OSE Immunotherapeutics New Immune Checkpoint Inhibitor OSE-172 (Effi-DEM) at the 24th Molecular Med TRI-CON 2017 Meeting

Session "Cancer Immunotherapy"

San Francisco, February 20-22, 2017

Nantes, February 21, 2017, 6:00 p.m. - OSE Immunotherapeutics SA (ISIN: FR0012127173; Mnémo: OSE) announced today that the company has been invited to present its SIRP-α antagonist OSE-172 (Effi-DEM), and its main preclinical results at the 24th Molecular Med TRI-CON 2017 Meeting, session "Cancer Immunotherapy" in San Francisco (CA) on February 20-22, 2017.

OSE-172 (Effi-DEM) is a humanized monoclonal antibody targeting SIRP-α expressed on suppressive cells involved in the tumor micro-environment (Myeloid cells, named Myeloid Derived Suppressive Cells and Tumor Associated Macrophages).

OSE-172 is an antagonist of SIRP-α which transforms these suppressive cells into effector cells, in particular it inhibits macrophages M2 pro-tumorigenic cells and increases M1 anti-tumorigenic cells. In addition, OSE-172 does not bind human T-cells (does not bind SIRP-γ expressed on T-cells), allowing strong effector T-cell proliferation. This original mechanism of action provides reduction of tumor growth in various solid tumor models through such an immune-cell transformation in the tumor micro-environment. As an example, the combination of OSE-172 with anti-PD-L1 is very effective allowing effector macrophages and T-cells to work together at tumor level.

"Our vision is to become a leader with our SIRP-α antagonist in the very attractive and competitive new field of myeloid suppressive cells and tumor associated macrophages. The interest of the blockade on such cells is today increasing as these cells are involved in the limits of action related to T-cell checkpoint inhibitors", said Bernard Vanhove, COO of OSE Immunotherapeutics, in charge of R&D and International scientific collaborations.

FOR MORE INFORATION ON THE 24TH MOLECULAR MED TRI-CON 2017 MEETING, SESSION "CANCER IMMUNOTHERAPY": http://www.triconference.com/Cancer-Immunotherapy/
February 20-22, 2017 - Moscone North Convention Center, San Francisco
Session: TARGETING MACROPHAGE CHECKPOINTS FOR NEW IMMUNOTHERAPIES AND COMBINATIONS
Targeting SIRPα to Control Myeloid-Derived Suppressor Cells and Tumor-Associated Macrophages
Bernard Vanhove, Ph.D., COO, OSE Immunotherapeutics

ABOUT OSE IMMUNOTHERAPEUTICS
Our ambition is to become a world leader in activation and regulation immunotherapies
OSE Immunotherapeutics is a biotechnology company 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:

In immuno-oncology:

- **Tedopi® (OSE-2101), 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® in combination with a checkpoint inhibitor** in NSCLC is considered in 2017**.**
- **OSE-172 (Effi-DEM), new generation checkpoint inhibitor** targeting the **SIRP-α receptor - In preclinical development** for several cancer models.

In auto-immune diseases and transplantation:

- **FR104,** CD28-antagonist in immunotherapy - **Phase 1 trial completed** – For the treatment of autoimmune diseases and for use with transplantation - **Licensed to Janssen Biotech Inc.** to pursue clinical development.
- **OSE-127 (Effi-7),** interleukin receptor-7 antagonist - **In preclinical development** for inflammatory bowel diseases and other autoimmune diseases. **License option agreement with Servier** for the development and commercialization.

The portfolio's blockbuster potential gives OSE Immunotherapeutics the ability to enter global agreements at different stages of development with major pharmaceutical players.

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 towards $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.

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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.