Press release

TxCell appoints Lentigen Technology, Inc. to manufacture the lentiviral vector for its first CAR-Treg program in transplant rejection

Clinical development of TxCell's new technology on track to start by end of 2018

Valbonne, France, June 19, 2017, 5.45pm CEST – TxCell SA (FR0010127662 – TXCL), a biotechnology company developing innovative, personalized cellular immunotherapies using regulatory T cells (Treg) to treat severe inflammatory and autoimmune diseases as well as transplant rejection, today announces the signing of a strategic agreement with Lentigen Technology, Inc. (LTI), a wholly-owned subsidiary of Miltenyi Biotec GmbH. This agreement appoints LTI as TxCell's contract manufacturing organization (CMO) for the GMP production of its HLA-A2 CAR lentiviral vector. This vector will be used to manufacture TxCell's CAR-Tregs targeting transplant rejection.

TxCell's lead CAR-Treg product-candidate targets the prevention of chronic rejection after organ transplantation, a significant unmet medical need. It is expected to enter clinical studies by the end of 2018. The objective of the first-in-man study, to be conducted in the setting of solid organ transplantation (lung and/or kidney), would be to assess the toxicity profile of the selected HLA-A2 CAR-Treg candidate as well as to obtain a first evaluation of the control of inflammation-related markers and of the induction of tolerance. Transplant rejection is one of the key challenges of organ transplantation. In 2014, the global market of immunosuppressant drugs used in transplantation was estimated to be $5.1 billion[1].

As per the terms of the agreement announced today, Lentigen, a Miltenyi Biotec Company, will be responsible for the production, under Good Manufacturing Practice (GMP) conditions, of the HLA-A2 CAR lentiviral vector clinical batches. Prior to that, LTI will produce smaller quantities of the HLA-A2 CAR lentiviral vector for IND-enabling preclinical studies. These will be conducted with the humanized CAR-Treg candidate selected for future clinical development.

TxCell is also in the process of selecting a second CMO, which will be responsible for the production of the cellular therapy drug product. TxCell is developing a proprietary manufacturing process for CAR-Treg cells and expects to start the technology transfer to the selected cell therapy CMO by the end of 2017. LTI will be responsible for transferring the HLA-A2 CAR clinical batch to the cell therapy CMO for the clinical manufacturing of HLA-A2 CAR-Treg cells to be used in the first-in-man study.

"TxCell's process development team has made significant progress in the last 12 months in developing a manufacturing process for our CAR-Tregs products. The GMP development of the specific viral vector is a critical step for this development," said Stéphane Boissel, CEO of TxCell.

[1] Organ Transplant Immunosuppressant Drugs Market, Transparency Market Research 2015.

"Lentigen's expertise in producing GMP lentiviral vectors for the pharma and biotech industry is widely recognized. This appointment has enabled TxCell to ensure that its first-in-man CAR-Treg study can start by the end of 2018 as previously announced. CAR-Tregs have yet to be tested in clinical studies and TxCell is looking forward to pioneering this promising field. Our objective with this first-in-man study is to obtain by 2020 a clinical proof-of-concept of our CAR-Treg platform, which has the potential to be used in a wide range of applications beyond transplantation, notably in severe chronic autoimmune and inflammatory disorders."

"*Lentiviral vectors are a critical component in the CAR-T cell manufacturing process. Their seamless and cost-effective integration into ex vivo cell manufacturing is very important for commercial success. As a result, Lentigen has successfully developed a large-scale chemically-defined, serum-free suspension bioreactor lentiviral vector manufacturing process to meet that goal,"* said Boro Dropulic, General Manager and Chief Science Officer of Lentigen Technology, Inc. "*We are excited to support TxCell by manufacturing lentiviral vectors for its first-ever CAR-Treg clinical trial – thus helping TxCell's innovative cellular therapy approach to become clinical practice.*"

About Lentigen Technology, Inc.

Lentigen Technology, Inc. (LTI; Gaithersburg, MD, US) is a wholly owned subsidiary of Miltenyi Biotech GmbH, and a leader in the design, construction and manufacture of Lentiviral vectors for clinical application. As a member of the Miltenyi Biotec family, a pioneer in developing innovative workflows, tools and technologies for clinical cell and gene therapy applications, LTI is dedicated to support customers to move from translational research into the clinic, and towards commercialization by complementing Miltenyi's comprehensive portfolio of high quality, GMP compliant, state-of-the-art platforms and technologies. Miltenyi's GMP manufacturing facilities in the U.S. and Germany meet both the US Food and Drug Administration (FDA) and European Medicines Agency (EMA) requirements for current Good Manufacturing Practices (cGMP). For more information about Miltenyi Biotec or Lentigen, please visit www.miltenyibiotec.com or www.lentigen.com.

About TxCell's CAR-Treg transplantation program

The CAR-Treg Solid Organ Transplantation (SOT) program (also called ENTX#SOT) is TxCell's most advanced CAR-Treg program to date. Additional preclinical proof-of-concept data are expected in 2017 to support the selection of an optimized humanized HLA-A2 CAR-Treg candidate to enter clinical studies. A first-in-man clinical study is expected to be initiated by end 2018.

