Signature of strategic partnerships with major pharmaceuticals and biotech players to further speed up development of the pipeline of the Company.

12.3 Know trends, uncertainties, demand or commitments or events that could reasonably have a notable effect on Company perspectives

On the basis of TxCell's development plan described in paragraph 12.2 above, the Company expects that its operational cash burn should be of approximately €13 million in 2017.

13. PROFIT FORECASTS AND ESTIMATES

The Company does not intend to make any profit forecasts or estimates.

14. ADMINISTRATIVE, MANAGEMENT, SUPERVISORY AND EXECUTIVE BODIES

The Company is a French limited liability company (*société anonyme)* with a board of directors (*conseil d'administration*). During the meeting held on September 6, 2013, the board of directors chose to separate the functions of chairman of the board and Chief Executive Officer (*directeur général)*.

A brief description of the main provisions of the Company's bylaws and its special committees' internal regulations can be found in paragraph 21.2 and in the board of directors' report on corporate governance, internal control and risk management set out in paragraph 16.3 of the *Document de Référence*, respectively.

14.1 Executive officers and members of the board of directors

14.1.1 Executive officers

The Company is a French limited liability company (*société anonyme*) with a board of directors, the roles and responsibilities of which are described in the bylaws and summarized in paragraphs 21.2.2 and 16.3 of the *Document de Référence*.

The Company is managed by Mr. Stéphane Boissel as Chief Executive Officer.

Following the definitive closure of the pharmaceutical establishment in Besancon, notified to the French National Health Products Safety Agency (*Agence Nationale de Sécurité du Médicament et des produits de santé*, "ANSM") on January 25, 2016, Mr. Eric Pottier resigned from his position as head pharmacist (*pharmacien responsable*) and from his position as Deputy Chief Executive Officer effective February 2, 2016. At its meeting held on February 3, 2016, the board acknowledged this resignation. Mr. Eric Pottier was then dismissed for economic reasons dated March 17, 2016 in connection with the closing of the Besancon site.

As of the date of the *Document de Référence*, the list of executive officers is as follows:

Name	Office	Date of first appointment or most recent renewal, term of office	Main functions within the Company
Stéphane Boissel	Chief Executive Officer (not a member of the board of directors)	First appointment as Chief Executive Officer: April 27, 2015 Term of office: following the general meeting convened to vote on the financial statements for the financial year ending on December 31, 2017	Chief Executive Officer

The business address of the Chief Executive Officer is the head office of the Company.

The Chief Executive Officer's expertise and experience in management results from his previous positions as employee and/or executive officer (please refer to paragraph 14.1.5 of the *Document de Référence*).

14.1.2 Members of the board of directors

At the date of the *Document de Référence*, the Company's board of directors is composed of the following members:

Name	Office	Date of first appointment or most recent renewal, term of office	Main functions within the Company
François Meyer	Chairman of the board of directors	First appointment to the board: September 28, 2012 Term of office as a member of the board of directors: following the general meeting convened to vote on the financial statements for the financial year ending on December 31, 2017 First appointment as chairman of the board of directors: September 28, 2012	Head of Research
Auriga Partners represented by Bernard Daugeras	Director	First appointment: September 28, 2012 Term of office: following the general meeting convened to vote on the financial statements for the financial year ending on December 31, 2017	None
Bpifrance Investissement represented by Marie-Laure Garrigues	Director	First appointment: September 28, 2012 Term of office: following the general meeting convened to vote on the financial statements for the financial year ending on December 31, 2017	None
Bpifrance Participations represented by Thibaut Roulon	Director	First appointment: May 26, 2015 Term of office: following the general meeting convened to vote on the financial statements for the financial year ending on December 31, 2020	None
Marie-Yvonne Landel Meunier	Independent director	First appointment: March 7, 2014 Term of office: following the general meeting convened to vote on the financial statements for the financial year ending on December 31, 2019	None
David Horn Solomon	Independent director	First appointment: March 30, 2015 Term of office: following the general meeting convened to vote on the financial statements for the financial year ending on December 31, 2017	None

The expertise and experience in management of the people listed above result from their previous positions as employees and/or executive officers (please refer to paragraph 14.1.3. of the *Document de Référence*).

The board of directors appointed Mr. Laurent Arthaud and Mr. Laurent Higueret as observers (*censeurs*) on March 7, 2014 and May 22, 2014, respectively, for six-year terms, which expire following the general meeting convened to vote on the financial statements of the financial year ending December 31, 2019. In accordance with the Company's bylaws, these appointments were ratified by the combined ordinary and extraordinary shareholders' meeting held on May 26, 2015.

14.1.3 Other corporate offices

Other corporate offices currently held by the Chief Executive Officer

Management	Other corporate offices currently held outside the Company	
	Type of office	Company
Stéphane Boissel	Chairman of the board of directors	Elsalys Biotech SAS
	Chairman	SAS Cottages Participations

Other corporate offices currently held by the members of the board of directors

Director	Other corporate offices currently held outside the Company	
	Type of office	Company
François Meyer	None	None
Auriga Partners represented by Bernard Daugeras	*Bernard Daugeras as representative of Auriga Partners*	
	Member of the board of directors	Domain Therapeutics
	Member of the board of directors	Isocell
	Member of the board of directors	Population Genetics
	Member of the supervisory board	Firalis
	Member of the supervisory board	Theranexus
	Offices held by Bernard Daugeras in his own name	
	Member of the board of directors	CNRS Fondation
	Member of the board of directors	IHU Strasbourg
	Member of the board of directors	Chronocam
	Member of the management board	Auriga Partners
Bpifrance Investissement represented by Marie-Laure Garrigues	*Marie-Laure Garrigues as representative of Bpifrance Investissement*	
	Member of the board of directors	EOS Imaging
	Member of the board of directors	Uromems
	Member of the board of directors	Medtech
	Offices held by Marie-Laure Garrigues in her own name	
	None	None
Bpifrance Participations represented by Thibaut Roulon	*Thibaut Roulon as representative of Bpifrance Participations*	
	None	None
	Thibaut Roulon as representative of Bpifrance Investissement	
	Member of the board of directors	Biom'Up
	Member of the supervisory board	Step Pharma
	Observer	Gensight Biologics
	Offices held by Thibaut Roulon in his own name	
	Member of the board of directors	Advicenne Pharma
	Observer	Poxel
Marie-Yvonne Landel Meunier	Member of the board of directors and chairman of the audit committee	Cellnovo
	Member of the board of directors and chairman of the audit committee	Safe orthopedics
David Horn Solomon	Member of the board of directors	Onxeo
	Member of the board of directors	Promosome
	Managing Partner	Sund Capital ApS

Corporate offices held by the Chief Executive Officer over the five previous financial years, now expired:

Management	Corporate offices held over the five previous financial years, now expired	
	Type of office	Company
Stéphane Boissel	Chief Executive Officer	Genclis
	Member of the board of directors	Genclis
	Member of the board of directors	Transgene
	Member of the board of directors	Transgene BioPharmaceutical Technology
	Member of the board of directors	Pharmaxon

Corporate offices held by the members the board of directors over the five previous financial years, now expired:

Director	Corporate offices held over the five previous financial years, now expired	
	Type of office	Company
François Meyer	Member of the supervisory board	Uniqure BV
	Member of the board of directors	FNR Luxembourg
	Chairman of the scientific board	FNR Luxembourg
Auriga Partners represented by Bernard Daugeras	*Bernard Daugeras as representative of Auriga Partners*	
	Member of the management board	Bioalliance
	Member of the board of directors	Median Technologies
	Member of the management board	Novagali
	Member of the supervisory board	Supersonic Imagine
	Offices held by Bernard Daugeras in his own name	
	Member of the supervisory board	Inserm Transfert
Bpifrance Investissement represented by Marie-Laure Garrigues	*Marie-Laure Garrigues as representative of Bpifrance Investissement*	
	Member of the board of directors	Cytheris
	Offices held by Marie-Laure Garrigues in her own name	
	Manager	Bio Thema Consulting
Bpifrance Participations represented by Thibaut Roulon	*Thibaut Roulon as representative of Bpifrance Participations*	
		Néant
	Thibaut Roulon as representative of Bpifrance Participations	
	Member of the supervisory board	TxCell
	Offices held by Thibaut Roulon in his own name	
	Member of the board of directors	Gamamabs Pharma
	Member of the board of directors	Sensorion
Marie-Yvonne Landel Meunier	Member of the board of directors and treasurer	Hepatochem
David Horn Solomon	President and Chief Executive Officer	Bionor
	President and Chief Executive Officer	Zealand Pharma

14.1.4 Representations relating to the executive officers, the members of the board of directors and the observers

None of the mentioned persons have any family ties among each other.

During the last five years, none of these persons:

- have been convicted for fraud;
- have been associated to a bankruptcy, receivership or liquidation, as executive officer or member of a governing body;
- have been prohibited from managing a company; or
- have been the subject of any allegations or official public sanctions by statutory or regulatory authorities.

14.1.5 Biographies of the chairman of the board of directors, the Chief Executive Officer, the members of the board of directors and the Observers.

François Meyer, chairman of the board of directors, was previously chairman and Chief Executive Officer of the Company from 2011 to 2013. From 2010 to 2014, he was also a member of the supervisory board of uniQure NV, a Dutch gene therapy company (AMX and NASDAQ). From 2006 to 2010, he was a member of the board of the Luxembourg National Research Fund, and was president of its scientific board from 2010 to 2014. From 1996 to 2006, François was successively senior vice president of research world-wide at Rhône Poulenc Rorer, senior vice president R&D at d'Aventis Pharma France and Chief Executive Officer of Gencell, a wholly-owned subsidiary of Aventis. From 1993 to 1996, he held various management positions at Sandoz within R&D, in particular, he was global head of the gene and cell therapy business. François started his career in Industry in 1980 by creating and integrating the first molecular biology department of Ciba-Geigy, which led to the first biotechnology products coming from the pharmaceutical industry.

From 1993 to 1996, he has been a member of boards of directors and scientific boards for a number of biotechnology companies specialized in gene and cell therapy, including Introgen Therapeutics, Inc., Gene Therapy Inc., Systemix, Inc., and Biotransplant Inc.

François holds a Ph.D. in Molecular Biology from the University of Zurich in 1978 and a diploma in chemistry from the Swiss Federal Institute of Technology in Zurich in 1972. In 2014, he got awarded *Grand Officier de l'ordre du Mérite du Grand-Duché de Luxembourg* for his contributions to the development of Research in Luxembourg.

Stéphane Boissel, Chief Executive Officer, holds a degree in management and finance from the universities of Lyon and Paris-Dauphine. He also holds an MBA from the University of Chicago, United States of America. Stéphane has solid experience in the fields of both investment banking and immunotherapy. At the beginning of his career, from 1990 to 2002, Stéphane worked for PwC and then for the Lazard investment bank, primarily as an investor in France, Singapore, and Hong Kong. He then became a member of the Innate Pharma SA team from 2002 to 2010, first as a Chief Financial Officer, and then as a Deputy Chief Executive Officer. From 2010 to 2014, he served as Deputy Chief Executive Officer of Transgene. He oversaw several public offerings and private placements and negotiated several international agreements while he was at Transgene and Innate Pharma. He was also a member of the board of directors of Erytech Pharma SA between 2005 and 2010. In 2014, Stéphane served as Chief Executive Officer of Genclis, a molecular diagnostic company, prior to becoming the Chief Executive Officer of TxCell in April 2015. Stéphane is also the non-executive chairman of the board of directors of Elsalys Biotech SAS.

Bernard Daugeras, permanent representative of Auriga Partners, member of the board of directors, is co-founder and member of the management board of Auriga Partners. He is a specialist of life sciences. Bernard has engineered a number of investments such as Onxeo (formerly BioAlliance Pharma) (Euronext Paris: ONXEO), NicOx (Euronext Paris: COX) and SuperSonic Imagine (Euronext Paris: SSI), and is a member of the French Academy of Technologies.

Researcher in particle physics at the University of Orsay, the University of California at Berkeley and the CNRS (the French national scientific research center), Bernard held a number of senior posts in the French Ministry of Industry and Research, including being responsible for relations between research and businesses and for promoting technology transfer. As such, he participated in establishing the industrial research agreement system (*conventions industrielles de formation par la recherche – CIFRE*). In 1986 he was part of the creation of Innolion, the Crédit Lyonnais's venture capital structure, before joining Finovelec in 1990.

Bernard is a graduate of the Ecole Polytechnique and holds a PhD from the University of Orsay.

Marie-Laure Garrigues, permanent representative of Bpifrance Investissement, member of the board of directors, is the director of investments for Bpifrance Investissement (formerly CDC Enterprises) since 2008. Previously, she founded Bio-Thema Consulting in 2002, and carried out consulting missions in the biotechnologies sector. She has been member of the boards of directors of Faust Pharmaceuticals, BioAlliance Pharma, GeneSystems, Palumed, Fournitures Hospitalières, Proteus and Ingen Biosciences, and was appointed chairman of the management board of Pherecydes Pharma in 2007. Between 1986 and 2002, she directed the R&D and marketing teams at Sanofi Diagnostics Pasteur before working as director of the microbiology division of Bio-Rad laboratories, a Californian company that manufactures diagnostic products. Between 2012 and 2014, she was observer of TxCell.

Marie-Laure Garrigues is a pharmacist and a former hospital intern in medical biology. She holds a postgraduate diploma (DEA) in microbiology from the University of Paris V.

Thibaut Roulon, permanent representative of Bpifrance Participations, member of the board of directors, graduated in engineering from the Ecole Centrale de Paris and holds a doctorate from the University Pierre and Marie Curie. He began his career as a researcher in a U.S. biotechnology company developing anticancer immunotherapies.

In 2005, he joined Bioam Gestion, a venture capital firm investing in the field of life sciences. In 2010, Bioam was acquired by Bpifrance Investments (formerly CDC Entreprises), a subsidiary of Caisse des Dépôts in charge of investments in small and medium-sized enterprises (*petites et moyennes entreprises - PMEs*) and mid-tier enterprises (*entreprises de taille intermédiaire – ETIs*). He is responsible for investments in companies specialized in life sciences (seed or venture capital, listed companies).

Marie-Yvonne Landel-Meunier, independent member of the board of directors, moved to Boston in 1990 and founded Marie Landel & Associates, a company whose focus is worksharing financial management and whose clients - French and European companies essentially working in the high-tech and biotech sectors – are based throughout the U.S.. The firm is a member of the Constantin network.

Marie-Yvonne graduated from the European Business School in 1975 and then qualified as an independent accountant (*expert-comptable*) in 1989.

David Horn Solomon, independent member of the board of directors, obtained his doctorate in medical science from the Cornell University Graduate School of Medical Science of New York in 1991. He was a member of the faculty of the College of Physicians and Surgeons at the University of Columbia (New York, NY, USA).

From 2003 to 2006, David headed healthcare investments for Carrot Capital Healthcare Ventures in New York. He has also held various management positions in biotechnology and pharmaceutical companies and medical systems, including Remedy Pharmaceuticals, Critical Diagnostics, and Vital Sensors. He thus acquired broad experience in listed companies in the fields of biotechnology, healthcare investment and pharmacological research. David then served as Chairman and Chief Executive Officer of Zealand Pharma A/S (NASDAQ CO: ZEAL) from 2008 to 2015, and as President and Chief Executive Officer of Bionor Pharma ASA (OSE: BIONOR and NASDAQ: BNRPF) from 2015 to 2016. He is currently a member of the boards of directors of Onxeo in Paris (Euronext Paris and NASDAQ OMX: ONXEO) and of Promosome in La Jolla, California (USA).

Laurent Arthaud, observer, is a graduate of the Ecole Polytechnique and of the French National School of Statistics and Economic Administration. Laurent Arthaud was Vice-chairman of Aventis Capital, the capital investment subsidiary of the pharmaceutical group Aventis, and chairman of Pharmavent Partners, before joining Bpifrance Investissement (formerly CDC Entreprises) in 2006 as Deputy Chief

Executive Officer in charge of new developments. In 2009, he took the head of all the life sciences activities of CDC Enterprises and became manager of the InnoBio investment fund. Since 2013, he has been managing the investment activities in Lifesciences, Cleantech and French Tech Acceleration of Bpifrance Investissement.

Laurent Higueret, observer, is an investment director in the Large Venture Fund team at Bpifrance, specializing in healthcare and life sciences investments. He is currently member of the board of directors of Biom'Up and formely at Poxel. Laurent is responsible for Bpifrance's investments in Cerenis, DBV Technologies and MedDay. Before Joining Bpifrance in 2014, he spent six years as an investment banker with BNP Paribas' Healthcare M&A Group. Laurent Higueret holds a PhD in Pharmacy from the University of Bordeaux and holds a Master Degree in Financial Engineering from the EM Lyon Business School.

The biographies of the members of senior management who are not executive officers are set out in paragraph 6.1.5.3 of the *Document de Référence*.

14.2 Conflicts of interest between members of the administrative and executive management bodies

The members of the board of directors and the Chief Exectuive Officer are all direct or indirect shareholders of the Company and/or hold securities that give access to the Company's capital (please refer to paragraph 18.1 and 21.1.4 of the *Document de Référence*). The observers are not shareholders and do not hold any instruments that give access to the capital of the Company.

The regulated agreements entered into by the Company are described in paragraph 19.3. "Statutory auditors' special report on regulated agreements"

The Company is not aware of any current or potential conflict of interest between the private interests and/or other duties of the members of the Company's administrative, management and executive management bodies, as listed in paragraph 14.1 above, and their duties to the Company.

As part of the investment by Bpifrance Participations, a Shareholders' Agreement was entered into on March 27, 2014 by and among Auriga Partners, Seventure Partners, Bpifrance Participations, Innobio, and Mr. François Meyer, Mr. Miguel Forte, Mr. Arnaud Foussat, Mr. Raphaël Flipo, Mr. Damian Marron and Mr. Eric Pottier (the "Shareholders' Agreement").

Following the resignation of Mr. Damian Marron from his positions as Chief Executive Officer and member of the board of directors of the Company on April 27, 2015, the parties to the Shareholders' Agreement entered into an addendum to the Shareholders' Agreement on May 6, 2015, under which they decided that Mr. Damian Marron is no longer subject to the rights and obligations of the Shareholders' Agreement.

Following the resignation of Mr. Eric Pottier from his position as Deputy Chief Executive Officer on February 2, 2016, the parties to the Shareholders' Agreement entered into an addendum to the Shareholders' Agreement on February 3, 2016, having the same purpose as the aforementioned addendum.

As part of the departure of Mr. Miguel Forte of the Company and the termination of his duties as director of operations with effect from November 30, 2016, the parties to the Shareholders' Agreement t entered into an addendum to the Shareholders' Agreement on November 16, 2016, having the same purpose as the aforementioned addendum.

The key commitments of this Shareholders' Agreement include:

- A commitment to hold shares:

Innobio and the investment funds managed by Auriga Partners and Seventure Partners (the "Funds") have committed towards the other parties to the Shareholders' Agreement to hold the Shares (as that term is defined by the Shareholders' Agreement) that they hold or will come to hold directly or indirectly as follows: (i) 100% of their Shares during the six months from the date of the first listing of the Company's shares, (ii) 75% of their Shares during the six months that follow the preceding period, (iii)

50% of their Shares during the six months that follow the preceding period, and (iv) 25% of their Shares for the six months following the preceding period.

Messrs. François Meyer, Arnaud Foussat and Raphaël Flipo (the "Managers") have committed towards the other parties to the Shareholders' Agreement to hold the Shares that they hold or will come to hold directly or indirectly, as follows: (i) 100% of their Shares for two years from the date of the first listing of the Company's shares, (ii) 75% of their Shares during the one year period that follows the preceding period, and (iii) 50% of their Shares during the one year period that follows the preceding period.

Bpifrance Participations has committed towards the other parties to the Shareholders' Agreement to hold 100% of the Shares to which it subscribed to during the Offering for two years from the date of first listing of the Company's Shares.

Notwithstanding the above, Bpifrance Participations and the Funds may freely transfer all or a part of their Shares to a third party in the event of: (i) transfer to any entity that it controls, that controls it, or is under joint control within the meaning of Article L.233-3 of the French commercial code; (ii) violation of any of the commitments under the Shareholders' Agreement, other than a simple omission that is not likely to challenge the commitments provided for in the Shareholders' Agreement, and; (iii) a public offer of the Company's Shares.

In addition, Bpifrance Participations may also freely transfer its ownership: (i) in the event of a modification of the list of important decisions mentioned in article 2.1.3 of the Shareholders' Agreement, that has not been approved by Bpifrance Participations, and (ii) in the event of a change in Company strategy that is not approved by Bpifrance Participations.

- Orderly disposal procedure:

The parties related to the Shareholders' Agreement (the "Related Parties") may, if they wish, institute an orderly disposal procedure without disturbing the market. Any Related Party wishing to dispose of Shares that are not subject to a lock-up pursuant to the Shareholders' Agreement may provide notice to the other Related Parties of the number of Shares it wishes to dispose of.

Each of the other Related Parties thus informed will have a period of five days to notify the other Related Parties of its intention to dispose of its Shares by indicating the number of Shares that it wishes to transfer. The Related Parties having indicated their desire to transfer Shares will mutually agree on a recognized investment services provider to transfer the Shares under the best terms, and will mutually define in good faith the procedure and the terms of the sale, in particular the sale price or the terms for setting the price. All Related Parties having communicated their intention to transfer may participate in the sale on the same terms (including price).

In the event that one of the Related Parties decides to no longer participate in the sale, it may withdraw from the process and the other Related Parties, in the absence of another agreement, will reallocate among themselves, proportionally to the number of Shares sold, the number of Shares that would have been sold by the withdrawing party. The withdrawing party will then be free to sell all or part of the number of Shares (such as that number was communicated to the other Related Parties) at any time after the expiration of the time frame provided for in the following paragraph.

In the event that one or several Related Parties provides notice of their intention to proceed with a disposal in accordance with the foregoing terms, no Related Party may transfer Shares prior to the expiration of a 30-day period following the date of completion (or withdrawal) of the sale in accordance with the orderly disposal procedure, with the exception of transfers implemented in accordance with that procedure by the party or Related Parties that provided notice of the intention to sell.

In the event that no party has provided notice of their intention to proceed with a disposal in accordance with the foregoing terms, each Related Party will be free to transfer at any time any Shares that are not subject to a lock-up. This orderly disposal procedure will remain in effect for a period of two years from the date of first listing of the Company's Shares.

- The appointment of a member to the board of directors upon proposal by Bpifrance Participations and that this member serves on at least one of the special committees of the board of directors.

- Bpifrance Participations may request the appointment of an observer to the board of directors.

The Shareholders' Agreement has been entered into for a ten-year period, given that it can be terminated in the event that Bpifrance Participations sells more than half of its investment in the Company.

The Shareholders' Agreement is not intended by the parties, and the parties do not intend to act in concert.

To the best of the Company's knowledge, no other agreements or contracts whatsoever have been entered into with shareholders, clients, suppliers, or any other party under which any of the Company's executive officers or members of the board have been appointed.

In addition, as part of the capital increase carried out in February 2017 (see prospectus approved by the AMF under number 17-030 dated January 24, 2017), the Company's main historical investors (two entities of Bpifrance, six funds managed by Seventure Partners and the fund managed by Auriga Partners) collectively holding 67.55% of the undiluted capital as at the date of the visa, have entered into a retention agreement with the Lead Partner and Bookrunner, for a 365 calendar days period following the start date of the ABSA negotiations on the regulated market of Euronext in Paris, ie until February 26, 2018, with the exception of one of the funds managed by Seventure Partners, for which the commitment is limited to three months and is conditioned to a TxCell share price of less than 3 euros.

To the best of the Company's knowledge, as at the date of the *Document de Référence*, no other restrictions accepted by the persons listed in paragraph 14.1. "Executive officers and members of the board of directors" concerning the transfer of their interest in the Company's capital exist.

15. COMPENSATION AND BENEFITS

15.1 Compensation of the corporate officers

The information in this chapter has been prepared with reference to the Corporate Governance Code for Midcap and Smallcap Companies published in September 2016 by MiddleNext and approved as a reference document by the AMF (the "MiddleNext Code"). The tables included in the AMF recommendation no. 2009-16 are set out below.

The Company is a French limited liability company *(société anonyme*) with a board of directors (*conseil d'administration*). At the meeting held on September 6, 2013, the board of directors opted to separate the functions of Chairman of the board and Chief Executive Officer. Readers are advised to refer to the additional information provided below each table.

- **Table 1:** Summary of compensation, stock options and shares allocated to each executive corporate officer

In thousands of euros Name	2016 financial year	2015 financial year
François Meyer – Chairman of the board of directors		
Compensation for the financial year (1)	118	82
Value of multiannual variable compensation allocated during the financial year	0	0
Value of options and warrants allocated during the financial year as per method used in the financial statements prepared in accordance with IFRS (2) (3)	46	84
Value of free shares allocated during the financial year (3)	0	0
Total	**163**	**166**
Stéphane Boissel – Chief Executive Officer (4)		
Compensation for the financial year (1)	381	210
Value of multiannual variable compensation allocated during the financial year	0	0
Value of options and warrants allocated during the financial year as per method used in the financial statements prepared in accordance with IFRS (2) (3)	0	451
Value of free shares allocated during the financial year (3)	164	0
Total	**546**	**661**
Damian Marron – Chief Executive Officer (5)		
Compensation for the financial year (1)	0	271
Value of multiannual variable compensation allocated during the financial year	0	0
Value of options and warrants allocated during the financial year as per method used in the financial statements prepared in accordance with IFRS (2) (3)	0	0
Value of free shares allocated during the financial year (3)	0	0
Total	**0**	**271**
Eric Pottier – Deputy Chief Executive Officer (6)		
Compensation for the financial year (1)	93	98
Value of multiannual variable compensation allocated during the financial year	0	0
Value of options and warrants allocated during the financial year as per method used in the financial statements prepared in accordance with IFRS (2) (3)	0	19
Value of free shares allocated during the financial year (3)	0	0
Total	**93**	**118**
Total	**801**	**1,215**

(1) See Table 2.

(2) See Table 4.

(3) The valuation of the warrants, stock options and free shares awarded during the financial year, according to the method used in IFRS accounting, corresponds to the probability-weighted value of the awarded plans after a non-transferability discount. In the financial statements presented in paragraph 20.1 of the *Document de Référence*, these charges are spread over the vesting periods of the warrants, the stock options and the free shares.

(4) Mr. Stéphane Boissel was appointed CEO of the Company by the board of directors on April 27, 2015.

(5) Mr. Damian Marron was appointed CEO of the Company by the board of directors on September 6, 2013, a position which he resigned from on April 27, 2015. As part of his departure, Mr. Damian Marron received during the financial year 2015 a severance package in an amount that complies with the MiddleNext Code recommendations.

(6) Mr. Eric Pottier was hired as Vice President for the Supply Chain on January 14, 2013 and was appointed Deputy Chief Executive Officer of the Company by the board of directors on January 22, 2013, a position which he resigned from on February 2, 2016. Eric Pottier was dismissed on economic grounds on March 17, 2016 in connection with the shutdown of the Besançon site.

- **Table 2** Summary of compensation allocated to each executive corporate officer

The following tables presents the compensation allocated to the executive corporate officers for the past two financial years, and the actual compensation received during the same periods:

In thousands of euros Name	2016 financial year		2015 financial year	
	Amount due[(1)]	Amount paid[(2)]	Amount due[(1)]	Amount paid[(2)]
François Meyer – Chairman of the board of directors				
Fixed compensation (6)	107	107	82	82
Variable compensation (6)	10	0	0	0
Exceptional compensation	0	0	0	0
Director's attendance fees	0	0	0	0
Benefits in kind	0	0	0	0
Total	**118**	**107**	**82**	**82**
Stéphane Boissel – Chief Executive Officer (3)				
Fixed compensation (7)	275	275	186	186
Variable compensation (8)	93	17	17	0
Exceptional compensation	0	0	0	0
Director's attendance fees	0	0	0	0
Benefits in kind (9)	14	14	7	7
Total	**381**	**305**	**210**	**194**
Damian Marron – Chief Executive Officer (4)				
Fixed compensation (10)	0	0	60	60
Variable compensation (11)	0	0	0	46
Exceptional compensation (12)	0	0	211	211
Director's attendance fees	0	0	0	0
Benefits in kind	0	0	0	0
Total	**0**	**0**	**271**	**316**
Eric Pottier – Deputy Chief Executive Officer (5)				
Fixed compensation (13)	43	43	96	96
Variable compensation (14)	0	0	0	18
Exceptional compensation (15)	49	49	0	0
Director's attendance fees	0	0	0	0
Benefits in kind (16)	0	0	2	2
Total	**93**	**93**	**98**	**116**
Total	**592**	**505**	**661**	**708**

(1) For the financial year. The variable compensation owed for one financial year is paid in the next financial year.

(2) During the financial year.

(3) Mr. Stéphane Boissel was appointed CEO of the Company by the board of directors on April 27, 2015.

(4) Mr. Damian Marron was appointed CEO of the Company by the board of directors on September 6, 2013, a position from which he resigned on April 27, 2015.

(5) Mr. Eric Pottier was hired as Vice President for the Supply Chain on January 14, 2013 and was appointed Deputy Chief Executive Officer of the Company by the board of directors on January 22, 2013, a position

from which he resigned on February 2, 2016. Mr. Eric Pottier was dismissed on economic grounds on March 17, 2016 in connection with the shutdown of the Besançon site.

(6) The board of directors' meeting held on September 6, 2013 set Mr. François Meyer's gross annual compensation at €60 thousand, covering his functions as Chairman, as well as his general management support function. The board of directors' meeting held on February 10, 2015 revalued and revised the apportionment of François Meyer's compensation to make a distinction between his compensation as Chairman of the board of directors (€60 thousand gross per year) and the compensation for his specific mission (€24 thousand gross per year) effective February 1, 2015. The board of directors of September 21, 2016 reviewed the specific mission of assistance to the executive management team from Mr. François Meyer, and decided to o entrust him with the specific mission of "Head of Research" to manage the entire research division of the Company and its programs. As part of this assignment, Mr François Meyer's fixed remuneration was increased, with effect from August 1, 2016, from 24,000 euros gross annual to 80,000 euros gross annual, plus an annual variable compensation of 30% of said specific remuneration, according to the achievement of corporate objectives set annually by the board of directors. On March 8, 2017, upon recommendation of the nomination and compensation committee, the board of directors decided to set the variable compensation of Mr. François Meyer at 10,275 euros gross for the financial year 2016 in consideration of the achievement of corporate and individual objectives.

(7) The Company entered into a management agreement with Stéphane Boissel following his appointment as the Company's CEO by the board of directors on April 27, 2015, with a view to determining the main terms and conditions of his duties as CEO. The signature of the management contract was authorized by the board at its meeting held on April 27, 2015. As consideration for his duties, Stéphane Boissel will receive (i) a yearly fixed compensation of €275 thousand euros, (ii) a variable compensation that may not exceed 30% of the said fixed compensation, based on the achievement of objectives set annually by the Company's board of directors, and (iii) in-kind benefits consisting of the payment of business travel, expense, an unemployment insurance policy for executives, and supplementary social security, healthcare and retirement protection.

(8) On February 3, 2016 the board of directors, upon the proposal of the nomination and compensation committee, set at 20% the percentage of completion at that date of the objectives set in Stéphane Boissel's management contract, representing €16,500 of variable compensation for 2015, it being understood that a substantial part of this variable compensation will be evaluated as of June 30, 2017, in accordance with the management contract amended by an amendment dated September 21, 2016, duly authorized by the board of directors on the same day. The board of directors of March 8, 2017, upon recommendation of the nomination and compensation committee, fixed the additional 2015 variable remuneration for Stéphane Boissel at 66,000 euros in consideration of the achievement of the objectives set out in the management contract and 26,813 euros for its 2016 variable compensation in consideration of the achievement of the Corporate objectives.

(9) Mr. Stéphane Boissel's benefits in kind are, pursuant to the management agreement entered into with the Company on April 27, 2015, the provision of a vehicle and unemployment insurance.

(10) On September 6, 2013, the board of directors set the fixed annual compensation allocated to Damian Marron at €180 thousand, to be paid pro rata according to his presence in the Company until December 2013 to take into account a transition period. Damian Marron's compensation was increased to €184 thousand by the board of directors on January 22, 2014, as part of its general increase policy for 2014. Damian Marron resigned as Chief Executive Officer effective April 27, 2015.

(11) The variable compensation allocated to Damian Marron was capped at €70 thousand and is conditional upon the achievement of corporate objectives defined and reviewed annually on the basis of proposals made by the nomination and compensation committee. The achievement of the 2013 and 2014 objectives was confirmed respectively by the board of directors on January 22, 2014, and on February 10, 2015. No variable compensation was paid to Damian Marron for the 2015 financial year.

(12) Damian Marron received a severance package in the financial year 2015, in view of his departure and pursuant to the MiddleNext Code's recommendations.

(13) Mr. Eric Pottier did not receive any compensation as Deputy Chief Executive Officer. He was remunerated only for his position as Vice President for the Supply Chain and Qualified Pharmacist (*pharmacien responsable*).

(14) The board of director's meeting held on January 22, 2014 set Eric Pottier's variable compensation for 2014 at a maximum of €25 thousand, for 50% conditional upon attaining the corporate targets and for 50% conditional upon attaining his personnel targets, as defined and reviewed annually on a proposal by

the nomination and compensation committee. The achievement of the 2014 targets was confirmed by the board of directors on February 10, 2015. No variable compensation was paid to Eric Pottier for the 2015 financial year.

(15) Eric Pottier received a severance package in the financial year 2016, in view of his departure and pursuant to the MiddleNext Code's recommendations.

(16) Mr. Eric Pottier's benefits in kind relates to the provision of a vehicle.

- **Table 3:** Directors' attendance fees and other compensation received by non-executive corporate officers

In thousands of euros Nom	2016 financial year		2015 financial year	
	Amount due[(1)]	Amount paid[(2)]	Amount due[(1)]	Amount paid[(2)]
Bernard Daugeras – Director				
Director's attendance fees	0	0	0	0
Other compensation	0	0	0	0
Total	0	0	0	0
Marie-Laure Garrigues – Director				
Director's attendance fees	0	0	0	0
Other compensation	0	0	0	0
Total	0	0	0	0
Thibaut Roulon – Director				
Director's attendance fees	0	0	0	0
Other compensation	0	0	0	0
Total	0	0	0	0
Marie Yvonne Landel Meunier – Independent Director				
Director's attendance fees (3)	35	35	35	30
Other compensation (4)	0	0	0	0
Total	35	35	35	30
David Horn Solomon – Independent Director				
Director's attendance fees (3)	35	35	35	0
Other compensation (4)	0	0	34	0
Total	35	35	69	0
Laurent Arthaud – Observer				
Director's attendance fees	0	0	0	0
Other compensation	0	0	0	0
Total	0	0	0	0
Laurent Higueret – Observer				
Director's attendance fees	0	0	0	0
Other compensation	0	0	0	0
Total	0	0	0	0
Total	**70**	**70**	**104**	**30**

(1) For the financial year. Director's attendance fees owed for one financial year are paid in the next financial year.

