

PRESS RELEASE

OSE PHARMA AND EFFIMUNE ANNOUNCE PROPOSED MERGER TO CREATE SIGNIFICANT IMMUNOTHERAPY PLAYER

Companies Bring Together Clinical Pipelines and Expertise in Immune Activation and Regulation

- Conference calls to be held today at 6 PM CET in French and at 6:30 PM CET in English

Paris and Nantes (France), 24 February 2016, 05:40 pm – OSE Pharma (ISIN: FR0012127173; Mnemo: OSE), an immuno-oncology company with a specific immunotherapy activating T lymphocytes, currently in a registration Phase 3 study, and Effimune, a biotech company specialized in immune regulation with clinical applications in autoimmunity, transplantation and immune-oncology, today announce the signing of a proposed merger agreement.

The Boards of Directors of both OSE Pharma and Effimune have approved the proposed terms of the merger, which will be submitted for approval to the shareholders of the two companies during Extraordinary General Meetings that are expected to take place at the end of the second quarter of 2016. The merger will result in the shareholders of OSE Pharma owning approximately 71% of the capital of the merged entity and the shareholders of Effimune, 29%.

The new company will benefit from a **balanced portfolio** that would open up major avenues to growth and have a **financial visibility of about two years** to advance its projects toward greater attractiveness.

The objective of the merger is to create a new international enterprise that offers innovative immunotherapies based on the activation or regulation of the immune system. This **new generation of products is optimized** to better target key receptors of the activation or regulation of immune response and allow a durable therapeutic effect.

Emile Loria, Chairman of the Board of Directors and the main shareholder of OSE Pharma, explained: *“The merger with Effimune is a major step for both our companies, which have complementary expertise and multiple synergies. Now that our Phase 3 registration trial of Tedopi[®] has been launched in Europe and in the USA in the field of immuno-oncology, the development of other **clinical and pre-clinical programs co-financed by grants or industrial companies** opens up additional strong perspectives for growth. The proposed merger gives us a unique opportunity to create value for all of our shareholders in the rapidly growing field of immunotherapy.”*

Dominique Costantini, Chief Executive Officer of OSE Pharma, commented: *“We are very happy to join forces with a leading team in immunotherapy and, specifically, with a group able to develop **a next generation checkpoint inhibitor**. We acknowledge the work of Effimune’s team that, based on its experience in the field of transplantation, developed at INSERM/French Institute of Transplantation, Urology and Nephrology in Nantes, France, has established major immunotherapy projects with the support of an international leading pharmaceutical group and developed a first product, a CD28-antagonist that prevents the activation of T cells, which is currently at the end of clinical Phase 1. In the future, the merged entity will have a balanced portfolio, from R&D through to the last clinical phase before registration, and a diversified risk profile.”*

Maryvonne Hiance, Chairman of Effimune, said: *“This merger capitalizes on immuno-activation and immuno-regulation technologies. It is the perfect lever to deploy our programs and optimize innovative drug candidates in the field of immuno-oncology, autoimmune diseases and transplantation. **These next generation products are attractive for the pharmaceutical industry, and provide the flexibility to out-license either at an early stage or later in development, retaining more value for the group.**”*

Bernard Vanhove, Chief Executive Officer of Effimune, added: *“We are very proud of the **complementarity of our teams, experience and networks of international experts in the field of immunotherapy**, which is one of the major assets of this merger. The new company will provide scientific and clinical innovations to patients requiring a restoration of immunological functions and this is our shared ambition.”*

Creating a leading group in the field of activation and regulation immunotherapy

The company will have an innovative technological background, know-how to select and optimize the targeting of receptors and an expertise in development through all the phases required for registration. Product development will be carried out by internal teams or through strategic industrial partnerships.

