OSE Immunotherapeutics Presents Preclinical Updates in Immuno-Oncology at AACR Annual Meeting 2025

- **OSE-CYTOMASK®, a new CIS-Demasking[1] cytokine bispecific technology.**
- **CLEC-1, a novel immune checkpoint target.**

NANTES, France – April 3, 2025, 6:00 p.m. CET - OSE Immunotherapeutics SA (ISIN: FR0012127173; Mnemo: OSE), a biotech company dedicated to developing first-in-class therapies in immuno-oncology and immuno-inflammation, today announced that the latest preclinical data on its novel OSE-CYTOMASK® CIS-Demasking cytokine technology and on the CLEC-1 immune checkpoint target, have been selected for poster presentation at the American Association for Cancer Research (AACR) Annual Meeting being held on April 25 – 30, 2025, in Chicago.

Aurore Morello, Head of Research and Director of R&D programs, OSE Immunotherapeutics, comments: "*We are very happy to present the latest advancements from two of our ground-breaking preclinical programs, showcasing our unwavering commitment to innovative research. Our novel OSE-CYTOMASK® technology has demonstrated remarkable preclinical efficacy and an improved tolerance profile, positioning this drug candidate as a potential first-in-class cytokine treatment with a superior therapeutic index in oncology. Moreover, its potential extends beyond oncology, offering promising applications in autoimmune and inflammatory diseases. Our collaborative research with Dr. Elise Chiffoleau's CR2TI (Center for Research in Transplantation and Translational Immunology) research team in Nantes [2] on the immune checkpoint target CLEC-1 has confirmed the therapeutic efficacy of anti-CLEC-1 antibodies, both as monotherapy and in novel combinations. This provides compelling evidence to support the further development of a new cancer immunotherapy, reinforcing our dedication to advancing transformative treatments for patients.*"

OSE-CYTOMASK® is a technology that helps make cancer treatments safer and more effective. It works by attaching a special linker sequence that can mask a molecule called a cytokine, which is part of the immune system. This masking technology keeps the cytokine inactive until it reaches the right type of immune cell, like PD1-expressing T cells, which are often found in tumors.

When the cytokine reaches these specific cells, the mask is removed, and the cytokine becomes active. This targeted approach helps to reduce side effects and improve the effectiveness of the treatment by only activating the right immune cell into the tumor microenvironment.

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[1] *CIS-Demasking: Bispecific antibodies [(*)] have the capability to target cells either in a Cis- targeting (on the same cell) or in a Trans-binding orientation (between two different cells). Cis-Demasking bispecific technology targets two antigens expressed on the same cell, with one masked modality (eg. Cytokine) and enabling conditional activity of the cytokine on the desired immune cell types upon antibody binding.*

[(*)] Segués A. et al. International Review of Cell and Molecular Biology 2022.

[2] *Collaborative academic program between OSE Immunotherapeutics and Dr Elise Chiffoleau's research teams (Center for Research in Transplantation and Translational Immunology (CR2TI), UMR1064, INSERM, Nantes University at Nantes University Hospital, https://cr2ti.univ-nantes.fr/research/team-1).*

The poster presentation titled "***Cis demasking cytokine technology improves therapeutic index of immunocytokine***" explains how this technology can make cancer therapies more precise and safer by reducing unwanted immune activity outside of tumors and focusing the treatment on the cancer cells.

CLEC-1 is a new type of immune checkpoint, which is a receptor found on certain myeloid cells and endothelial cells. It can block important immune functions that help fight cancer, making it harder for the body to attack tumors.

The poster presentation titled ***"First in class Anti-CLEC-1A myeloid checkpoint antibodies for the treatment of solid tumors with monotherapy and combination therapy efficacies"*** highlights recent positive results from preclinical studies. These studies show how CLEC-1 can weaken the immune system's ability to fight cancer. The findings suggest that targeting CLEC-1 with specific antibodies could be a promising new treatment option for cancer, either alone or in combination with other therapies.

Poster presentations details

Session PO.IM01.07 - Enhanced Antibodies, TCR Constructs, Cytokines and Chimeric Proteins

3412/7 - Cis demasking cytokine technology improves therapeutic index of immunocytokine

April 28, 2025 – 2:00PM – 5:00PM CT, Section 35
Session Type: Poster session
Track(s): Immunology

Session PO.IM01.09 - Overcoming Checkpoint Inhibition and Tumor Suppression

7293 / 8 - First in class Anti-CLEC-1A myeloid checkpoint antibodies for the treatment of solid tumors with monotherapy and combination therapy efficacies

April 30, 2025, 9:00 AM – 12:00 PM CT, Section 39
Session Type: Poster session
Track(s): Immunology

ABOUT OSE IMMUNOTHERAPEUTICS

OSE Immunotherapeutics is a biotech company dedicated to developing first-in-class assets in immuno-oncology (IO) and immuno-inflammation (I&I) that address the unmet patient needs of today and tomorrow. We partner with leading academic institutions and biopharmaceutical companies in our efforts to develop and bring to the market transformative medicines for people with serious diseases. OSE Immunotherapeutics is based between Nantes and Paris and is quoted on Euronext.

Additional information about OSE Immunotherapeutics assets is available on the Company's website: www.ose-immuno.com. Click and follow us on LinkedIn.

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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 considering 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 Universal Registration Document filed with the AMF on April 30, 2024, including the annual financial report for the fiscal year 2023, 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.