(2) During the financial year.

(3) On March 30, 2015 the board of directors set the directors' attendance fees to be paid to Marie-Yvonne Landel-Meunier and David Horn Solomon at a maximum of €35 thousand per year staring from 2015, depending on their attendance and the time actually spent on their duties. After reviewing these two criteria for 2016, the board of directors on January 23, 2017 voted to award these two directors the maximum director's fee. The board of directors on February 3, 2016 voted to award Marie-Yvonne Landel-Meunier and David Horn Solomon the maximum director's fee for 2015.

(4) Other compensation refer to the valuation of the warrants awarded during the year, according to the method used in IFRS accounting, corresponds to the probability-weighted value of the awarded plan after a non-transferability discount. In the financial statements given in paragraph 20.1 of the *Document de Référence*, these charges are spread over the vesting periods of the warrants.

In addition, the board of directors of March 8, 2017 granted 20,000 BSA 03-17 warrantes to Mr. David Horn Solomon and 20,000 BSA 03-17 warrants to Mrs Marie-Yvonne Landel meunier, both independent directors. As at the date of the *Document de Référence*, these warrants have not been subscribed (see paragraphe 21.1.4.2 of the *Document de Référence*).

- **Table 4:** Warrants and stock options (subscription or purchase) allocated to each executive corporate officer during the financial year

Name	Plan	Date of grant	Value of warrants and stock options as per method used in the financial statements published in accordance with IFRS (in thousands of euros)	Number of warrants and stock options allocated	Subscription price per share (€)	Expiry date
François Meyer – Chairman of the board of directors	BSA 09-16	09/21/2016	46	200,000	0.18	09/21/2026
TOTAL			**46**	**200,000**		

- **Table 5:** Warrants and stock options (subscription or purchase) exercised by each executive corporate officer during the financial year

Name	Plan	Date of grant	Number of warrants and stock options exercised during the period	Subscription price (€)
François Meyer – Chairman of the board of directors	BSA 04-11 (1)	04/18/2011	576,255	0.55
TOTAL			**576,255**	

(1) According to the reverse stock split of the Company's shares at a ratio of five existing shares for one new share decided by the shareholders' meeting held on March 7, 2014, the exercise of 576,255 BSA 04-11 gave rise to the issue of 115,251 new shares at a unit price of 2.75 euros, including share premium.

- **Table 6:** Free shares granted during the year to each corporate officer

Free shares allocated by the shareholders' meeting during the year to each corporate officer by the Company or any company of the group	Plan	Date of grant	Number of shares allocated during the year	Value of free shares as per method used in the financial statements prepared in accordance with IFRS (in thousands of euros)	Date of share acquisition	End date of retention period	Performance conditions
Stéphane Boissel – Directeur général	2016 AGA management	02/05/2016	150 000	164	(1)	(2)	(1)
TOTAL			**150 000**	**164**			

(1) The 2016 AGA management are acquired by a third at the end of each year from their allocation by the board of directors, provided that the acquisition is subject to a condition of presence, and to performance conditions, linked to the realization of annual objectives by the beneficiary (i.e. financing, progess on research and development programs, signature of strategic partneships), as determined by the board of directors.

In case of a change of control of the Company, all AGA allocated to a beneficiary will immediately become acquired at the later of the two following date: (i) the first anniversary of the allocation date (the condition of presence is then lifted and the vesting period is completed with a holding period expiring on the second anniversary of the allocation date, i.e. on May 2, 2018) and (ii) the date of completion of the change of control (said date marking the end of the vesting period), if necessary extended by a holding period up to the second anniversary of the allocation date, i.e. on May 2, 2018

(2) The first third of the allocated free shares is subject to a one-year holding period from the date of acquisition, i.e. until May 2, 2018. No holding period was set for the two other thirds, subject to the provisions applicable in case of a change of control as described in (1) above.

- **Table 7:** Free shares that became available during the year

None.

- **Table 8:** Past awards of warrants and stock options (purchase or subscription)

Please refer to the tables in paragraphs 21.1.4.1 and 21.1.4.2 of the *Document de Référence*.

- **Table 9:** Stock options (subscription or purchase) allocated to the top ten beneficiary employees who are not corporate officers, and options exercised by them

None

- **Table 10:** Past awards of free shares

Please refer to the tables in paragraph 21.1.4.3 of the *Document de Référence*.

- **Table 11:** Details of compensation and other benefits granted to executive corporate officers

Executive corporate officers	Contract of employment		Supplementary pension plan		Compensation or benefits that will or may be paid if the officer leaves office or changes office		Payments under non-competition clause	
	Yes	No	Yes	No	Yes	No	Yes	No
François Meyer **Chaiman of the board of directors**		X		X		X		X
Start of office:	By decision of the shareholders' metting hel on September 28, 2012, member for a six-year term of office to expire following the general meeting convened to vote on the financial statements for the financial year ending on December 31, 2017 By decision of the board of directors on September 6, 2013, Chairman of the board of directors (separation of the functions of Chairman and Chief Executive							
Term of office:	Following the general meeting convened to vote on the financial statements for the financial year ending on December 31, 2017							
Stéphane Boissel **Chief Executive Officer**		X	(1)			X	(2)	
Start of office:	By decision of the board of directors on April 27, 2015							
Term of office:	Following the general meeting convened to vote on the financial statements for the financial year ending on December 31, 2017							
Eric Pottier **Deputy Chief Executive Officer**	X			X		X	(3)	
Start of office:	By decision of the board of directors on January 22, 2013							
Term of office:	Resignation with effect on February 2, 2016							

(1) In accordance with the management contract signed on April 27, 2015 (see paragraph 16.2 of the *Document de Référence*), the Company has implemented an Article 83-type supplemental pension policy effective April 1, 2016, for Mr. Stephane Boissel, as for all employees of the Company.

(2) Stéphane Boissel is obliged to comply with a non-competition clause until 12 months have passed after the expiration of his term of office as Chief Executive Officer. In consideration for this clause he will receive, for as long as it is in effect, a monthly compensation equal to 40% of his last monthly gross fixed compensation.

(3) Eric Pottier was subject to a non-competition clause, which was lifted by the board of directors on February 3, 2016.

15.2 Provisions for the payment of pensions, retirement benefits and other benefits to corporate officers

The Company has not recorded any provision for the payment of pensions, retirement benefits and other benefits to members of the board of directors and executive officers.

The Company has subscribed to directors and officers insurance from AIG. This policy covers all the de facto and de jure executive officers of the Company and its subsidiaries within a limit of €5 million, worldwide, with the exception of claims relating to professional misconduct committed in subsidiaries located in common law countries (please refer to paragraph 4.8 of the *Document de Référence*).

The Company has subscribed to an unemployment insurance policy for executives (*Garantie Sociale des Chefs dirigeants d'entreprise - GSC*) for Stéphane Boissel, effective August 1, 2015.

15.3 Free shares, warrants and stock options allocated to corporate officers

A detailed description of each of the above-mentioned plans can be found in paragraph 21.1.4 of the *Document de Référence*. The figures correspond to the total number of shares that can be subscribed following the exercise, or as appropriate the acquisition, of all the rights or securities giving access to the Company's share capital.

16. FUNCTIONING OF ADMINISTRATIVE AND MANAGEMENT BODIES

16.1 Management of the Company

The Company is a French limited liability company (*société anonyme*) with a board of directors, whose operation is described in the bylaws, which are available on the Company's website: www.txcell.com.

The Company's board of directors is chaired by Mr. François Meyer as Chairman of the board of directors. The Company is managed by Mr. Stéphane Boissel as Chief Executive Officer, appointed by the board of directors on April 27, 2015.

Powers of the Chief Executive Officer

The powers of the Chief Executive Officer are described in Article 14 of the Company's bylaws. The Chief Executive Officer is vested with the broadest powers to act in the Company's name in all circumstances. He exercises his authority within the limits of the Company's purpose and subject to the authority expressly granted by law to the general shareholders' meetings and to the board of directors.

In addition, the shareholders agreement dated on March 27, 2014 provides that the following major decisions require prior consent by the board of directors:

- actions likely to affect the Company's strategy, its capital, its financial structure or the scope of its activity;
- approval or alteration of the Company's business plan and adoption of the annual budget;
- merger, spin-off, partial asset transfer or any similar or equivalent operation, dissolution, liquidation, management lease or sale of business assets, or the transfer of critical assets, with respect to both the Company and its subsidiaries;
- acquisitions or disposals, equity investments or sale of equity in other entities, or joint-ventures, for an amount greater than €1 million each or a combined amount greater than €5 million; any exchanges of property or securities as part of an acquisition or disposal;
- investments or disinvestments (in the form of capital expenditures or operating expenditures), commitments or de-commitments, acquisitions or disposals of assets not in the annual budget and for an amount greater than €5 million each including credit facilities and leasing agreements; any decision by the Company or one of its subsidiaries that might put the Company or its subsidiary in default under the financing subscribed by the Company or its subsidiaries;
- offering sureties, endorsements or guarantees on the property of the Company or its subsidiaries, granting any off-balance sheet commitment outside the normal course of business;
- agreements establishing or altering the main terms and conditions of any agreement related to strategic partnerships;
- sale or transfer of intellectual property rights and R&D results, as well as any license associated therewith, outside the normal course of business or not anticipated in the annual budget;
- implementing and conducting significant disputes and transactions related to such disputes;
- amending the rules concerning the composition of the board of directors or the voting on issues brought before the board of directors;
- changing the important decisions made as to the above;
- recruiting facility managers or department managers employed by the Company or one of its subsidiaries categorized in group XI as defined in rider no. 1 to the national collective agreement of the pharmaceutical industry of April 6, 1956 entitled "*Accord du 11 mars 1997 relatif aux classifications et aux salaires*";
- any signing, amending and/or terminating by the Company or one of its subsidiaries of an agreement directly or directly concluded with an affiliate, shareholder, member of the board of

directors, a director and/or any other officer of the Company or one of its subsidiaries, (including any regulated agreement as defined by the French commercial code (*code de commerce*));

- convening the general shareholders' meeting or proposing any resolution to that body.

16.2 Agreements entered into between managers and the Company, and other tasks assigned to the managers by the Company

Agreements entered into with Stephane Boissel, CEO

The Company entered into a management agreement with Stéphane Boissel following his appointment as the Company's Chief Executive Officer by the board of directors on April 27, 2015, with a view to determining the main terms and conditions of his duties as Chief Executive Officer. The board of directors, at a meeting held on April 27, 2015 authorized the signature of said management agreement. This agreement was approved by the general combined shareholders' meeting held on April 21, 2016. As consideration for his duties, Mr. Stéphane Boissel receives (i) a yearly fixed compensation, (ii) a variable compensation based on the achievement of objectives set annually by the Company's board of directors, and (iii) in-kind benefits consisting of the payment of business travels, an unemployment insurance policy for managers (*Garantie Sociale des Chefs et dirigeants d'entreprise* - GSC), and an "Article 83" type supplementary social security, healthcare and retirement protection. This supplemental pension was implemented as of April 1, 2016 for Stéphane Boissel, as it was for all employees of the Company.

This management agreement has been modified by an amendment dated September 21, 2016, duly authorized by the board of directors on the same day, in order to modify the performance conditions to which are subject the first third of free shares and the variable compensation of Stéphane Boissel, in order to align them with the Company's new strategy endorsed by the board of the same day. Following the recognition of the performance conditions set out in its management contract, the board of directors of March 8, 2017 has granted Stéphane Boissel with 80,000 free shares AGA 2017 (see section 21.1.4.3 of the *Document de Référence*), and raised its annual gross fixed remuneration at 300.000 euros from January 1, 2017.

Agreements entered into with François Meyer, chairman of the board of directors

On September 6, 2013, the Company's board of directors entrusted Mr. François Meyer with a specific mission covering a certain number of specific topics (assistance in the development of the Company, giving access to his professional network, regular visits to the Company's facilities, and pursuing negotiations related to a pharmaceutical partnership). The board decided that from October 1, 2013 François Meyer would receive an annual compensation of €60,000 gross annual for this specific mission and his duty as chariman of the board.

The meeting held by the board of directors on February 10, 2015 re-evaluated and reviewed the allocation of the compensation to be received by Mr. François Meyer as of February 1, 2015 in order to make a clear distinction between the sums received for his duties as Chairman of the board of directors (€60.000 gross annual) and the sums received as part of his specific mission (€24.000 gross annual). This modification was approved by the general combined shareholders' meeting held on April 21, 2016. On February 3, 2016, the board of directors modified the terms of this specific mission in order to exclude the pursuit of negotiations related to the pharmaceutical partnership, the latter having been terminated. Subject to this modification, the board approved the continuation of this specific mission for 2016.

The board of directors of September 21, 2016 amended the terms of the specific mission of François Meyer, to entrust him with the specific mission of Head of Research, consisting in piloting the entire research division of the Company and the programs that are conducted. In this context, the board of directors has set the remuneration for this specific mission at 80,000 euros gross annual as of August 1, 2016, plus an annual variable compensation of 30% of the specific remuneration according to the achievement of objectives of the Company, set annually by the board of directors, more outlays providing evidence. The board of directors of March 8, 2017, upon recommendation of the nomination and compensation committee, re-evaluated the annual compensation of Mr François Meyer for his specific mission of "Head of Research" to 200,000 euros gross annual, effective January 1, 2017, due to

the knowledge and effort required to achieve this mission. The same board decided in consideration of the nature of this specific mission, that the variable remuneration would finally be based for 70% on Corporate objectives of the Company, and for 30% on individual objectives of François Meyer, set annually by the board of directors.

None of the other officers have entered into any contracts with the Company.

16.3 Operation of the board of directors and of the special committees

16.3.1 The board of directors

The composition and information relating to the members of the management bodies are developed in chapter 14 and paragraph 21.2 of the *Document de Référence*.

The members of the board of directors may be remunerated through the allocation of attendance fees allocated on the basis of their assiduousness the board of directors' meetings and their involvement in special committees.

The board of directors meeting held on March 30, 2015 set the maximum amount of attendance fees to be allocated to Marie-Yvonne Landel-Meunier and to David Horn Solomon at €35,000 per year, starting from the financial year 2015, depending on their attendance and on the time actually dedicated to their duties. On January 23, 2017, after reviewing these two criteria, the board of directors decided to allocate to both members of the board, for the financial year 2016, the maximum amount of attendance fees.

The Company's bylaws and the board of directors' internal regulations are also available on the Company's website: www.txcell.com.

The internal regulations include, in particular, the rules of conduct and obligations of the members of the Company's board of directors. Each member of the board of directors undertakes to maintain his independence of analysis, judgment and action and to actively participate in the work of the board. He informs the board of directors of conflict of interest situations that he may encounter. Furthermore, these regulations recall the rules relating to the dissemination and use of privileged information in force and specify that its members must abstain from engaging in transactions on securities of the Company when they hold privileged information. Each member of the board of directors is bound to report to the Company and to the AMF all transactions that he carries out, directly or indirectly, on the Company's securities.

The board of directors believes that it has two independent members as defined by the MiddleNext Code, Ms. Marie-Yvonne Landel-Meunier and Mr. David Horn Solomon, inasmuch as each of these individuals:

- are not employees or officers of the Company or not employees or officers of a company in its group, nor have they been for the past five years;
- are not a major customer, supplier or bank of the Company, or a company in its group, or one for which the Company or its group represents a significant proportion of its business, and have not not been such during the last two years;
- are not major shareholders of the Company;
- do not hold a significant percentage of voting rights;
- have no proximity or close family ties with any officer or major shareholder; and
- have not been statutory auditors of the Company during the past six years.

The number of meetings of the board of directors takes into account the different events concerning the Company's life. Hence, the members of the board are convened as regularly as the interest of the Company dictates.

It is reminded that at the date of the *Document de Référence*, the board of directors comprises of two observers (*censeurs*). The observers are convened to the meetings of the board of directors under the same conditions as the board members and benefit, to this end, of a right to information prior to the meetings of the board under the same conditions as the board members. They attend the board of

directors' meetings and take part in the deliberations without having any voting rights (see section 21.2.2.2 of the *Document de Référence* related to the statutory provisions regarding the observers).

16.3.2 Special committees

The board of directors has internal regulations with regard to its audit committee and its nomination and compensation committee.

The composition of the board and the committees as at the date of the *Document de Référence* is set out in the following table, details of which are described in the following paragraphs:

Name	Corporate office	Main functions within the Company	Independent director	Date of first appointment	Term of office	Audit committee	Nomination and compensation committee
François Meyer	Chariman of the board of directors	Head of Research	No	09/28/2012	Following the general meeting convened to vote on the financial statements for the financial year ending on December 31, 2017		
Auriga Partners represented by Bernard Daugeras	Director	None	No	09/28/2012	Following the general meeting convened to vote on the financial statements for the financial year ending on December 31, 2017		Member
Bpifrance Investissement represented by Marie-Laure Garrigues	Director	None	No	09/28/2012	Following the general meeting convened to vote on the financial statements for the financial year ending on December 31, 2017		Member
Bpifrance Participations represented by Thibaut Roulon	Director	None	No	05/26/2015	Following the general meeting convened to vote on the financial statements for the financial year ending on December 31, 2020	Member	
Marie-Yvonne Landel Meunier	Independent director	None	Yes	03/07/2014	Following the general meeting convened to vote on the financial statements for the financial year ending on December 31, 2019	Chairman	
David Horn Solomon	Independent director	None	Yes	03/30/2015	Following the general meeting convened to vote on the financial statements for the financial year ending on December 31, 2017		Chairman

16.3.2.1Audit committee

The board of directors of January 23, 2017 approuved the draft amendments to the audit committee's internal regulations. These amended internal regulations have been adopten by the audit committee on March 3, 2017. The main terms of the audit committee's internal regulations are described below.

16.3.2.1.1 Composition

The audit committee is composed, if possible, of two members appointed by the board of directors on the basis of recommendations by the nomination and compensation committee. Members of the audit committee are chosen from amongst the board of directors, with the exception of those who hold an executive management position. At least one member of the committee must be an independent member with specific financial or accounting expertise, and all the members must have a minimum understanding of financial and accounting matters.

It is emphasized that none of the members of the board of directors who also holds a management position within the Company can sit on the audit committee.

As at the date of the *Document de Référence*, the audit committee is composed of:

- Marie-Yvonne Landel-Meunier, as chairman of the committee; and
- Bpifrance Participations, represented by Thibaut Roulon.

It is stated that Marie-Yvonne Landel-Meunier, an independent member, has specific financial and accounting expertise.

16.3.2.1.2 Assignments

The audit committee's assignments include, in particular:

- monitoring the process for preparing the financial information;
- monitoring the effectiveness of the internal control and risk management systems;
- monitoring the legally required audit of the annual financial statements by the statutory auditors;
- issuing a recommendation concerning the statutory auditors to be proposed for appointment at the general shareholders' meeting, and reviewing the terms of their compensation;
- monitoring the independence of the statutory auditors;
- examining the conditions under which derivatives are used;
- regularly reviewing major disputes; and
- generally, providing advice and issuing appropriate recommendations in connection with any of the above matters.

16.3.2.1.3 Operation

In 2016, the minimum frequency for meetings of the audit committee was four meetings per year. By amending the internal regulation of the audit committee (see paragraph 16.3.2.1 of the *Document de Référence*), and in accordance with Recommendation R 5 of the Corporate Governance Code for Midcap and Smallcap Companies as published in September 2016 by MiddleNext, no minimum frequency is set for meetings of the committee, but the frequency and duration of meetings should allow for a thorough examination of the issues to be addressed in order to meet the audit committee's mission.

The audit committee meets, with the statutory auditors if the committee chairman considers it necessary, in accordance with a schedule determined by the committee chairman, in order to examine, inter alia, the annual financial statements, half yearly financial statements and, if applicable, quarterly financial statements, on the basis of an agenda drawn up by the committee chairman and sent to the members of the audit committee at least seven days before the date of the meeting. It will, in any event, meet to examine the annual financial statements before the board of directors is convened to approve them. It will also meet whenever requested by its chairman, by two of its members or by the Chairman of the Company's board of directors.

The audit committee may interview any of the members of the Company's board of directors, and may organize any internal or external audit covering any topic that it considers being within the scope of its assignment. In that case, the chairman of the audit committee will inform the board of directors in advance. The audit committee is in particular entitled to interview any person involved in the preparation of the financial statements or their verification (Chief Executive Officer, senior financial managers).

The audit committee interviews the statutory auditors. It may interview them without any Company representatives being present.

16.3.2.1.4 Reports

The chairman of the audit committee will ensure that reports presented to the board of directors on the committee's work are sufficiently detailed to ensure the board is fully informed, thus facilitating its deliberations.

The annual report will contain a presentation of the committee's work over the past financial year.

If, in the course of its work, the audit committee detects any material risk which, in its opinion, is not being dealt with adequately, the committee chairman will immediately inform the Chairman of the board of directors.

16.3.2.2Nomination and compensation committee

The board of directors of January 23, 2017 approuved the draft amendments to the nomination and compensation committee's internal regulations. These amended internal regulations have been adopten by the nomination and compensation committee of Februray 15, 2017 and March 8, 2017. The main terms of the audit committee's internal regulations are described below.

By means of a decision of the board of directors dated March 7, 2014 the Company has set up a nomination and compensation committee. The members of this committee have defined how the committee operates in internal regulations that were approved by the board of directors on the same day. The main terms of the nomination and compensation committee's internal regulations are described below.

16.3.2.2.1 Composition

If possible, the nomination and compensation committee is composed of at least two members of the board of directors, designated by the board. As far as possible, independent board members will make up the majority of its members.

It is stated that none of the members of the board of directors who also hold an executive management position within the Company can sit on the nomination and compensation committee.

As at the date of the *Document de Référence*, the nomination and compensation committee is composed of:

- David Horn Solomon, as chairman of the committee;
- Bpifrance Investissement, represented by Marie-Laure Garrigues; and
- Auriga Partners, represented by Bernard Daugeras.

16.3.2.2.2 Assignments

The nomination and compensation committee's assignments include, in particular:

- with regard to appointments:
    - presenting recommendations to the board of directors concerning the composition of the board of directors and its committees;
    - proposing to the board of directors once a year a list of its members who qualify as "independent members" in accordance with the criteria defined by the MiddleNext; Code
    - setting up a succession plan for the Company's officers and assisting the board of directors in the selection and assessment of the members of the board of directors;
    - preparing a list of individuals whose appointment to the board of directors can be recommended; and
    - preparing a list of individuals whose appointment to one of the board's committees can be recommended.
- with regard to compensation:
    - examining the main objectives proposed by the executive management in connection with the compensation of Company managers who are not officers, including free share and stock option plans;
    - examining the compensation of Company managers who are not officers, including free share and stock option plans, retirement and benefits schemes and other benefits in kind;
    - presenting recommendations and proposals to the board of directors concerning:

- officers' compensation, retirement and benefits schemes, benefits in kind and other pecuniary rights, including when they leave office. The committee proposes amounts and compensation structures, including in particular the rules for calculating variable compensation taking into consideration the Company's strategy, objectives and results, as well as market practices, and
- free share plans, stock option plans and any other similar incentive scheme including, in particular, specific allocations by name to the officers eligible for this type of scheme,

- examining the total amount of attendance fees and their system of allocation amongst board members, as well as the terms of reimbursement of any expenses incurred by members of the board of directors;
- preparing and presenting any reports required, when appropriate, by the board of directors' internal regulations; and
- preparing any recommendations concerning compensation that the board of directors may ask it to present.

Generally, the nomination and compensation committee provides advice and issues appropriate recommendations in connection with any of the above matters.

16.3.2.2.3 Operation

In 2016, the minimum frequency for meetings of the nomination and compensation committee was four meetings per year. By amending the internal regulation of the nomination and compensation committee (see paragraph 16.3.2.2 of the *Document de Référence*), and in accordance with Recommendation R 5 of the Corporate Governance Code for Midcap and Smallcap Companies as published in September 2016 by MiddleNext, no minimum frequency is set for meetings of the committee, but the frequency and duration of meetings should allow for a thorough examination of the issues to be addressed in order to meet the nomination and compensation committee's mission.

The nomination and compensation committee meets in accordance with a schedule determined by the committee chairman and on the basis of an agenda drawn up by the committee chairman and sent to the members of the nomination and compensation committee at least seven days before the date of the meeting. It will also meet whenever requested by its chairman, by two of its members or by the Chairman of the board of directors.

Members of the board of directors who are not managers and who are not members of the nomination and compensation committee may attend any of its meetings.

If the Chairman of the Company's board of directors is not a member of the committee, he may be invited to attend committee meetings. The committee will invite him to present his proposals. He will not be entitled to vote and will neither take part, nor assist, in any discussion concerning his own situation.

The nomination and compensation committee can submit a request to the Chairman of the board of directors that it be assisted by any of the Company's senior managers whose skills and expertise might facilitate the discussion of any matters on the agenda. The chairman of the nomination and compensation committee or the chairman of the session will draw to the attention of any person attending a committee meeting the confidentiality obligations arising from their attendance.

16.3.2.2.4 Reports

The chairman of the nomination and compensation committee will ensure that reports presented to the board of directors on the committee's work are sufficiently detailed to ensure the board is fully informed, thus facilitating its deliberations.

The annual report will contain a presentation of the committee's work over the past financial year.

The nomination and compensation committee inter alia reviews the Company's draft report on the compensation of managers.

16.4 Corporate governance

For the sake of transparency and information to the public and in order to comply with the requirements of Article L. 225-37 of the French commercial code (*code de commerce*), the Company adopted the MiddleNext Code as its reference code.

The following table lists the various recommendations of the MiddleNext Code and specifies those with which the Company is or is not in compliance at the date of the *Document de Référence*.

	MiddleNext Code Recommendations	Conformity	Non-conformity
	II. Supervisory authority		
R 1	Ethics of the members of the board	X	
R 2	Conflicts of interest	X	
R 3	Composition of the board - Presence of independent members	X	
R 4	Information provided to members of the board	X	
R 5	Meetings of the board and the committees	X	
R 6	Implementation of committees	X	
R 7	Implementation of the board internal regulations	X	
R 8	Selection of directors	X	
R 9	Terms of office of the members of the board	X	
R 10	Compensation of the member of the board of directors	X	
R 11	Implementation of an assessment process of the board's work	X	
R 12	Relationship with shareholders	X	
	III. Executive authority		
R 13	Definition and transparency of the compensation of executive corporate officers	X	
R 14	Succession plan of corporate officers	X	
R 15	Corporate officers with employment contracts	X	
R 16	Severance pay	X	
R 17	Supplemental pension plans	X	
R 18	Stock options and allocation of free shares	X	
R 19	Review of vigilance points	X	

16.5 Internal control

As required by the provisions Article 222-9 of the AMF's general regulation (*règlement general*) and in accordance with Article L. 225-37 of the French commercial code (*code de commerce*), the Chairman of the board of directors will present in a report, the composition of the board, compliance with gender equality principles within the board, the conditions under which the board of directors prepares and organizes its work, and the internal control and risk management procedures existing within the Company. This report is presented in Appendix 2 of the annual management report set out in APPENDIX 2 of section 26 of the *Document de Référence*.

At the date of the *Document de Référence*, the Company has internal control procedures as described in the report prepared by the Chairman of the board of directors on corporate governance, internal control and risk management.

17. EMPLOYEES

17.1 Human Resources

17.1.1 Number of employees and breakdown

The Company's employed workforce has changed as follows at the end of each period presented:

Category	03/31/2017	12/31/2016	12/31/2015
VP	5	7	6
Directors	6	5	4
Mlanagers and scientists	15	14	18
Technicians and workers	18	19	32
Headcount at end of period	**44**	**45**	**60**

The change in headcount is explained by :

- The closing of the Besançon site as part of the restructuring of the Company's production activities. This restructuring involved 26 employees on permanent contracts. The Company has put in place support measures for reclassification within an "employment preservation plan" (Plan de Sauvergarde de l'Emploi, "PSE") approved in 2015 which led to 23 economic lay-off for economic reasons and 3 internal reclassifications. The majority of redundancies were actually notified in 2016;
- The suspension of clinical developments of the ASTrIA platform until validation of a new optimized manufacturing process and GMP-proved. This strategic decision resulted in the suppression of 5 posts on permanent contracts within the framework of a collective dismissal procedure for economic reasons. The majority of redundancies were actually notified in 2016;
- The parallel integration of new key skills, notably in cell engineering and industrial process development, in order to align the operational structure with the strategic refocus of the Company.

17.1.2 Staff representatives

As part of the closing of the Besançon site, on February 8, 2016 the Company obtained authorization from the Labor Inspection Service (*Inspection du travail*) to give the Besançon employee representative notice of termination, which was done on February 9, 2016.

As of the date of the *Document de Référence*, the Company's employees are represented by two principal employee representatives and two alternate representatives, elected on April 7, 2015.

The Company believes that it maintains a good relationship with its employees, including with its employee representatives.

17.2 Equity interests and stock options held by corporate officers

Please refer to paragraph 21.1.4 of the *Document de Référence*.

17.3 Company shares held by employees

As of the date of the *Document de Référence*, the Company has not been informed of any stock ownership by an employee in the Company's share capital. The employees do however, hold 330,041 stock options, which may give rise to the issue of 347,863 shares (see paragraph 21.1.4.1 of the *Document de Référence*) and 249,650 free shares, which may give rise to the issue of 260,053 shares (see paragraph 21.1.4.3 of the *Document de Référence*) representing in total approximately 2.06% of the Company's share capital on a fully diluted basis).

17.4 Incentive and profit-sharing agreements

None.

18. MAIN SHAREHOLDERS

18.1 Capital ownership and voting rights

The following table presents the ownership of the Company's equity and voting rights as at the date of the *Document de Référence*, based on the information available:

	Situation as at the date of the *Document de Référence*, on an undiluted basis		Situation as at the date of the *Document de Référence*, on a fully diluted basis (1)						
	Number of shares	% of capital and voting rights (1)	Number of shares to be issued upon exercice of stock options (2)	Number of shares to be issued upon exercice of warrants (2)	Number of shares to be issued upon exercice of listed warrants (2)	Number of shares to be issued upon vesting of free shares (2)	Number of shares upon conversion of convertible notes issued and unconverted (2) (3)	Number of shares after exercise of warrants and stock options, vesting of free shares and conversion of convertible notes	% of capital and voting rights after exercise of warrants and stock options, vesting of free shares and conversion of convertible notes (1)
Auriga Ventures II FCPR	4 162 619	21,43%	-		187 500	-	-	4 350 119	14,76%
Total Auriga Partners	**4 162 619**	**21,43%**	-	-	**187 500**	-	-	**4 350 119**	**14,76%**
BIOAM FCPR	295 688	1,52%	-	-	-	-	-	295 688	1,00%
BIOAM 1 B FCPR	147 810	0,76%	-	-	-	-	-	147 810	0,50%
Innobio FCPR	3 793 835	19,53%	-	-	51 839	-	-	3 845 674	13,05%
Total Bpifrance Investissement	**4 237 333**	**21,82%**	-	-	**51 839**	-	-	**4 289 172**	**14,56%**
Large Venture	2 488 290	12,81%	-	-	777 509	-	-	3 265 799	11,08%
Total Bpifrance Participations	**2 488 290**	**12,81%**	-	-	**777 509**	-	-	**3 265 799**	**11,08%**
Sub-total Bpifrance	**6 725 623**	**34,63%**	-	-	**829 348**	-	-	**7 554 971**	**25,64%**
Seventure Partners	904 340	4,66%	-	-	-	-	-	904 340	3,07%
Other shareholders holding less than 5%	**8 386 059**	**43,18%**	**216 455**	-	**3 135 377**	-	-	**11 737 891**	**39,84%**
Marie Yvonne Landel Meunier	-	0,00%	-	41 080	-	-	-	41 080	0,14%
David Horn Solomon	-	0,00%	-	41 080	-	-	-	41 080	0,14%
Meyer François	115 251	0,59%	-	537 540	-	-	-	652 791	2,22%
Stéphane Boissel	33 000	0,17%	316 200	-	9 750	238 100	-	597 050	2,03%
Total corporate officers	**148 251**	**0,76%**	**316 200**	**619 700**	**9 750**	**238 100**	-	**1 332 001**	**4,52%**
Total Scientific Advisory Board	-	**0,00%**	-	**52 160**	-	-	-	**52 160**	**0,18%**
Total employees	-	**0,00%**	**271 941**	-	-	**260 051**	-	**531 992**	**1,81%**
Convertible notes with warrants financing	-	**0,00%**	-	**691 155**	-	-	**2 062 500**	**2 753 655**	**9,35%**
Optional equity line financing	-	**0,00%**	-	**1 150 000**	-	-	-	**1 150 000**	**3,90%**
TOTAL	**19 422 552**	**100,00%**	**804 596**	**2 513 015**	**4 161 975**	**498 151**	**2 062 500**	**29 462 789**	**100,00%**

(1) At the date of the *Document de Référence* there are no existing shares with double voting rights. Only treasury shares held as part of the liquidity contract have no voting rights. Given the number of treasury shares, the difference between share capital and voting rights is considered not material and is not shown in this table.

(2) The figures appearing in the column "Number of shares to be issued upon exercice of stock options", "Number of shares to be issued upon exercice of warrants", "Number of shares to be issued upon exercice of listed warrants","Number of shares to be issued upon vesting of free shares" and "Number of shares upon conversion of convertible notes issued and unconverted" are given on a fully-diluted basis, i.e. assuming that every outstanding stock option and warrants is exercised, every free shares have been vested and every outstanding convertible note has been converted.

(3) Number of shares that may be issued upon conversion of every convertible note outstanding and unconverted at the date of the *Document de Référence*, based on 93% of the lowest daily volume weighted average price prior to March 8, 2017,i.e. 1.60 euro per share.

The evolution of the share capital and voting rights over the last three years is presented in paragraph 21.1.7.2 of the *Document de Référence*.

During the 2016 financial year the Company received the following declarations that ownership thresholds had been crossed:

- On September 6, 2016, Auriga Partners, acting on behalf of the Auriga Ventures II venture capital mutual investment fund (*Fonds Communs de Placement à Risques* – FCPR) that it manages, declared it had fallen below the 30% threshold of capital and voting rights in the Company as a result of the Company's capital increase and that on behalf of such fund it held 3,912,619 shares in the Company, representing the same number of voting rights.