The product portfolio will include two products under **clinical development**:

- Tedopi[®], a specific T immunotherapy that activates cytotoxic T lymphocytes and targets patients with Non-Small Cell Lung Cancer (NSCLC) and who are HLA-A2 positive.
 - Tedopi[®] is currently in Phase 3 registration clinical trial for lung cancer in Europe and in the USA; trial completion is expected in 2018.
 - A Phase 2 clinical trial of Tedopi[®] combined with a checkpoint inhibitor is considered for lung cancer in 2017, in partnership with a European research organization.
 - New indications for other cancers involving a strong medical need are considered with industrial partners.
- FR104 is currently in Phase 1 clinical trial and targets indications for autoimmune diseases and transplantation.
 - FR104, a CD28-antagonist, is an optimized monoclonal antibody fragment targeting the CD28

receptor, a key receptor in effector T lymphocytes. These effector T lymphocytes are harmful in the case of autoimmune diseases and transplantation.

- At the end of 2013, with FR104 at a preclinical stage, a global option and license agreement was signed with Janssen Biotech, owned by Johnson & Johnson (one of the world leading pharmaceutical groups), which allowed the development of the product to this stage. This option could be exercised by Johnson & Johnson in the second half of 2016 to continue Phase 2 clinical development, with expected payments of milestones and royalties.

The product portfolio will also include products in **preclinical development**:

- Effi-7 is being developed for autoimmune diseases and transplantation.
 - It is a monoclonal immunomodulatory antibody targeting the CD127 receptor, the alpha chain of the Interleukin 7 receptor, with *in vivo* proof of concept for several autoimmune models.
 - Being developed as part of the consortium EFFIMab, led by Effimune, the Effi-7 project is financed by Bpifrance for an amount of € 9.1m (with the INSERM, the APHP, the regional hospital of Lille and PxTherapeutics, a bioproduction company and subsidiary of Aguettant).
- Effi-dem is being developed for immuno-oncology.
 - It is a second generation checkpoint inhibitor. It targets particular suppressor cells present in the tumor microenvironment, associated with a poor prognosis. They are myeloid-derived suppressor cells (MDSC) and macrophage cells associated with tumors called “Tumor Associated Macrophages” or TAM. TAM cells are a major part of the tumor microenvironment in the case of aggressive tumors and are linked to malignant progression.

In terms of research and development, the new entity may develop other drug candidates targeting new receptors of interest for autoimmune and inflammatory diseases, immuno-oncology and transplantation.

The increased scale of the company should give it the capacity to strengthen its agreement and licensing activities to ensure product development and significantly help to cover its cash-flow needs, with better access to milestones and royalties.

Every product in the portfolio is intended to have the leading or ‘blockbuster’ potential in its respective market.

Governance and executive management of the merged entity

Assuming completion of the merger, Dominique Costantini will assume the role of Chief Executive Officer of the new group. Maryvonne Hiance will become the Vice-Chairman of the Board of Directors, alongside Emile Loria, Chairman. Two independent Board Directors from Effimune will join and strengthen the Board of Directors alongside current board members of OSE Pharma.

Two Chief Operating Officers will assist the Chief Executive Officer: Bernard Vanhove, Chief Operating

Officer in charge of R&D and international scientific collaborations, and Alexis Peyroles, Chief Operating Officer in charge of operations, finance, agreements and licenses within the new entity.

Terms of the proposed transaction and schedule

After completion of the merger, the shareholders of OSE Pharma will hold approximately 71% of the capital of the merged entity and the shareholders of Effimune will own approximately 29%. The agreement will take the form of a merger by OSE Pharma of Effimune at the end of which the shareholders of Effimune will receive 1.93 newly issued shares of OSE Pharma (an issuing of approximately 4 million OSE Pharma new shares) in exchange for each 1 held share of Effimune.

To reflect the change in company profile brought by the merger, it is expected that OSE Pharma will be renamed “OSE Immunotherapeutics,” and the headquarters will be transferred from Paris (France) to Nantes (France), reflecting Effimune’s strong academic establishment.

