

**OSE Immunotherapeutics to present the preclinical data of its  
new checkpoint inhibitor Effi-DEM on SIRP- $\alpha$ /CD47 strategic pathway  
at the 2016 Immune Checkpoint Inhibitors Conference  
*Munich (Germany), November 16-18, 2016***

**Nantes, Paris, October 4, 2016 - OSE Immunotherapeutics SA** (ISIN: FR0012127173; Mnémo: OSE), a biotechnology company developing immunotherapies of activation and regulation in immuno-oncology, auto-immune diseases and transplantation, will present in an oral session preclinical studies results for Effi-DEM, a new generation checkpoint inhibitor targeting Myeloid Derived Suppressor Cells (MDSC) and Tumor Associated Macrophages (TAM), at the ICI (Immune Checkpoint Inhibitors) conference (Munich, November 16<sup>th</sup> to 18<sup>th</sup>, 2016).

Bernard Vanhove, Chief Operating Officer of OSE Immunotherapeutics, in charge of R&D and International scientific collaborations, will present and comment all of the data from its preclinical studies conducted with Effi-DEM both *in vivo* and *in vitro* and in various cancer models.

Effi-DEM, a new generation checkpoint inhibitor specifically targeting the SIRP-  $\alpha$  receptor on the strategic SIRP- $\alpha$ /CD47 pathway, has the potential to transform suppressor myeloid and macrophage cells in non-suppressive cells, thereby inducing a reactivation of the immune response, an anti-tumor impact and an immune memory.

SIRP- $\alpha$  is a receptor strongly expressed by Myeloid Derived Suppressor Cells (MDSC) and Tumor Associated Macrophages (TAM) and its ligand is CD47. Suppressor immune cells MDSC and TAM play a key role in tumor growth of inflammatory cancers.

Effi-DEM has shown to be effective in various aggressive cancer models with encouraging preclinical results, both in monotherapy and in therapeutic combinations with anti-PD-L1 (checkpoint inhibitors) and anti-CD137 (4-1BB), activators of the T-cell response. Significant efficacy and survival increase data were demonstrated in hepatocarcinoma, melanoma and triple negative breast cancer models.

*“These preclinical results validate the therapeutic potential of our new generation checkpoint inhibitor Effi-DEM in immuno-oncology, and show how the product enhances immune response by targeting novel checkpoint SIRP- $\alpha$ /CD 47 pathway. OSE Immunotherapeutics is at the forefront of this new immuno-oncology area and clearly focuses in developing such an innovative product”,* commented Dominique Costantini, Chief Executive Officer of OSE Immunotherapeutics.

***Details of the presentation are as follows:***

***Title:*** *Selective Targeting of The SIRP- $\alpha$  Immune Checkpoint To Dampen Suppression By Myeloid-Derived Suppressor Cells And Control Polarization Of Human Macrophages*

***Date/Time:*** *Thursday, November 17, 2016, 10:30am CET*

***Location:*** *Maritim Hotel München, Goethestraße 7, 80336 Munich, Germany*

These preclinical data will also be presented in an abstract at the Annual World Gene Convention-2016 (WGC-2016), which will be held during November 3-5, 2016 in Shanghai, China.

## About ICI (IMMUNE CHECKPOINT INHIBITORS) EUROPE

ICI Europe is a forum dedicated to immune checkpoint inhibitors. It focuses specifically on the preclinical, translational and clinical challenges that drug developers face in advancing more checkpoint inhibitors onto the market. Combining data driven case studies with interactive experience sharing sessions, its program provides cutting edge insights into novel checkpoint pathways, more predictive preclinical models, the optimal combination strategies, patient stratification biomarkers and emerging clinical trial data.

## ABOUT WGC (ANNUAL WORLD GENE CONVENTION)

WGC-2016 features a very strong technical program, mainly focused on breakthroughs in DNA and RNA research, advances of genomics & genetics, the frontier research of life sciences. It aims to provide a platform for all experts from academia, industry and national labs to discuss latest hot researches and achievements.

## ABOUT OSE IMMUNOTHERAPEUTICS

*Our ambition is to become a world leader in activation and regulation immunotherapies*

OSE Immunotherapeutics is a biotechnology company led by world-class immunologists and focused on the development of innovative immunotherapies for immune activation and regulation in the fields of immuno-oncology, auto-immune diseases and transplantation.

The company has a balanced portfolio of first-in-class products with a diversified risk profile ranging from clinical phase 3 registration trials to R&D:

- **Tedopi<sup>®</sup>, a combination of 10 optimized neo-epitopes** to induce specific T activation in immuno-oncology - **currently in registration Phase 3 trial advanced NSCLC HLA A2+ patients EU /US** - Orphan Status in the US - **registration expected in 2019** - a Phase 2 with Tedopi<sup>®</sup> in combination with a checkpoint inhibitor in NSCLC is considered in 2017 - the product is also **considered in other cancer indications**.
- **FR104**, CD28-antagonist in immunotherapy - **Phase 1 trial completed** - targets autoimmune diseases and transplantation - **licensed to J&J** to pursue clinical development
- **Effi-7**, interleukin receptor 7 antagonist - **in preclinical development** for inflammatory bowel diseases and other autoimmune diseases
- **Effi-DEM**, **new generation checkpoint inhibitor** targeting the **SIRP- $\alpha$  receptor on the strategic SIRP- $\alpha$ /CD47 pathway** - **in preclinical development** for immuno-oncology
- **R&D**: candidates targeting new receptors in immuno-oncology

The portfolio's blockbuster potential gives OSE Immunotherapeutics the ability to enter into global agreements at different stages of development with major pharmaceutical players, such as the one signed for FR104 with the J&J Group.

Immunotherapy is a highly promising and growing market. By 2023 Immunotherapy of cancer could represent nearly 60% of treatments against less than 3% at present \* and the projected market is estimated at \$67 billion in 2018 \*\*.

There are more than 80 autoimmune diseases that represent a significant market including major players in the pharmaceutical industry with sales upper \$10 billion for the main products. The medical need is largely unmet and requires the provision of new innovative products involved in the regulation of the immune system.

\*Citi Research Equity

\*\*BCC Research

More information: <http://ose-immuno.com>

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## ***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 8 June 2016 under the number R.16-052, the consolidated financial statements and the management report for the fiscal year 2015, as well as the Merger Document registered with the AMF on 26 April 2016 under number E.16-026, all 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.