Since December 31, 2016 until the date of the *Document de Référence*, the Company received the following declarations that ownership thresholds had been crossed:

- On February 28, 2017, the company CVI Investments, Inc.[1], declared it had exceeded on February 24, 2017 the 5% threshold of capital and voting rights in the Company as a result of the subscription of shares to a capital increase of the Company, and that it held 1,042,041 shares in the Company, representing the same number of voting rights. In addition, CVI Investments, Inc. reported holding 1,042,041 listed warrants;
- On March 1, 2017, Auriga Partners, acting on behalf of the Auriga Ventures II venture capital mutual investment fund (*Fonds Communs de Placement à Risques* – FCPR) that it manages, declared it had fallen on February 24, 2017, below the 25% threshold of capital and voting rights in the Company as a result of the Company's capital increase and that on behalf of such fund it held 4,162,619 shares in the Company, representing the same number of voting rights;
- On March 2, 2017, Seventure Partners, acting on behalf of funds that it manages, declared it had fallen on February 24, 2017, below the 5% threshold of capital and voting rights in the Company as a result of the Company's capital increase and that on behalf of such fund it held 903,340 shares in the Company, representing the same number of voting rights;
- On March 27, 2017, the company CVI Investments, Inc., declared it had fallen on February 24, 2017, below the 5% threshold of capital and voting rights in the Company as a result of a sale on the market, and that it held 966,961 shares.

During the 2016 financial year the Company received the following transaction reports from management members:

- On June 6, 2016, François Meyer, chairman of the board of directors, declared having exercised 576,255 BSA 04-11 warrants, resulting in the issuance of 115,251 shares at a unit price of 2.75 euros, including a par value of 0.20 euro.

Since December 31, 2016 until the date of the *Document de Référence*, the Company received the following transaction reports from management members:

- On January 17, 2017, François Meyer, chairman of the board of directors, declared having subscribed 200,000 BSA 09-16 warrants at a subscription price of 0.18 euro, which may result in the issue of 200,000 shares at an exercise price of 3.59 euros, including a par value of 0.20 euro;
- On March 1, 2017, Stéphane Boissel, CEO, declared having subscribed 13,000 shares with warrants attached on February 24, 2017 in connexion with the capital increase with shareholders' preferential subscription rights;
- On February 20, 2017, the company Bpifrance Investissement, acting on behalf of the Bioam 1B, Bioam and Innobio funds that it manages, declared having sold 2,820,409 preferential subscription rights for a global amount of 3 euros;
- On February 20, 2017, the company Bpifrance Participations declared having sold 362,902 prefenrential subscription rights for a global amount of 1 euro;
- On February 28, 2017, the company Bpifrance Investissement, acting on behalf of the Bioam 1B, Bioam and Innobio funds that it manages, declared having subscribed to 691,119 shares with warrants attached on February 24, 2017 in connexion with the capital increase with shareholders' preferential subscription rights;
- On February 28, 2017, the company Bpifrance Participations declared having subscribed to 1,036,678 shares with warrants attached on February 24, 2017 in connexion with the capital increase with shareholders' preferential subscription rights.

[1] Controlled by Heights Capital Management, Inc., acting as "discretionary investment manager"

To the Company's knowledge there is no other significant difference in the allocation of capital and voting rights as of the date of the *Document de Référence*.

18.2 Major shareholders not represented on the board of directors

None.

18.3 Major shareholders represented on the board of directors

As of the date of the *Document de Référence*, Auriga Partners, Bpifrance Participations and Bpifrance Investissement each own over 5% of the capital and are represented on the board of directors.

18.4 Voting rights held by main shareholders

As of the date of the *Document de Référence*, all shares in the Company are ordinary shares. There are no double voting rights.

The Company's treasury stock comprises shares held in connection with a liquidity contract. These shares confer no voting rights.

18.5 Control of the Company

As of the date of the *Document de Référence*, there is no controlling shareholder as defined by Article L. 233-3 of the French commercial code (*code de commerce*).

The Company has not implemented any measures to prevent any abusive exercise of control.

18.6 Shareholders' agreements and concerted actions

A shareholders' agreement was entered into on March 27, 2014 among Auriga Partners, Seventure Partners, Bpifrance Participations, Innobio, Mr. François Meyer, Mr. Miguel Forte, Mr. Arnaud Foussat, Mr. Raphaël Flipo, Mr. Damian Marron and Mr. Eric Pottier (the "Shareholders' Agreement").

Following the resignation of Damian Marron from his positions as Chief Executive Officer and member of the board of directors of the Company on April 27, 2015, the parties to the Shareholders' Agreement entered into an addendum to the Shareholders' Agreement on May 6, 2015, pursuant to which they decided that Mr. Damian Marron is no longer subject to the rights and obligations of the Shareholders' Agreement.

Following the resignation of Eric Pottier from his position as Deputy Chief Executive Officer of the Company on February 2, 2016, the parties to the Shareholders' Agreement entered into an addendum to the Shareholders' Agreement on February 3, 2016, having the same purpose as the aforementioned addendum.

As part of the departure of Mr. Miguel Forte of the Company and the termination of his duties as director of operations with effect from November 30, 2016, the parties to the Shareholders' Agreement t entered into an addendum to the Shareholders' Agreement on November 16, 2016, having the same purpose as the aforementioned addendum.

This agreement does not provide for any concerted, or group, action. The details of the Shareholders' Agreement are spelled out in paragraph 14.2 of the *Document de Référence*.

Bpifrance Participations and Bpifrance Investissement, both controlled by Bpifrance S.A., have both declared that they are acting in concert with each other with regard to the Company in terms of (i) investments in the Company by the Innobio and Bioam funds managed by Bpifrance Investissement and (ii) the investment in the Company held by Bpifrance Participations and managed by Bpifrance Investissement. At the date of the *Document de Référence* Bpifrance Investissement and Bpifrance Participations hold in total 34.63% of the Company's equity through the funds that they manage.

To the Company's best knowledge, there are no other shareholders acting in concert.

18.7 Agreements that could result in a change of control

To the Company's best knowledge, no agreements exist that could result in a change of control in the Company.

18.8 Pledges of Company shares

None.

19. RELATED PARTIES TRANSACTIONS

19.1 Intra-group agreements

None.

19.2 Related parties transactions

All the agreements with related parties presented below are mentioned in paragraph 16.2 of the *Document de Référence* and in the the statutory auditors' special report presented in paragraph 19.3 of the *Document de Référence*.

19.2.1 Agreements concluded with Stéphane Boissel, CEO

The board of directors of the Company has authorized the signature of a management contract between the Company and Mr. Stéphane Boissel, including the implementation of a Article 83-type supplementary pension (see paragraph 16.2 of the *Document de Référence*).

19.2.2 Agreements concluded with François Meyer, chairman of the board of directors

The board of directors of the Company entrusted Mr. François Meyer with a specific mission, in addition to his position as chairman of the board of directors (see paragraph 16.2 of the *Document de Référence*).

19.3 Statutory auditors' special report on regulated agreements

Audit Conseil Expertise S.A.S.
Member of PKF International

ERNST & YOUNG Audit

This is a free translation into English of a report issued in French and it is provided solely for the convenience of English-speaking users.
This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

TxCell
General meeting of shareholders to approve the financial statements for the year ended December 31, 2016

Statutory auditors' report on related party agreements and commitments

AUDIT CONSEIL EXPERTISE S.A.S.
Member of PKF International
17, boulevard Augustin Cieussa
13007 Marseille

Commissaire aux Comptes
Membre de la compagnie
régionale d'Aix-en-Provence - Bastia

ERNST & YOUNG Audit
1/2, place des Saisons
92400 Courbevoie - Paris-La Défense
S.A.S. à capital variable

Commissaire aux Comptes
Membre de la compagnie
régionale de Versailles

TxCell

General meeting of shareholders to approve the financial statements for the year ended December 31, 2016

Statutory auditors' report on related party agreements and commitments

To the Shareholders,

In our capacity as statutory auditors of your company, we hereby report on certain related party agreements and commitments.

We are required to inform you, on the basis of the information provided to us, of the terms, the conditions and the reasons for the company's interest of those agreements and commitments indicated to us, or that we may have identified in the performance of our engagement. We are not required to comment as to whether they are beneficial or appropriate or to ascertain the existence of any such agreements and commitments. It is your responsibility, in accordance with article R. 225-31 of the French commercial code (*Code de commerce*), to evaluate the benefits resulting from these agreements and commitments prior to their approval.

In addition, we are required, where applicable, to inform you in accordance with article R. 225-31 of the French commercial code (*Code de commerce*) concerning the implementation, during the year, of the agreements and commitments already approved by the general meeting of shareholders.

We performed those procedures which we considered necessary to comply with professional guidance issued by the national auditing body (*Compagnie nationale des commissaires aux comptes*) relating to this type of engagement. These procedures consisted in verifying that the information provided to us is consistent with the documentation from which it has been extracted.

Agreements and commitments submitted for approval by the general meeting of shareholders

We hereby inform you that we have not been advised of any related party agreements and commitments authorized during the past financial year to be submitted for the approval of the general meeting in accordance with the provisions of Article L. 225-38 of the French Commercial Code(*Code de commerce*)

Agreements and commitments already approved by the general meeting of shareholders

Agreements and commitments approved in previous years, for which the execution continued during the past financial year

In accordance with article R. 225-30 of the French commercial code (*Code de commerce*), we have been advised that the implementation of the following agreements and commitments which were already approved by the general meeting of shareholders in prior years continued during the year.

With Mr Stéphane Boissel, CEO of your company

Nature and purpose

Management agreement

On April 27, 2015 the board of directors, following the appointment of Mr Stéphane Boissel as CEO of the company, authorized the signing of the aforementioned management contract, including in particular the implementation of a supplementary pension as mentioned in article 83 of the French commercial code. This supplementary pension has been signed yet by your company, thus no impact was noticed in 2015. This supplementary pension is effective from April 1 2016, for Mr. Stéphane Boissel, as well as for all the employees of your company.

February 3, 2016 board of directors reviewed the regulated agreements, the effect of which continues to exist over time and after examination, confirmed the continuation of this regulated agreement. This agreement was approved by the ordinary and extraordinary shareholders' meeting of April 21, 2016.

Conditions

In this regard, the amount of the expenses booked during the year ended December 31, 2016 amounts to €8 thousand for Mr. Stephane Boissel

With Mr François Meyer, chairman of the board of directors

Nature and purpose

Specific assistance mission to the head office

On September 6, 2013 the board of directors gave to Mr François Meyer "considering his history within your company and his knowledge of this company and the market on which it operates" a special assistance mission to the head office concerning specific fields:

The February 10, 2015 board of directors reviewed the allocation of Mr François Meyer's pay in order to proceed in a distinction between the sums received in conformity with his function as chairman of the board of directors, of an annual gross amount of €60,000, and the sums received in conformity with his specific mission, for an annual gross amount of €24,000, more outlays providing evidence.

The February 3, 2016 board of directors reviewed the regulated agreements, the effect of which continues to exist over time and after examination, confirmed the continuation of this regulated agreement After modification of the specific fields of the specific assistance mission, as follows:

- assistance to the CEO under the production process development and its industrialization, under the strategic development of your company, in particular concerning the choices of therapeutic indications, and also under the technological platforms development;
- providing his professional relationships network, particularly in order to formalize relationships with pharmaceutical labs or potential investors;
- regular visits of the Sophia sites, and of all other sites where your company could develop its activities, in order to be informed of the current achievements realized.

Conditions

The September 21, 2016 board of directors redefined François Meyer's specific mission to entrust him with the "Head of Research" mission of managing the entire research division of your company. The same board of directors reviewed the terms and conditions of Mr François Meyer's remuneration and decided that, in addition to his remuneration for his duties as chairman of the board of directors, François Meyer will receive, for this specific mission, effective August 1, 2016, a fixed annual remuneration of €80,000 gross, plus a variable remuneration of 30% of the said specific remuneration, depending on the achievement of corporate objectives set annually by the board of directors, more outlays providing evidence.

In this regard, the amount of the expenses booked during the year ended 31 December 2016 amounts to €47,000.

Marseille and Paris-La Défense, March 24, 2017

The statutory auditors
French original signed by

AUDIT CONSEIL EXPERTISE S.A.S *Member of PKF International*	ERNST & YOUNG Audit
Guy Castinel	Cédric Garcia

20. FINANCIAL INFORMATION ON THE ISSUER'S ASSETS, FINANCIAL POSITION AND RESULTS

Only the annual audited accounts prepared in accordance with French GAAP have any legal value. These are included in Appendix 1 of Section 26 of the *Document de Référence*.

20.1 Historical financial information

20.1.1 Statement of financial position

20.1.1.1 Assets

Assets (in thousands of euros)	Note	12/31/2016	12/31/2015
Intangible assets	3	5,911	5,907
Property, plant and equipment	4	736	876
Other property, plant and equipment under lease purchase agr	4	63	0
Financial assets	5	322	155
Total non-current assets		**7,031**	**6,939**
Trade receivables	6	4	4
Other current assets	7	2,277	4,570
Cash and cash equivalents	9	3,482	9,208
Total current assets		**5,763**	**13,781**
Total assets		**12,794**	**20,720**

20.1.1.2 Liabilities

Liabilities (in thousands of euros)	Note	12/31/2016	12/31/2015
Share capital	10	2,775	2,577
Issue premiums		32,724	29,885
Reserves		(20,737)	(9,576)
Net profit / (loss) for the year		(13,570)	(11,297)
Total shareholders' equity		**1,192**	**11,589**
Financial debt - non current	11	3,650	1,641
Debts related to finance leases - non-current	11	51	0
Other non-current liabilities	12	9	23
Total non-current liabilities		**3,709**	**1,664**
Financial debt - current	11	1,575	0
Trade and other payables	14	893	1,608
Other current liabilities	14	5,358	5,087
Debts related to finance leases - current	11	12	0
Provisions - current	13	55	772
Total current liabilities		**7,893**	**7,467**
Total liabilities		**12,794**	**20,720**

20.1.2 Statement of net income and comprehensive income

Statement of net income (in thousands of euros)	Note	12/31/2016	12/31/2015
Revenue	15	0	920
Other income	15	2,948	3,718
Revenue and other income		**2,948**	**4,637**
Costs of sales		0	0
Research and development expenses	17	(10,486)	(10,839)
General and administrative expenses	17	(4,509)	(3,460)
Expenses related to share-based payments	18	(649)	(483)
Current operating profit / (loss)		**(12,697)**	**(10,145)**
Other operating expenses	19	(954)	(1,189)
Other operating income	19	867	22
Operating profit / (loss)		**(12,783)**	**(11,312)**
Income from cash and cash equivalents	20	3	42
Cost of gross financial debt	20	(21)	0
Cost of net financial debt		**(18)**	**42**
Other financial income	20	23	10
Other financial expenses	20	(792)	(37)
Net profit / (loss) before tax		**(13,570)**	**(11,297)**
Income taxes	21	0	0
Net profit / (loss)		**(13,570)**	**(11,297)**
Basic earnings per share (in €)	24	(1.04)	(0.93)

Items of other comprehensive income:

Net profit / (loss) (in thousands of euros)	Note	(13,570)	(11,297)
Non-recyclable elements in income statement:			
Revaluations of net liabilities arising from defined benefit schemes	12	17	38
Items of other comprehensive income		**17**	**38**
Comprehensive income		**(13,554)**	**(11,260)**

20.1.3 Statement of changes in equity

In thousands of euros	NUMBER OF SHARES	CAPITAL	SHARE PREMIUMS	RESERVES AND RETAINED EARNINGS	OTHER ITEMS OF COMPREHENSIVE INCOME	INCOME	TOTAL
12/31/2015	**12,887,326**	**2,577**	**29,885**	**(9,581)**	**5**	**(11,297)**	**11,589**
Allocation of net profit / (loss) for the previous period				(11,297)		11,297	0
Subscription of BSA PACEO warrants			0				0
H1 2016 - Exercise of BSA 04-11 warrants	115,251	23	294				317
Subscription of BSA 05-16 warrants			8				8
Subscription of BSA 09-16 warrants			38				38
Capital increase by conversion of debt	77,689	16	209				225
Conversion of convertible bonds	792,986	159	1,541				1,700
Allocation of unamortized redemption premiums on the date of conversion			(26)				(26)
Allocation of capital increase costs			(93)				(93)
Expenses arising from share-based payments			649				649
Liquidity Contract - Treasury shares			(49)				(49)
Actuarial gains and losses					17		17
Fair value of convertible bonds			387				387
Reserves for allocation of free shares			(120)	120			0
Net profit / (loss) for the period						(13,570)	(13,570)
12/31/2016	**13,873,252**	**2,775**	**32,724**	**(20,759)**	**22**	**(13,570)**	**1,192**

20.1.4 Statement of cash flows

In thousands of euros	12/31/2016	12/31/2015
Net profit / (loss)	**(13,570)**	**(11,297)**
Eliminations of items with no impact on cash and cash equivalents		
Elimination of depreciation, amortization and provisions	(326)	1,135
Share-based payment	649	483
Financial expenses arising from bonds	732	
Other eliminations with no impact on cash and cash equivalents	36	(7)
OPERATING CASH FLOW	**(12,479)**	**(9,687)**
Change - non-current	**230**	**(313)**
Other eliminations of non-current items with no impact on cash and cash equivalents	244	27
Change in other non-current liabilities	(14)	(340)
Change - current	**1,815**	**(66)**
Change in trade receivables		997
Change in other current assets	2,294	(987)
Change in trade payables	(714)	213
Change in other current liabilities (excluding fixed asset suppliers)	235	(288)
CHANGE IN WORKING CAPITAL REQUIREMENTS	**2,044**	**(379)**
Net cash from operating activities	**(10,435)**	**(10,066)**
Acquisition of intangible assets	(7)	(5,902)
Change in intangible assets supplier account	39	3,905
Other eliminations of intangible items with no impact on cash and cash equivalents	(39)	(3)
Acquisition of property, plant and equipment	(330)	(214)
Sale of property, plant and equipment	97	23
Change in property, plant and equipment supplier account	(4)	(83)
Acquisition of non-current financial assets	(225)	(3)
Sale of non-current financial assets	8	3
Net cash from investing activities	**(460)**	**(2,274)**
Capital increases or contributions	270	7,631
Receipts from loans	4,900	
Net cash from financing activities	**5,170**	**7,631**
NET CASH FLOWS	**(5,725)**	**(4,710)**
OPENING CASH	**9,208**	**13,917**
CLOSING CASH	**3,482**	**9,208**

20.1.5 Notes to the financial statements

Note 1 : The Company

TxCell (the "**Company**") is a listed biotechnology company which develops innovative, personalized immunotherapy platforms based on T cells to treat chronic severe inflammatory and autoimmune diseases, as well as transplantation-related inflammatory disorders. TxCell is the only clinical stage cellular therapy company which focuses exclusively on regulatory T lymphocytes (Tregs). Tregs are a recently discovered T cell population for which anti-inflammatory properties have been demonstrated.

Highlights of the 2016 financial year

On February 29, 2016, the Company announced the launch of its laboratory specialized in the development of manufacturing processes and technology transfer, in the premises of Genbiotech, which are located in the Sophia Antipolis technology park.

On March 31, 2016, the Company announced the creation of its new international Scientific Advisory Board ("SAB") chaired by Professor Zelig Eshhar to strengthen the Company's scientific expertise and strategic orientations with a view to developing its new ENTrIA platform.

On April 25, 2016, the Company announced the signing of a strategic collaboration agreement with Ospedale San Raffaele (OSR). The collaboration includes a development arm on CAR-Tregs focused on lupus nephritis, as well as a research program dedicated to CAR-Treg biology.

On June 1, 2016, the Company announced the signature of a strategic partnership agreement with the Lübeck Institute of Experimental Dermatology (LIED). This partnership is for the development of a cellular immunotherapy product using CAR-Treg cells to treat bullous pemphigoid, a rare and potentially lethal disease.

On June 21, 2016, the Company announced that the patent for all redirected, genetically-engineered regulatory T cells (CAR-Treg) and their use in treating autoimmune and inflammatory diseases had been issued by the European Patents Office (patent identification number: EP 2126054), and that therefore, the Company had exercised its option and signed an exclusive worldwide license agreement with Yeda Research and Development Co. Ltd., the technology transfer arm of the Weizmann Institute of Sciences, which is the patent holder.

On June 17, 2016, the Company announced a reserved issue of convertible notes with warrants (OCABSA) for a maximum nominal amount of €20 million, subject to shareholder approval at the extraordinary general shareholders' meeting of August 1, 2016. On August 3, 2016, the Company announced the effective issue of bonds convertible into shares to which share warrants are attached and the drawing on an initial tranche with a nominal value of €3 million. On November 3, 2016, the Company announced that it was drawing on a second tranche with a nominal value of €2 million.

On August 1, 2016, the Company announced that on July 31, 2016 it had terminated its liquidities contract which had been in place since May 2014 with Oddo Corporate Finance and that it had entered into a new liquidities contract with Kepler Cheuvreux, effective as of August 1, 2016 in the morning. This new contract has the exact same resources as those allocated to the previous contract.

On September 27, 2016, when presenting its half-yearly results, the Company gave an update on its strategy and announced (i) the suspension of all clinical development on the historical ASTrIA platform until the approval (expected in 2017) of a new optimized manufacturing process validated under GMP conditions and (ii) the acceleration of the development of the new ENTrIA platform to generate new pre-clinical proof of concept data in 2017 for its four main programs with a view to beginning at least one initial clinical study on humans by the end of 2018.

On October 19, 2016, the Company announced the signature of a strategic research and development agreement with the University of British Columbia (UBC), based in Vancouver, Canada, an internationally-renowned multidisciplinary research and teaching center. This partnership agreement is for the development of a cellular immunotherapy product based on CAR-Tregs for the prevention of graft rejection in the context of solid organ transplantation.

On November 29, 2016, the Company announced that it had adapted its operational structure with a view to meeting its new strategic priorities.

On December 8, 2016, the Company announced the signature of an exclusive worldwide license agreement with Inserm Transfert for two patent families filed by the transplantation and immunology research center (CRTI). These patents are for a new type of non-cytotoxic T regulatory (Treg) lymphocyte, which carries the CD8 marker, as opposed to traditional Tregs, which carry the CD4 marker such as type 1 Tregs and FoxP3+ Tregs. It has a unique and highly immunosuppressive action mechanism. These patents also cover the use of CAR-Treg cells manufactured using these CD8+ Tregs.

Note 2 : Accounting principles and methods

The financial statements are presented in thousands of euros.

Figures have been rounded up or down when calculating certain financial items and other information contained in the financial statements. Consequently, the totals given in certain tables may not be the exact sum of the figures that precede them.

Note 2.1 : Basis of preparation of the financial statements

These financial statements were approved on March 8, 2017 by the board of directors and are not submitted to the shareholders' meeting for approval.

The accounting principles used to prepare the 2016 annual financial statements comply with the IFRS standards and interpretations as adopted by the European Union. They are available on the European Commission's website (http://ec.europa.eu/internal_market/accounting/ias/index_fr.htm).

The accounting principles used are identical to those used to prepare the financial statements for the financial year ended December 31, 2015, with the exception of the application of the following new standards and amendments to rules and interpretations adopted by the European Union; these must be applied as of January 1, 2016:

- the amendment to IAS 1 "Disclosure Initiative";
- the amendments to IAS 16 and IAS 38 "Clarification on acceptable amortization methods";
- the amendment to IAS 19 "Employee Benefits";
- the annual improvements of the IFRS: 2010-2012 cycle;
- the amendments to IFRS 11 "Joint Arrangements";
- the annual improvements of the IFRS: 2012-2014 cycle.

The application of these amendments and standards had no significant impact on the financial statements.

Furthermore, the Company decided not to proceed with the early application of new standards, amendments, revisions and interpretations if their application was compulsory after December 31, 2016, irrespective of whether they have been adopted by the European Union. Management is currently assessing the impacts of the first application of these new texts and does not expect there to be any major impact on its financial statements.

Principle of preparation of the financial statements

The financial statements have been prepared on a historical-cost basis, with the exception of financial assets and liabilities, which are measured at fair value, in accordance with the IFRS provisions. The categories concerned are mentioned in the following notes.

Use of judgments and estimates

Preparing the financial statements in accordance with IFRS requires the formulation of estimates and assumptions that affect the amounts and disclosures contained therein. Actual results may turn out to be significantly different from these estimates, depending on the different conditions and assumptions used,

and where such differences are material, sensitivity analysis may be carried out as applicable. The main judgments and estimates are described below:

- valuation of stock option subscription plans, warrants, free shares and bonds convertible into shares (see notes 2.9 and 10.3);
- recognition of deferred taxes on loss carryforwards (see Notes 2.15 and 21);
- valuation of provisions for risks and charges (see Notes 2.11.1 and 13);
- Valuation of rights locked in under the license acquired (see Note 3).

Note 2.2 : Going-concern principle

The going-concern principle was adopted in light of the following factors:

- the Company's historical loss-making position is the result of the innovative nature of its products, which require several years of research and development;
- at December 31, 2016, the Company had €3.5 million in cash and cash equivalents. Further, on February 22, 2017 the Company announced the success of its capital increase through the issue of 5,549,300 new shares with warrants (ABSA) for a gross amount of €11.1 million likely to be completed with a gross amount of €10.8 million if all of the BSA share warrants issued are exercised by February 26, 2018. To date, the Company estimates, based on its growth plan, that it is not exposed to any short-term liquidity risk (12 months).

Note 2.3 : Intangible assets

In accordance with IAS 38, acquired intangible assets are recognized at acquisition cost on the statement of financial position. Impairment tests are performed on intangible, non-amortizable assets and intangible assets in progress at the end of each financial year. The method currently used for this valuation is the discounted cash flow (DCF) method.

Note 2.3.1 : *Research and development expenses*

Research costs are systematically recognized as an expense.
In accordance with IAS 38, development costs are recognized in intangible assets only if the Company can demonstrate all of the following:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- its intention to complete the intangible asset and use or sell it;
- its ability to use or sell the intangible asset;
- how the intangible asset will generate probable future economic benefits;
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- its ability to measure reliably the expenditure during its development.

Pursuant to this standard, the Company recognizes all its research and development costs as expenses. The Company considers that the technical feasibility of its development projects is not demonstrated until the required marketing authorizations are issued, which also corresponds to the time at which virtually all of the development costs have been incurred.

Note 2.3.2 : *Patents*

Costs associated with filing currently valid patents, and incurred by the Company before those patents are secured, are recognized in expenses, consistent with the approach used for research and development costs.

Note 2.3.3 : *Software*

The costs of acquiring software licenses are recorded in assets, based on the costs incurred to acquire and use the software concerned.

Software is amortized on a straight-line basis over its estimated useful life. The following useful lives are applicable:

Nature of intangible asset	Duration
Software	3 years

The software amortization charge is recognized under results in the "Research and development expenses" or "General and administrative expenses" category depending on the nature of the assets held.

Note 2.3.4 : *Other intangible assets*

The acquisition costs of other intangible assets are recorded in assets when they can be measured reliably.

Other intangible assets are recognized as in progress up until the date when they satisfy the conditions to be commissioned.

Note 2.4 : Property, plant and equipment

Property, plant and equipment are recognized at acquisition cost. Costs arising from major renovation and improvement work are capitalized. Costs arising from repairs, maintenance and other renovation work are recognized as they are incurred.

Property, plant and equipment are depreciated on a straight-line basis over their estimated useful lives.

The following useful lives are applicable:

Nature of property, plant and equipment	Duration
Fixtures and fittings on third-party land	10 years
Component : Major construction work	20 years
Component : Miscellaneous fixtures and fittings	5 to 8 years
Component : Plumbing	8 to 10 years
Component : Air conditioning	8 to 10 years
Component : Electricity	15 years
Laboratory fittings	4 to 5 years
Laboratory equipment	5 to 6 years
IT equipment	3 to 5 years
Office furniture	3 to 10 years

The property, plant and equipment amortization charge is recognized under results in the "Research and development expenses" or "General and administrative expenses" category depending on the nature of the assets held.

Note 2.4.1 : *Leasing*

Leased property is capitalized at the purchase value as at the date of the lease. Each rent is broken down between the payable and the financial cost so as to determine a constant interest rate on the capital remaining due. The corresponding rental obligations, net of financial expenses, are reported as leasing liabilities. The part of the financial expense corresponding to the interest is reported under expense over the duration of the lease. Property, plant and equipment acquired under a finance lease is amortized over the duration of use. Royalties due in more than one year's time are reported as Debts related to finance leases - non-current; those due in under one year are reported as Debts related to finance leases - current.

Note 2.5 : Financial assets

Financial assets include security deposits, a construction loan, other capitalized receivables and liquidities held under a liquidities contract.

Financial assets and liabilities are measured and recognized in accordance with IAS 39 “Financial Instruments: Recognition and Measurement.”

Loans and receivables:

This category includes loans as well as deposits and guarantees recognized under non-current financial assets.

These are recognized initially at fair value and subsequently at amortized cost, calculated using the effective interest method. Short-term receivables with no stated interest rate are measured at the original invoice amount except where the application of an implied interest rate has a material effect. The effective interest rate matches the expected future cash inflows to the current net book value of the asset in order to determine its amortized cost.

Loans and receivables are monitored for objective indications of impairment. A financial asset is impaired when an impairment test establishes that its carrying amount is higher than its estimated recoverable amount. The resulting impairment loss is recognized in the income statement.

In accordance with IAS 32 "Financial instruments", treasury shares held under a liquidity contract are deducted from equity and the losses and profits realized on the sale of a part of the shares are neutralized in the income statement.

Note 2.6 : Recoverable value of non-current assets

Impairment testing takes place on tangible and intangible assets with a finite useful life if doubt is cast on the recoverability of their book value by an internal or external index.

Impairment tests are carried out at the close of the financial year on non-amortized assets (irrespective of whether there is an indication of an impairment loss). An impairment test involves comparing the asset's net carrying amount tested at its recoverable value. The test was carried out at cash-generating unit ("CGU") level, which is the smallest asset group and includes assets whose continued use generates cash inflows largely independent of those generated by other assets or asset groups. At December 31, 2016, the concept of a CGU was assessed at the level of the Company taken as a whole.

Impairment is recognized up to the excess of the book value over the asset's recoverable value. The asset's recoverable value is the higher of the fair value less costs to sell and the value in use.

The fair value less exit costs is the amount which can be obtained from the sale of an asset via a transaction conducted under normal competitive conditions between well-informed, consenting parties, less exit costs.

The value in use is determined each year in accordance with IAS 36: it is the discounted value of the estimated future cash flows expected from the continued use of an asset and of its exit at the end of its useful life. The value in use is determined using cash flows estimated on the basis of five-year plans or budgets, with flows being further extrapolated by applying a constant or declining growth rate, and updated using the long-term market rates after tax which reflect market estimates of the time value of money and the risks specific to the assets. The residual value is determined using discounting to infinity from the last cash flows of the test (see Note 3).

Note 2.7 : Cash, cash equivalents and other financial assets

Cash and cash equivalents consist of immediately available cash and short-term available-for-sale securities. Cash equivalents are held for the purpose of covering short-term liquidity requirements rather than for investment or other purposes. They can be readily converted to known amounts of cash and are not exposed to any material risk of impairment.

They are measured at fair value, and any changes in value are recorded in financial income and expense.

For the purposes of the statement of cash flows, net cash includes cash and cash equivalents as defined above.

Note 2.8 : Capital

Classification under shareholder's equity depends on the specific analysis of the features of each instrument issued. On the basis of this analysis, it was possible to classify shares as equity instruments.

Additional costs directly attributable to share issues or options are recognized in equity as deductions against the proceeds of those issues. Moreover, in the absence of clarification on IAS 32, the Company has chosen to recognize these costs by deducting them from shareholder's equity prior to the operation if a year-end takes place between the date the services were rendered and the transaction when the planned transaction is considered highly likely. If the transaction does not subsequently take place, these costs would be recorded under charges for the following financial year.

Note 2.9 : Share-based payments

The Company has implemented several equity-instrument payment plans in the form of share subscription options, share warrants (BSA) or free share awards to its employees, executive officers, members of the board of directors and members of the scientific advisory board (SAB).

In accordance with IFRS 2, the cost of equity-settled transactions is expensed against an increase in equity over the vesting period of the equity instruments in question.

The fair value of share warrants granted to employees is determined using Monte-Carlo or Black & Scholes simulation techniques, as described in Note 18.

These models require the Company to use certain calculation assumptions which can differ for each plan, such as the expected volatility of the share, the price of the share used, the risk-free rate, the turnover rate, the non-transferability discount and the acquisition assumption for these plans if applicable.

Note 2.10 : Measurement and recognition of financial liabilities

Note 2.10.1 : *Financial liabilities at amortized cost*

Borrowings and other financial liabilities are measured initially at fair value and subsequently at amortized cost, calculated using the effective interest method.

Transaction costs directly attributable to the acquisition or issue of a financial liability are deducted from the value of said liability. These costs are then amortized on an actuarial basis over the life of the liability, using the effective interest method. The effective interest rate matches the expected future cash payments to the current net book value of the liability in order to determine its amortized cost.

Note 2.10.2 : *Liabilities at fair value through the income statement*

Liabilities at fair value through profit and loss are measured at fair value.

Note 2.10.3 : *Fair value*

The fair value of financial instruments traded on an active market, such as available-for-sale securities, is based on their market price at the reporting date. The market prices used for financial assets held by the Company are the market bid prices at the valuation date.

In line with the amendments to IFRS 7 "Financial instruments: disclosures", the financial instruments are presented according to three categories based on a hierarchization of the methods used to determine the fair value:

- level 1: fair value determined based on the prices quoted on the asset markets for identical assets or liabilities;
- level 2: fair value determined based on the observable data for the asset or liability concerned, either directly or indirectly;

- level 3: fair value determined using measurement techniques based wholly or partially on non-observable data; an unobservable parameter is one whose value is derived from assumptions or correlations based neither on transaction prices observable on the markets for the same instrument on the valuation date, nor on observable market data available on the same date.

The nominal amount of current receivables and payables, less any impairment losses, is presumed to be close to the fair value of those items.

Note 2.11 : Provisions

Note 2.11.1 : *Provisions for risks and charges*

Provisions for risks and charges correspond to financial commitments arising from various risks and legal proceedings, of an uncertain maturity and amount, which the Company may face in the course of its business.

A provision is recognized where the Company has a legal or constructive obligation to a third party resulting from a past event where it is probable or certain that payment to said third party will arise from the obligation (with no equal or greater payment expected to be received from said third party), and where future payments can be reliably estimated.

The amount recognized as a provision is management's best estimate of the amount of the expense needed to settle the liability, discounted at the reporting date as applicable.

