

OSE Immunotherapeutics Receives a Grant from the French National Research Agency to Validate New Targets Linked to Myeloid Cells And Identify Innovative New Immunotherapies in Oncology

- *Research program coordinated by the Cancer Research Center of Lyon within the Léon Bérard Cancer Center*

Nantes, France, July 23, 2019 - 6:00 p.m. CET - OSE Immunotherapeutics (ISIN: FR0012127173; Mnemo: OSE) announces that its **DC-TARGET** project has been selected by the French National Research Agency (ANR) to be awarded a grant up to €800,000 following the “AAPG 2019” call for proposals assessment process.

This research program is coordinated by Dr. Christophe Caux, a pioneer in the field of tumor immunological escape. Dr. Caux is leading a collaborative research team at the Cancer Research Center (CRCL) and Cancer Immunotherapy Laboratory of Lyon (LICL), as part of the innovation and translational research department of Léon Bérard Cancer Center, which includes several academic research centers of excellence.

The aim of this program is to identify new targets of interest expressed by myeloid cells (tumor associated macrophages, myeloid-derived suppressive cells, dendritic cells). These suppressive immune cells play a major role in both tumor immune escape and in their invasive process. In order to discover new targets of therapeutic interest in the tumor microenvironment, the role of each cell will be characterized in depth by single cell RNAseq (scRNAseq – Cellenion) and gene editing.

The Bioinformatics platform, created by Gilles Thomas⁽¹⁾ and headed by Alain Viari⁽²⁾, will be an essential tool to analyze the thousands of data points generated by the bioanalysis technologies used, and to define immunological signature deconvolution.

Once the targets identified and clinically validated, OSE Immunotherapeutics will focus on translation of the research study findings through the development of specific monoclonal antibodies that are able to block the deleterious targets identified.

In particular, this immuno-oncology research program will explore tissues from triple negative breast cancer (TNBC), a cancer with a high risk of progression.

“This new collaboration with the Léon Bérard cancer research center, a leader in modern oncology treatments combining translational and immunological research platforms, is focused on an aggressive breast cancer with a strong need for medical innovation. OSE is already strongly involved clinically in the field of myeloid cell-based therapies for cancers,” said Alexis Peyroles, chief executive officer of OSE Immunotherapeutics.

⁽¹⁾ Pr Gilles Thomas, worldwide recognized for his major contribution to the knowledge of genetic predispositions to cancer, created the Bioinformatics platform in 2009 as part of a senior chair of excellence of Synergy Lyon Cancer Foundation and headed it until his death, in 2014.

⁽²⁾ Dr Alain Viari (Gilles Thomas Bioinformatics platform, Synergy Lyon Cancer Foundation, Léon Bérard Center, Lyon): advanced expertise in bioinformatics, biostatistics, genomics, transcriptomics and personalized medicine; strong experience in cancer research on breast cancer, prostate and gynecological carcinosarcoma as part of the International Cancer Genome Consortium (ICGC).

ABOUT THE LÉON BÉRARD CENTER (CLB)

The Léon Bérard Center (CLB) is developing on its site an oncology research of excellence focused on innovation. Research is one of the three essential missions of cancer centers in France and around the world, in addition to healthcare and teaching. The research conducted on its site is recognized internationally. Within the CLB, the CRCL (Cancer Research Center of Lyon – UMR Inserm 1052 CNRS 5286 Joint CLB) is an accredited research structure with a hospital partner: Hospices Civils de Lyon (HCL). With its cancer immunotherapy and translational research laboratory (LICL, Laboratoire d'Immunothérapie du Cancer), CLB has recognized scientific know-how in oncology, particularly in tumor targeting and the immune environment. His translational research is structured around research teams but also advanced technology platforms, including the platform "Innovation in Immunomonitoring and Immunotherapy" led by Christophe Caux. In clinical research, more than 200 trials are open to enrollment. As a hospital and a research center, the CLB promotes the rapprochement between practitioners and researchers, with the aim of shortening the time between scientific discoveries and the development of new treatments. For more information : www.centreleonberard.fr



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ABOUT OSE Immunotherapeutics

OSE Immunotherapeutics is a clinical-stage biotechnology company focused on developing and partnering therapies to control the immune system for immuno-oncology and autoimmune diseases. The company has a diversified first-in-class clinical portfolio consisting of several scientific and technological platforms including neoepitopes and agonist or antagonist monoclonal antibodies, all ideally positioned to fight cancer and autoimmune diseases. The most advanced therapeutic-candidate, Tedopi[®], is a proprietary combination of 10 neo-epitopes aimed at stimulating T-lymphocytes and is currently in Phase 3 development in non-small cell lung cancer (NSCLC) after checkpoint inhibitor failure (anti PD-1 and anti PD-L1) and in Phase 2 testing in pancreatic cancer in combination with checkpoint inhibitor Opdivo[®]. BI 765063 (OSE-172) (anti-SIRPa monoclonal antibody) is under a license and collaboration agreement with Boehringer Ingelheim; this checkpoint inhibitor is currently under Phase 1 clinical trial in advanced solid tumors. BiCKI[®] is a bispecific fusion protein platform built on the key backbone component anti-PD-1 (OSE-279) and targeting innovative targets. FR104 (an anti-CD28 mAb) has successfully completed Phase 1 testing and has potential to treat autoimmune diseases. OSE-127 (monoclonal antibody targeting the CD127 receptor, the alpha chain of the interleukin-7 receptor) is partnered with Servier under an option agreement up to the completion of a Phase 2 clinical trial planned in autoimmune bowel diseases; in parallel, Servier plans a development in the Sjögren syndrome. OSE-127 is currently under Phase 1 clinical trial. For more information: <https://ose-immuno.com/en/>

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Forward-looking statements

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