The purpose of this program is to engineer regulatory T cells (Tregs) with a Chimeric Antigen Receptor (CAR), which is specific for HLA-A2, one of the forms of the HLA histocompatibility system. Incompatibility between the donor and recipient HLA systems is one of the main causes of transplant rejection. HLA-A2 CAR-Treg cells are designed to specifically recognize an HLA-A2+ graft and trigger a reduction of the inflammation as well as an induction of immune tolerance in a local and specific manner, thereby reducing graft rejection.

TxCell is working with two leading academic partners for this program, the University of British Columbia (UBC) in Vancouver, Canada (see TxCell press release dated October 19, 2016), and the Center for Research in Transplantation and Immunology (CRTI) in Nantes, France (see

TxCell press release dated May 2, 2017). These collaborations are exploring two different subtypes of Treg cells, CD4+ and CD8+, respectively.

About Organ Transplantation

Solid Organ Transplantation (SOT) consists in taking an organ (graft) from one body (donor) to another body (recipient or host), to replace the recipient's damaged or absent organ. More than 30,000 organ transplants were performed in the US in 2015[2], and more than 31,000 in Europe in 2013[3].

Transplant rejection is one of the key challenges of transplantation. In order to avoid such rejection, the most appropriate donor-recipient match is sought and immunosuppressant drugs are used. In 2014, the global market of immunosuppressant drugs used in transplantation was estimated to reach $5.1 billion[4]. In the US alone, the cost of long term oral maintenance immunosuppression and other prescription drugs represents between $10,000 and $14,000 per patient per year on average, and can exceed $2,500 per month for certain patients[5].

About TxCell – www.txcell.com

TxCell is a biotechnology company that develops platforms for innovative, personalized T cell immunotherapies for the treatment of severe inflammatory and autoimmune diseases with high unmet medical need. TxCell is targeting a range of autoimmune diseases (both T-cell and B-cell-mediated) including Crohn's disease, lupus nephritis, bullous pemphigoid and multiple sclerosis, as well as transplant rejection.

TxCell is the only clinical-stage cellular therapy company fully dedicated to the science of regulatory T lymphocytes (Tregs). Tregs are a recently discovered T cell population for which anti-inflammatory properties have been demonstrated. Contrary to conventional approaches based on non-specific polyclonal Tregs, TxCell is exclusively developing antigen-specific Tregs. This antigen specificity may either come from genetic modifications with Chimeric Antigen Receptor (CAR) or from pre-existing Treg cell T-Cell Receptor (TCR). TxCell is developing two proprietary technology platforms, ENTrIA, which is composed of genetically-engineered Tregs, and ASTrIA, which is composed of non-modified naturally antigen-specific Tregs.

Based in Sophia-Antipolis, France, TxCell is listed on Euronext Paris and currently has 46 employees.

Next events

Financial and business conferences

June 19-22	BIO International Convention	San Diego (US)
June 28-29	European MidCap Event 'Spring'	Paris (FR)

[2] US Department of Health & Human Services. 'More than 30,000 transplants performed annually for first time in United States' Jan. 2016.
[3] European Commission, Journalist workshop on organ donation and transplantation, Nov. 2014.
[4] Organ Transplant Immunosuppressant Drugs Market, Transparency Market Research 2015.
[5] James A, Mannon RB. The Cost of Transplant Immunosuppressant Therapy: Is This Sustainable? Curr. Transplant. Rep. 2015, 2(2):113-121.

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Forward-Looking Statements - TxCell

This press release contains certain forward-looking statements relating to the business of TxCell, which shall not be considered *per se* as historical facts, including TxCell's ability to develop, market, commercialize and achieve market acceptance for specific products, estimates for future performance and estimates regarding anticipated operating losses, future revenues, capital requirements, needs for additional financing. In addition, even if the actual results or development of TxCell are consistent with the forward-looking statements contained in this press release, those results or developments of TxCell may not be indicative of their in the future.

In some cases, you can identify forward-looking statements by words such as "could," "should," "may," "expects," "anticipates," "believes," "intends," "estimates," "aims," "targets," or similar words. Although the management of TxCell believes that these forward-looking statements are reasonably made, they are based largely on the current expectations of TxCell as of the date of this press release and are subject to a number of known and unknown risks and uncertainties and other factors that may cause actual results, performance or achievements to be materially different from any future results, performance or achievement expressed or implied by these forward-looking statements. In particular, the expectations of TxCell could be affected by, among other things, uncertainties involved in the development of the Company's products, which may not succeed, or in the delivery of TxCell's products marketing authorizations by the relevant regulatory authorities and, in general, any factor that could affects TxCell capacity to commercialize the products it develops, as well as, any other risk and uncertainties developed or identified in any public documents filed by TxCell with the AMF, included those listed in chapter 4 "Risk factors" of the 2016 *document de référence* (registration document) approved by the AMF on April 26, 2017 under number R.17-024. In light of these risks and uncertainties, there can be no assurance that the forward-looking statements made in this press release will in fact be realized. Notwithstanding the compliance with article 223-1 of the General Regulation of the AMF (the information disclosed must be "accurate, precise and fairly presented"), TxCell is providing the information in these materials as of this press release, and disclaims any intention or obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.