Note 2.11.2 : *Retirement benefits*

The Company's employees are entitled to statutory French retirement benefits:

- a lump sum paid by the Company upon their retirement (defined benefit scheme);
- a pension paid by the social security authorities and funded by employer and employee contributions (national defined contribution scheme).

The cost of retirement benefits in a defined benefit scheme is estimated using the projected unit credit method pursuant to revised IAS 19.

Under this method, the cost is recorded in the income statement in such a way as to spread it evenly over the employee's career at the Company. Past-service costs, however, are recognized immediately in expenses (increase in benefits allocated) or in income (decrease in benefits allocated) as soon as a new scheme is implemented or an existing one is modified. Actuarial gains or losses are recognized immediately and in full under equity in items of other comprehensive income.

Retirement obligations are measured at the present value of estimated future payments, using the market rate based on long-term investment grade corporate bonds with a duration equal to the estimated length of the scheme.

The Company's payments under defined contribution schemes are recorded as expenses in the income statement for the period to which they relate.

More details on retirement obligations can be found in Note 13.

Note 2.12 : Revenue and other income

Note 2.12.1 : *Revenues*

Revenue which the Company is likely to generate can come from the signature of strategic partnerships and include various components, such as amounts payable upon entering into the agreement; amounts payable upon reaching certain predefined development, sales and production targets, as well as one-off payments to fund research and development costs; and royalties on future product sales.

Amounts payable upon signature of the contracts which are non-refundable are staggered over the estimated duration of the Company's involvement in future developments of the object of the contract.

The amounts which are payable upon reaching certain predefined development, sales and production targets, are the amounts received by partners when certain scientific, regulatory or sales milestones are

reached. The Company recognizes this revenue when the milestone has passed and there is no risk of repaying these amounts.

License revenues are gradually recorded over the whole period of the agreement.

Note 2.12.2 : *Other income*

Other income is recognized in accordance with IAS 20:

Grants:

Since its creation, and on account of its innovative nature, the Company has received grants and aid from French national and local government aimed at funding its operations or specific recruitment drives.

Grants are recognized where there is a reasonable assurance that:

- the Company will meet the conditions of the grant; and
- the conditions of their receipt have been met.

Grants are recognized under other income (see Note 15) as the associated expenses are committed and independently of the receipts, in line with the principle of linking expenses to income.

Grants receivable either as compensation for expense or losses already incurred, or as immediate financial aid with no related future costs, are recognized in income in the year in which they become receivable.

Research tax credit:

The French government awards research tax credits to companies to encourage them to conduct technical and scientific research. Companies that can demonstrate expenditure meeting the required criteria are eligible for a tax credit that can be offset against corporate income tax in respect of the year in which the expenditure is incurred and the following three years, or refunded where applicable (i.e. where it exceeds the amount of corporate income tax payable). Since the Company has not paid any corporate income tax since its formation, every year it receives payment of the research tax credit relating to the previous year from the French Treasury.

These amounts are recognized in other income for the year in which the corresponding expenses are incurred.

Note 2.13 : Research and development contracts

Note 2.13.1 : *Services contracts*

Service contracts are recognized as they progress according to management's best estimate. Expenses can be estimated according to the period over which a service is provided or according to certain objective criteria, such as the number of patients recruited or the number of visits completed.

Any amounts payable upon the attainment of certain targets representing technical success milestones for the service provider are recorded as expenses when the milestone is reached.

Note 2.13.2 : *Research and development agreements*

Research agreements are recognized as they progress according to management's best estimates based on the information provided by external partners corroborated by internal analyses.

Development agreements can include various components, such as the amounts payable upon signature and amounts payable when certain growth targets are reached. When the concept of continued service can be determined, development agreements are recognized as they progress according to management's best estimates based on the information provided by external partners corroborated by internal analyses.

Otherwise, the non-refundable amounts payable upon signature of the contracts are recorded immediately under income and the amounts payable upon attainment of certain targets representing scientific or regulatory milestones are recorded under expenses once the milestone has been reached.

Note 2.14 : Lease agreements

Finance leases within the meaning of IAS 17 are recorded under other property, plant and equipment upon signature, in exchange for a financial payable. Each year, amortization is allocated to the income statement, and the royalties paid are allocated to financial expenses at the rate stated in the contract to offset the financial payable on the balance sheet (see Note 2.4.1 for more detail).

Lease agreements where a significant portion of the risks and benefits is retained by the lessor are classed as operating leases. Net of any incentive, payments under an operating lease are recognized in expenses in the income statement on a straight-line basis over the duration of the lease.

Note 2.15 : Income tax

The Company is subject to corporate income tax in France in connection with its activities.

Deferred taxes are recognized using the comprehensive allocation and liability methods, for all timing differences arising from the difference between the tax base and accounting base of assets and liabilities shown in the financial statements. The main timing differences relate to tax loss carryforwards. Deferred taxes are calculated based on the tax rates enshrined in law at the reporting date.

Deferred tax assets mainly corresponding to tax loss carryforwards are recognized only to the extent that it is probable that future taxable profits will be available. The Company must use its judgment to determine the probability that future taxable profits will be available.

Note 2.16 : Industry information

The Company considers that it operates in a single specialist sector: research and development into pharmaceutical products with a view to their future marketing.

The whole of the Company's research and development activity is located in France. All the Company's tangible assets are located in France. The main operational decision-makers measure the Company's performance in terms of the cash burn rate of its activities. This is why the Company's management believes it is not appropriate to break its internal reports down into separate business segments.

Note 2.17 : Items of other comprehensive income

Any components of income and expense for the period that are recognized directly in equity are posted under items of other comprehensive income. This item, for the period presented, includes the impacts of changes in actuarial assumptions for provisions for retirement indemnities.

Note 3 : Intangible assets

Changes to intangible assets break down as follows:

In thousands of euros	01/01/2016	Augmentations	Diminutions	12/31/2016
Acquisition cost				
Software	8	7	0	15
Intangible assets in progress	5,902	0	0	5,902
Gross intangible assets	**5,910**	**7**	**0**	**5,917**
Amortization				
Software	3	4	0	7
Intangible assets in progress	0	0	0	0
Amortization of intangible assets	**3**	**4**	**0**	**7**
Net total intangible assets	**5,907**	**3**	**0**	**5,911**

On December 2, 2015, the Company and Trizell concluded an agreement terminating their collaboration, development, option and license agreement on Ovasave®. Under this agreement the Company recovered all Trizell's rights over Ovasave® in return for paying amounts which could reach €15 million, €6 million of which is fixed and €9 million of which is conditional on the future revenues generated by Ovasave®. In 2015, the acquisition costs, for these rights, for which the amount and maturity can be fixed definitely, were recognized as an asset, i.e. €6 million. These acquisition costs were discounted in accordance with IAS 38. The 10-year French Government bond rate (*taux OAT*) as at December 31, 2015 of 0.995% was used as the discount rate. The repurchase of these rights after discounting therefore

totals €5.9 million. This intangible asset is recognized as in progress insofar as it has not satisfied the conditions for being put into service as at the date of this document.

The annual impairment test was performed on this asset on December 31, 2016, and found no impairment loss.

Sensitivity analysis

The main valuation principles are the discount rate (determined at 18%) and the number of years to achieve peak market penetration (seven years).

Sensitivity tests were performed on these assumptions:

- discount rate (+3%);
- number of years to achieve peak market penetration (+1 year/+3 years).

This analysis does not affect the value of the asset as regards its valuation as at December 31, 2016 (€5.9 million).

Note 4 : Property, plant and equipment

Changes to property, plant and equipment break down as follows:

In thousands of euros	01/01/2016	Augmentations	Diminutions	12/31/2016
Acquisition cost				
Fixtures and fittings	1,054	31	(241)	844
Laboratory equipment	2,353	279	(518)	2,114
Office and IT equipment	318	20	(32)	306
Gross property, plant and equipment	**3,725**	**330**	**(792)**	**3,263**
Amortization				
Fixtures and fittings	913	59	(264)	709
Laboratory equipment	1,681	349	(457)	1,572
Office and IT equipment	255	43	(51)	247
Amortization of property, plant and equipment	**2,849**	**451**	**(772)**	**2,528**
Net total plant, property and equipment	**876**	**(122)**	**(19)**	**736**
Other property, plant and equipment under lease purchase agreements	0	63	0	63
Amortization of other property, plant and equipment under lease purchase agreements	0	()	0	()
Net total other property, plant and equipment under lease purchase agreements	**0**	**63**	**0**	**63**

The main investments for 2016 were purchases of equipment for the new laboratories specialized in the development of manufacturing processes and technology transfer.

The decrease in net property, plant and equipment is mainly due to the sale and scrapping of fixtures, fittings and laboratory equipment which took place in 2016 due to the closure of the Besançon site.

The Company signed several leases during the 2016 financial year. These apply solely to laboratory equipment. These leases are entered into for a period of five years. Recognition of these leases is outlined in Note 2.4.1.

Note 5 : Financial assets

In thousands of euros	01/01/2016	Augmentations	Diminutions	12/31/2016
Loans	5	0	0	5
Deposits and guarantees	45	52	(8)	89
Other long-term receivables	0	172	0	172
Liquidity contract	105	0	(49)	55
Total non-current financial assets	**155**	**225**	**(57)**	**322**

Non-current financial assets include the following items:

- a €5 thousand tax free construction loan in 2011;
- security deposits for €89 thousand, mainly corresponding to commercial leases, for which the increases are linked to the lease entered into in early 2016 for the new laboratories specialized in the development of manufacturing processes and technology transfer;
- other long-term receivables for €172 thousand, corresponding to the guarantee deductions in 2016 relating to pre-financing of the Company's 2016 Research Tax Credit (see Note 7). The guarantee deductions are made up of the following:
    - an individual portion to cover the individual risk specific to the sum owed to the Company, returnable after the occurrence of one of these events, whichever happens first: (i) after repayment of the research tax credit by the French government (ii) after the tax inspection on said credit, after any adjustments are allocated, or (iii) at the end of the taxation limitation period for the credit concerned (December 31 of the third year following the date the CIR declaration is filed),
    - a collective portion to cover the collective risk of the receivables recorded in the portfolio of the pre-financing fund, returnable upon closure of the pre-financing fund, after any allocation shared between the sellers from any adjustments in excess of the individual deductions from the companies subject to adjustment;
- the cash balance of the liquidities contract in place with Kepler Cheuvreux since August 2016, for €55 thousand. Under this liquidity contract, 27,943 treasury shares were recognized as a reduction in shareholders' equity at December 31, 2016 compared to 16,280 shares at December 31, 2015;

Note 6 : Trade receivables

Trade receivables are as follows:

In thousands of euros	12/31/2016	12/31/2015
Trade receivables	4	4
Total Trade receivables	**4**	**4**

All these amounts have been received.

Note 7 : Other current assets

Other current assets break down as follows:

In thousands of euros	12/31/2016	12/31/2015
Receivables from suppliers, advances and downpaymen	3	17
Staff costs and related accounts	0	10
Grants receivable	94	84
Competitiveness and employment tax credit	47	86
Research tax credit	0	3,023
VAT	157	238
Other receivables	1,215	33
Prepaid expenses	761	1,078
Total other current assets	**2,277**	**4,570**

At December 31, 2016, the 2016 research tax credit (CIR) was €2.8 million, compared with €3.0 million at December 31, 2015. In the course of 2016, the Company sold its 2016 and 2017 research tax credits receivables (CIR) to Predirec Innovation 2020, a mutual securitization fund. In exchange, the Company benefits, subject to it meeting prior contractual conditions, from pre-financing lines for its 2016 and 2017 CIR.

In 2016, the Company received €1.6 million in partial pre-financing of its 2016 CIR following allocation of legal costs, financial costs and guarantee deductions (see Note 5). The 2016 CIR thus sold therefore appears under other miscellaneous receivables for its amount net of the completed pre-financing operations, i.e. €0.9 million.

The balance of other receivables mainly corresponds to credits receivable from contracts with CROs (Contract Research Organizations) for the Ovasave® Phase IIb clinical study, which is being shut down following the decision to stop this clinical study. Under these contracts, the Company has made downpayments or paid advances upon the completion of milestones, which had not been fully used at December 31, 2016.

Grants receivable correspond to the proportional measurement of grants for collaborative research projects as they are received.

Prepaid expenses are mostly operating expenses. They are mainly due to the staggering in line with the progress of research and development agreements signed in 2016, for €495 thousand. At December 31, 2015, prepaid expenses were mainly linked to the staggering in line with the progress of subcontracting agreements with the CROs for Phase IIb of the Ovasave® clinical study. Some of these items were recognized under expenses during the financial year; the balance was recognized under credits receivable at December 31, 2016 following the ongoing termination of the contracts concerned.

Note 8 : Financial instruments recorded on the balance sheet and their impact on net profit/(loss)

Accounting standards relating to financial instruments have been applied to the following items:

As of 12/31/2016 (in thousands of euros)	Note	Carrying amount	Fair value by result (1)	Loans and receivables	Liabilities at amortized cost
Financial assets	5	322		322	
Trade receivables	6	4		4	
Other current assets	7	2,277		2,277	
Cash and cash equivalents	9	3,482	3,482		
Total financial instrument assets		**6,085**	**3,482**	**2,602**	**0**
Financial debt - non current	11	3,650	2,164		1,486
Financial debt - current	11	1,575	1,406		169
Trade and other payables	14	893			893
Other current liabilities	14	5,358			5,358
Total financial instrument liabilities		**11,475**	**3,570**	**0**	**7,905**

(1) The fair value level of the instruments is presented in Note 8.1.

At December 31, 2015, the accounting standards applicable to financial instruments were applied as follows:

As of 12/31/2015 (in thousands of euros)	Note	Carrying amount	Fair value by result (1)	Loans and receivables	Liabilities at amortized cost
Financial assets	5	155		155	
Trade receivables	6	4		4	
Other current assets	7	4,570		4,570	
Cash and cash equivalents	9	9,208	9,208		
Total financial instrument assets		**13,936**	**9,208**	**4,729**	**0**
Financial debt - non current	11	1,641			1,641
Trade and other payables	14	1,608			1,608
Other current liabilities	14	5,087			5,087
Total financial instrument liabilities		**8,336**	**0**	**0**	**8,336**

(1) The fair value level of the instruments is presented in Note 8.

Note 8.1 : Measurement of fair value

Note 8.1.1 : *Levels of fair value*

As of 12/31/2016 (in thousands of euros)	Fair value by result			Total
	Level 1 (1)	Level 2 (2)	Level 3 (3)	
Cash and cash equivalents	3,482	0	0	3,482
Total financial instrument assets at fair value	**3,482**	**0**	**0**	**3,482**
Financial debt - non current	0	2,164	0	2,164
Financial debt - current	0	1,406	0	1,406
Total financial instrument liabilities at fair value	**0**	**3,570**	**0**	**3,570**

(1) Level 1: the fair value of the items at fair value through the income statement corresponds to the market value of these assets.
(2) Level 2: the fair value of the items at fair value through the income statement corresponds to an average market value of these assets and liabilities.
(3) Level 3: no assets or liabilities were measured at level 3 fair value.

Note 8.1.2 : *Transfers between levels of fair value*

There were no transfers of fair value measurement levels in 2016.

Note 9 : Cash and cash equivalents

"Cash and cash equivalents" consist of immediately available cash and short-term available-for-sale securities.

These deposits satisfy the cash and cash equivalents classification criteria described in Note 2.7.

Cash and cash equivalents break down as follows:

In thousands of euros	12/31/2016	12/31/2015
Cash	474	3,201
Cash equivalents	3,008	6,007
Total cash and cash equivalents	**3,482**	**9,208**

Note 10 : Capital

Note 10.1 : Issued capital

As at December 31, 2016, the share capital was €2,774,650.40. It is divided into 13,873,252 shares, subscribed and fully paid up, with a par value of €0.20.

This number does not include instruments convertible to Company equity which have not yet been exercised or acquired, as applicable.

The change in share capital over the period breaks down as follows:

Changes over the period (in thousands of euros)	Number of shares	Capital (in thousands of euros)	Par value (in euros)	Issue premium per share (in euros)
12/31/2015	**12,887,326**	**2,577**		
06/03/2016 - Exercise of BSA 04-11 warrants	115,251	23	0.20	2.55
08/03/2016 - Capital increase by conversion of debt	36,023	7	0.20	3.27
08/22/2016 - Conversion of convertible bonds	32,573	7	0.20	2.87
09/15/2016 - Conversion of convertible bonds	70,175	14	0.20	2.65
10/10/2016 - Conversion of convertible bonds	71,684	14	0.20	2.59
11/03/2016 - Capital increase by conversion of debt	41,666	8	0.20	2.20
11/30/2016 - Conversion of convertible bonds	51,546	10	0.20	1.74
12/02/2016 - Conversion of convertible bonds	103,092	21	0.20	1.74
12/09/2016 - Conversion of convertible bonds	257,731	52	0.20	1.74
12/12/2016 - Conversion of convertible bonds	206,185	41	0.20	1.74
12/31/2016	**13,873,252**	**2,775**		

At its meeting of June 3, 2016, the board of directors noted that François Meyer had exercised 576,255 BSA 04-11 warrants, which gave rise to the issue of 115,251 ordinary shares, each with a par value of €0.20, i.e. a capital increase of €23,050.20 in nominal value, representing a subscription for a total amount, including the issue premium, of €316,940.25.

All of the other changes in share capital listed below are linked to the OCABSA issue of convertible notes with warrants described in Note 10.3.4.2.

By decision of the Chief Executive Officer on August 4, 2016, in accordance with the delegation of authority granted to him by the board of directors at its meeting on August 3, 2016, the Company noted a capital increase by the conversion of debt on August 3, 2016, resulting in the issue of 36,023 ordinary shares each with a par value of €0.20, i.e. a capital increase of 7,204.60 euros in nominal value.

By decision of the Chief Executive Officer on November 4, 2016, in accordance with the delegation of authority granted to him by the board of directors at its meeting of November 3, 2016, the Company noted a capital increase by the conversion of debt on November 3, 2016, which resulted in the issue of 41,666 ordinary shares with a par value of €0.20 each, i.e. a capital increase of €8,333.20 in nominal value.

During 2016, under an optional equity line bond financing arrangement, the Company noted capital increases as a result of the conversion of 17 bonds convertible into shares (OCA), which resulted in the issue of 792,986 ordinary shares each with a par value of €0.20, i.e. a capital increase of €158,597.20 in nominal value.

Note 10.2 : Treasury shares

Pursuant to the liquidities contract with Kepler Cheuvreux in place since August 2016, the Company held 27,943 treasury shares at December 31, 2016, compared with 16,280 treasury shares at December 31, 2015. These treasury shares were recognized as a reduction in shareholders' equity in the financial statements established pursuant to IFRS standards, for a total amount of €145 thousand at December 31, 2016, compared to €95 thousand at December 31, 2015.

Note 10.3 : Securities convertible to equity

At December 31, 2016, securities convertible to Company equity broke down as follows:

Note 10.3.1 : *Stock option subscription plans*

Description of the plan	2014 T1 Options	2014 T2 Options	SB 2015 Options	2015 Options	TOTAL
Date of meeting	07/03/2014	07/03/2014	07/03/2014	07/03/2014	-
Date of the board of directors' decision	07/03/2014	07/03/2014	27/04/2015	27/04/2015	-
Total number of stock options authorized	2,400,000	2,400,000	2,400,000	2,400,000	-
Total number of stock options attributed	203,211	720,000	300,000	137,968	**1,361,179**
including number of stock options for corporate officers	*0*	*455,000*	*300,000*	*10,000*	***765,000***
Corporate officers in exercice concerned:					
Stéphane Boissel (3)	-	-	300,000	-	**300,000**
Number of non-corporate-officer beneficiaries	20	30	0	64	
Option exercise start date	(1)	(2)	(3)	(2)	-
Option expiry date	07/03/2024	07/03/2024	27/04/2025	27/04/2025	-
Subscription price	5.58 €	5.58 €	5.56 €	5.56 €	-
Exercise methods	(1)	(2)	(3)	(2)	-
Total number of options subscribed	203,211	716,400	300,000	137,968	**1,357,579**
Stock options outstanding at December 31, 2015	**153,043**	**426,271 (6)**	**300,000**	**122,968**	**1,002,282**
Number of canceled or voided stock options during the period	-	85,270	-	58,814	**144,084**
Number of shares subscribed during the period	-	-	-	-	-
Stock options outstanding at December 31, 2016	**153,043**	**341,001 (6)**	**300,000**	**64,154**	**858,198**
Total number of shares that can be subscribed by exercising the stock options outstanding at December 31, 2016	153,043	341,001 (6)	300,000	64,154	**858,198**
Potential capital increase of a maximum nominal amount of:	30,608.60 €	68,200.20 €	60,000.00 €	12,830.80 €	**171,639.60 €**

(1) All 2014 T1 Options are exercisable for a ten-year period, starting from their allocation by the board of directors. Should the beneficiary leave the Company he or she has, from the time he or she ceases to be an eligible beneficiary, six months to exercise the Options that would be exercisable at the date of leaving, after which the Options are void.

Notwithstanding the above, in case of a change of control of the Company, the board of directors will have the choice of deciding that any Option not exercised before the completion of such change of control will automatically be void.

(2) The 2014 T2 and the 2015 Options are exercisable by a third at the end of each year from their allocation by the board of directors, provided that the beneficiary is still an employee and/or corporate officer of the Company or one of its affiliates. Should the beneficiary leave the Company he or she has, from the time he or she ceases to be an eligible beneficiary, six months to exercise the Options that would be exercisable at the date of leaving, after which the Options are void.

Notwithstanding the above, in case of a change of control of the Company, all Options will immediately become exercisable by the beneficiary before the completion of such change of control, and the board of directors will have the choice of deciding that any Option not exercised before the completion of such change of control will automatically be void.

(3) Stéphane Boissel was appointed Chief Executive Officer of the Company by the board of directors on April 27, 2015. The SB 2015 Options can be exercised by a third at the end of each year from their allocation by the board and are subject to performance conditions, the fulfillment of which will be established by the board of directors, provided that Stéphane Boissel remains a corporate officer of the Company or one of its affiliates. Should he leave the Company, Stéphane Boissel has, from the time he ceases to be an eligible beneficiary, six months to exercise the SB 2015 Options that would be exercisable at the date of leaving, after which the Options are void.

Notwithstanding the above, in case of a change of control of the Company, all SB 2015 Options will immediately become exercisable by Stéphane Boissel before the completion of such change of control, and the board of directors will have the choice of deciding that any SB 2015 Option not exercised before the completion of such change of control will automatically be void.

Note 10.3.2 : *Share warrants ("BSA")*

At December 31, 2016, the BSA share warrant plans allocated to the Company's employees and corporate officers and members of its Scientific Advisory Board (SAB) break down as follows:

Description of the plan	BSA 04-11	BSA 03-14	BSA 05-14	BSA 03-15	BSA 05-16	BSA 09-16	TOTAL
Date of meeting	04/18/2011	03/07/2014	03/07/2014	03/07/2014	04/21/2016	04/21/2016	-
Date of the board of directors' decision	-	03/07/2014	05/22/2014	03/30/2015	05/02/2016	09/21/2016	-
Number of warrants authorized	698,289	2,400,000	2,400,000	2,400,000	500,000	500,000	-
Number of warrants issued	698,289	260,000	20,000	70,000	40,000	210,000	**1,298,289**
Number of warrants subscribed	698,289	260,000	20,000	70,000	30,000	210,000	**1,288,289**
Total number of shares that can be subscribed:	139,657 (1)	260,000	20,000	70,000	30,000	210,000	**729,657** (1)
including those which can be subscribed by corporate officers	*139,657*	*260,000*	*20,000*	*70,000*	-	*200,000*	**689,657**
Corporate officers in exercice concerned:							
François Meyer	139,657	260,000	-	50,000	-	200,000	**649,657**
Marie-Yvonne Landel Meunier	-	-	20,000	-	-	-	**20,000**
David Horn Solomon	-	-	-	20,000	-	-	**20,000**
Number of non-corporate-officer beneficiaries	-	-	-	-	-	1	-
Warrant exercise start date	10/18/2011	(2)	(3)	(5) (6)	(8)	(9) (10)	-
Warrant expiry date	06/30/2016	03/07/2024	05/22/2024	03/30/2025	05/02/2026	09/21/2026	-
Warrant issue price	0.03 €	0.28 €	0.30 €	0.30 €	0.28 €	0.18 €	-
Warrant strike price	0.55 €	5.58 €	5.94 €	5.97 €	5.57 €	3.59 €	-
Exercise methods (7)	(4)	(2)	(3)	(5) (6)	(8)	(9) (10)	-
Number of warrants outstanding at December 31, 2015	**576,257**	**260,000**	**20,000**	**70,000**	**0**	**0**	**926,257**
Number of shares subscribed during the period	115,251 (1)	-	-	-	-	-	**115,251** (1)
Number of warrants voided or canceled during the period	2	-	-	-	-	-	**2**
Number of warrants outstanding at December 31, 2016	**0**	**260,000**	**20,000**	**70,000**	**30,000**	**210,000**	**590,000**
Total number of shares that can be subscribed by exercising the warrants outstanding at December 31, 2016	0	260,000	20,000	70,000	30,000	210,000	**590,000**
Potential capital increase of a maximum nominal amount of:	0.00 €	52,000.00 €	4,000.00 €	14,000.00 €	6,000.00 €	42,000.00 €	**118,000.00 €**

(1) This number takes account of the reverse stock split of the Company's shares at a ratio of five existing shares for one new share decided by the shareholders' meeting held on March 7, 2014. It will therefore take five BSA 04-11 warrants to obtain one share.

(2) The BSA 03-14 share warrants allocated to François Meyer are exercisable on the following schedule: (i) 200,000 BSA 03-14 are exercisable from the time they are subscribed, and (ii) 20,000 additional BSA 03-14 are exercisable at the end of each year from their allocation by the board of directors, provided in both cases that on the date of exercise the beneficiary is a corporate officer of the Company or has entered into a consultant contract with the Company.

(3) The BSA 05-14 warrants allocated to Marie-Yvonne Landel-Meunier can be exercised by a third at the end of each year from their allocation by the board of directors, subject to the beneficiary's continuous presence on the board of directors over the vesting period.

(4) The BSA 04-11 share warrants were exercisable until June 30, 2016. Any BSA 04-11 share warrants not exercised at this date shall become void.

(5) The BSA 03-15 warrants allocated to David Horn Solomon can be exercised by a third at the end of each year from their allocation by the board of directors, subject to the beneficiary's continuous presence on the board of directors over the vesting period.

(6) The BSA 03-15 warrants allocated to François Meyer can be exercised by a third at the end of each year from their allocation by the board of directors, provided he is Chairman of the board of directors on the exercise date.

(7) In case of a change of control of the Company, all warrants allocated to any beneficiary will immediately become exercisable by such beneficiary before the completion of such change of control, and the board of directors will have the choice of deciding that any warrant not exercised before the completion of such change of control will automatically be void.

(8) The BSA 05-16 warrants have been allocated to the Scientific Advisory Board (SAB) members. The BSA 05-16 share warrants are fully exercisable, provided that, on the date of exercise, the beneficiary is either: (i) a member or observer of the board of directors of the Company or of one of its subsidiaries, or (ii)

bound to the Company or to one of its subsidiaries via a services or consultancy contract, or (iii) a member of any of the board's committees.

(9) At its meeting on September 21, 2016, the board of directors allocated 10,000 BSA share warrants to a member of the Company's Scientific Advisory Board (SAB). The BSA 09-16 share warrants are fully exercisable, provided that, on the date of exercise, the beneficiary is either: (i) a member or observer of the board of directors of the Company or of one of its subsidiaries, or (ii) bound to the Company or to one of its subsidiaries via a services or consultancy contract, or (iii) a member of any of the board's committees.

(10) At its meeting of September 21, 2016, the board of directors allocated 200,000 BSA share warrants to François Meyer, exercisable according to the following schedule: two tranches of 50,000 BSA share warrants as of the first anniversary of their issue date, 50,000 BSA share warrants as of the second anniversary of their issue date, and 50,000 BSA share warrants as of the third anniversary of their issue date. The exercising of these BSA share warrants is fully dependent upon performance conditions being met, as decided by the board of directors, and provided that, on the date of exercise, the beneficiary is either: (i) a member or observer of the board of directors of the Company or of one of its subsidiaries, or (ii) bound to the Company or to one of its subsidiaries via a services or consultancy contract, or (iii) a member of any of the board's committees.

Note 10.3.3 : *Free shares (AGAs)*

Description of the plan	2016 AGA employees (without performance conditions)	2016 AGA employees (with performance conditions)	2016 AGA management (with performance conditions)	TOTAL
Date of meeting	21/04/2016	21/04/2016	21/04/2016	-
Date of the board of directors' decision	02/05/2016	02/05/2016	02/05/2016	-
Number of free shares authorized	750,000	750,000	750,000	-
Number of free shares allocated	130,000	320,000	150,000	**600,000**
including those allocated to corporate officers	-	-	*150,000*	***150,000***
Corporate officers in exercice concerned:				
Stéphane Boissel	-	-	150,000	**150,000**
Date of share acquisition	(1)	(1)	(2)	-
End date of retention period	(3)	(3)	(3)	-
Number of shares vested in 2016	-	-	-	-
Number of voided or canceled free shares at Dec. 31, 2016	37,350	120,000	0	**157,350**
Free shares outstanding at December 31, 2016	**92,650**	**200,000**	**150,000**	**442,650**

(1) Free share awards granted to employees in 2016 are acquired by a third at the end of each year as of their allocation by the board of directors. Vesting is subject to an attendance condition, and, for some employees, to performance conditions (i.e. financing, progress with research and development programs, signature of strategic partnership agreements, etc.) being met, as decided by the board of directors. At its meeting of September 21, 2016, the board of directors also decided to amend the performance conditions relating to the attainment of the Company's targets determining allocation of the first third of the free share award to certain employees, so as to align said conditions with the Company's new strategy approved by the board on the same day.

In the event of a change in the Company's control, all free shares allocated to a beneficiary will be immediately vested on one of the following dates, whichever happens latest: (ii) the first anniversary of the date of award (the attendance condition thus being lifted and a holding period expiring on the second anniversary of the date of award, i.e. May 2, 2018) being added to the vesting period and (ii) the date of the change in control (said date thus marking the end of the vesting period), potentially followed by a holding period lasting up until the second anniversary of the date of award, i.e. May 2, 2018.

(2) Free share awards for 2016 are acquired by a third at the end of each year as of their allocation by the board of directors. Vesting is subject to an attendance condition and performance conditions (i.e. financing, progress with research and development programs, signature of strategic partnership agreements) being met, as decided by the board of directors. At its meeting of September 21, 2016, the Board of directors also decided to amend the performance conditions relating to the attainment of the Company's targets determining allocation of the first third of the free share award to Stéphane

Boissel, so as to align said conditions with the Company's new strategy approved by the board on the same day.

In case of a change of control of the Company, all AGAs allocated to a beneficiary will immediately become acquired, under the same conditions as described in (1) above.

(3) The first third of the allocated free shares is subject to a one-year holding period from the date of acquisition, i.e. until May 2, 2018. No holding period was set for the two other thirds, subject to the provisions applicable in case of a change of control as described in (1) above.

Note 10.3.4 : *Other dilutive instruments*

Note 10.3.4.1 : PACEO® optional equity line financing

On December 22, 2015 the Company announced that it had entered into an optional equity financing line ("PACEO®") with Société Générale involving the issuance of up to 1,150,000 new shares over the 24 months following the subscription date of the warrants, using the delegation of authority granted to the board of directors under the 15th resolution of the combined general shareholders' meeting held on May 26, 2015.

On January 25, 2016 the Company obtained the AMF's approval No. 16-036 on the prospectus required to set up the optional equity financing line (PACEO®) with Société Générale signed on December 22, 2015. On January 27, 2016, Société Générale therefore subscribed for 1,150,000 share warrants for an overall price of €115.

At December 31, 2016, none of this equity financing line had been drawn down; 1,150,000 share warrants thus remain outstanding. The Company is under no obligation to draw on this line and has a contractual commitment not to do so for as long as all the bonds convertible into shares (OCA) already issued to YA II CD have not been converted or exercised (see Note 10.3.4.2).

Note 10.3.4.2 : OCA issue credit line with attached share warrants

The Company set up a reserved issue of 200 convertible notes with warrants (OCABSA) to YA II CD Ltd, an investment fund managed by the US management company Yorkville Advisors Global LP, which fully subscribed them. These notes, exercisable until August 3, 2019, require their bearer at the Company's request and provided that certain conditions are met, to subscribe for up to 200 OCA, each with a par value of €100,000, for an overall nominal value of €20 million, to which up to €10 million may be added in the event that all of the attached BSA share warrants are exercised. A prospectus regarding this operation was made available to the public and was approved by the AMF on July 27, 2016 (approval number 16-356).

In 2016, the Company issued 50 OCA to YA II CD Ltd for an overall nominal value of €5 million, from which 686,350 BSA share warrants have been detached. These will generate additional Company equity of €2.5 million if they are fully exercised. At December 31, 2016, 17 bonds convertible into shares (OCA) had been converted and no BSA share warrants had been exercised by YA II CD. The Company is under no obligation to draw on this line.

Note 10.3.4.2.1 : Bonds convertible into shares (OCA)

The features of the OCA issued by the Company at December 31, 2016 are as follows:

Description of the plan	OCA 08-16	OCA 11-16	TOTAL
Date of meeting	08/01/2016	08/01/2016	-
Date of the board of directors' decision	08/03/2016	11/03/2016	-
Number of convertible bonds authorized	200	200	-
Number of convertible bonds issued	30	20	50
Number of convertible bonds subscribed	30	20	50
Total number of shares that can be subscribed:	(1)	(1)	-
including those which can be subscribed by corporate officers	-	-	-
Number of non-corporate-officer beneficiaries	1	1	-
Nominal value of one convertible bond	100,000	100,000	-
Interest rate of convertible bonds	(3)	(3)	-
Maturity date of convertible bonds	10/03/2017	01/03/2018	-
Conversion methods	(1)	(1)	-
Total number of convertible bonds converted as at December 31, 2016	17	0	17
Total number of convertible bonds reimbursed as at December 31, 2016	0	0	0
Number of outstanding bonds as at December 31, 2016	**13**	**20**	**33**
Total number of shares that can be subscribed by conversion of convertible bonds outstanding as at December 31, 2016	604,651 (2)	930,232 (2)	1,534,883 (2)

(1) The OCA may be converted into new ordinary Company shares at the request of the bearer, at any time from their issue and for a period of 14 months as of this date (inclusive) or if the bonds convertible into shares are not exercised on their maturity date, according to the conversion rate determined using the formula below:

N = Vn / P, where:

a. "N" is the number of ordinary new TxCell shares to be issued upon conversion of an OCA;

b. "Vn" is the bond which the OCA represents (par value of an OCA);

c. "P" is 93% of the lowest volume-weighted average daily price of TxCell shares (as published by Bloomberg) over the ten (10) trading days immediately prior to the date a notice of conversion for the OCA concerned is sent. Trading days on which the holder of the bond convertible into shares sold TxCell shares shall not be included. However, P cannot be less than the par value of a TxCell share, i.e. €0.20 on the date of the discount.

