

**OSE PHARMA SA ACQUIRED  
ALL OF OSE-2101 ASSETS, WORDWIDE RIGHTS AND KNOW-HOW  
A MULTI-EPITOPES THERAPEUTIC CANCER VACCINE IN ADVANCED CLINICAL STAGES**

**Paris, France, April 7<sup>th</sup> 2014**, OSE Pharma SA, dedicated to severe and orphan diseases, announces the acquisition of OPI SA including worldwide rights and know how related to OSE-2101 multi-epitopes technology. This specific innovative immunotherapy is key in educating the immune system allowing it to recognize and destroy the tumor cells through the induction of specialized cytotoxic T cells.

Through this acquisition, OPI shareholders are becoming shareholders of OSE Pharma and OPI SA registered in Geneva is becoming the Swiss subsidiary of OSE Pharma.

OSE Pharma is now undertaking the worldwide development of this multi-epitopes therapeutic cancer vaccine based on know-how and industrial peptides combination. This innovative and patented technology is targeting 5 tumor antigens clinically present in various cancers. The epitopes (active fragment of tumor antigens) are modified in order to increase the cytotoxic T cell response (high binding affinity for the receptor HLA-A2 and/or the T cytotoxic receptor TCR). This combination provides an amplification of the immune T cytotoxic response and is overcoming the self-immune tolerance normally induced by cancer cells.

The clinical Phase 3 in preparation is focused on NSCLC (non-small cell Lung Cancer) advanced stage IIIb invasive or metastatic stage IV for HLA-A2 positive patients expressing this receptor (45% of the NSCLC population). The selected clinical programs are attractive for future strategic industrial partnering, either by regions (Asia Europe USA) or by cancer indication (lung, ovarian, colon, breast, prostate).

*“Today OSE Pharma is opening a new era through OPI acquisition providing assets and worldwide rights for the multi- epitopes program. This acquisition is the logical next step in our international development. We are preparing the global phase III in the most exciting and promising field of immunotherapy with considerable hope for cancer patients. Our HLA-A2 multi-epitopes cancer vaccine is a suitable candidate for future strategic therapeutic combinations in a new field offering unprecedented potential to fight cancer”*, declares Dominique Costantini, M.D., CEO of OSE Pharma.

**OSE Pharma qualifies for the new PEA-PME French investment SME rules as is headquartered in France, Cochin Hospital Paris.**

*Criteria: article 70 French Financial Law n° 2013-1278 (December 29, 2013 2014 and its application decree n. 2014-283, March 4<sup>th</sup>, 2014), as a company with less than 5 000 employees, with annual revenues lower than 1 500 millions Euros. This investment tool is subject to same fiscal benefits as the Saving Plan in Shares (Plan d'Epargne en Actions or PEA) and Midsize companies of which 50% are in shares without exceeding 75 000 euros.*

## About OSE Pharma

OSE Pharma, an innovative biopharmaceutical company is at late stage clinical Phase III for NSCLC lung cancer and at Phase II for other cancer indications (ovarian, colon, breast, prostate). The company is established in Paris - Hospital Cochin France. Emile Loria and Dominique Costantini both experienced Biotech entrepreneurs founded OSE in 2012. In 2014, the company acquired OSE-2101 technology assets, the worldwide rights and the related know-how. OSE Pharma is focused on targeting severe and orphan diseases. This medico-economic model is based on protection and acceleration of development for drugs significantly improving treatment options for patients with unmet medical needs.

OSE lead product OSE2101 has completed a Phase II clinical trial in late-stage non-small cell lung cancer HLA -A2 positive patients. This HLA -A2 biomarker is expressed in 45% of this population and is considered a poor prognosis factor in various cancers including the NSCLC. The 10 epitopes combined are providing T cytotoxic responses (able to kill cells) of the tumor cells expressing the tumor antigens. The 5 Tumor Associated Antigens targeted - TAA (HER2/neu; P53; CEA; MAGE2; MAGE3) have been selected as their presence is linked to the poor prognosis and severity of various cancers. Two clinical Phase I/II results in colon cancer and in NSCLC were performed to define the tolerance, the level of response (>90%) and the scheme of administration (subcutaneous injection every 3 weeks for 6 injections then every 3 months).

OSE 2101 cancer immune therapy is a suitable candidate for combination therapy and could potentially be applied to other cancer indications.

The company has in its portfolio a separate clinical project in Cystic Fibrosis, an orphan genetic disorder with progressive lung damage, "re-profiling" a molecule with new anti-inflammatory properties. This molecule safety profile is already established allowing the immediate design of a clinical phase II Proof of concept program.

## Lung cancer

Lung cancer is the leading cause of cancer death in the world. More people die of lung cancer than of colon, breast and prostate cancers combined. According to the epidemiology site of Globocan (IARC 2012), lung cancer (non-small cell, NSCLC, and small cell type) affects more than 1.58 million patients a year, with around 1.39 million deaths annually and around 600,000 in Europe (27) (288 000) the U.S (214 000), and Japan (141 000). About 85 to 88 percent of all lung cancers are the non-small cell type. The majority of patients are at advanced stage disease at diagnosis: stage III invasive or Stage IV metastatic. Despite aggressive treatments, the 5-year relative survival rates are about 2% for patients with metastatic disease (stage IV).

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