

OSE Immunotherapeutics Announces New Research Collaboration with Léon Bérard Cancer Center to Use Artificial Intelligence Technologies to Identify Novel Immuno-Oncology Targets

Findings from the collaboration will provide relevant information, especially for the development of novel bispecific antibodies (BiCKI® platform)

Nantes, France, March 26, 2019, 6:00 p.m. CET – OSE Immunotherapeutics (ISIN: FR0012127173; Mnémo: OSE), announces a new research collaboration agreement with premier cancer research hospital, Léon Bérard Cancer Center in Lyon, France, to use artificial intelligence (AI)-based bioanalysis and bioinformatics to identify novel targets in immuno-oncology.

Léon Bérard Cancer Center (CLB) has both a cancer immunotherapy laboratory and translational research laboratory and is recognized as a scientific expert in oncology, particularly in tumor targeting and in the immune environment. Additional resources at CLB include its state-of-the-art bioinformatics platform and biological resource center. Their experience in analyzing and integrating data from The Cancer Genome Atlas (TCGA) allows detailed analysis of clinically relevant targets in populations that could potentially benefit from an innovative therapeutic approach.

This new collaborative immuno-oncology research program will use different patient cohorts and tumor biopsies to identify novel molecular targets associated with the primary and secondary resistance to PD-1/PD-L1 immune checkpoint inhibitors and to validate a strategy of combining drugs based on target expression profile.

The research is based on an artificial intelligence approach jointly developed which will be applied to analyze gene expression in the human tumor microenvironment and the composition of tumor infiltrates. The findings from this collaboration will be used for the selection and validation of innovative targets for early development of new drug candidates from the platform of bispecific fusion proteins targeting PD-1 and innovative targets (BiCKI®).

"We are very excited to begin a new collaboration with an expert team and the CLB, a premier cancer research center. The goal of this partnership is to identify and validate new targets that will help streamline the development of new treatment approaches for cancer, especially in difficult to treat tumors," said Alexis Peyroles, chief executive officer of OSE Immunotherapeutics.

Professor Jean-Yves Blay, M.D., Ph.D., director of the Léon Bérard Cancer Center commented, "Our Al approach combined with our translational and immunological research platforms will enable us to analyse tumor immune parameters and to identify potential new pathways to address unmet needs for cancer patients. This partnership brings together top experts in oncology research and translational science with the hopes of rapidly advancing the discovery of first-class treatment options for cancer patients. We are very pleased to work in collaboration on this cutting-edge research with OSE Immunotherapeutics."



About the Léon Bérard Center

The Centre Léon Bérard (CLB) is part of the twenty French Comprehensive Cancer Centres in France, providing a global management of cancer patients on a unique area, from diagnosis to treatment and beyond. The Centre is a regional, national and international recognized reference cancer Centre assigned with three essential missions: Care, Research and Education and is willing to continuously improve the quality and accessibility of care for cancer patients.



More than 34,000 patients are received each year, on consultations or exams and 6,000 new cancer cases are diagnosed.

The CLB has technical and treatment facilities (operating room, radiation therapy centre, medical imaging departments, pathology and nuclear medicine departments).

The bench-to-bedside process is one of the strength of the Centre Léon Bérard

The Centre Léon Bérard develops an excellence and multidisciplinary research, in association with the cares carried out on site and institutional and private partners.

The foundations of this development lay in the medical and scientific project. The CLB aims to reinforce the benchto-bedside process by facilitating translational research to help innovation and speed-up its access to patients for diagnoses and therapies.

Clinical research has been certified ISO 9001 since 2013 and is thus one of the strength of the Centre.

As a result, more than 19% of patients were included in clinical trials in 2017.

At the Centre Léon Bérard 1,700 persons work in cares, research, education and supportive care (200 physicians, 500 researchers, 600 caregivers).

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 autoimmmune 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®. FR104 (an anti-CD28 mAb) has successfully completed Phase 1 testing and has potential to treat autoimmune diseases. BI 765063 (OSE-172) (anti-SIRPa monoclonal antibody) is under a license and collaboration agreement with Boehringer Ingelheim; this checkpoint inhibitor has received CTA from French and Belgian health authorities for a Phase 1 clinical trial in multiple cancer indications. BiCKI® is a bispecific antibody fusion protein platform built on the key anti-PD-1 (OSE-279) backbone component and targeting innovative second targets. 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.

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Contacts

OSE Immunotherapeutics Sylvie Détry Sylvie.detry@ose-immuno.com +33 153 198 757

French Media: FP2COM Florence Portejoie fportejoie@fp2com.fr +33 607 768 283

U.S. Media: LifeSci Public Relations Darren Opland, Ph.D. Darren@lifescipublicrelations.com +1 646 627 8387

U.S. and European Investors Chris Maggos chris@lifesciadvisors.com +41 79 367 6254



Forward-looking statements

This press release contains express or implied information and statements that might be deemed forward-looking information and statements in respect of OSE Immunotherapeutics. They do not constitute historical facts. These information and statements include financial projections that are based upon certain assumptions and assessments made by OSE Immunotherapeutics' management in light of its experience and its perception of historical trends, current economic and industry conditions, expected future developments and other factors they believe to be appropriate.

These forward-looking statements include statements typically using conditional and containing verbs such as "expect", "anticipate", "believe", "target", "plan", or "estimate", their declensions and conjugations and words of similar import.

Although the OSE Immunotherapeutics management believes that the forward-looking statements and information are reasonable, the OSE Immunotherapeutics' shareholders and other investors are cautioned that the completion of such expectations is by nature subject to various risks, known or not, and uncertainties which are difficult to predict and generally beyond the control of OSE Immunotherapeutics. These risks could cause actual results and developments to differ materially from those expressed in or implied or projected by the forward-looking statements. These risks include those discussed or identified in the public filings made by OSE Immunotherapeutics with the AMF. Such forward-looking statements are not guarantees of future performance.

This press release includes only summary information and should be read with the OSE Immunotherapeutics Reference Document filed with the AMF on 26 April 2018, including the annual financial report for the fiscal year 2017, available on the OSE Immunotherapeutics' website.

Other than as required by applicable law, OSE Immunotherapeutics issues this press release at the date hereof and does not undertake any obligation to update or revise the forward-looking information or statements.