(2) On the basis of 93% of the lowest volume-weighted average price over the ten trading days prior to December 31, 2016, i.e. €2.15, the conversion of all 13 OCA 08-16 and the 20 OCA 11-16 issued and not converted would represent a theoretical issue of 1,534,883 new shares.

(3) Bonds convertible into shares (OCA) do not carry interest. However, in the event of default, each OCA in force will carry interest equal to 15% per annum (redeemed in cash as of the occurrence of any default until the date on which (ii) the default is remedied or (ii) the OCA concerned is redeemed or converted).

Note 10.3.4.2.2 : Share warrants (BSA)

The features of the BSA detached from the 50 OCA issued at December 31, 2016 are as follows:

Description of the plan	BSA OCA 08-16	BSA OCA 11-16	TOTAL
Date of meeting	08/01/2016	08/01/2016	-
Date de décision du conseil d'administration	08/03/2016	11/03/2016	-
Number of warrants authorized	50,000,000	50,000,000	-
Number of warrants issued	349,650	336,700	**686,350**
Number of warrants subscribed	349,650	336,700	**686,350**
Total number of shares that can be subscribed:	349,650	336,700	**686,350**
including those which can be subscribed by corporate officers	-	-	-
Number of non-corporate-officer beneficiaries	1	1	-
Warrant exercise start date	08/03/2016	11/03/2016	-
Warrant expiry date	08/03/2021	11/03/2021	-
Warrant issue price	0.00 €	0.00 €	-
Warrant strike price	4.29 €	2.97 €	-
Exercise methods	(1)	(1)	-
Number of warrants outstanding at December 31, 2015	-	-	-
Number of shares subscribed during the period	-	-	-
Number of warrants voided or canceled during the period	-	-	-
Number of warrants outstanding at December 31, 2016	**349,650**	**336,700**	**686,350**
Total number of shares that can be subscribed by exercising the warrants outstanding at December 31, 2016	349,650	336,700	**686,350**

(1) BSA OCA 08–16 and BSA OCA 11-16 are fully exercisable.

The impact of share-based payments on overall profit is described in Note 18.

Note 11 : Loans and financial payables

In thousands of euros	12/31/2016	12/31/2015
Financial debt - non current	3,650	1,641
Debts related to finance leases > 12 months	51	0
Total non current financial payables	**3,700**	**1,641**
Financial debt - current	1,575	0
Debts related to finance leases < 12 months	12	0
Other current financial liabilities	0	0
Total current financial payables	**1,587**	**0**
Total financial payables	**5,288**	**1,641**

The table below shows the breakdown of financial payables by type and by maturity:

In thousands of euros	Gross amount	one year at most	Over one year and 5 year at most	Over 5 years
Zero Interest Innovation Loan	1,655	169	1,324	162
Convertible bonds	3,570	1,406	2,164	0
Total loans and financial payables	**5,225**	**1,575**	**3,487**	**162**
Finance leases	63	12	51	0
Debts related to finance leases	**63**	**12**	**51**	**0**

Note 11.1 : Leasing

The Company signed several leases during the 2016 financial year. These apply solely to laboratory equipment. These leases are entered into for a period of five years.

Note 11.2 : Zero-interest innovation loan

In 2014, the Company obtained a zero-interest innovation loan (*Prêt à Taux Zéro innovation* - PTZI) from Bpifrance Financement in the gross amount of €1.7 million. This sum was paid within the scope of the Phase IIb clinical trial for Ovasave®, which started in December 2014. The zero-interest innovation loan is repayable over a period of eight years, with a deferred repayment of three years. The contract provides for several scenarios of early repayment, mainly relating to curtailment or suspension of the financed project without prior information from Bpifrance Financement or the occurrence of a major legal or financial event which has a significant impact on the Company's operations. The Company has notified Bpifrance Financement of the stoppage of Phase IIb of the Ovasave® clinical study; at the date of the *Document de Référence*, the Company was not aware of any early repayment request.

In accordance with Note 2.10, the repayment flows for the zero-interest innovation loan are discounted on the closing date. The ten-year French Government bond rate (*taux OAT*) at December 31, 2014 of 0.837% was used to discount these flows. The discounting proceeds are processed as a grant within the meaning of IAS 20 and linearized over the duration of the project to which the loan is attached. The impact of the accretion expense of the debt is recognized as a financial expense.

Note 11.3 : Bond issue

In 2016, the Company issued 50 OCA to YA II CD Ltd (see paragraph 2 of Note 10.3.4) for an overall nominal value of €5 million, from which 686,350 BSA share warrants have been detached. These will generate additional Company equity of €2.5 million if they are fully exercised. At December 31, 2016, 17 bonds convertible (OCA) into shares had been converted and no BSA share warrants had been exercised by YA II CD. Maturities for the bonds convertible into shares (OCA) can be found in Note 10.3.4.2.1.

Bonds convertible into shares (OCA) do not carry interest and shall be redeemed at par value. However, in the event of default, each OCA in force shall bear interest equal to 15% per annum (redeemed in cash as of the occurrence of the default until the date (i) the default is remedied or (ii) the bond convertible into shares is redeemed or converted).

In accordance with IAS 32, bonds convertible into shares (OCA) are financial instruments measured at fair value through the income statement.

At the time of issue, bonds convertible into shares (OCA) are recognized at nominal (par) value. They are subscribed at 98% of par. The remaining 2% is recognized under other financial expenses.

At each conversion, the difference between the carrying amount of the bonds convertible into shares (OCA) and their fair value, calculated using the average volume-weighted TxCell share price for the last ten trading days prior to the conversion, is recognized under other financial expenses.

Bonds convertible into shares (OCA) not converted at year-end are revalued at fair value through the income statement under other financial expenses, using the average volume-weighted TxCell share price for the last ten trading days prior to year-end. This is a level 2 measurement (see Note 8.1).

At December 31, 2016, financial expenses recorded for the OCA amounted to €732 thousand.

Share warrants (BSA) are recognized as zero, as the fair value of these instruments cannot be reliably measured given the very many criteria to be taken into account and their uncertainty.

Note 12 : Other non-current liabilities

Other non-current liabilities total €9 thousand and correspond to the over-one-year portion of the staggering of the zero-interest innovation loan grant.

Note 13 : Provisions

In thousands of euros	01/01/2016	Expenses	Reversals used	Reversals not used	12/31/2016
Provisions for risks	0	0	0	0	0
Provisions for expenses	772	42	(680)	(80)	55
Total current provisions	**773**	**42**	**(680)**	**(80)**	**55**

The provisions for expenses at December 31, 2016 correspond to:

- €48 thousand in provisions for restructuring, corresponding to the expected residual cost in 2017 following the change to the Company's production strategy (2015) and clinical development strategy (2016). This provision was subject to a €745 thousand reversal over the financial year, of which €66 thousand was unused;
- a retirement benefits provision of €7 thousand, compared to €21 thousand at December 31, 2015. This provision decreased by €14 thousand in 2016, mainly due to a change in the assumptions used to calculate these commitments. By applying the IAS 19 standard, the negative impact on income is €2 thousand for 2016. The actuarial differences relating to the change in the discount rates and other assumptions are recognized as items of other comprehensive income (see Note 2.12.2), constituting an expense of €17 at December 31, 2016. The assumptions used to calculate retirement indemnities for the Company's employees, defined in the collective bargaining agreement for the pharmaceutical industry, are as follows:

Valuation date	31/12/2016	31/12/2015
Retirement method	*For all employees:* voluntary departure at 67 years	*For all employees:* voluntary departure at 67 years
Rate of social security charges	49.00%	46.00%
Discount rate	1.810% Indice Bloomberg : F66710Y IND Euros Composite Zéro coupon yield AA)	1.674% Indice Bloomberg : F66710Y IND Euros Composite Zéro coupon yield AA)
Life table	TGH05 - TGF05	TGH05 - TGF05
Rate of increase in salaries (inflation included)	1.5%	1.5%
Turnover rate	14%	12%

Note 14 : Trade payables and other current liabilities

Note 14.1 : Trade payables and related accounts

In thousands of euros	12/31/2016	12/31/2015
Trade payables	893	1,608
Total	**893**	**1,608**

The change to Trade payables and related accounts is mostly due to the stoppage of Phase IIb of the Ovasave® clinical study, and more particularly the operations subcontracted to the CROs (Contract Research Organizations) and CMOs (Contract Manufacturing Organizations).

No discounting has been applied to this item, since none of the amounts in question were more than a year old at the end of each reporting period.

Note 14.2 : Other current liabilities

In thousands of euros	12/31/2016	12/31/2015
Social security payables	1,028	978
Tax payables	40	6
Deferred income	276	125
Other payables	70	70
Fixed asset suppliers	3,944	3,909
Total other current liabilities	**5,358**	**5,087**

Employee-related payables mainly include social security, retirement and pension expenses, as well as provisions for paid leave and bonuses.

Deferred revenue is all from operating grants.

The balance of the fixed assets suppliers' item of €3.9 million concerns the repurchase of rights over Ovasave® from Trizell. The initial debt of €6 million was partially paid by a €2 million payment upon termination agreement signature on December 2, 2015. The balance is due for €2 million on December 2, 2017 and €2 million on December 2, 2018, i.e. €3.9 million after taking discounting into account (see Note 3).

Note 15 : Revenue and other income

En K€	12/31/2016	12/31/2015
Business revenue	0	920
Revenue	**0**	**920**
Grants	153	89
Research tax credit	2,794	3,023
Other income	0	605
Other income	**2,948**	**3,718**
Revenue and other income	**2,948**	**4,637**

As expected, the Company did not generate any revenues in 2016. The revenue in 2015 of €920 thousand came exclusively from the revenue generated by progress in the collaborationn, development, option and license agreement with Ferring/Trizell for Ovasave®, which was terminated on December 2, 2015. On this date, the remaining proceeds generated by this agreement and not yet recognized under revenue were recognized under other income for €605 thousand.

Other income mainly comprises:

- grants in the amount of €153 thousand;
- a 2016 research tax credit receivable of €2,794 thousand, compared to €3,023 thousand as at December 31, 2015.

Note 16 : Staff costs

In thousands of euros	12/31/2016	12/31/2015
Salaries	3,291	3,352
Social security expenses	1,524	1,563
Expense arising from share-based payments	649	483
Retirement benefits	2	(20)
Total staff costs	**5,467**	**5,378**

Changes to salaries and social security expenses are explained in Note 17 below.

Changes in the average headcount were as follows:

Category	12/31/2016	12/31/2015
VP	8	4
Directors	5	5
Managers and Scientists	16	19
Technicians and workers	19	36
Average headcount	**49**	**64**

The expenses relating to share-based payments are described in Note 18.

Note 17 : Breakdown of expenses by function

Note 17.1 : Research and development

Research and development costs break down as follows:

In thousands of euros	12/31/2016	12/31/2015
Purchase of raw materials	1,114	1,942
Scientific fees, studies and other expenses	5,515	5,097
Salaries and social security expenses	3,484	3,666
Depreciation, amortization and provisions	372	153
Retirement benefits	1	(19)
Total research and development expenses	**10,486**	**10,839**

The decrease in purchase of raw materials is mainly due to the stoppage of production activities since June 2015.

The studies, scientific fees and other expenses item breaks down as follows:

In thousands of euros	12/31/2016	12/31/2015
Cost of acquiring patents	781	354
Fees and studies	3,923	3,649
Other	811	1,095
Total studies, scientific fees and other expenses	**5,515**	**5,097**

The increase in the patents item is partly due to:

- the costs of the CAR-Treg patent of the Weizmann Institute of Science, issued in Europe in the first half of 2016, for which the Company has signed an exclusive worldwide license agreement;
- costs linked to the issue in 2016 of several Treg patents.

The increase in the Fees and studies item is mostly due to the costs linked to technology transfer for the production of Ovasave® which began in September 2015 to the CMO MaSTherCell and the research and development agreements signed in 2016. These costs were partially offset by the decrease in

subcontracting expenses generated by suspending recruitment for Phase IIb of the Ovasave® clinical study.

The decrease in other R&D expenses is mainly due to the closure of the Besançon site in 2016.

The decrease in Salaries and social security expenses is principally explained by the closure of the Besançon site and partly offset by reinforcements to the management team (notably in process development and cell engineering).

Note 17.2 : General and administrative expenses

General and administrative expenses are presented as follows:

In thousands of euros	12/31/2016	12/31/2015
Rent, fees and other expenses	3,133	2,158
Salaries and social security expenses	1,332	1,249
Depreciation, amortization and provisions	43	55
Retirement benefits	1	(2)
Total general and administrative expenses	**4,509**	**3,460**

The leases, fees and other expenses item breaks down as follows:

In thousands of euros	12/31/2016	12/31/2015
Property leases	382	179
Fees	1,494	884
Other	1,258	1,094
Total rent, fees and other expenses	**3,133**	**2,158**

The increase in the leases, fees and other expenses item is mainly due to:

- the launch of the laboratory specialized in the development of manufacturing processes and technology transfer at Sophia Antipolis;
- the increase in legal fees, notably for contract matters for the partnership, research, development and license agreements signed over the period.

The increase in other G&A expenses is mainly due to increased investor relations and communication costs.

The increase in salaries and social security expenses is mainly due to reinforcements to the G&A team (notably in business development), partly offset by the presence of non-recurring expenses in the first half of 2015 (employee contributions on issues of stock option subscription plans and severance pay for Damian Marron).

Note 18 : Share-based payments

The Company allocated share warrants (BSA), share subscription options (Options) and free shares (AGA) to employees, executive officers, members of the board of directors and members of the Scientific Advisory Board (SAB).

Note 18.1 : Conditions of allotment and exercise

The following table shows the number of free shares and options acquired and exercisable, whilst the details of the plans can be found in Note 10.3:

No. of rights acquired and exercisable on	12/31/2016	06/30/2017	12/31/2017	06/30/2018	12/31/2018	06/30/2019	12/31/2019
Sub-total BSA	316,665	366,666	466,666	490,000	540,000	540,000	590,000
BSA 03-14	240,000	260,000	260,000	260,000	260,000	260,000	260,000
BSA 03-15	23,332	46,666	46,666	70,000	70,000	70,000	70,000
BSA 04-11	0	0	0	0	0	0	0
BSA 05-14	13,333	20,000	20,000	20,000	20,000	20,000	20,000
BSA 05-16	30,000	30,000	30,000	30,000	30,000	30,000	30,000
BSA 09-16 *	10,000	10,000	110,000	110,000	160,000	160,000	210,000
Sub-total Options	577,014	743,854	743,854	858,198	858,198	858,198	858,198
2104 T1 Options	153,043	153,043	153,043	153,043	153,043	153,043	153,043
2104 T2 Options	288,495	341,001	341,001	341,001	341,001	341,001	341,001
2015 Options	35,476	49,810	49,810	64,154	64,154	64,154	64,154
SB 2015 Options (1)	100,000	200,000	200,000	300,000	300,000	300,000	300,000
Sub-total AGA	0	147,539	147,539	295,089	295,089	442,650	442,650
AGA 2016 employees (1)	0	97,539	97,539	195,089	195,089	292,650	292,650
AGA 2016 management (1)	0	50,000	50,000	100,000	100,000	150,000	150,000
Total	**893,679**	**1,258,059**	**1,358,059**	**1,643,287**	**1,693,287**	**1,840,848**	**1,890,848**

(1) Some of these instruments are subject to performance conditions (see Note 10.3).

Note 18.2 : Fair value measurement of allotted equity instruments

The measurement methods used to determine the fair value of plans for instruments convertible to Company equity since 2014 are as follows:

- the share price on the allocation date is equal to the strike price;
- the risk-free rate is determined from the average lifespan of the instruments, based on the borrowing rates of the GRFN index;
- volatility was determined on the basis of a sample of listed companies in the biotechnology sector, both at the date on which the instruments are subscribed and over a period equivalent to the life of the options;
- the price discount linked to the non-transferability of the share subscription options compared to equivalent options without transfer restrictions has been calculated using the "forward price" model at the estimated borrowing rate;
- the Black & Scholes model was used to measure the fair value of the plans for instruments convertible to Company equity.

The parameters used to estimate and value the new and ongoing share warrant plans and share subscription options are outlined below:

Description of the plan (in thousand of euros)	2014 T2 Options	BSA 03-14	BSA 05-14	BSA 03-15	2015 Options	SB 2015 Options	BSA 05-16	BSA 09-16	TOTAL
Date of award	03/07/2014	03/07/2014	05/22/2014	03/30/2015	04/27/2015	04/27/2015	05/02/2016	04/21/2016	
Price on the allocation date (in €)	5.58	5.58	5.94	5.97	5.56	5.56	3.44 (1)	2.37 (1)	
Strike price (in €)	5.58	5.58	5.94	5.97	5.56	5.56	5.57	3.59	
Average maturity used	5.79	5.34	5.79	6.00	6.00	6.00	5.00	5.57	
Average risk free rate used	1.28%	1.13%	0.84%	0.14%	0.18%	0.18%	-0.10%	-0.11%	
Number of valued options	720,000	260,000	20,000	70,000	137,968	300,000	30,000	210,000	2,283,836
Volatility	45%	45%	45%	45%	45%	45%	45%	45%	
Subscription price of plan	0	72,800	6,000	21,000			8,400	37,800	122,844
Probabilized value of the plan before discount	**1,507**	**510**	**42**	**118**	**268**	**451**	**16**	**52**	**3,393**
Non-transferability discount	59	40		1	1				118
Probabilized value of the plan	**1,449**	**470**	**42**	**118**	**267**	**451**	**16**	**52**	**3,275**

(1) This price corresponds to the weighted average price on the actual subscription date by each beneficiary.

The parameters used to estimate and value the new free share allocation plans are as follows:

Description of the plan (in thousand of euros)	2016 AGA employees (without performance conditions)	2016 AGA employees (with performance conditions)	2016 AGA management (with performance conditions)
Date of award	05/02/2016	05/02/2016	05/02/2016
Price on the allocation date (in €)	5.49	5.49	5.49
Vesting period	1 to 3 years	1 to 3 years	1 to 3 years
Free share value	(1)	(1)	(1)
Free share value after discount	(2)	(2)	(2)
Vesting hypothesis	100.00%	32.33%	32.33%
Number of valued instruments	130,000	320,000	150,000
Probabilized value of the plan before discount	**585**	**350**	**164**
Non-transferability discount	0	0	0
Probabilized value of the plan	**585**	**350**	**164**

(1) For the first third of the AGA (see Note 10.3.3), the closing price used is the one on the date of the award, i.e. €5.49. For the second and final thirds of the AGA, the closing price used is the one prevailing at December 31, 2016, i.e. €3.42.

(2) No non-transferability discount was applied to the AGAs; the value of the free share after discount is thus identical to the value of the free share.

The annual charges recognized are shown below:

Periods (in thousands of euros)	2014 T2 Options	BSA 03-14	BSA 05-14	BSA 03-15	BSA 05-16	BSA 05-16	2015 Options	SB 2015 Options	AGA 2016 employees	AGA 2016 management	TOTAL
12/31/2016	(6)	14	6	42	16	7	11	169	298	91	649
12/31/2015	67	35	16	55			101	209			483

Pursuant to IFRS 2, the expenses recognized take into account the adjustment of expenses on options which were not vested on the beneficiaries' departure date.

Note 19 : Other operating income and expenses

In thousands of euros	12/31/2016	12/31/2015
Other operating expenses	(954)	(1,189)
Other operating income	867	22
Total	**(87)**	**(1,167)**

Other operating income and expenses correspond to the expenses relating to the restructuring of the Company's operations for 2016; these consist of:

- a €160 thousand expense for the restructuring of the Valbonne site in 2016 following the change to the Company's clinical development strategy;
- Proceeds of €73 thousand as a result of the restructuring of the Besançon site in 2015 following the change to the Company's clinical development strategy and explained by (i) the reevaluation at December 31, 2016 of the related provisions and (ii) the gains made from disposals in 2016 from the assets of the Besançon site.

Note 20 : Financial income and expenses

Financial income and expense (in thousands of euros)	12/31/2016	12/31/2015
Foreign exchange gains	23	10
Other financial income	0	(0)
Sub-total other financial income	**23**	**10**
Gains on cash and cash equivalents	0	1
Interest on cash and cash equivalents	3	41
Sub-total income from cash and cash equivalents	**3**	**42**
Total financial income	**26**	**52**
Financial interests on leases	(0)	0
Contractual interest on bonds	(21)	0
Financial interests	0	0
Sub-total cost of gross financial debt	**(21)**	**0**
Foreign exchange losses	(8)	(20)
Other financial expense	(784)	(17)
Sub-total other financial expense	**(792)**	**(37)**
Total financial expense	**(813)**	**(37)**
Total financial income and expense	**(787)**	**15**

Income from cash and cash equivalents corresponds to accrued interest and short-term gains on investment securities.

Other financial expenses amounted to €784 thousand and corresponded to:

- €14 thousand in accretion of finance flows linked to the zero-interest innovation loan (see Note 11);
- €39 thousand in accretion of the trade payable assets (see Note 14.2); and
- €732 thousand from the fair value recognition through profit and loss of the bond issues (see Note 11.3).

Note 21 : Tax charge

Based on current legislation, as at December 31, 2016 the Company has tax losses amounting to €82.7 million which can be carried forward indefinitely.

In France, losses can be carried forward against future profits with no time limit, but the amount that can be offset against profit in the financial year is capped at €1 million plus 50% of the taxable income exceeding €1 million in that financial year.

Net deferred tax assets from timing differences have not been recognized on the grounds of prudence, in accordance with the principles described in Note 2.15.

Note 22 : Commitments

Note 22.1 : Obligations arising from operating leases

On December 22, 2015, the Company signed a rider to renew the commercial lease expiring on June 30, 2016, for an annual rent of €147 thousand excluding taxes (the initial index-linked rent, which is now indexed annually to the quarterly service businesses index). This commercial lease is granted for a term of nine consecutive years, with the possibility of giving notice to quit every three years as well as, exceptionally, at the end of each of the first two years of the renewed lease.

Future rent and charges as at December 31, 2016 break down as follows:

- due in less than one year: €147 thousand;
- due in between one and five years: €74 thousand.

The Company entered into a lease which is exempt from the commercial leases regime with Genbiotech SAS, which took effect on February 1, 2016. The lease was entered into for a duration of two years (from February 1, 2016 to January 31, 2018), with an annual rent of €209 thousand before tax the first year and €198 thousand before tax the second year. In case of early termination of the lease, the Company will continue to be liable to SAS Genbiotech for the remaining rents due from the termination date to the end of the lease with a monthly 5% discount as of January 31, 2017.

Future rent and charges as at December 31, 2016 break down as follows:

- due in less than one year: €199 thousand;
- due in between one and five year(s): €17 thousand.

The rents recognized under expenses during the period ending December 31, 2016 amount to €339 thousand for these two rental agreements.

Note 22.2 : Obligations under the termination agreement with Trizell

On December 2, 2015, the Company and Trizell entered into an agreement terminating their collaboration, development, option and license agreement on Ovasave®, signed on December 12, 2013 and modified by a rider dated March 30, 2015. Under this agreement, the Company recovers all of Trizell's rights over Ovasave® in return for paying amounts which could reach €15 million including:

- a fixed €6 million, of which the Company has already paid €2 million upon signature on December 2, 2015. Of the balance already recognized at December 31, 2015, €2 million is due on December 2, 2017 and €2 million is due on December 2, 2018;
- a conditional €9 million on the future revenue generated by Ovasave®, which will be recognized if the contractual conditions are met.

Note 22.3 : Obligations relating to the sale of the research tax credit

In the course of 2016, the Company sold its 2016 and 2017 research tax credits (CIR) to Predirec Innovation 2020, a mutual securitization fund. In exchange, the Company benefits, subject to it meeting prior contractual conditions, from pre-financing lines for its 2016 and 2017 CIR.

Note 22.4 : Obligations under the bond-issue and equity line financing

Under the BEOCABSA issue contract of June 17, 2016, the Company made a contractual commitment not to draw on the PACEO® optional equity line financing for as long as all bonds convertible into shares (OCA) already issued to YA II CD have not been converted or redeemed (see Note 10.3.4.2).

As a result of the capital increase recorded on February 24, 2017, the Company is contractually committed not to draw upon the PACEO® optional equity line financing, or to issue any new OCAs until December 31, 2017.

Note 22.5 : Obligations pursuant to intellectual property contracts

The quantified obligations relating to the following paragraphs are not disclosed for commercial reasons.

Note 22.5.1 : *Obligations pursuant to contracts for the purchase of rights over licenses*

Generally, contracts for the purchase of rights over licenses make the Company responsible for patent filing, examination and extension costs, as well as costs relating to their protection; they also make the Company accountable vis-a-vis the owner of the rights to lump sums and royalties as certain milestones are reached.

Note 22.5.2 : *Obligations pursuant to contracts for options over licenses*

Generally, contracts for options over licenses make the Company responsible for patent filing, examination and extension costs, as well as costs relating to their protection and may require payment of a lump sum in exchange for the option, will make the Company accountable vis-a-vis the owner of the rights to lump sums and royalties as certain milestones are reached.

Note 22.5.3 : *Obligations resulting from joint ownership of intellectual property rights*

Joint ownership agreements, which define the joint ownership rules and sub-licensing rules of certain intellectual property rights, generally make the Company responsible for patent filing, examination and extension costs, as well as costs relating to their protection and the payment of lump sums and royalties as certain milestones are reached as payment for the license granted by the co-owner on the rights which belong to it.

Note 23 : Related party transactions

Note 23.1 : Compensation and director's attendance fees for executive corporate officers and members of the board of directors

The compensation presented below was granted to executive corporate officers and members of the board of directors during the periods shown:

In thousands of euros	2016 Financial year	2015 Financial year
Salaries and other short-term benefits	592	661
Probabilized cost of instruments giving acces to the capital of the Company allocated during the financial year	210	588
Directors' attendance fees	70	70
Total	**871**	**1,319**

Salaries and other short-term benefits break down as follows:

In thousands of euros Nom	2016 Financial year Amount owed[1]	2016 Financial year Amount due[2]	2015 Financial year Amount owed[1]	2015 Financial year Amount due[2]
François Meyer – Chairman of the board of directors				
Fixed compensation (6)	107	107	82	82
Variable compensation (6)	10	0	0	0
Exceptional compensation	0	0	0	0
Director's attendance fees	0	0	0	0
Benefits in kind	0	0	0	0
Total	**118**	**107**	**82**	**82**
Stéphane Boissel – Chief Executive Officer (3)				
Fixed compensation (7)	275	275	186	186
Variable compensation (8)	93	17	17	0
Exceptional compensation	0	0	0	0
Director's attendance fees	0	0	0	0
Benefits in kind (9)	14	14	7	7
Total	**381**	**305**	**210**	**194**
Damian Marron – Chief Executive Officer (4)				
Fixed compensation (10)	0	0	60	60
Variable compensation (11)	0	0	0	46
Exceptional compensation (12)	0	0	211	211
Director's attendance fees	0	0	0	0
Benefits in kind	0	0	0	0
Total	**0**	**0**	**271**	**316**
Eric Pottier – Deputy Chief Executive Officer (5)				
Fixed compensation (13)	43	43	96	96
Variable compensation (14)	0	0	0	18
Exceptional compensation (15)	49	49	0	0
Director's attendance fees	0	0	0	0
Benefits in kind (16)	0	0	2	2
Total	**93**	**93**	**98**	**116**
Total	**592**	**505**	**661**	**708**

(1) For the financial year. Variable compensation owed for one financial year is paid in the next financial year.

(2) During the financial year.

(3) Stéphane Boissel was appointed CEO of the Company by the board of directors on April 27, 2015.

(4) Damian Marron was appointed CEO of the Company by the board of directors on September 6, 2013, a position from which he resigned on April 27, 2015.

(5) Eric Pottier was hired as Vice President Supply Chain on January 14, 2013 and was appointed Deputy Chief Executive Officer of the Company by the board of directors on January 22, 2013, a position from which he resigned on February 2, 2016. Eric Pottier was dismissed on economic grounds on March 17, 2016 in connection with the shutdown of the Besançon site.

(6) The board of directors' meeting held on September 6, 2013 set François Meyer's gross annual compensation at €60,000, covering his functions as Chairman, as well as his general management support function. The board of directors' meeting held on February 10, 2015 revalued and revised the apportionment of François Meyer's compensation to make a distinction between his compensation as Chairman of the board of directors (€60,000 gross per year) and the compensation for his specific mission (€24,000 gross per year) effective February 1, 2015. At its meeting of September 21, 2016, the board of directors reviewed the specific assistance mission to general management for François Meyer, and decided to entrust to him the specific role of Head of Research which involves managing the Company's entire research division and its programs. For this task, the fixed compensation paid to François Meyer was increased, with effect from August 1, 2016, from €24,000 gross per year to €80,000 gross per year, along with variable annual compensation of 30% of said specific compensation according to the attainment of corporate targets set yearly by the board of directors. At its meeting of March 8, 2017, the

board of directors, on the proposal of the nomination and compensation committee, decided to set the variable compensation paid to François Meyer at €10,275 for the 2016 financial year in consideration of the attainment of corporate and individual targets.

(7) The Company entered into a management agreement with Stéphane Boissel following his appointment as the Company's CEO by the board of directors of April 27, 2015, with a view to determining the main terms and conditions of his duty as CEO. The signature of this management contract was authorized by the board of directors at its meeting held on April 27, 2015. As consideration for his duties, Stéphane Boissel will receive (i) a yearly fixed compensation of €275,000, (ii) variable compensation that may not exceed 30% of the said fixed compensation, based on the achievement of objectives set annually by the Company's board of directors, and (iii) in-kind benefits consisting of the payment of business travel expenses, an unemployment insurance policy for executives, and supplementary social security, healthcare and retirement protection.

(8) At its meeting of February 3, 2016, the board of directors, on the proposal of the nomination and compensation committee, set at 20% the percentage of attainment to date of the targets set in Stéphane Boissel's management contract, which represent €16,500 in variable compensation for 2015; a substantial part of this variable compensation will be measured by June 30, 2017 at the very latest, in accordance with the management agreement amended by a rider dated September 21, 2016, duly authorized by the board of directors at its meeting held on the same day. At its meeting on March 8, 2017, the board of directors, on the proposal of the nomination and compensation committee, set at €66,000 the variable compensation supplement paid to Stéphane Boissel for 2015 and set his variable compensation for 2016 at €26,813.

(9) Stéphane Boissel's benefits in kind are, pursuant to the management agreement entered into with the Company on April 27, 2015, the provision of a vehicle and of unemployment insurance.

(10) On September 6, 2013, the board of directors set the fixed annual compensation allocated to Damian Marron at €180 thousand, to be paid pro rata according to his presence in the Company until December 2013 to take into account a transition period. Damian Marron's compensation was increased to €184 thousand by the board of directors on January 22, 2014, as part of the general increase policy for 2014. Damian Marron resigned as Chief Executive Officer effective April 27, 2015.

(11) Damian Marron's variable compensation was a maximum of €70,000 conditional on the achievement of corporate targets defined and reviewed annually on the basis of a proposal made by the nomination and compensation committee. The achievement of the 2013 and 2014 objectives was confirmed respectively by the board of directors on January 22, 2014, and February 10, 2015. No variable compensation was paid to Damian Marron for the 2015 financial year.

(12) Damian Marron received a severance package in respect of the 2015 financial year, in view of his departure and pursuant to the MiddleNext Code's recommendations.

(13) Eric Pottier did not receive any compensation as Deputy Chief Executive Officer. He was remunerated only for his position as Vice President for the Supply Chain and Qualified Pharmacist (*pharmacien responsable*).

(14) The board of director's meeting held on January 22, 2014 set Eric Pottier's variable compensation for 2014 at a maximum of €25,000, for 50% conditional upon attaining the corporate targets and for 50% conditional upon attaining his personnel targets, as defined and reviewed annually on a proposal from the nomination and compensation committee. The achievement of the 2014 targets was confirmed by the board of directors held on February 10, 2015. No variable compensation was paid to Eric Pottier for the 2015 financial year.

(15) Eric Pottier received a severance package in respect of the 2016 financial year, in view of his departure and in line with the MiddleNext Code's recommendations.

(16) Eric Pottier's Benefits in kind relate to the provision of a vehicle.

The possible allocation plans for deferred instruments convertible to equity, allocated over the financial year to the corporate officers break down as follows:

In thousands of euros		2016 Financial year		2015 Financial year	
Name		Amount owed[1]	Amount due[2]	Amount owed[1]	Amount due[2]
François Meyer – Chairman of the board of directors					
Probabilized cost of instruments giving acces to the capital of the Company allocated during the financial year (3)		46	N/A	84	N/A
	Total	**46**	**N/A**	**84**	**N/A**
Stéphane Boissel – Chief Executive Officer (4)					
Probabilized cost of instruments giving acces to the capital of the Company allocated during the financial year (3)		164	N/A	451	N/A
	Total	**164**	**N/A**	**451**	**N/A**
Eric Pottier – Deputy Chief Executive Officer					
Probabilized cost of instruments giving acces to the capital of the Company allocated during the financial year (3)		0	N/A	19	N/A
	Total	**0**	**N/A**	**19**	**N/A**
David Horn Solomon – Independent member (5)					
Probabilized cost of instruments giving acces to the capital of the Company allocated during the financial year (3)		0	N/A	34	N/A
	Total	**0**	**N/A**	**34**	**N/A**
Total		**210**	**N/A**	**588**	**N/A**

(1) For the financial year. Variable compensation owed for one financial year is paid in the next financial year.
(2) During the financial year.
(3) Share-based payments correspond to the possible costs of allocation plans for instruments convertible to Company equity allocated during the financial year to the corporate officers, following deduction of the non-transferability discount linked to the shareholders; agreement in place on the date of the award.
(4) Stéphane Boissel was appointed Chief Executive Officer of the Company by the board of directors on April 27, 2015.
(5) David Horn Solomon was appointed independent member of the board of directors by the board of directors on March 30, 2015.