The terms of the intended merger have been approved by the Boards of Directors of OSE Pharma and Effimune, and will be submitted for approval to the shareholders of both companies during Extraordinary General Meetings that are expected to take place at the end of the second quarter of 2016.

Other detailed information regarding the characteristics and terms of the merger will be provided as part of the invitation to the Extraordinary General Meetings of the two companies, whose notice of meeting will be released around 15 March 2016. Any decision to join in the merger must be based on the full documentation regarding this intended merger, especially on the Merger Prospectus which will be registered (Document E) by the “Autorité des Marchés Financiers” (French stock exchange market regulator) and on the Merger Treaty. This documentation will be published and posted before the Extraordinary General Meetings of the two companies.

Details of the conference call

Dominique Costantini, CEO of OSE Pharma and Alexis Peyroles, CFO, BD of OSE Pharma, jointly with Maryvonne Hiance, Chairman of Effimune and Bernard Vanhove, CEO of Effimune, will comment on this transaction during a conference call in French on 24 February 2016 from 6 PM to 6.30 PM CET followed by a conference call in English from 6.30 PM to 7 PM CET.

To participate in the conference call in English, you can call the following telephone numbers:

France access number: 0170770944

UK access number: +44 – 2033679459

US Free access number: US Free: +1 8554027763

Web access:

<http://www.anywhereconference.com?UserAudioMode=DATA&Name=&Conference=135299659&PIN=8229981>

Replay of the conference:

France: 01 72 00 15 00
UK: +44(0) 2033679460
US: +1 877 64 230 18
REF: 299659#

A presentation will be available on OSE Pharma's website at: www.osepharma.com.

ABOUT THE IMMUNOTHERAPY MARKETS

Citi Research Equity, a department of Citi Group in a study of 2013 is expecting a world market for immune oncology of \$35bn a year in 2023, taking into account the development of new treatments, the combination of these treatments, the lengthening of the durations of treatments and the emergence of predictive markers of response.

Cancer immunotherapy should represent around 60% of treatments, against 3% today with two registered products.

BCC Research announced in 2015 a higher estimated market of immuno-oncology in its assumptions, expecting a market at \$ 67bn in 2018.

Examples of 2014*revenues for leading treatments or “blockbusters” in autoimmune diseases

Humira®: \$ 13bn (AbbVie) with Crohn's disease, rheumatoid polyarthritis and psoriasis

Remicade®: \$ 10bn (J&J - Merck) with Crohn's disease and rheumatoid polyarthritis

Copaxone®: \$ 4.2bn (Sanofi) with multiple sclerosis

World transplantation market* is estimated for 2015 at \$4.3bn for targeted markets, gathered in highly-specialized centers.

**Market elements presented in the press releases of the pharmaceutical companies involved*

ABOUT OSE PHARMA

OSE Pharma is a biotechnology company that designs and develops cancer immunotherapy treatments aimed at re-educating the immune system to fight cancer while preserving patients' quality of life. The Company is conducting a Phase 3 registration trial in Europe and the U.S. for its lead product, Tedopi®, in the treatment of NSCLC.

Tedopi® (OSE-2101) is a new “off-the-shelf” cancer immunotherapy approach based on OSE Pharma's proprietary Memopi® technology. This technology is based on “neo-epitopes” (small synthetic peptides chemically modified to increase the binding the HLA A2 or TCR receptors) which activate a cytotoxic T-cell response and leads the immune system to destroy cancer cells. More than 10,000 epitopes were selected to obtain a therapeutic universal T vaccine.

Tedopi® combines 10 optimized “neo-epitopes” simultaneously acting against 5 tumor-associated antigens (TAAs). These 5 antigens have been selected because they are a factor of poor prognosis in several types of cancers. The 10 “neo-epitopes” have been selected and modified to enhance their binding to HLA-A2 and TCR receptors, and trigger a stronger cytotoxic T-cell response and lead the immune system to destroy cancer cells expressing the HLA-A2 antigen or one of the targeted cancer antigens.

