



Press release

TxCell to present new data on CAR-Treg construct optimization at CAR-TCR Summit

Oral presentation and poster highlight TxCell's CAR-Treg discovery technology

Valbonne, France, August 31, 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 that Li Zhou, PhD, Vice-president Cell Engineering at TxCell, will give an oral presentation and present a poster with new CAR-Treg-related data at the CAR-TCR Summit to be held in Boston (MA, USA), September 5-8, 2017.

Both presentations describe the design of the next-generation Chimeric Antigen Receptors (CARs) for regulatory T cell therapy, using *in silico* modeling-guided single-chain Fv engineering. The single-chain variable fragment (scFv) is the extracellular portion of the CAR, which is responsible for specific targeting of CAR-Treg cells to the diseased tissue of interest. The scFv is typically derived from a monoclonal antibody: the heavy chain variable region and the light chain variable region of said antibody are linked to one another by a peptide to give a single chain, which binds to the desired antigen. scFv optimization is critical to ensure specific binding, as well as optimal CAR function in Treg cells.

“Participating in the CAR-TCR Summit provides us the opportunity to highlight our advanced CAR-Treg optimization approach,” said François Meyer PhD, Chairman of the Board and Head of Research at TxCell. *“Over the past 12 months, we have achieved significant progress in building a robust CAR-Treg discovery platform, which we intend to further leverage to develop novel therapeutics. Optimizing the scFv sequence is one step in this process, and we look forward to presenting further in vitro and in vivo data at other scientific conferences by the end of 2017.”*

TxCell optimizes not only the scFv fragment, but also the intracellular signaling DNA sequences, which are critical for the stability and function of genetically-modified Treg cells. CAR-Treg cells are first analyzed *in vitro* to ensure that key features, such as CAR-dependent activation and resulting Treg cell potency, are well controlled prior to *in vivo* validation in clinically relevant animal models.

Presentations details

- **Title:** *Designing the next generation of chimeric antigen receptors for Regulatory T cell therapy through in silico modeling-guided single chain Fv engineering¹.*

¹ Zhou L, Abel T, Schneider IC, Beghelli S, Labbal F, David M, Menkova-Garnier I and Meyer F. Designing the next generation of chimeric Antigen receptors for Regulatory T cell therapy through in silico modeling-guided single chain Fv engineering. CAR-TCR Summit 2017, oral presentation & poster N°12, September 5-8, 2017.

- **Event:** CAR-TCR Summit, September 5-8, 2017, Boston, MA, USA.
- **Oral presentation:** Late-breaking session, September 7, 2017, 9.55am EST.
- **Poster:** Poster session, Poster N°12, September 6, 2017, 4.05pm EST.
- **Abstract:** available on TxCell's website www.txcell.com in the Technology > Publications & Abstracts section as well as on the conference website <http://car-tcr-summit.com/>.

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

Scientific and medical conferences

Sept 5-8	CAR-TCR Summit	Boston (US)
Sept 20-21	Phacilitate Leaders Forum Europe	Berlin (DE)
Sept 26	Journée « Bioproduction des immunothérapies en France »	Paris (FR)
Oct 17-20	ESGCT 2017 (European Society of Gene & Cell Therapy)	Berlin (DE)

Financial and business conferences

Sept 14	Biotech & Money CEO Forum	London (UK)
Sept 26-27	Annual Biotech in Europe Investor Forum (Sachs Associates)	Basel (CH)
Oct 4-5	Large & Midcap Event Paris	Paris (FR)
Oct 4-5	Cell & Gene Meeting on the Mesa	La Jolla (US)

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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 affect 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.