Directors' attendance fees break down as follows:

In thousands of euros		2016 Financial year		2015 Financial year	
Name		Amount owed[1]	Amount due[2]	Amount owed[1]	Amount due[2]
Marie-Yvonne Landel Meunier – Independent member					
Director's attendance fees		35	35	35	30
	Total	**35**	**35**	**35**	**30**
David Horn Solomon – Independent member					
Director's attendance fees		35	35	35	0
	Total	**35**	**35**	**35**	**0**
Total		**70**	**70**	**70**	**30**

(1) For the financial year. Variable compensation owed for one financial year is paid in the next financial year.
(2) During the financial year.

Note 23.2 : Miscellaneous

As at December 31, 2016, to the Company's knowledge, there was no management and/or financial link between its main suppliers and the members of its board of directors.

Note 24 : Earnings per share

The basic earnings per share are calculated by dividing the net profit (loss) attributable to the Company's shareholders by the weighted average number of shares outstanding during the year:

Net earnings par share	12/31/2016	12/31/2015
Net profit / (loss) (in thousands of euros)	(13,570)	(11,297)
Weighted average number of shares in circulation	13,062,729	12,201,594
Basic earnings par share (in euros)	**(1.04)**	**(0.93)**

Diluted earnings per share are calculated by dividing the net profit / (loss) attributable to the Company's shareholders by the following:

- the weighted average number of shares outstanding during the financial year;
- plus the number of shares that may result from the conversion of instruments giving deferred access to the share capital, as soon as such instruments have been issued.

Deferred instruments convertible to Company equity (BSA, Options, AGA and OCA) are considered as non-dilutive as they bring about a decrease in the loss per share. As a result, diluted and basic earnings per share are identical.

Note 25 : Management of financial risks

The main risks to which the Company is exposed are liquidity risk, currency risk, interest rate risk and credit risk.

Cash and cash equivalents constitute the principal financial instruments of the Company. These instruments are used to finance the Company's activities. It is the Company's policy not to use financial instruments for speculative purposes. The Company does not use derivative financial instruments.

Note 25.1 : Liquidity risk

Cash flow forecasts are produced by the finance department. Management uses these forecasts, which are regularly updated, to monitor the Company’s cash requirements and ensure that there is sufficient liquidity available to cover its operating needs.

These forecasts take into account the Company’s funding plans. Any surplus cash held by the Company is invested in short-term investment securities that are sufficiently liquid to meet the flexibility requirements set forth in the above-mentioned forecasts (see Note 2.7).

Since its creation, the Company has financed its growth by strengthening its equity through successive capital increases, and by obtaining public grants for innovation and research tax credit payments.

The Company has never resorted to bank loans, but has received a zero-interest innovation loan from Bpifrance Financement. The Company has also set up a reserved issue of convertible notes with warrants (OCABSA) to YA II CD, Ltd (see Note 10.3.4.2). Bonds convertible into shares (OCA) have a maturity of 14 months as of their issue. Once matured, non-converted OCA must be redeemed by the Company, as well as, at the request of the OCA bearer, in the event that the OCA terms are not adhered to or in the event of default.

At December 31, 2016, the Company had €3.5 million in cash and cash equivalents. Further, on February 22, 2017 the Company announced the success of its capital increase through the issue of 5,549,300 new shares with warrants (ABSA) for a gross amount of €11.1 million likely to be completed with a gross amount of €10.8 million if all of the BSA share warrants issued are exercised by February 26, 2018. To date, the Company estimates, based on its growth plan, that it is not exposed to any short-term liquidity risk (12 months).

Note 25.2 : Foreign exchange rate risk

As at December 31, 2016 the Company does not consider itself exposed to a foreign exchange rate risk as only a small part of its supplies are obtained outside the Eurozone and invoiced in foreign currency, mainly in American dollars, pounds sterling, and Swiss francs.

In view of the insignificant amounts in currency positions, at this stage of the development of its business, the Company has not made any hedging arrangements to protect its business against fluctuations in exchange rates.

However, the Company cannot rule out the possibility that a significant increase in its business could leave it more exposed to currency risk. Should this occur, the Company would put in place an appropriate policy to hedge this risk. For the year ended December 31, 2016, the Company considers that a 10% variation in exchange rates in either direction would not have a material impact.

Note 25.3 : Credit risk

The Company manages its cash and cash equivalents in a conservative manner. Cash and cash equivalents are cash and current financial instruments held by the Company (exclusively short-term investment securities that can be moved immediately).

In addition, credit risk relating to cash, cash equivalents and short-term financial instruments is not significant in view of the quality of the co-contracting financial institutions.

Note 25.4 : Interest rate risk

The only interest rate risk exposure concerns investments of cash and cash equivalents. Given the current low rate of return on this type of investment, the Company believes that any 1% increase or decrease would have no material effect on its net income in light of the losses generated by its operating activities.

The Company has not used bank loans to finance its growth and has no variable-rate liabilities. Loans and borrowings contracted by the Company are as follows:

- zero-interest innovation loan taken out on November 28, 2014 for €1.7 million with Bpifrance Financement. This loan bears no interest (see Note 11.2);
- optional convertible-bond line financing with YA II CD, Ltd, an investment fund managed by the US management company Yorkville Advisors Global LP. During the 2016 financial year, the Company drew on two tranches by issuing 30 OCA for €3 million on August 3, 2016 and 20 OCA for €2 million on November 3, 2016. Bonds convertible into shares (OCA) do not generate interest (except in cases of default) and have a maturity of 14 months as of their issue date. At December 31, 2016, the principal represented €3.3 million (see Note 10.3.4.2 and Note 11.3).

Therefore, the Company does not believe that it is exposed to a major interest rate change risk.

Note 26 : Events subsequent to the reporting period

The following events occurred after the closing date:

- at its meeting on January 20, 2017, the board of directors decided to increase the share capital by a nominal amount of €1,109,860.00, by issuing 5,549,300 new shares with warrants (ABSA) at a price of €2.00 including the issue premium, through a capital increase with preferential subscription rights for the gross sum of €11,098,600, including issue premium. This capital increase was noted by decision of the Chief Executive Officer, Stéphane Boissel, on February 24, 2017, the day of settlement and delivery of the new shares.

Note 27 : Fees paid to the statutory auditors

According to Art. 2 of decree 2008-1487 of December 30, 2008, the fees paid to the statutory auditors are presented below:

In thousands of euros	Audit Conseil Expertise, member of PKF International				Ernst & Young			
	2016		2015		2016		2015	
	Amount excluding taxes	%	Amount excluding taxes	%	Amount excluding taxes	%	Amount excluding taxes	%
Statutory audit	47	60%	52	90%	84	54%	84	87%
Services other than account certification	32	40%	6	10%	71	46%	12	13%
Total fees	**79**	**100%**	**58**	**100%**	**155**	**100%**	**96**	**100%**

20.2 Statutory auditors' report on the financial statements prepared in accordance with the IFRS standards as adopted in the European Union for the financial year ended December 31, 2016

AUDIT CONSEIL EXPERTISE
Membre de PKF International

ERNST & YOUNG Audit

This is a free translation into English of a report issued in French and it is provided solely for the convenience of English-speaking users.
This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

TxCell

Year ended December 31, 2016

Statutory auditors' report on the annual financial statements prepared in accordance with IFRS as adopted by the European Union

AUDIT CONSEIL EXPERTISE S.A.S.
Membre de PKF International
17, boulevard Augustin Cieussa
13007 Marseille

Commissaire aux Comptes
Membre de la compagnie
Régionale d'Aix-en-Provence - Bastia

ERNST & YOUNG Audit
1/2, place des Saisons
92400 Courbevoie - Paris-La Défense 1
S.A.S. à capital variable

Commissaire aux Comptes
Membre de la compagnie
régionale de Versailles

TxCell

Year ended December 31, 2016

Statutory auditors' report on the annual financial statements prepared in accordance with IFRS as adopted by the European Union

To the members of the board of directors,

In our capacity as statutory auditors of TxCell and in accordance with your request in connection with your financial communication, we hereby report to you on the audit of the accompanying annual financial statements prepared in accordance with IFRS as adopted in the EU, for the year ended December 31, 2016.

The preparation of these annual financial statements is the responsibility of the board of directors. Our role is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with professional standards applicable in France. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the annual financial statements are free from material misstatement. An audit involves performing procedures, by audit sampling and other means of testing, to obtain audit evidence about the amounts and disclosures in the annual financial statements. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as the overall presentation of the annual financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

In our opinion, the financial statements present fairly, in all material respects, the assets and liabilities and the financial position of the company at December 31, 2016 and the results of its operations for the year then ended in accordance with IFRS as adopted by the European Union.

Marseille and Paris-La Défense, March 24, 2017

The statutory auditors
French original signed by

AUDIT CONSEIL EXPERTISE
Membre de PKF International

Guy Castinel

ERNST & YOUNG Audit

Cédric Garcia

20.3 Date of the most recent financial information

The latest financial information is presented in paragraph 20.1 of the *Document de Référence*. The previous information goes back to the financial year ended December 31, 2015 and is presented in the *document de référence* registered with the AMF on May 24, 2016 under the number R.16-048.

20.4 Interim financial reports

Not applicable.

20.5 Dividend policy

20.5.1 Dividends paid during the last three years

The Company has not made a profit and therefore has not distributed dividends since it was created.

20.5.2 Dividend policy

There are no plans to introduce a dividend payment policy in the short term on account of the Company's stage of development.

20.6 Court and arbitration proceedings

As at the date of the *Document de Référence*, to the best of the Company's knowledge, there are no government, court or arbitration proceedings pending or threatened that may have or has recently had a material impact on the Company's financial position or profitabiliy.

20.7 Significant change in the financial or commercial position

As far as the Company is aware, there has been no significant change in the Company's financial and commercial position from December 31, 2016 up to the date of the *Document de Référence*.

21. ADDITIONAL INFORMATION

21.1 Share capital

21.1.1 Share capital amount

At the date of the *Document de Référence*, the Company's share capital amounts to €3,884,510.40 divided into 19,422,552 shares with a par value of €0.20 each. The Company's shares are entirely subscribed and fully paid up. The entire share capital consists of ordinary shares.

The change in the share capital and the number of outstanding shares over the financial year is described in paragraph 20.1.3 "Statement of changes in shareholders' equity" of the *Document de Référence* as well as in Note 10 "Equity".

21.1.2 Non-equity securities

None.

21.1.3 Acquisition by the Company of its own shares

The combined general shareholders' meeting held on April 21, 2016 authorized the board of directors, for a period of 18 months from the date of the meeting, to carry out a share buyback program pursuant to Article L. 225-209 of the French commercial code (*code de commerce*) and in compliance with the General Regulations of the AMF. This authorization has terminated the authorization granted by the combined shareholders' meeting of May 26, 2015 with the same purpose.

A maximum purchase price per share (excluding costs and commissions) was set at €20, with a total cap of €1,000,000. The maximum number of treasury shares shall not exceed 10% of the total number of outstanding shares of the Company.

During the financial year 2016, the share buyback program of the Company was used exclusively under the liquidity contract entered into with ODDO Corporate Finance, and transferred to the company Kepler-Cheuvreux on August 1, 2016.

As of December 31, 2016 the number of treasury shares held was 27,943 (versus 16,280 as of December 31, 2015) for a total of €67 thousand (versus €110 thousand as of December 31, 2015), representing 0.20% of the Company's share capital. The cash balance in the liquidity account at the same date amounted to €55 thousand (versus €105 thousand as of December 31, 2015). During the course of the financial year 2016, pursuant to such liquidity contract, 201,877 shares were bought at an average price of €4.07855, and 190,214 shares were sold at an average price of €4.5576. These treasury shares are recognized as a deduction from shareholders' equity in the financial statements prepared in accordance with IFRS.

21.1.4 Potential share capital

At the date of the *Document de Référence*, the securities giving access to the share capital are presented below:

21.1.4.1 Stock option subscription plans

Description of the plan	2014 T1 Options	2014 T2 Options	SB 2015 Options	2015 Options	TOTAL
Date of meeting	03/07/2014	03/07/2014	03/07/2014	03/07/2014	-
Date of the board of directors' decision	03/07/2014	03/07/2014	04/27/2015	04/27/2015	-
Total number of stock options authorized	2 400 000	2 400 000	2 400 000	2 400 000	-
Total number of stock options attributed	203 211	720 000	300 000	137 968	**1 361 179**
including number of stock options for corporate officers	*0*	*455 000*	*300 000*	*10 000*	***765 000***
Corporate officers in exercice concerned: Stéphane Boissel (3)	-	-	300 000	-	**300 000**
Number of non-corporate-officer beneficiaries	20	30	0	64	
Option exercise start date	(1)	(2)	(3)	(2)	-
Option expiry date	03/07/2024	03/07/2024	04/27/2025	04/27/2025	-
Subscription price	5,58 €	5,58 €	5,56 €	5,56 €	-
Exercise methods	(1)	(2)	(3)	(2)	-
Total number of options subscribed	203 211	716 400	300 000	137 968	**1 357 579**
Cumulated number of canceled or voided stock options	-	431 640	-	101 304	**532 944**
Cumulated number of exercised stock options	50 168	11 093	-	-	-
Stock options outstanding	**153 043**	**273 667**	**300 000**	**36 664**	**763 374**
Total number of shares that can be subscribed by exercising the outstanding stock options (4)	161 307	288 445	316 200	38 644	**804 596**

(1) All 2014 T1 Options are exercisable for a ten-year period, starting from their allocation by the board of directors. Should the beneficiary leave the Company he or she has, from the time he or she ceases to be an eligible beneficiary, six months to exercise the Options that would be exercisable at the date of leaving, after which the Options are void.

Notwithstanding the above, in case of a change of control of the Company, the board of directors will have the choice of deciding that any Option not exercised before the completion of such change of control will automatically be void.

(2) The 2014 T2 and the 2015 Options are exercisable by a third at the end of each year from their allocation by the board of directors, provided that the beneficiary is still an employee and/or corporate officer of the Company or one of its affiliates. Should the beneficiary leave the Company he or she has, from the time he or she ceases to be an eligible beneficiary, six months to exercise the Options that would be exercisable at the date of leaving, after which the Options are void.

Notwithstanding the above, in case of a change of control of the Company, all Options will immediately become exercisable by the beneficiary before the completion of such change of control, and the board of directors will have the choice of deciding that any Option not exercised before the completion of such change of control will automatically be void.

(3) Stéphane Boissel was appointed Chief Executive Officer of the Company by the board of directors on April 27, 2015. The SB 2015 Options can be exercised by a third at the end of each year from their allocation by the board and are subject to performance conditions, the fulfillment of which will be established by the board of directors, provided that Stéphane Boissel remains a corporate officer of the Company or one of its affiliates. Should he leave the Company, Stéphane Boissel has, from the time he ceases to be an eligible beneficiary, six months to exercise the SB 2015 Options that would be exercisable at the date of leaving, after which the Options are void.

Notwithstanding the above, in case of a change of control of the Company, all SB 2015 Options will immediately become exercisable by Stéphane Boissel before the completion of such change of control, and the board of directors will have the choice of deciding that any SB 2015 Option not exercised before the completion of such change of control will automatically be void.

(4) This number takes into account, when applicable, the parity adjustment decided by the board of directors on February 21, 2017 in connection with the capital increase of February 24, 2017, for the protection of the interests of holders of warrants, stock options and free shares.

21.1.4.2 Warrants ("BSA")

Description of the plan	BSA 03-14	BSA 05-14	BSA 03-15	BSA 05-16	BSA 09-16	BSA 03-17	TOTAL
Date of meeting	03/07/2014	03/07/2014	03/07/2014	04/21/2016	04/21/2016	04/21/2016	-
Date of the board of directors' decision	03/07/2014	05/22/2014	03/30/2015	05/02/2016	09/21/2016	03/08/2017	-
Number of warrants authorized	2,400,000	2,400,000	2,400,000	500,000	500,000	500,000	-
Number of warrants issued	260,000	20,000	70,000	40,000	210,000	50,000	**650,000**
Number of warrants subscribed	260,000	20,000	70,000	30,000	210,000	0	**590,000**
including those which can be subscribed by corporate officers	*260,000*	*20,000*	*70,000*	-	*200,000*	*40,000*	**590,000**
Corporate officers in exercice concerned:							
François Meyer	260,000	-	50,000	-	200,000	-	**510,000**
Marie-Yvonne Landel Meunier	-	20,000	-	-	-	20,000	**40,000**
David Horn Solomon	-	-	20,000	-	-	20,000	**40,000**
Number of non-corporate-officer beneficiaries	-	-	-	3	1	1	-
Warrant exercise start date	(2)	(3)	(4) (5)	(6)	(7) (8)	(9)	-
Warrant expiry date	03/07/2024	05/22/2024	03/30/2025	05/02/2026	09/21/2026	03/08/2027	-
Warrant issue price	0.28 €	0.30 €	0.30 €	0.28 €	0.18 €	0.09 €	-
Warrant strike price	5.58 €	5.94 €	5.97 €	5.57 €	3.59 €	1.84 €	-
Exercise methods (1)	(2)	(3)	(4) (5)	(6)	(7) (8)	(9)	-
Cumulated number of warrants exercised	-	-	-	-	-	-	-
Cumulated number of warrants voided or canceled	-	-	-	-	-	-	-
Number of outstanding warrants	**260,000**	**20,000**	**70,000**	**30,000**	**210,000**	**50,000**	**640,000**
Total number of shares that can be subscribed by exercising the outstanding warrants (10)	274,040	21,080	73,780	31,620	221,340	50,000	**671,860**

(1) In case of a change of control of the Company, all warrants allocated to any beneficiary will immediately become exercisable by such beneficiary before the completion of such change of control, and the board of directors will have the choice of deciding that any warrant not exercised before the completion of such change of control will automatically be void.

(2) The BSA 03-14 warrants allocated to François Meyer are exercisable on the following schedule: (i) 200,000 BSA 03-14 are exercisable from the time they are subscribed, and (ii) 20,000 additional BSA 03-14 are exercisable at the end of each year from their allocation by the board of directors, provided in both cases that at the date of exercise the beneficiary is a corporate officer of the Company or has entered into a consultant contract with the Company.

(3) The BSA 05-14 warrants allocated to Marie-Yvonne Landel-Meunier can be exercised by a third at the end of each year from their allocation by the board of directors, subject to the beneficiary's continuous presence on the board of directors over the vesting period.

(4) The BSA 03-15 warrants allocated to David Horn Solomon can be exercised by a third at the end of each year from their allocation by the board of directors, subject to the beneficiary's continuous presence on the board of directors over the vesting period.

(5) The BSA 03-15 warrants allocated to François Meyer can be exercised by a third at the end of each year from their allocation by the board of directors, provided he is Chairman of the board of directors on the exercise date.

(6) The BSA 05-16 warrants have been allocated to the Scientific Advisory Board (SAB) members. The BSA 05-16 are all exercisable, provided that, at the exercise date, the beneficiary (i) is a member or observer of the board of directors of the Company or one of its affiliates, or (ii) has entered into a consultant contract with the Company or one of its affiliates, or (iii) is a member of any committee implemented by the board of directors.

(7) The board of directors of September 21, 2016 has granted 10,000 BSA warrants to a member of the SAB of the Company. The BSA 09-16 warrants are all exercisable, provided that, at the exercise date, the beneficiary (i) is a member or observer of the board of directors of the Company or one of its affiliates, or (ii) has entered into a consultant contract with the Company or one of its affiliates, or (iii) is a member of any committee implemented by the board of directors.

(8) The board of directors of September 21, 2016 has granted 200,000 BSA warrants to François Meyer, exercisable on the following schedule: 100,000 BSA warrants on the first anniversary of their allocation, 50,000BSA warrants on the second anniversary of their allocation, and 50,000 BSA warrants on the third anniversary of their allocation. The exercise of the Bsa warrants is subject to performance conditions, which shall be determined by the board of directors, and provided that, at the exercise date, the beneficiary (i) is a member or observer of the board of directors of the Company or one of its affiliates, or (ii) has entered into a consultant contract with the Company or one of its affiliates, or (iii) is a member of any committee implemented by the board of directors.

(9) The board of directors of March 8, 2017 has granted 50,000 BSA warrants, of which 10,000 to the profit of a clinical advice of the Company and 20,000 to each independent director. The BSA 03-17 warrants may be subscribed until June 30, 2017. At the date of the *Document de Référence*, no BSA has been subscribed. Subject to their subscription, the BSA 03-17 may be exercised by a third at the end of each year from their allocation by the board of directors, provided that at the exercise date, the beneficiary (i) is a member or observer of the board of directors of the Company or one of its affiliates, or (ii) has entered into a consultant contract with the Company, or one of its affiliates, or (iii) is a member of any committee implemented by the board of directors.

(10) This number takes into account, when applicable, the parity adjustment decided by the board of directors on February 21, 2017 in connection with the capital increase of February 24, 2017, for the protection of the interests of holders of warrants, stock options and free shares.

21.1.4.3Free shares (AGA)

Description of the plan	2016 AGA employees (without performance conditions)	2016 AGA employees (with performance conditions)	2016 AGA management (with performance conditions)	2017 AGA	TOTAL
Date of meeting	04/21/2016	04/21/2016	04/21/2016	04/21/2016	-
Date of the board of directors' decision	05/02/2016	05/02/2016	05/02/2016	03/08/2017	-
Number of free shares authorized	750,000	750,000	750,000	750,000	-
Number of free shares allocated	130,000	320,000	150,000	137,000	**737,000**
including those allocated to corporate officers	-	-	*150,000*	*80,000*	***230,000***
Corporate officers in exercice concerned:					
Stéphane Boissel	-	-	150,000	80,000	**230,000**
Date of share acquisition	(1)	(1)	(2)	(4)	-
End date of retention period	(3)	(3)	(3)	(4)	-
Cumulated number of shares vested	-	-	-	-	-
Cumulated number of voided or canceled free shares	37,350	220,000	-	-	**257,350**
Oustanding free shares	**92,650**	**100,000**	**150,000**	**137,000**	**479,650**
Parity adjustment	5,002	5,401	8,100	-	**18,503**
Number of shares to be issued unpon free shares vesting (5)	97,652	105,401	158,100	137,000	**498,153**

(1) The 2016 AGA employees are acquired by a third at the end of each year from their allocation by the board of directors, provided that the acquisition is subject to a condition of presence, and, for some employees, to performance conditions, linked to the realization of annual objectives by the beneficiary, as determined by the board of directors.

In case of a change of control of the Company, all AGA allocated to a beneficiary will immediately become acquired at the later of the two following date: (i) the first anniversary of the allocation date (the condition of presence is then lifted and the vesting period is completed with a holding period expiring on the second anniversary of the allocation date, i.e. on May 2, 2018) and (ii) the date of completion of the change of control (said date marking the end of the vesting period), if necessary extended by a holding period up to the second anniversary of the allocation date, i.e. on May 2, 2018.

(2) The 2016 AGA management are acquired by a third at the end of each year from their allocation by the board of directors, provided that the acquisition is subject to a condition of presence, and to performance conditions, linked to the realization of annual objectives by the beneficiary (i.e. financing, progess on research and development programs, signature of strategic partneships), as determined by the board of directors.

In case of a change of control of the Company, all AGA allocated to a beneficiary will immediately become acquired, at the same conditions as described in (1) above.

(3) The first third of the allocated free shares is subject to a one-year holding period from the date of acquisition, i.e. until May 2, 2018. No holding period was set for the two other thirds, subject to the provisions applicable in case of a change of control as described in (1) above.

(4) Following the recognition of the performance conditions set out in its management contract, the board of directors of March 8, 2017 has granted Stéphane Boissel with 80,000 free shares 2017 AGA, the acquisition of which will be definitive, subject to a presence condition, at the expiration of a period of one year from their allocation by the board of directors.

The same board of directors granted 57,000 2017 AGA to employees, of which 30,000 will be vested at the end of a period of one year from their allocation and 27,000 will be acquired by a third at the end of each year following their allocation, it being specified that the acquisition is subject to a presence condition.

In case of a change of control of the Company, all AGA allocated to a beneficiary will immediately become acquired at the later of the two following date: (i) the first anniversary of the allocation date (the condition of presence is then lifted and the vesting period is completed with a holding period expiring on the second anniversary of the allocation date, i.e. on March 8, 2019) and (ii) the date of completion of the change of control (said date marking the end of the vesting period), if necessary extended by a holding period up to the second anniversary of the allocation date, i.e. on March 8, 2019.

(5) This number takes into account, when applicable, the parity adjustment decided by the board of directors on February 21, 2017 in connection with the capital increase of February 24, 2017, for the protection of the interests of holders of warrants, stock options and free shares.

21.1.4.4Other dilutive instruments

21.1.4.4.1 PACEO® optional equity line financing

On December 22, 2015 the Company announced that it had entered into an optional equity financing line ("PACEO®") with Société Générale involving the issuance of up to 1,150,000 new shares over the 24 months following the subscription date of the warrants, using the delegation of authority granted to the board of directors under the 15th resolution of the combined general shareholders' meeting held on May 26, 2015.

On January 25, 2016 the Company obtained the AMF's approval No. 16-036 on the prospectus required to set up the optional equity financing line (PACEO®) with Société Générale signed on December 22, 2015. On January 27, 2016, Société Générale therefore subscribed for 1,150,000 share warrants for an overall price of €115.

At December 31, 2016, none of this equity financing line had been drawn down; 1,150,000 share warrants thus remain outstanding. The Company is under no obligation to draw on this line and has a contractual commitment not to do so for as long as all the bonds convertible into shares (OCA) already issued to YA II CD have not been converted or exercised.

21.1.4.4.2 OCA issue credit line with attached share warrants

The Company set up a reserved issue of 200 convertible notes with warrants (OCABSA) to YA II CD Ltd, an investment fund managed by the US management company Yorkville Advisors Global LP, which fully subscribed them. These notes, exercisable until August 3, 2019, require their bearer at the Company's request and provided that certain conditions are met, to subscribe for up to 200 OCA, each with a par value of €100,000, for an overall nominal value of €20 million, to which up to €10 million may be added in the event that all of the attached BSA share warrants are exercised. A prospectus regarding this operation was made available to the public and was approved by the AMF on July 27, 2016 (approval number 16-356).

In 2016, the Company issued 50 OCA to YA II CD Ltd for an overall nominal value of €5 million, from which 686,350 BSA share warrants have been detached. These will generate additional Company equity of €2.5 million if they are fully exercised. At December 31, 2016, 17 bonds convertible into shares (OCA) had been converted and no BSA share warrants had been exercised by YA II CD. The Company is under no obligation to draw on this line.

(A) OCA

The features of the OCA issued by the Company at December 31, 2016 are as follows:

Description of the plan	OCA 08-16	OCA 11-16	TOTAL
Date of meeting	08/01/2016	08/01/2016	-
Date of the board of directors' decision	08/03/2016	11/03/2016	-
Number of convertible bonds authorized	200	200	-
Number of convertible bonds issued	30	20	50
Number of convertible bonds subscribed	30	20	50
Total number of shares that can be subscribed:	(1)	(1)	-
including those which can be subscribed by corporate officers	-	-	-
Number of non-corporate-officer beneficiaries	1	1	-
Nominal value of one convertible bond	100 000	100 000	-
Interest rate of convertible bonds	(3)	(3)	-
Maturity date of convertible bonds	10/03/2017	01/03/2018	-
Conversion methods	(1)	(1)	-
Total number of convertible bonds converted	17	0	17
Total number of convertible bonds voided or canceled	0	0	0
Number of warrants outstanding	**13**	**20**	**33**
Total number of shares that can be subscribed by exercising the warrants outstanding	812 500 (2)	1 250 000 (2)	2 062 500 (2)

(1) The OCA may be converted into new ordinary Company shares at the request of the bearer, at any time from their issue and for a period of 14 months as of this date (inclusive) or if the bonds convertible into shares are not exercised on their maturity date, according to the conversion rate determined using the formula below:

N = Vn / P, where:

a. "N" is the number of ordinary new TxCell shares to be issued upon conversion of an OCA;

b. "Vn" is the bond which the OCA represents (par value of an OCA);

c. "P" is 93% of the lowest volume-weighted average daily price of TxCell shares (as published by Bloomberg) over the ten (10) trading days immediately prior to the date a notice of conversion for the OCA concerned is sent. Trading days on which the holder of the bond convertible into shares sold TxCell shares shall not be included. However, P cannot be less than the par value of a TxCell share, i.e. €0.20 on the date of the discount.

(2) On the basis of 93% of the lowest volume-weighted average price over the ten trading days prior to March 8, 2017, i.e. €1.60, the conversion of all 13 OCA 08-16 and the 20 OCA 11-16 issued and not converted would represent a theoretical issue of 2,062,500 new shares.

(3) Bonds convertible into shares (OCA) do not carry interest. However, in the event of default, each OCA in force will carry interest equal to 15% per annum (redeemed in cash as of the occurrence of any default until the date on which (ii) the default is remedied or (ii) the OCA concerned is redeemed or converted).

(B) Share warrants (BSA)

The features of the BSA detached from the 50 OCA issued at December 31, 2016 are as follows:

Description of the plan	BSA OCA 08-16	BSA OCA 11-16	TOTAL
Date of meeting	01/08/2016	01/08/2016	-
Date de décision du conseil d'administration	03/08/2016	03/11/2016	-
Number of warrants authorized	50 000 000	50 000 000	-
Number of warrants issued	349 650	336 700	**686 350**
Number of warrants subscribed	349 650	336 700	**686 350**
Total number of shares that can be subscribed:	349 650	336 700	**686 350**
including those which can be subscribed by corporate officers	-	-	-
Number of non-corporate-officer beneficiaries	1	1	-
Warrant exercise start date	03/08/2016	03/11/2016	-
Warrant expiry date	03/08/2021	03/11/2021	-
Warrant issue price	0,00 €	0,00 €	-
Warrant strike price	4,29 €	2,97 €	-
Exercise methods	(1)	(1)	-
Number of warrants exercised	-	-	-
Number of warrants voided or canceled during the period	-	-	-
Number of warrants outstanding	**349 650**	**336 700**	**686 350**
Total number of shares that can be subscribed by exercising the warrants outstanding (2)	352 097	339 056	**691 153**

(1) BSA OCA 08–16 and BSA OCA 11-16 are fully exercisable.

(2) This number takes into account, where applicable, the par value adjustment decided by the board of directors on February 21, 2017 in connection with the capital increase of February 24, 2017, for the protection of the interests of holders of warrants, stock options and free shares.

The impact of share-based payments on overall profit is described in Note 18.

21.1.4.4.3 Listed warrants

Following the capital increase carried out in February 2017 by public offer through the issue of new shares with warrants attached (ABSA), 5,549,300 listed warrants, with a maturity of one year, ie until 26 February 2018, were detached from the ABSA subscribed. The exercise of all listed warrants would generate a capital contribution of a total amount of € 10.8 million through the issuance of 4,161,975 new shares at a price of € 2.60 including issue premium.

21.1.4.5Summary of the dilutive instruments

At the date of the *Document de Référence*, the total number of shares that might be created by the exercise of all the securities giving access to the Company's share capital granted and outstanding amounts to 10,040,237 new shares, representing 34.08% of the fully diluted share capital, it being specified that this theoretical calculation takes into account, although they are exclusive of each other, the exercise or conversion, on the basis of the price on March 8, 2017, of all the financing instruments issued within the framework of PACEO® and OCABSA.

In addition, at the date of the *Document de Référence*, there were 150 unexercised Tranche Warrants outstanding under the Notes with Warrants financing line. The Company is under no obligation to make any additional issues and has committed not to make any further drawdowns in 2017. On the basis of 93% of the lowest volume-weighted average price over the ten trading days prior to March 8, 2017, i.e. €1.60, the exercising of all 150 outstanding Tranche Warrants, the conversion of the 150 Notes issued as a result of the exercise of the Tranche Warrants and the exercise of the attached Warrants would give rise to the issue of 468,750, 9,375,000 and 3,787,878 new shares respectively (i.e. a total of 13,631,628 new shares).

Consequently, as at the date of the *Document de Référence*, in the event of (i) the full exercise and, as the case may be, the full acquisition of instruments giving access to the capital of the Company issued

and outstanding, and (ii) the exercise of the 150 remaining Tranche Warrants, the conversion of the 150 notes issued as a result of the exercise of the Tranche Warrants and the exercise of the attached Warrants, on the basis of the price mentioned in the previous paragraph, the total number of shares would then amount to 23,671,865 new shares representing 54.93% of the fully diluted share capital.

21.1.5 Authorized capital

The resolutions relating to issuance approved by the extraordinary general shareholders' meeting held on April 21, 2016 are summarized below. The minutes of this shareholders' meeting are available on the Company's website: (www.txcell.com).

	Valid for / expiry	Maximum	Methods used to determine price
Authorization granted to the board of directors in order for the Company to purchase its own shares	18 months	€1,000,000 up to 10% of the share capital	10% of the share capital
Authorization granted to the board of directors in order to reduce the share capital by cancelling shares pursuant to the authorization to buy back the Company's own shares	18 months	10% of total share capital per 24-month period	10% of total share capital per 24-month period
Delegation of authority granted to the board of directors in order to increase the capital by issuing ordinary shares and/or any equity securities giving access to other equity securities or giving entitlement to the allocation of debt securities , and/or securities giving access to equity securities to be issued, with shareholders' preferential subscription right	26 months	€2,100,000 (1)	
Delegation of authority granted to the board of directors in order to increase the capital, immediately or in the future, by issuing ordinary shares or any equity securities giving access to other equity securities or giving entitlement to the allocation of debt securities, without shareholders' preferential subscription right and public offering	26 months	€2,100,000 (1)	(2)
Delegation of authority granted to the board of directors in order to increase the capital by issuing ordinary shares and/or any equity securities giving access to other equity securities or giving entitlement to the allocation of debt securities, and/or any securities giving access to equity to be issued, without shareholders' preferential subscription right through an offer to qualified investors or a limited circle of investors referred to in article L. 411-2 II of the French monetary and financial code (*code monétaire et financier*)	26 months	€520,000 (1) up to 20% of share capital per 12-month period	(2)
Delegation of authority granted to the board of directors in order to increase the capital by issuing ordinary shares or any securities without shareholders' preferential subscription right to a category of persons underwriting to subscribe the Company's securities issued pursuant to the exercise of an equity line	18 months	€520,000 (1)	(3)
Authorization grantedto the board of directors, in the event of an issue of shares or any securities giving access to the capital without shareholders' preferential subscription right, in order to set the issue price up to 10% of the share capital and within the limitations provided by the general shareholders' meeting	26 months	up to 10% of share capital per 12-month period	(4)
Delegation of authority granted to the board of directors in order to increase the number of shares to be issued pursuant to a capital increase with or without a preferential subscription right	26 months	up to 15% of the initial issue (1) (5)	Same price as initial issue
Delegation of authority granted to the board of directors in order to issue ordinary shares and securities giving access to the Company's capital, in the event of a public exchange offer by the Company including an exchange component	26 months	€2,100,000 (1)	

	Valid for / expiry	Maximum	Methods used to determine price
Delegation of power granted to the board of directors in order to issue Company's ordinary shares or securities giving access by any means, immediately or in the future, to Company's ordinary shares, up to 10% of the capital, in compensation for contributions in kind involving third-party companies' equity securities or securities giving access to their share capital outside a public exchange offer	26 months	€260,000 up to 10% of the existing share capital on the date of the transaction under consideration (1)	
Delegation of authority granted to the board of directors in order to increase the capital by incorporation of premium, reserves, profits and other funds	26 months	€ 480 000	
Authorization granted to the board of directors in order to grant stock options	38 months	500,000 shares (6)	(7)
Authorization granted to the board of directors in order to allot free shares to be issued or purchased by the Company	38 months	750,000 shares up to 10% of the share capital (6)	
Delegation of authority granted to the board of directors in order to issue and allocate warrants to (i) observers (*censeurs*) and members of the Company's board of directors in office on the date of the warrants' allocation, who are not employees or managers of the Company or any of its subsidiaries, (ii) persons who entered with the Company into a services or consultant contract or (iii) members of any committee that have been set up or that might be set up by the board of directors, who are not employees or managers of the Company or any of its subsidiaries	18 months	500,000 shares (6)	(8)

(1) These amounts are not cumulative. The cumulative maximum nominal amount for capital increases was set by the shareholders' meeting at €2,450,000.