The Phase 3 trial is based on Phase 2 results showing an immune T-cell response significantly correlated with a survival increase, as well as on the long term survival benefit observed in highly pretreated patients with a poor prognosis.

Tedopi® can also be developed in Phase 2 in combination with other immunotherapeutic products or targeted therapies. It is also considered for other oncology indications (ovary, colon, breast) for HLA-A2 positive patients. OSE Pharma is listed on Euronext Paris (ISIN: FR0012127173; Mnemo: OSE).

For more information, please visit www.osepharma.com



Suivez-nous sur Twitter @OSE_Pharma

ABOUT EFFIMUNE

Located in Nantes, France, Effimune is a biotech company specialized in immune regulation for applications in transplantation, autoimmunity and cancer immunotherapy.

The originality of Effimune's therapeutic strategy, compared to conventional immunosuppression, is the modification in the balance between effector and regulatory immune cells. The biological drugs Effimune develops are aimed at restoring the natural balance of these cells by targeting the molecular checkpoint.

The expertise of the company lies in its ability to identify new therapeutic targets and develop effective biomolecules for the pharmaceutical industry by guaranteeing the manufacture of pilot and clinical batches and by validating preclinical and clinical proofs of concept.

Effimune is a spin-off of the Nantes Institute of Transplantation Urology Nephrology-(ITUN), created in December 2007. For the development of FR104, Effimune was supported by local and regional public authorities: Loire Territories Innovation, Atlanpole Biotherapies, Bpifrance, and by the government through the Prime d'aménagement du territoire and by the European Union through the FEDER and FP7.

Effimune has signed long-lasting international collaborations. Several reference scientific articles have been published in the fields of transplantations and immunotherapy in collaboration with ITUN, Inserm, Nantes University within Atlanpole Biotherapies, University of Maryland in Baltimore (Prof. Richard N. Pierson), and Seattle's Children's Institute (Prof. L. Kean).

For more information, please visit: www.ffmpegune.com

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Disclaimer

Important information

This press release does not constitute and shall not be construed as an offer or the solicitation of an offer to purchase, sell or exchange any securities of OSE Pharma and Effimune. In addition, it does not constitute an offer or the solicitation of an offer to purchase, sell or exchange of securities in any jurisdiction (including the US and the United Kingdom) in which it would be unlawful or subject to registration or qualification under the laws of such jurisdiction.

In connection with the proposed transaction, the required information documents will be filed with the Autorité des Marchés Financiers ("AMF"). Investors and shareholders are strongly advised to read, when available, the information documents that have been filed with the AMF and any other relevant document that has been filed with the AMF as well as any related amendment if any and/or supplements because they will contain important information.

Shareholders and investors may obtain free copies of documents filed with the AMF at www.amf-france.org.

Forward-looking statements

This press release contains information and statements that might be deemed forward-looking information and statements with respect to OSE Pharma and Effimune and the aggregate operations of both companies once the transaction would have been completed. They do not constitute historical facts. These information and statements

include financial projections that are based upon certain assumptions and assessments made by OSE Pharma and Effimune's 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.

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 Pharma and Effimune's management believes that the forward-looking statements and information are reasonable, the OSE Pharma and Effimune shareholders and other investors are cautioned that the completion of such expectations is by nature subject to various risks and uncertainties many of which are difficult to predict and generally beyond the control of OSE Pharma and Effimune. 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 Pharma and Effimune with the AMF. Such forward-looking statements are not guarantees of future performance.

Neither OSE Pharma nor Effimune undertakes any obligation to update or revise the forward-looking statements and information except to the extent legally required.

Combined financial data

This press release contains certain financial information resulting from the aggregation of revised historical financial information. This information is given for indicative purposes only and does not constitute pro forma financial information and has not been audited."