(2) The issue price of the shares shall be at least equal to the weighted average share price over the last three trading days preceding the day on which it is set minus, where applicable, the legally authorized discount (i.e. currently 5%) and adjusted if there are differences in the dates from which the shares earn dividends, provided that the issue price of the securities giving access to the Company's capital is such that the sum received immediately by the Company plus, where applicable, the sum which it may receive subsequently, is, for each share issued as a result of the issuance of these securities, at least equal to the issue price defined above.

(3) The issue price of the shares shall be at least equal to the volume-weighted average price over the last three trading days preceding the day on which it is set, minus a maximum discount of 20%, taking into account as the case may be the date from which the shares earn dividends, provided (i) that in the case of an issue of securities giving access to the capital, the issue price of the shares that might result from the exercise, conversion or exchange of such securities may, at the discretion of the board of directors, be set by reference to a mathematical formula defined by the board and applicable to the issue of such securities subsequently (e.g. at the time of exercise, conversion or exchange), in which case the aforementioned maximum discount may be calculated, if the board of directors deems it appropriate, as of the date such formula is applied (and not at the date where the issue price is set) and (ii) that the issue price of the securities giving access to the capital, if any, issued under this delegation will be such that the funds, if any, immediately received by the Company, plus those that it might receive at the time of the exercise or conversion of said securities, is, with regard to each share issued consequent to the issue of these securities, at least equal to the aforementioned minimum amount.

(4) Within the limit of 10% of the Company's capital (as at the date of the transaction) every 12 months, the board of directors may waive the pricing requirements set forth by the aforementioned delegations

and set the issue price of the ordinary shares and/or issued securities giving immediate or future access to the Company's capital, as follows:

- the issue price of the ordinary shares will be at least equal to the volume-weighted average share price over the last three trading days prior to its determination minus, where appropriate, a maximum discount of 20%, it being specified that it can under no circumstances be less than the par value of a share of the Company on the date of issuance of such shares;
- the issue price of the securities giving access to the Company's capital will be such that the sum received immediately by the Company plus, if any, that which it may receive subsequently, is, for each share issued as a result of the issuance of these securities, at least equal to the issue price specified in the paragraph above.

(5) 15% or any other fraction that may be determined by the applicable regulations.

(6) These amounts are not cumulative. The overall cap for the authorized issuances is 1,200,000 shares.

(7) The purchase or subscription price per share will be set by the board of directors as of the day the option is granted within the limits set by law and this delegation and shall under no circumstances be inferior to ninety-five per cent (95%) of the average share price over the twenty trading days prior to the date of the board's decision to grant the options, rounded up to the next euro cent, or, in the case of purchase options, inferior to 80% of the average purchase price of the Company's treasury shares, rounded up to the next euro cent.

(8) The issue price of a warrant will be determined by the board of directors as of the day such warrant is issued based on the warrant's specific terms and conditions and will be at least equal to 5% of the volume-weighted average price on Euronext Paris over the last five (5) trading days preceding the grant date of such warrant by the board. The exercise price will be set by the board of directors at the date the warrants are allocated and shall be at least equal to the weighted average price over the twenty trading days prior to the date of the board's decision to grant the warrants.

The following delegation of authority has been granted to the board of directors by the extraordinary general shareholders' meeting held on August 1, 2016 :

	Valid for / expiry	Maximum	Methods used to determine price
Delegation of authority granted to the board of directors in order to (i) issue, free of charge, bonds convertible into shares with share warrants attached and (ii) to increase the share capital by issuance of ordinary shares without shareholders' preferential subscription, to the benefit of YA II CD, Ltd.	18 months	(1)	(2)

(1) This delegation may be used within the following limits:

- (i) a maximum number of 100,000,000 ordinary shares with a par value of 0.20 euro each, that may result from the conversion of notes, representing a capital increase of a maximum nominal amount of 20,000,000 euros,
- (ii) a maximum number of 50,000,000 ordinary shares with a par value of 0.20 euro each, that may result from the exercise of the warrants, representing a capital increase of a maximum nominal amount of 10,000,000 euros, and
- (iii) a maximum of 5,000,000 ordinary shares with a par value of € 0.20 each, that may result from any capital increase decided by the board of directors pursuant to this resolution in the event of the exercise of all the BEOCABSA, representing a capital increase of a maximum nominal amount of 1,000,000 euros.

(2) The methods for the price determination are as follows:

- each BEOCABSA, in the event of exercise, will give rise to the issue of one Note of a principal amount of 100,000 euros each with Warrants attached (OCABSA), for a total of 200 OCABSA, representing a total nominal amount of €20,000,000 in the event of the exercise of all 200 BEOCABSA referred to above.

- the notes (OCA) will have a par value of 100,000 euros each and will be subscribed to 98% of the par. The OCA may be converted into TxCell shares at the request of their holder at any time at a conversion ratio determined by the following formula: N = Vn / P: "N" corresponding to the number of new ordinary shares to be issued upon conversion of a note, "Vn" corresponding to the bond debt that the notes represent (nominal value of a note) and "P" corresponding to 93% of the lowest daily volume weighted average price of TxCell shares over the last ten (10) trading days (as published by Bloomberg) immediately preceding the applicable note conversion request date, it being specified that the trading days on which the relevant notes holder will have sold TxCell shares will be excluded. P may not, however, be less than the nominal value of a TxCell share, i.e. 0.20 euro to date.
- the number of warrants attached to each tranche of OCA will be calculated so that in the event of the exercise of all warrants, the capital increase (including issue premium) resulting from the exercise of these warrants is equal to 50% of the nominal amount of the corresponding tranche of OCA. The exercise price of the warrants will be equal to 115% of the lowest daily volume weighted average price over the last ten (10) trading days immediately preceding the Tranche Warrant (BEOCABSA) exercise date giving rise to the issuance of the OCA from which said warrants are detached.
- the issue price of the new ordinary shares that would be issued pursuant to the delegation to increase the share capital by issuing ordinary shares, will be determined by the board of directors and will be equal to 93% of the lowest daily volume weighted average price of TxCell shares over the last ten (10) days (as published by Bloomberg) immediately preceeding the relevant Tranche Warrant exercise date, which price may not, in any event, be less than the nominal value of a TxCell share, i.e. 0.20 euro to date.
- if applicable, the nominal amount of shares to be issued in the event of new financial transactions to preserve, in accordance with the law and, where applicable, the applicable contractual stipulations, the rights of the holders of securities and other rights giving access to capital, will be added to these amounts.

At the ordinary and extraordinary shareholders' meeting to be held on April 27, 2017, the Company has made available to shareholders the information required by Article R.225-73-1 of the French Commercial Code, , and in particular the text of the resolutions. The latter is contained in the notice of meeting published in the BALO on March 22, 2017 and is available on the Company's website www.txcell.com section Investors - Documentation – Shareholders' meetings.

21.1.6 Information about the capital of any member of the group which is under option or agreed conditionally or unconditionally to be put under option

To the best of the Company's knowledge, there is no option, nor any conditional or unconditional agreement providing for such an option, on the Company's capital.

21.1.7 History of the share capital

21.1.7.1Changes in the share capital

The table below presents a summary of the changes in the share capital from December 31, 2014 until the date of the *Document de Référence*.

Date of transaction	Nature of transaction	Number of shares issued or canceled	Cumulated number of shares outstanding	Par value (in €)	Nominal amount (in €)	Issue or contribution premium (in €) *
12/31/2014		**11,663,015**	**11,663,015**		**2,332,603.00**	
H1 2015	Exercice Options 2014	54,203	11,717,218	0.20	10,840.60	291,612.14
07/24/2015	Placement privé	1,166,300	12,883,518	0.20	233,260.00	7,697,580.00
S2 2015	Exercice Options 2014	3,808	12,887,326	0.20	761.60	20,487.04
12/31/2015		**12,887,326**	**12,887,326**		**2,577,465.20**	
06/03/2016	06/03/2016 - Exercise of BSA 04-11 warrants	115,251	13,002,577	0.20	23,050.20	293,890.05
08/03/2016	08/03/2016 - Capital increase by conversion of debt	36,023	13,038,600	0.20	7,204.60	117,795.21
08/22/2016	12/02/2016 - Conversion of convertible bonds	32,573	13,071,173	0.20	6,514.60	93,484.51
09/15/2016	12/02/2016 - Conversion of convertible bonds	70,175	13,141,348	0.20	14,035.00	185,963.75
10/10/2016	12/02/2016 - Conversion of convertible bonds	71,684	13,213,032	0.20	14,336.80	185,661.56
11/03/2016	08/03/2016 - Capital increase by conversion of debt	41,666	13,254,698	0.20	8,333.20	91,665.20
11/30/2016	12/02/2016 - Conversion of convertible bonds	51,546	13,306,244	0.20	10,309.20	89,690.04
12/02/2016	12/02/2016 - Conversion of convertible bonds	103,092	13,409,336	0.20	20,618.40	179,380.08
12/09/2016	12/02/2016 - Conversion of convertible bonds	257,731	13,667,067	0.20	51,546.20	448,451.94
12/12/2016	12/02/2016 - Conversion of convertible bonds	206,185	13,873,252	0.20	41,237.00	358,761.90
12/31/2016		**13,873,252**	**13,873,252**		**2,774,650.40**	
02/24/2017	Public offering through new shares with warrants attached	5,549,300	19,422,552	0.20	1,109,860.00	11,098,600.00
2016 *Document de Référence*		**19,422,552**	**19,422,552**		**3,884,510.40**	

*Excluding the allocation of issue fees

21.1.7.2 Changes in the distribution of the capital and voting rights over the past three financial years

Shareholder	*Situation as of 31/12/2014*		*Situation as of 31/12/2015*		*Situation as of 31/12/2016*	
	% of capital	*% of voting rights*	*% of capital*	*% of voting rights*	*% of capital*	*% of voting rights*
Auriga Partners	33.55%	33.60%	30.36%	30.40%	28.20%	28.26%
Bpifrance Investissement	30.41%	30.45%	27.52%	27.55%	25.56%	25.61%
Bpifrance Participations	12.45%	12.46%	11.26%	11.28%	10.46%	10.48%
Seventure Partners	15.32%	15.35%	8.48%	8.50%	6.52%	6.53%
Other shareholders holding less than 5%	8.13%	8.15%	22.25%	22.28%	29.05%	29.11%
Treasury shares (1)	0.14%	0.00%	0.13%	0.00%	0.20%	0.00%
TOTAL	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**

(1) Shares held as part of a liquidity contract, without voting rights

The capital and the corresponding voting rights at the date of the *Document de Référence* is presented in section 18.1 of the *Document de Référence*.

21.2 Act of incorporation and bylaws

21.2.1 Corporate purpose

This paragraph is described by Article 3 of the Company's bylaws.

The Company's direct and indirect purpose, in France and abroad, is as follows:

- to carry out, on its behalf or on behalf of third parties, any research, development and study operation and to develop production and marketing processes for pharmaceutical products;
- to file or grant patents and licenses directly or indirectly related to its activities;
- and, more generally, any economic, legal, financial, civil or commercial transaction of any kind whatsoever, that may be directly or indirectly related to the corporate purpose or any similar, related or supplementary purpose.

21.2.2 Provisions of the bylaws or other documents relating to members of the Company's administrative and management bodies

21.2.2.1Board of directors

This paragraph is described by Article 11 of the Company's bylaws.

The Company is governed by a board composed of individuals and legal entities; the number of members is determined by the ordinary general shareholders' meeting, within the limits set forth by the law.

At the time of their appointment, legal entities must designate an individual to act as their permanent representative on the board of directors. The term of office of the permanent representative will be identical to the term of office of the legal entity he/she represents. When a legal entity dismisses its permanent representative, it must designate a replacement immediately. These rules also apply in the event of the death or resignation of the permanent representative.

Members of the board of directors will be appointed for a six-year term of office. The office of a member of the board of directors will expire at the close of the ordinary general shareholders' meeting convened to vote on the financial statements for the previous financial year and held in the year in which the member of the board of directors' term of office is due to expire.

Members of the board of directors may be re-elected. They may be removed from office at any time by decision of the general shareholders' meeting.

In the event one or more seats on the board of directors fall vacant due to death or resignation, the board of directors may make provisional appointments between two general shareholders' meetings.

Any appointments made by the board pursuant to the previous paragraph are subject to the ratification of the next ordinary general shareholders' meeting.

If they are not ratified, the decisions and actions already taken by the board will nevertheless remain valid.

In the event the number of the members of the board of directors falls below the minimum set by law, the remaining members must immediately convene an ordinary general shareholders' meeting in order to appoint the necessary number of members of the board of directors.

A company employee may be appointed to the board. However, his or her contract of employment must correspond to a genuine position. In this case, an appointment to the board will not result in the termination of the person's employment contract.

No more than one-third of the members of the board of directors in office can be bound to the Company by a contract of employment.

No more than one-third of the members of the board of directors in office can be aged over 75. In the event this threshold is crossed during their terms, the eldest board member will be deemed to have resigned automatically at the close of the next general shareholders' meeting.

21.2.2.2Observers (*censeurs*)

This paragraph is described by Article 15 of the Company's bylaws.

The ordinary general shareholders' meeting may appoint observers of the board on the basis of proposals made by the board of directors. The board of directors may also appoint observers directly, subject to ratification of the appointment by the next general shareholders' meeting.

No more than five observers, who form a panel may be appointed. They are selected solely on the basis of their skills and expertise.

They are appointed for a six-year term of office, expiring at the close of the ordinary general shareholders' meeting convened to vote on the financial statements for the previous financial year.

The panel of observers examines matters submitted to it by the board of directors or its Chairman, for their consideration. Observers attend the board of directors' meetings and take part in the deliberations in an advisory capacity only; without their absence affecting the validity of these deliberations.

They are convened to attend board meetings under the same conditions as the other board members.

The board of directors may remunerate the observers out of the directors' attendance fees allocated to the board of directors by the general shareholders' meeting.

21.2.2.3Meetings of the board of directors

This paragraph is described by Article 12 of the Company's bylaws.

The board of directors meets as often as the Company's interest requires.

The members of the board of directors are convened to its meetings by the Chairman. Notice of a meeting may be given by any method, orally or in writing.

The Chief Executive Officer can also ask the Chairman to convene a meeting of the board of directors, with regard to a specific agenda.

Moreover, members of the board of directors representing at least one-third of the total number of members of the board can also validly convene a meeting. In that case, they must specify the agenda to be discussed.

If the Company has a works council (*comité d'entreprise*), the members of this council, appointed in accordance with the French labor code (*code du travail*), must be convened to attend all meetings of the board of directors.

Board meetings will be held at the head office or at any other location in France or abroad.

At least one half of the total members must be present for the board to validly deliberate.

Decisions of the board of directors will be adopted by a majority of the votes; in the event of a tie, the Chairman of the meeting will not have a casting vote.

Internal rules that may be adopted by the board of directors may provide, in particular, that for purposes of calculating the quorum and majority any member of the board of directors who attend a board meeting via videoconferencing or telecommunication methods that comply with by the applicable regulations will be deemed present. This provision does not apply to the decisions listed in Articles L.232-1 and L.233-16 of the French commercial code (*code de commerce*).

Each member of the board of directors will receive the necessary information to perform his or her duties and may request any documents he or she considers useful.

Any member of the board of directors may grant a power of attorney to another member to be represented at a board meeting, by means of a letter, telegram, telex, fax, e-mail or any other electronic method; however, a member of the board of directors can only hold one proxy per meeting.

Copies of or excerpts from minutes of the board of directors' meetings are validly certified by the Chairman of the board of directors, the Chief Executive Officer, any member of the board of directors acting temporarily as Chairman or any person duly empowered to this effect.

21.2.2.4General Management

This paragraph is described by Article 14 of the Company's bylaws.

The general management of the Company is carried out, under the board's responsibility, either by the Chairman of the board of directors or by another individual appointed by the board of directors and bearing the title of Chief Executive Officer.

The Chief Executive Officer is vested with the broadest powers to act in the Company's name in all circumstances. He exercises his authority within the limits of the Company's purpose and subject to the authority expressly granted by law to the shareholders' meeting and to the board of directors.

He represents the Company in its relations with third parties. The Company will be bound by the Chief Executive Officer's actions that fall outside the scope of the Company's purpose, unless it can establish that the third party knew that the action fell outside of the scope thereof or that the third party could not have been unaware of the fact, given the circumstances; the mere publication of the bylaws not being sufficient to constitute such proof.

The Chief Executive Officers may not be over 65 years old. If the Chief Executive Officer reaches this age limit, he will be deemed to have resigned de facto. However, his term of office will be extended until the next board of directors' meeting, at which the new Chief Executive Officer will be appointed.

He may be removed from office by the board of directors at any time. Removal from office without just and serious cause may give rise to the payment of compensation unless the Chief Executive Officer also holds office as Chairman of the board of directors.

The board of directors will decide, by a majority of the votes of the members of the board of directors present or represented, between the two forms of general management referred to in the first paragraph of this section.

The shareholders and third parties are informed of this choice under the legal and regulatory conditions.

The board of directors' decision will remain in effect until it decides otherwise or, at the discretion of the board of directors, for a period corresponding to the Chief Executive Officer's term of office.

When the general management of the Company is carried out by the Chairman of the board of directors, the provisions applying to the Chief Executive Officer will apply to him.

In accordance with Article 706-43 of the French code of criminal procedure (*code de procédure pénale*), the Chief Executive Officer may validly delegate authority to any person of his choice to represent the Company in criminal proceedings brought against it.

On the basis of a proposal made by the Chief Executive Officer, the board of directors may appoint one or more individuals to assist the Chief Executive Officer, as Deputy Chief Executive Officer.

In agreement with the Chief Executive Officer, the board of directors defines the scope and duration of the powers conferred upon the Deputy Chief Executive Officers. The board of directors sets their compensation. When a Deputy Chief Executive Officer is also a member of the board of directors, his term of office may not exceed his term as member of the board.

With respect to third parties, the Deputy Chief Executive Officers have the same powers and authority as the Chief Executive Officer, including, in particular, the power to engage in legal proceedings.

No more than three Deputy Chief Executive Officers may be appointed.

The Deputy Chief Executive Officer(s) may be removed from office by the board of directors at any time, on the basis of the proposal made by the Chief Executive Officer. Any removal from office without just and serious cause may give rise to the payment of compensation.

Deputy Chief Executive Officers must not be aged over 65. If a Deputy Chief Executive Officer reaches this age limit he will be deemed to have resigned automatically. However, his term of office will be extended until the next board of directors' meeting, at which a new Deputy Chief Executive Officer may be appointed.

When the Chief Executive Officer ceases to perform or is prevented from performing his or her duties, the Deputy Chief Executive Officers will remain in office and continue to perform their duties until a new Chief Executive Officer is appointed, unless the board of directors decides otherwise.

21.2.3 Rights, privileges and restrictions attached to the Company shares

21.2.3.1Form of shares

This paragraph is described by Article 7 of the Company's bylaws.

Fully paid up shares may be held in registered or in bearer form, as chosen by each shareholder, subject, however, to the legal provisions relating to the mandatory form of shares held by certain specific individuals or legal entities. Shares that have not been fully paid up must be held in registered form.

Shares are recorded in individual accounts in accordance with the terms and conditions set out in the applicable laws and regulations.

Ownership of shares issued in registered form results from their registration in an account in the shareholder's name.

21.2.3.2Voting rights

This paragraph is described by Article 9 of the Company's bylaws.

The voting rights attached to shares are proportional to the fraction of the capital they represent and each share shall give right to at least one vote. The bylaws expressly exclude any mechanism that would grant a double voting right to shares having been registered in the same shareholder's name for at least two years.

21.2.3.3Rights to dividends and profits

This paragraph is described by Articles 9 and 12 of the Company's bylaws.

Each share entitles its holder to a share of the Company assets, profits and liquidation surplus in proportion to the number of shares issued and outstanding, and their par value.

Whenever it is necessary to hold a certain number of shares, whether preferential or not, or securities in order to exercise a given right, the shareholders or holders of the securities must personally arrange to group together the necessary number of shares or securities.

At least five percent (5%) must be drawn from the profits for the financial year, after deduction of prior losses, if any, and charged to a reserve account named "legal reserve". This deduction is no longer required once the legal reserve has reached one-tenth of the share capital.

The available earnings comprises the profits for the financial year, minus the prior losses and the deduction described in the previous paragraph, plus retained earnings.

If the financial statements for the financial year, as approved by the general shareholders' meeting, show the existence of available earnings, the shareholders may resolve to charge the amount to one or more reserve accounts, for which it will determine the allocation and use, to carry it forward as retained earnings or to distribute it as a dividend.

After noting the existence of available reserves, the shareholders may decide to distribute amounts drawn from these reserves. In such a case, the resolution must expressly indicate the reserve accounts from which the funds will be drawn. However, dividends are drawn in priority from the available earnings for the financial year.

The terms of payment of dividends are determined by a general shareholders' meeting or, failing that, by the board of directors.

However, the dividends must be paid within nine months of the end of the financial year.

The general meeting convened to vote on the financial statements for the financial year may grant each shareholder, for all or part of the dividend being distributed, the option of receiving payment of the dividend in cash or in shares.

Likewise, the ordinary general shareholders' meeting, voting in accordance with the conditions set out in Article L.232-12 of the French commercial code, may grant the shareholders an interim dividend and the option, for all or part of this interim dividend, between receiving payment of the interim dividend in cash or in shares.

21.2.3.4Dividend limitation period

Dividends that remain unclaimed for a period of five years after payment date revert to the State (Article L.1126-1 of the French general code of property owned by public bodies – *code général de la propriété des personnes publiques*).

21.2.3.5Preferential subscription rights

The Company's shares carry a preferential subscription right to capital increases, in accordance with the conditions set out in the French commercial code.

21.2.3.6Limitations placed on voting rights

The bylaws do not place any limitations on the voting rights attached to the shares.

21.2.3.7 Identifiable bearer shares

This paragraph is described by Article 8 of the Company's bylaws.

At any time, at its own expense, and in accordance with the applicable legislation and regulations, the Company may ask any authorized body to provide it with the name, or the company name in the case of legal entities, nationality and address of each of the holders of securities immediately or subsequently entitling to voting rights in the Company's general shareholders' meetings, as well as the number of securities held by each of them and any restrictions that may apply to the securities.

21.2.3.8 Acquisition of treasury shares

Please refer to paragraph 21.1.3 of the *Document de Référence*.

21.2.4 Methods for modifying shareholders' rights

This paragraph is described by Article 19 of the Company's bylaws.

As set out in the Company's bylaws, the shareholders' rights may only be modified by the shareholders at an extraordinary general shareholders' meeting.

21.2.5 General shareholders' meetings

21.2.5.1 Holding of shareholders' meetings

This paragraph is described by Article 19 of the Company's bylaws.

General shareholders' meetings are convened and held in accordance with the conditions laid down by law.

If the Company wishes to send convening notices electronically rather than by post, it must first obtain the consent of the relevant shareholders, who must give the Company their e-mail address.

Meetings are held at the registered office or at any other location specified in the convening notice.

The right to attend general shareholders' meetings is governed by the applicable laws and regulations and is, in particular, conditional upon the registration of the shares in the name of the shareholder or of the intermediary registered to act on the shareholder's behalf by midnight (Paris time) two business days prior to the general shareholders' meeting, either in the registered share accounts kept by the Company or in the bearer share accounts held by the authorized intermediary.

Any shareholder who does not personally attend a meeting can choose one of the following three options, in accordance with the terms and conditions set out in the laws and regulations:

- appoint a proxy in accordance with the terms and conditions set out in the laws and regulations;
- vote by post; or
- send a blank proxy form to the Company.

The board of directors may arrange for the shareholders to attend and vote at shareholders' meetings via videoconferencing facilities or any other telecommunication method allowing them to be identified, in accordance with the terms and conditions set out in the applicable laws and regulations. If the board of directors decides to make use of this ability for a given shareholders' meeting, this decision will be specified in the meeting notice and/or the convening notice. Shareholders attending general shareholders' meetings via videoconferencing facilities or another telecommunication method referred to above, as the board of directors may decide, will be deemed to be present at the meeting for the purpose of calculating the quorum and the majority.

General shareholders' meetings are chaired by the Chairman of the board of directors or, in his absence, by the Chief Executive Officer, by a Deputy Chief Executive Officer provided he is a member of the board, or by a member of the board specifically delegated for that purpose by the board. Failing that, the general shareholders' meeting elects its Chairman.

The scrutineers' (*scrutateurs*) functions are performed by the two shareholders present at the general shareholders' meeting who hold the largest number of votes, and who accept these duties. The officers of the meeting appoint a secretary, who need not be a shareholder.

An attendance sheet is kept in accordance with applicable law.

When an ordinary general shareholders' meeting is held on first call, shareholders may validly deliberate only if the shareholders present or represented hold at least one-fifth of the shares with voting rights. When an ordinary general shareholders' meeting is held on second call, shareholders may validly deliberate regardless of the number of shareholders present or represented.

At ordinary general shareholders' meetings, resolutions are adopted by a majority of the shareholders present or represented.

When an extraordinary general shareholders' meeting is held on first call, shareholders may validly deliberate only if the shareholders present or represented hold at least one-quarter of the shares with voting rights. When an extraordinary general shareholders' meeting is held on second call, shareholders may validly deliberate only if the shareholders present or represented hold at least one-fifth of the shares with voting rights.

At extraordinary general shareholders' meetings, resolutions are adopted by a majority of two-thirds of the shareholders present or represented.

Copies of or excerpts from the minutes of general shareholders' meetings are validly certified by the Chairman of the board of directors, a member of the board acting as Chief Executive Officer, or the secretary of the shareholders' meeting.

21.2.5.2Powers of shareholders' meetings

Ordinary and extraordinary general shareholders' meetings exercise their respective powers in accordance with the conditions laid down by law.

21.2.6 Provisions enabling to delay, defer or prevent a change of control

The Company's bylaws do not contain any provisions enabling to delay, defer or prevent a change of control.

21.2.7 Ownership disclosure thresholds set in the bylaws

The Company's bylaws do not provide for ownership threshold crossing declarations besides those required by law and regulations.

21.2.8 Specific provisions governing variations in capital

The Company's bylaws do not contain any specific provisions governing variations in its capital.

21.3 Pledge of Company assets or shares

At the date of the *Document de Référence*, the Company has not pledged any shares or assets.

22. KEY CONTRACTS

22.1 Licence agreement with INSERM

On January 30, 2006, the Company signed a licence agreement with INSERM concerning patent families jointly owned by INSERM and the Company (PTXC1 and PTXC5) and the related know-how. The relevant agreement was amended on December 9, 2013 and on December 31, 2014 (please refer to paragraph 11.3.1 of the *Document de Référence*).

Under the agreement, INSERM granted the Company exclusive worldwide rights to develop, manufacture and market (directly or through its subsidiaries or sub-licensee) products and processes using the relevant patents and related know-how in the field of cell therapy for chronic autoimmune and/or inflammatory diseases (the "Products").

The agreement was entered into for a term to expire at the latest of the following two dates: the date on which the last patent expires or becomes invalid, or the end of a ten-year period from the first market launch of a Product.

The agreement further provides that, in the event the Company develops and markets Products, it will pay to INSERM a series of lump sum amounts conditional on achievement of milestones reached in terms of the development, regulatory process and the first anniversary of the market launch. As at the date hereof, the total future payments for all indications can amount to €889 thousand. Note that €76 thousand was already paid on October 17, 2013 in view of the success of the first trial. In the event the Company or its subsidiaries market(s) the Products, the Company will also be required to pay royalties to INSERM based on a percentage of the sales (net of various charges, tax and discounts) for the Products.

However, in the event the Company grants a sublicense to a third party allowing it to develop and market Products, the amounts to be paid to INSERM by the Company will be calculated as a percentage of the amounts received by the Company from the third party because of the development and marketing of the Products. A payment of € 90 thousand has already been made under the sublicense agreement entered into with Ferring International Center and transferred to Trizell Holding SA entitled "Collaboration, option, development and licence agreement", which has been terminated by an agreement dated December 2, 2015 (please refer to paragraph 22.2 below).

22.2 Termination agreement of the Collaboration, option, development and licence agreement with Ferring International Center (as transferred to Trizell Holding SA)

On December 12, 2013, the Company and Ferring International Center ("Ferring") entered into a Collaboration, option, development and licence agreement under which Ferring has an option to obtain an exclusive, worldwide licence for the development, manufacture and marketing of Ovasave® for the treatment of inflammatory bowel diseases, including Crohn's disease and ulcerative colitis.

By way of a deed entitled "Assignment and novation" with effect on December 31, 2014, Ferring transferred all rights and obligations under the Collaboration, option, development and licence agreement to the benefit of Trizell Holding SA ("Trizell"), a company also controlled by the Dr. Frederik Paulsen Foundation.

Following this transfer, the Collaboration, option, development and licence agreement was subject to an amendment (the "Development Agreement") entered into between the Company and Trizell with effect on March 30, 2015. This Development Agreement provides for the financing, by Trizell, of certain research and development activities related to Ovasave® conducted by the Company, in anticipation of the possible exercise of the option by Trizell. On December 2, 2015, the Company and Trizell entered into an agreement, governed by English law, terminating the Collaboration, option, development and licence agreement and the Development Agreement. Under this agreement, Trizell waives the option granted to its benefit to obtain a worldwide exclusive license on development, manufacture and marketing of Ovasave® for the treatment of inflammatory bowel diseases, including Crohn's disease and ulcerative colitis. Trizell also transfers to the Company intellectual property rights which it could own, as well as Ferring, on Ovasave®. In return, the Company undertook to pay to Trizell, over several

years, certain amounts either as lump sums or based on the revenues generated by the products initially covered by the Collaboration, option, development and licence agreement, for a minimum global amount of € 6 million and a maximum amount of € 15 million, as follows:

- a lump sum payment of € 2 million payable at the signing of the contract, being specified that the first payment was made in December 2015;
- two lump sum payments of € 2 million payable at the second (December 2017) and third anniversaries (December 2018) of the signing of the contract, within the aggregate limit of € 15 million;
- royalties equal to a specific percentage of revenues arising from Ovasave®, within the overall limit of € 15 million.

22.3 Licence agreement granted by Yeda Research and Development Company Ltd.

On June 21, 2016, the Company signed exclusive worldwide licensing agreement with Yeda Research and Development Co. Ltd (« Yeda »),.the technology transfer arm of the Weizmann Institute of Science in Rehovot, Israel.

The Agreement is governed by English law and the courts of England and Wales shall have exclusive jurisdiction to resolve any claim arising from it.

This agreement, governed by England and Wales laws and to the exclusive jurisdiction of the courts of England and Wales, grants to the Company an exclusive worldwide and transferable license (subject to strict conditions), including the right to grant sublicenses (subject to certain conditions), on (i) the invention relating to genetically engineered Treg cells, created under the supervision of Professor Zelig Eshhar at the Weizmann Institute of Science, (ii) patent application WO 2008/095141 entitled "REDIRECTED, GENETICALLY-ENGINEERED T REGULATORY CELLS AND THEIR USE IN SUPPRESSION OF AUTOIMMUNE AND INFLAMMATORY DISEASE", as well as the corresponding patents and patent applications and (iii) any improvement arising from the services rendered by Professor Zelig Eshhar to the Company, as well as any resulting patent or patent application (the "Patents"). This agreement, in which the validity and non-infringing nature of the licensed rights is not guaranteed, authorizes the Company to develop, manufacture, market, keep, use, sell, supply, distribute, import and / or export any product, which, in the absence of a license, would infringe a Patent ("Product"). The Company shall make commercially reasonable efforts to develop, manufacture, sell and commercialise such Products in accordance with the time limits.

The Company, in the name of Yeda and in consultation with Yeda, is responsible for licensed patents and their maintenance in force (both those existing at the date of signature of the agreement and those resulting from services rendered by Professor Zelig Eshhar to the Company, at least for US patents and certain European patents).

The agreement will continue to be in effect until no further payment is due or may be due.

The license is granted in consideration for the payment by the Company to Yeda of the following amounts:

(i) fixed amounts, non-refundable, on the Effective Date,

(ii) annual, non-refundable amounts until the earlier of (a) the date of first sale of a Product and (b) fifteen years from the date of the signature of the agreement,

(iii) amounts reflecting the operation of the Products until the expiration of the later of (a) the last Patent and (b) a period of 12 years from the date of first commercialization of a Product, and

(iv) lump sums, subject to the completion of milestones relating to the development of the Products, and.

(v) royalties on net sales and amounts received by the Company from its sub-licensees

Once these payments are made, the Company will have a non-exclusive, free license to use the Product in question in each country.

The Company may terminate this Agreement without cause and at any time (subject to three months' written notice) prior to the date of first sale of a Product, in which case the Company will negotiate with Yeda a license agreement under which the Company will grant to Yeda, for the manufacture and / or sale of Products, a worldwide, non-exclusive license including the right to sublicense certain improvements made by the Company during the term of the agreement.

Yeda may terminate this Agreement if the Company disputes the validity of any Patent, subject to seven days notice given in writing to which it has not been remedied. Yeda may also terminate this Agreement in the event of a material breach or commencement of collective proceedings against the Company, in which case (i) the Company shall grant to Yeda a non-exclusive, irrevocable, perpetual, fully paid-up, sublicenseable, certain improvements made by the Company during the term of the agreement and (ii) where applicable, Yeda, at the written request of a sublicensee, shall enter into a license agreement directly with the said sublicensee

22.4 Agreement for the supply of clinical research services with SGS Belgium NV, SGS Life Science Services division

On January 31, 2014, the Company outsourced to SGS Belgium NV, SGS Life Science Services division (SGS), a Contract Research Organisation (CRO), the operational conduct of the Phase IIb trial of Ovasave® pursuant to a Clinical Research Services Agreement governed by Belgian law.

The services SGS undertakes to supply are regulatory CTA (Clinical Trial Application) preparation and submission, qualification and monitoring hospitals of the clinical trial, the management of clinical data, statistics and pharmacovigilance, in compliance with good clinical practice as defined by the European Union and the ICH. The Company sponsors and funds the trial, monitors the project advancement, is responsible for manufacturing the products and supplies the batches to be used for the trial.

All results obtained in the course of the clinical trial will remain the sole property of the Company, and no additional payments will be made to SGS in this respect.

In addition to the usual cases for termination, the Company can terminate the agreement at any time with 30 days prior notice. In the event of termination, the Company will be required to pay SGS a fixed amount of compensation, unless termination is due to the withdrawal of the authorisation to carry out the Phase IIb clinical trial of Ovasave® or the occurrence of a serious adverse event during the trial (including unsatisfactory analysis results).

SGS's liability is limited to twice the total amount of the study budget for any direct loss or damage (excluding serious negligence, intentional error or failure to comply by SGS with its obligations, in particular regarding the confidentiality of data or the property of results and inventions). SGS will not be liable for any indirect loss or damage.

SGS is only entitled to unilaterally terminate the agreement in the event of a material breach by TxCell that is not cured within 30 days, or in the event of liquidation or a similar event.

As part of the termination of the Phase IIb clinical trial on Ovasave® (CATS29) with effect from October 11, 2016, the Company has notified SGS Belgium NV, SGS Life Science Services Division, of its intention to terminate the contract. As of the date of the *Document de Référence*, the closing activities of the study are in progress.

22.5 Services agreement with MaSTherCell

On December 3, 2015, the Company and MaSTherCell SA (Manufacturing Synergies for Therapeutic Cells) entered into a framework agreement for a period of 5 years for manufacturing autologous antigen-specific type 1 regulatory T cells, products from the ASTrIA platform (the "Products"), including Ovasave® and Col-Treg. Under this framework agreement governed by English law, the Company undertakes to outsource exclusively to MaSTherCell the manufacturing of Products in Europe (the EU and EFTA) until December 3, 2020. However, this exclusivity remains subject to exceptions (in particular in case of lack of agreement on the quantity and the price of the Product, under a license granted by the Company on a Product or if MaSTherCell was not able to manufacture the quantities required by the Company).

Following the Company's decision to suspend any product development from the ASTrIA platform until the confirmation and validation under GMP conditions of a new production process, the Company and MaSTherCell SA amended the framework agreement entered into on December 3, 2015.

Under the terms of this amendment, the Company and MaSTherCell SA partially suspended the execution of the framework agreement until confirmation and validation under GMP conditions of the new production process. The Company's commitment to subcontract exclusively from MaSTherCell the manufacturing in Europe (European Union and European Free Trade Association) of the Products is extended by as much, up to 18 months, i.e. until June 3, 2022 at the latest.

22.6 Services agreement with PCT

On March 9, 2016, the Company entered into an agreement with PCT LLC ("PCT"), a subsidiary of Caladrius Biosciences, Inc., pursuant to which PCT undertakes to carry out a preliminary strategic assessment of existing manufacturing process of the Company, set up for its ASTrIA platform (the "Services").

Under the contract, PCT receives a fixed financial compensation calculated on the estimated number of hours needed to perform the services under the agreement. In addition, the agreement provides that PCT may charge overtime with the prior consent of the Company.

Under terms of this agreement, each party keeps the ownership or control of its former intellectual property rights (and related rights). PCT grants the Company a perpetual, worldwide, royalty-free and non-exclusive license on its former intellectual property rights relating to items used in the delivery of services and necessary for the Company to develop, manufacture, make manufacture, use, sale, offer for sale, export and import its products. This license includes the right for the Company to grant sublicenses to its affiliated companies and third parties which manufacture such products for the Company or which receive them under license from the Company.

The intellectual property rights (and related rights) relating to the deliverables, developments, improvements and other results obtained and made in the context of the agreement belong to the Company, including the rights to any improvements relating to items covered by the former intellectual property rights of PCT. On the latter, the Company grants PCT (for itself and its affiliated companies and their clients) a perpetual, worldwide, royalty-free, non-exclusive, non-assignable and non-sub-licensable right for use in connection with other products than those covered by the agreement.

The rights and obligations of the parties under the agreement may be assigned by either party to the benefit of any third party, subject to the prior written consent of the other party.

The agreement is subject to the laws of New York and provides that any dispute between the parties may be brought to any federal or state court located in the County or the State of New York as PCT may elect.

The agreement was concluded for an initial period expiring on December 31, 2016; however, each party may terminate it by 30 days prior written notice to the other party. It may also be terminated earlier or renewed by mutual agreement of the parties.

The Company may terminate the agreement in case of failure by PCT to comply with its contractual obligations and to cure such default within 30 days following the receipt of a notification.

The initial contract between TxCell and PCT related to the production of the ASTrIA platform products, in particular for Ovasave®. As at the date of the *Document de Référence*, the two companies are discussing an extension of their contractual relations in the framework of the future manufacturing of the ENTrIA platform products.

22.7 Collaboration agreement with Ospedale San Raffaele

A collaboration agreement (the "Agreement") was entered into between the Company and Ospedale San Raffaele S.R.L., ("OSR") on April 22 2016, mainly dedicated to research and development of chimeric antigen receptor engineered regulatory T cell (CAR-Treg) therapy products for the treatment of immune-mediated inflammatory diseases (excluding cancer and infectious disease).

The collaboration includes a development part focused on the non-clinical development of CAR-Treg cells for the treatment of Lupus Nephritis ("Development Program"), and a research part on the design and biology of other chimeric antigen receptors for use in Treg cell products addressing other autoimmune indications ("Research Program").

In addition, a steering committee, established by the parties, may select additional research and/or development programs ("Additional Program") (together with the Research Program and the Development Program, the "Collaboration Program").

In consideration for the performance by OSR of the activities allocated to it, the Company will pay to OSR a fixed amount every 6 months until 6 months after second anniversary of the effective date (i.e., October 22, 2018) (under the Research Program) and a fixed amount after the achievement of each milestone (under the Development Program).

Each party to the Agreement remains the sole owner of its background intellectual property rights (the "Background IP"), and of the foreground intellectual property rights relating to the results it identified, developed, generated or conceived solely in the performance of the Agreement (the "Foreground IP"). The intellectual property rights protecting any result identified, developed, generated or conceived by both parties in the performance of the Agreement shall be jointly owned by the parties (50/50) (the "Joint Foreground IP").

The Company is in charge of preparing, filing, prosecuting, defending (including actions challenging the ownership or validity of the rights but excluding actions against third parties infringers) and maintaining any patent or patent application claiming any Foreground IP and/or Joint Foreground IP, in the name of the relevant owner(s) at its costs (including the cost of damages awarded against the Company and its sub-licensees in connection with any such actions).

Each party grants to the other, to the extent necessary to perform its obligations under the Agreement, a non-exclusive, fully paid-up, non sub-licensable and non-transferable license under its Background IP, Foreground IP and the Joint Foreground IP.

During a specific period (the "Option Period"), each party grants to the other a non-exclusive, worldwide, royalty-free, irrevocable, sub-licensable (except for OSR), license under the Foreground IP, the Background IP and the Joint Foreground IP, for the purposes of research and development in relation to CAR-Treg products for the treatment or prevention of any immune-mediated inflammatory disease indication (excluding cancer and infectious disease) in humans or animals (the "Field"). During such Option Period, the Company benefits from an exclusive option to obtain a license in relation thereto, under predetermined terms and conditions, aimed (notably) at enabling the Company to develop, manufacture and commercialize products.

Should the Company elect not to exercise the option to obtain such a license during the Option Period, the Company must notify OSR of its decision so that both parties may have a non-exclusive and royalty free right to use the Foreground IP and Joint Foreground IP, for all purposes within the Field.

If the Company does not exercise its option, each party grants to the other a non-exclusive, worldwide, royalty-free (except for OSR), perpetual, irrevocable, sub-licensable license under the Foreground IP and Joint Foreground IP, as well as on OSR Background IP (with respect to the Company) for (i) research and development purposes, within the Field, with respect to the Company and (ii) all purposes, within the Field, with respect to OSR.

Each party grants to the other a non-exclusive, worldwide, royalty-free (except for OSR), perpetual, irrevocable, sub-licensable license under the Foreground IP and Joint Foreground IP (excluding the NGFR-spacer patents with respect to the Company), for all purposes outside the Field.

The Agreement may be terminated at any time by mutual consent. In addition, the Company may terminate the Research Program and the Development Program by notification to the steering committee and subject to 60 days prior written notice to OSR, provided that such termination may not take effect until after the expiry of a 12 months period following April 22, 2016. In this case, the Company will be liable to OSR for expenditure and costs irrevocably and reasonably incurred by OSR under the Research Programme on the date of termination and which exceed the amounts already paid by the Company, and reciprocally.

The Agreement will continue until terminated in accordance with the following provisions:

- mutual agreement of the Parties at any time;
- expiry of 6 month period following the completion or termination of all programs within the Collaboration Program; or
- failure by one party to comply with its contractual obligations and to cure such default within a 60 days period following the receipt of a notification from the other party.

Subject to written notice to the other party, either party may assign and transfer all of its rights and obligations under the Agreement to any person to which it transfers all or substantially all of its assets or business to which the Agreement relates, provided that the assignee undertakes to the other party to be bound by, and perform the, obligations of the assignor under the Agreement.

The Agreement is governed by English law and the courts of England and Wales shall have exclusive jurisdiction to resolve any claim arising from it.

22.8 Collaboration agreement with the University Hospital of Schleswig-Holstein, Campus Lübeck

On May 30, 2016, the Company signed a strategic R&D collaboration agreement with the University Hospital of Schleswig-Holstein, Campus Lübeck, (the « University »), on which depends the Lübeck Institute of Experimental Dermatology, « LIED »), one of the most prestigious research centers in the field of translational research on skin blistering diseases. The LIED depends on the University of Lübeck in Gerrmany.

This specific collaboration agreement covers the development of a cellular immunotherapy product based on CAR-Treg cells for bullous pemphigoid, a rare, potentially fatal autoimmune disease characterized by tense inflammatory skin blisters and in some patients, erosions on mucous membranes, in order to carry out a first-in-man in bullous pemphigoid patients.

Under the terms of this agreement, each party retains ownership of its previous intellectual property rights. The Company will retain all rights to current and future programs and products developed under this collaboration agreement. In return, the Company agrees to pay the University lump sum amounts subordinated to the milestones and intended to reimburse the expenses incurred by the University in the course of these works. This agreement, concluded for the duration of the underlying research program, may be terminated by mutual consent of the parties or unilaterally by the Company subject to 30 days' notice.

This agreement is subject to German law and is the sole competence of the German courts.

22.9 Collaboration agreement with the University of British Columbia

On October 17, 2016, the Company signed a strategic R&D collaboration agreement with the University of British Columbia (UBC) in Vancouver, Canada, a leading global center for multidisciplinary research and teaching.

This collaboration agreement covers the development of a cellular immunotherapy product based on CAR-Tregs for the prevention of graft rejection in the context of solid organ transplantation (the “Program”). Activities relating to this program will be primarily conducted in the UBC laboratories and led by Professor Megan Levings.

In consideration for UBC's completion of its activities under the Program, it is expected that the Company will pay a fixed amount to UBC every six months until April 2019.

With respect to the intellectual property rights to which the parties agree to file a patent, UBC is responsible for preparing, filing, prosecuting, defending and maintaining any patent or patent application relating to intellectual property rights developed or acquired by UBC alone under the Program (the "UBC IP") and / or intellectual property rights developed or acquired jointly by UBC and the Company

under the Program (the "Joint IP"), respectively in its name or in the joint name of UBC and of the Company, at the Company's expenses (the "Sponsored Patents").

With respect to intellectual property rights for which the Company does not wish to file a patent, UBC may prepare, file, prosecute, defend and maintain any patent or patent application relating to UBC IP or Joint IP respectively in its name or in the joint name of UBC and of the Company, at its own expenses (the "Non-Sponsored Patents").

The Company has two exclusive worldwide options available to UBC, each of which may be licensed, (i) one to enable the Company to use, exploit and commercialise products using UBC IP or the rights of UBC to the Joint IP in the context of Sponsored Patents, as well as all unpatented know-how within, and (ii) the other to enable the Company to use, exploit and commercialise products using UBC IP or the UBC rights to the joint IP in the context of Non-Sponsored Patents.

However, it is provided that each of the parties may use UBC IP and the Joint IP for the purposes of research, education, publications (as provided for in the contract) and any other non-commercial use .

The contract is concluded for a three year period and can be terminated by either party subject to 30 days' notice.

The contract is subject to the law of British Columbia and the courts of British Columbia have jurisdiction over any dispute arising therefrom.

23. INFORMATION PROVIDED BY THIRD PARTIES, DECLARATIONS OF EXPERTS AND DECLARATIONS OF INTERESTS

23.1 Designation of experts

None.

23.2 Designation of third parties

None.

24. PUBLIC DOCUMENTS

The following documents (or a copy of these documents) can be consulted while the *Document de Référence* remains valid:

- the Company's bylaws;
- all reports, letters and other documents and historical financial information;
- assessments and statements prepared by any expert at the Company's request that are partially reproduced or referred to in the *Document de Référence*;
- the financial information included in the *Document de Référence*; and
- the internal regulations of the board of directors.

In accordance with Article 28 of the European regulation No.809/2004/EC of April 29, 2004, the following information is incorporated by reference in the *Document de Référence*:

- the annual financial statements prepared in accordance with IFRS for the financial year ended December 31, 2015, and the corresponding statutory auditors' report, presented in paragraph 20.1 and 20.2 of the *document de référence* registered with the AMF on May 24, 2016 under number R.16-048;
- the annual financial statements prepared in accordance with IFRS for the financial year ended December 31, 2014, and the corresponding statutory auditors' report, presented in paragraph 20.1 and 20.2 of the *document de référence* registered with the AMF on June 11, 2015 under number R.15-049;
- chapter 5.2 – Investments –, chapter 9 – Review of results and financial position – and chapter 10 – Liquidity and capital resources – of the *document de référence* registered with this AMF on May 24, 2016 under number R.16-048;
- chapter 5.2 – Investments –, chapter 9 – Review of results and financial position – and chapter 10 – Liquidity and capital resources – of the *document de référence* registered with this AMF on June 11, 2015 under number R.15-049;

All of the legal and financial documents relating to the Company that must be made available to the shareholders in accordance with the applicable regulations can be consulted at the Company's head office.

The *Document de Référence*, the *document de référence* registered with the AMF on May 24, 2016 and the *document de référence* registered with the AMF on June 11, 2015 under number R.15-049 may also be consulted on the Company's website (www.txcell.com) and on the AMF's website (www.amf-france.org).

25. INFORMATION ON EQUITY INTERESTS

As at December 31, 2016, the Company has no equity interests in any other companies.

26. APPENDIX

APPENDIX 1: Statutory auditors' report on the financial statements and financial statements prepared in accordance with French GAAP for the financial year ended December 31, 2016

[INTENTIONALLY OMITTED]

APPENDIX 2: Annual management report of the board of directors for the year ended December 31, 2016

[INTENTIONALLY OMITTED]

APPENDIX 3: Assurance report by the appointed Independent Third Party, on the consolidated environmental, labour and social information

[INTENTIONALLY OMITTED]

27. GLOSSARY

A

Allogenic: concerns tissues and cells in individuals of the same species but a different line.

Allotransplantation: transplantation of a graft (solid organ, bone marrow or cells) from an individual to another individual of the same species. See also "Xenotransplantation" and "Autotransplantation".

Aminosalicylates: class of anti-inflammatory drugs that act by inhibiting the production of pro-inflammatory molecules such as arachidonic acid.

ANSM: Agence Nationale de Sécurité du Médicament/*National Health Products Safety Agency*

Antibody: an antibody is a complex protein used by the immune system to specifically detect and neutralize pathogens.

Antigen: an antigen is a natural or synthetic macromolecule, recognized by antibodies or immune system cells and that can cause an immune response.

Anti-TNF: drug that blocks TNF-α-dependent inflammatory processes.

APC: the role of antigen-presenting cells is to present parts of self and non-self to lymphocytes in order to trigger a specific immune response. They may be monocytes or macrophages, B lymphocytes and dendritic cells.

ATMP: Advanced Therapy Medical Products: industrially manufactured products used for gene therapy and cell therapy, obtained by tissue or cell engineering.

ATP: adenosine-5'-triphosphate is the molecule that uses hydrolysis to provide the energy required for biochemical metabolic reactions of all known organisms.

Auto-antigen: a normal constituent of the body that is attacked by the immune system in autoimmune diseases.

Autoimmune uveitis: a uveitis with no infectious cause. Uveitis is a rare inflammatory disease of the eye. Uveitis is classified anatomically according to the principal site of the inflammation, i.e. anterior, intermediate, posterior or pan-uveitis.

Autoimmunity: results from the defective installation or maintenance of self-tolerance. Autoimmune diseases result from hyperactivity of the immune system when exposed to substances or tissues normally present in the organism.

Autologous: concerns cells and tissues of the same individual.

Autotransplantation: transplantation of organs or tissues from one part of the body to another in the same person. See also "Xenotransplantation" and "Allotransplantation".

B

B lymphocytes: also called B cells (the "B" from the bursa of Fabricius in chicks in which they were first discovered), they are responsible for the production of antibodies. When antibodies bind to antigens on the surface of a micro-organism, this causes the death of the micro-organism in question. The process by which B lymphocytes protect the body is called humoral immunity because B cells release antibodies into body fluids (called humors).

Biological: a biological drug is obtained from a biological substance, for example vaccines or drugs obtained from human blood and plasma.

Biomarker: a measurable biological characteristic related to a normal or abnormal process. In medicine, a biomarker can be used for screening (search for a disease in a population), diagnosis (characterization of a disease in an individual), response to medical treatment, relapse after treatment, and toxicity of a molecule.

Biotherapies: the term biotherapies covers gene therapies (gene transfer, intervention on genes), cell therapies (manipulation of stem cells or differentiated cells), tissue therapies (grafts of living tissues), different types of immunotherapy, some innovative pharmacotherapies (biological drugs from substances in the human body), the use of biomaterials, the use of viruses (phagotherapy), etc.

Bullous pemphigoid: rare and potentially fatal autoimmune skin condition that is characterized by large, fluid-filled blisters on the surface of the skin, called bullae. Bullous pemphigoid occurs when the patient's immune system attacks a thin layer of tissue below the outer layer of skin. The blisters usually develop on the abdomen, legs and arms and are accompanied by severe itching.

C

Cachexia: cachexia is a severe weakening of the body (weight loss, muscular atrophy, etc.) related to severe malnutrition. Cachexia is not a disease itself but rather the symptom of another disorder.

CAR: Chimeric Antigen Receptor. It is an artificial molecule which, when present on the surface of an immune cell, can specifically recognize a predefined antigen.

CAR-T: effector T-cell bearing Chimeric Antigen Receptors (CAR) on its surface.

CAR-Treg: regulatory T-cell bearing Chimeric Antigen Receptors (CAR) on its surface.

CAT: Committee for Advanced Therapies: the committee of the European Medicines Agency (EMA) that assesses the quality, safety and efficacy of advanced therapy medical products (ATMP) and that monitors scientific developments in this area.

CDAI: Crohn's Disease Activity Index: a measure of the activity of Crohn's disease. This index is used as a standard in all French and international clinical trials and by regulatory authorities. If the CDAI is < 150 the patient is in remission, if it is between 150 and 450 the patient's Crohn's disease is active and if it is > 450 the disease is severe. A reduction of ≥ 100 points of the CDAI during therapy enables the patient to be placed in the group of responders. The CDAI is a set of weighted sub-scores calculated over one week. It includes the number of liquid or very soft stools, the intensity of abdominal pain, general wellbeing, other aspects related to the pathology such as the presence of fistulas, arthritis, uveitis, etc., taking anti-diarrhoea drugs, the presence or absence of an abdominal mass, packed cell volume and patient weight.

Cell mediation: cell mediation is the name given to a specific immune reaction involving cells such as effector T lymphocytes.

Cell therapy: this therapy aims to treat an organ or an organism by providing cells, occasionally modified, to replace or support dysfunctional cells.

Chemokines: these chemoattracting cytokines are a family of small proteins, most of which are soluble. Their most well known function is attraction (chemotactism) and the control of the activation state of immune system cells.

CHMP: Committee for Medicinal Products for Human Use

Chondrocytes: cells composing cartilage.

CIID: Chronic inflammatory intestinal diseases, as their name indicates, covers diseases related to chronic inflammation of the intestine.

Clinical study: A clinical trial, or clinical study, is a scientific study that evaluates the efficacy and safety of a drug in humans.

CMO: Contract Manufacturing Organisation. A company that provides the pharmaceutical industry with complete drug development services, in particular for manufacturing drugs.

Collagen type II: a fibrillar protein in all joints of the body and in the vitreous body of the eye.

Corticosteroids: hormones (also called corticoids) that are produced by the adrenal glands, located above the kidneys, in the part of the gland called the adrenal cortex. Corticosteroids can be synthesized in the laboratory and used therapeutically, in which case we speak of corticotherapy. Corticosteroids affect the

body's metabolic reactions, have an anti-inflammatory action that combats inflammations, and also has immunosuppressive activity, in other words reducing the body's defence reactions, sometimes desired in certain autoimmune diseases.

CRO: Contract Research Organisation. A company that offers support to the pharmaceutical, biotechnology and medical devices sectors, in the form of contractual research subcontracting.

Crohn's disease: this is one of the chronic inflammatory intestinal diseases (CIID). It is often characterized by chronic diarrhoea, abdominal pain, anorexia, fever and musculoskeletal malformations. Patients suffer from recurrent episodes with variable degrees of remission. Crohn's disease may cause serious symptoms, often accompanied by the appearance of fistulas.

CRP: C-Reactive Protein is a marker of acute inflammation. Its quantity increases very rapidly in the course of an inflammatory process and enables a differential diagnosis between certain pathologies.

Curative: signifies that the process, effect or product is used to cure a disease.

Cytokines: soluble cellular signalling substances synthesized by immune system cells or other cells and/or tissues, remotely acting on other cells to regulate and control their activity and function.

Cytotoxicity: the property of a chemical or biological agent to harm cells, in some cases leading to their destruction.

E

Effector T lymphocytes: also called effector T cells ("T" for thymus because they terminate maturation in the gland), they are responsible for what is called "cell immunity" by destroying cells recognized as being infected.

EMA: European Medicines Agency is a European Community agency created in 1995. It evaluates, coordinates and supervises the development of new drugs for human and veterinary use in the European Union.

Enzyme: an enzyme is a protein macromolecule that is a biological catalyst, i.e. it facilitates a biochemical reaction with no change to non-catalyzed products.

F

FDA: Food and Drug Administration. American agency that regulates foods and medicines and is empowered to authorize the distribution and commercialization of drugs in the United States, including those manufactured abroad.

Fistulizing: fistulizing Crohn's disease means that the patient has one or several fistulas, a medical term for an abnormal channel between two organs, causing the circulation of fluids into an organ for which they are not normally destined.

G

GCP: Good Clinical Practice, promoted by the International Conference of Harmonisation (ICH) dealing with technical requirements for the registration of drugs for human consumption. It describes an international standard for ethics applied in human clinical trials.

Gene therapy: a therapeutic strategy involving the introduction of genes in the cells or tissues of a patient to treat a disease.

GMP: Good Manufacturing Practice is a concept of quality assurance. GMPs are established by the European Commission and EU member states for the development of quality procedures and are applicable to drugs manufactured for human or veterinary use.

GvHD: graft-versus host disease. GvHD is a complication that can occur in the context of bone marrow or stem cells transplantation from another person (allotransplantation). In GvHD, the graft (i.e. the

donor's stem cells or bone marrow) reacts against the host (i.e. the patient receiving the graft). GvHD can cause diarrhea, rash and liver damage.

H

Helper T lymphocytes: also called T helper or Th, they are a cell type that differs from other T lymphocytes, are not cytotoxic and act only as intermediaries of the immune response. They proliferate only when they are bound to certain pathogenic antigens to activate other cell types that act more directly on the response, explaining why they are called T lymphocyte "helper cells".

Hematology: branch of medicine that studies blood and its diseases. Hematological cancers are therefore blood cancers.

Hemorrhagic rectocolitis: hemorrhagic rectocolitis is an inflammatory intestinal disease whose effects are inflammation and the formation of lesions in the walls of the large intestine (colon) and rectum. It is a chronic and autoimmune disorder.

Hepatocytes: cells of the liver conducting a large number of metabolic functions.

HLA: Human Leukocyte Antigen. Human leukocyte antigens are MHC molecules expressed on the surface of human cells.

Homeostasis: the capacity of a system (open or closed) to maintain its operating equilibrium.

HSP: Heat shock proteins in general are responsible for preventing damage to proteins in response to elevated body temperatures.

I

IBDQ: Inflammatory Bowel Disease Questionnaire. A questionnaire to assess the quality of life of patients. It is used as a standard in all French and international clinical trials and by regulatory authorities. It is calculated over two weeks and is composed of 32 questions covering four areas: digestive symptoms, systemic signs, emotional state and effects on social life.

ICH: International Conference on Harmonisation. An organisation of health authorities and the pharmaceutical industry (Western Hemisphere, Europe, Asia) that prepares regulatory standards to follow for the development of new drugs.

IDMC: Independent Data Monitoring Committee. A committee responsible, on one hand, for periodically assessing the clinical trial’s progress, safety data and efficiency critical results and, on the other hand, for making recommendations to the sponsor advising him whether to pursue, to modify or to interrupt a trial.

Immune system: the immune system is a biological system composed of a coordinated set of elements for recognition and defence, which differentiates between "self" and "non-self". Whatever is recognized as non-self is attacked, including pathogens such as viruses, bacteria, parasites, etc.

Immunity adjuvant: inorganic or organic compounds used to boost the immune response in the context of a therapeutic process (in particular used with vaccines).

Immunity: concept concerning the immune system (see immune system).

Immunodeficient: characterizes an individual whose immune system is weakened.

Immunogenicity: the potential of an antigen to induce an immune response.

Immunomodulator: qualifies a treatment that stimulates or inhibits immune system reactions.

Immunosuppressant: qualifies a treatment that prevents the body's immune response.

Immunotherapy: a treatment involving the administration of substances (that may be of biological origin, in particular in the case of cell immunotherapies) that stimulate or inhibit the body's immune defences to combat a variety of diseases.

IND: Investigational New Drug. The IND program of the FDA is how a pharmaceutical company obtains permission to send an experimental drug abroad (generally to clinical investigation centers for clinical trials) before applying for a marketing authorization for the drug.

Infectious pathogen: an agent responsible for an infectious disease.

Inhibitor: something that slows or opposes a given process.

Integrins: cell adhesion receptors. They are transmembrane proteins in which one extremity generally interacts with proteins of the extracellular matrix exterior to the cell, and whose other extremity interacts with intracellular constituents, in particular signalling molecules that control the migration, survival, proliferation and differentiation of cells.

Interleukins (IL): interleukins are a group of cytokines whose name was coined because the first observations seemed to show that they were expressed by white blood cells. It was subsequently found that interleukins are produced by a wide variety of tissues and cells. Even though they were classed under this terminology for reasons of facility, they are totally unrelated in terms of biochemical similarities and functions. The number they bear reflects only their chronological order of discovery.

***In vitro*:** experiment carried out outside any living organism.

***In vivo*:** experiment carried out withing a living organism.

Islets of Langerhans: islets of Langerhans cells are endocrine cells (producing hormones) clustered in pancreatic structures called islets.

L

Lupus Nephritis: this is one of the most serious complications of lupus (also called systemic lupus erythematosus, LES). Lupus is a chronic autoimmune disease involving many systems and organs within the human body, including joints, kidneys, central nervous system, heart and the hematological system. Lupus Nephritis occurs when systemic Lupus causes an inflammation in the kidney. If this inflammation is not controlled, Lupus Nephritis can lead to kidney failure.

Lymphatic system: composed of lymphocytes and a system of vessels transporting these cells in the lymphatic fluid or lymph.

Lymphocytes: one type of white blood cells with a major immune function to defend the body against aggressions by external microbial agents. They are produced in the bone marrow and circulate *via* the bloodstream and lymph vessels.

Lymphoma: a cancer of the lymphatic system that develops at the expense of lymphocytes, cells that play an essential role in immune defence reactions.

M

MA: Marketing Authorisation (product licence) required to market a therapeutic product.

Macrophages: white blood cells arising from the transformation of monocytes. They are localized in tissues that could be the site of infections or the accumulation of debris to eliminate (liver, lungs, lymph nodes, spleen, etc.). Macrophages have three main functions: phagocytosis (ingestion of bacteria, yeasts, cell debris, etc. for their destruction); secretion activity (cytokines, etc.); cell cooperation (they are antigen-presenting cells in relation to lymphocytes). They therefore are key players in natural immunity because they phagocytise non-specific elements. They are attracted to the site of an inflammation by chemotactism.

Major Histocompatibility Complex (MHC): histocompatibility molecules are present on the surface of antigen presenting cells (APC) to ensure the presentation of antigens to T lymphocytes, which then lead to the activation of those T lymphocytes. Due to the extreme diversity of the MHC (genetic polymorphism), it is also the main factor of acceptance (histocompatibility) or rejection of grafts between donor and recipient. In humans, MHC molecules are called human leukocyte antigen (HLA).

Mesenchymal stem cells: mesenchymal stem cells (MSC) are an example of "adult" tissues or stem cells. They are pluripotent, meaning that they can give rise to several specialized cell types in the body, but not all types (in comparison to totipotent cells). MSCs can produce different specialized cells in skeletal tissues, for example they can differentiate (or specialize) into cartilaginous cells (chondrocytes), bone cells (osteoblasts) and fat cells (adipocytes).

Methotrexate: methotrexate is an anti-metabolite used to treat certain cancers and autoimmune diseases. An anti-metabolite is a chemical substance that prevents the use of a metabolite, another substance that is part of the normal metabolism of an organism. The presence of anti-metabolites may have toxic effects on cells such as stopping growth and cell division.

Monoclonal antibodies: monoclonal antibodies are antibodies that recognize only one type of epitope (one chemical group) in a given antigen.

Monocytes: white blood cells that can be transformed to macrophages or dendritic cells.

Multiple sclerosis: multiple sclerosis (MS) is a chronic, autoimmune, neurological disease of the central nervous system. Its clinical signs result from the demyelination of nerve fibers of the brain, spinal cord and optic nerve.

Murine: related to rodents, usually mice or rats.

Myelin: an essential fatty membrane that insulates every nerve in the brain and spinal cord, just like plastic insulation on electric wires. Myelin is a protein complex indispensable for the propagation of nerve impulses. Partial or total destruction inevitably causes nerve conduction to occur at a slower rate or be lost, causing neurological disorders.

N

Natural killer cells (NK): cells of the natural immunity of mammals. They can lyse foreign cells independently of the antigen. In particular, they produce chemical substances that destroy cancer cells.

O

Orphan disease: a disease with no effective treatment. Most orphan diseases are rare.

Orphan drug: the orphan drug designation is a regulatory status granted by regulatory bodies to drugs developed for the treatment of rare diseases.

Ovalbumin: an essential protein of egg white.

P

PBMC: Peripheral Blood Mononuclear Cells. These are all peripheral blood cells with a single nucleus, including lymphocytes (T cells, B cells, NK cells) and monocytes.

Pemphigus vulgaris: designates rare autoimmune diseases, in other words due to the antibodies of an organism attacking its own cells. These pathologies concern the skin and mucous membranes.

Plasma membrane: membrane that delimits a cell, separating the cytoplasm (inside the cell) from the external environment.

Polyclonal: mixture of cells or antibodies that recognize various different antigens.

Preclinical model: experimentation carried out on animals with a pathology similar to a human disease and serving as a model to study this disease. Preclinical models provide preliminary information on the potential efficacy of a drug-candidate before entering clinical trials.

Protein therapy: treatment with proteins.

R

Rare disease: a disease with a low prevalence, between 1/1,000 and 1/200,000 according to national definitions.

Regenerative medicine: regenerative medicine creates functional living tissues to replace those of damaged tissues or organs. Regeneration may be *in situ* by the stimulation of damaged organs or in the laboratory *in vitro* (major progress for organ transplant issues). The use of stem cells is a major feature of regenerative medicine.

Regulator T lymphocytes: also called Tr, Treg or suppressor T lymphocytes, they are a sub-population of T lymphocytes with the property of inhibiting the proliferation of other effector T lymphocytes. They are required to maintain immunological tolerance and therefore participate in maintaining homeostasis of the immune system.

S

Single gene disorders: these phenomena occur when a mutation causes the modification or absence of only one gene.

Stem cells: undifferentiated cells that can give rise to specialized cells by cell differentiation and can maintain their number by proliferation in the body (auto-renewal) or indefinitely in culture.

Steroids: this term refers to steroid hormones (see corticosteroids).

Systemic: this term signifies that the treatment administered reaches its target *via* the bloodstream. It is the opposite of a local treatment.

T

TCR: T-cell receptor. TCRs are molecular complexes found on the T-cell membrane and responsible for the recognition of antigens. More precisely, TCRs recognizes MHC-peptide complexes.

Thiopurines: anti-metabolic drugs often used to treat ulcerative colitis and Crohn's disease.

Tolerance: in immunology, tolerance is the absence of an immune response to an antigen.

Transduction: process that involves the transfer of genetic material to a cell via a viral vector.

Transplantation: transplantation involves moving an organ (graft) from one organism (donor) to another (recipient or host), to replace a damaged or absent organ in the recipient's body.

Treg: regulatory T lymphocyte, or regulatory T cell.

Tumorigenicity: the ability of normal cells to become cancerous.

W

Wiskott-Aldrich syndrome: an immune deficiency. It is a genetic disease resulting from a mutation of the WAS gene in the secondary X chromosome.

X

Xenogenic: from another species. A xenograft for example is the transplant of body tissue between two different animal species.

Xenotransplantation: transplantation of a graft (solid organ, bone marrow or cells) from an individual to another individual of a different species (for example the transplantation of pigs heart valves to human patients). See also "Allotransplantation" and "Autotransplantation".