OSE Immunotherapeutics Presents Update on BiCKI®IL-7, CLEC-1 and OSE-230 Preclinical Programs in Immuno-Oncology and Immuno-Inflammation At International Conferences

Nantes, France – June 15, 2023, 7:30 p.m. CET – OSE Immunotherapeutics SA (ISIN: FR0012127173; Mnemo: OSE) presents scientific updates in oral and poster presentations selected for international conferences: at the Antibody Engineering & Therapeutics Europe 2023 Conference in Amsterdam, Netherlands (June 7), at the FOCIS 2023 Annual Meeting (June 20-23), the 4th Annual Cytokine-Based Drug Development Summit 2023 (June 27-29) and at the 3rd Annual Tumor Myeloid-directed Therapies Summit 2023 (July 18-20) in Boston, US. The communications feature the latest research on pre-IND programs for BiCKI®-IL-7 (bifunctional therapy targeting PD-1 and IL-7), CLEC-1(1) (new myeloid immune checkpoint) in immuno-oncology and for OSE-230 (first pro-resolutive monoclonal antibody) in chronic inflammation.

Dr Nicolas Poirier, Chief Executive Officer of OSE Immunotherapeutics, commented*: "We are very proud to share our latest scientific advances on our innovative pre-IND research programs with the international scientific community. The progress made on our next-generation immunotherapies in immuno-oncology and immuno-inflammation demonstrate our continued commitment to delivering first-in-class treatments for patients in high need for new therapeutic options. We are looking forward to progressing these programs with strategic partners into clinical stage".*

Dr Aurore Morello, Head of Research of OSE Immunotherapeutics, said: *"The latest data featured in our communications highlight the value and therapeutic potential of our pre-IND assets.*

BiCKI®-IL-7, our bispecific anti-PD1/IL-7 program, presents an innovative cytokine approach, selectively targeting tumor-specific T-cells to improve the quality and durability of memory T-lymphocyte responses.

CLEC-1, developed in academic collaboration with Dr Elise Chiffoleau's team at the Center for Translational Research in Transplantation and Immunology (1) in Nantes, acts as a new myeloid immune checkpoint and the CLEC-1/new ligand TRIM21 axis as a new target for cancer immunotherapy. These latest data further support the preclinical evaluation of monoclonal antagonist antibodies targeting CLEC-1.

OSE-230, our most advanced pre-IND program, stands as the first pro-resolutive agonist monoclonal antibody, capable of clearing chronic neutrophil infiltrates and inhibiting the pathogenic NETosis (2) process and fibrosis".

BICKI®-IL-7 PROGRAM IN IMMUNO-ONCOLOGY

ANTIBODY ENGINEERING & THERAPEUTICS EUROPE 2023 - JUNE 7, AMSTERDAM
Presenter: Aurore Morello, PhD., Head of Research of OSE Immunotherapeutics

"Anti-PD1/IL7v Cis-activated Stem-like T cells Expressing TCF1"

Human tumor-specific T cells expressed PD1. Stem-like TCF1+ T cells are key for the efficient and durable response of anti-PD1 mAbs in clinic [(3)]. Stem-like TCF1+ co-express PD1 and CD127 and an anti-PD1/IL7v bifunctional molecule preferentially cis-target and expand the proliferation and survival of stem-like TCF1+ T cells without inducing their exhaustion in vitro in human chronic stimulation and exhaustion assays as well as in-vivo in tumor bearing mice.

4TH ANNUAL CYTOKINE-BASED DRUG DEVELOPMENT SUMMIT 2023 - JUNE 27-29, BOSTON

Day: Pre-Conference Workshop Day

Time: 9:00 am

Presenter: Nicolas Poirier, PhD, CEO and CSO of OSE Immunotherapeutics

Seminar:

"Going Beyond IL-2 to Explore Different Possibilities for the Development of Cytokine-Based Drugs"

Although the IL-2s have been the forefront of research within the field of cytokine-based drugs, many interleukins and interferons beyond IL-2 are becoming increasingly relevant. The applications of these cytokines are vast and their different mechanisms of action open up the field to more R&D and an endless number of possibilities to tackle the various diseases affecting the world.

Join this workshop to:

- Discuss the progress of novel technologies on IL-7, IL-12, IL-18, IL-15 and more.
- Understand the different mechanisms and mode of action employed by these cytokines.
- Explore the TNF super family and interferons.
- Understand clinical evaluation of non-alpha IL-2 and IL-15 cytokine therapies and implications for future drug development.
- Discover how anti-PD1/IL7v bispecific selectively expand and maintain stemness of TCF1+ stem-like T cells.

CLEC-1 PROGRAM IN IMMUNO-ONCOLOGY

3RD ANNUAL TUMOR MYELOID-DIRECTED THERAPIES SUMMIT 2023 - 18-20 JULY, BOSTON

Day: Day Two

Time: 9:30 am

Presenter: Nicolas Poirier, PhD, CEO and CSO of OSE Immunotherapeutics

"CLEC-1 is a Novel Inhibitory Myeloid Receptor Sensing Cell Death & Limiting Tumor Antigen Cross-Presentation"

Details:

- The orphan receptor CLEC-1 interacts with Trim21 over-expressed during cell death.
- CLEC-1 inhibitory function limits T-cell cross-priming.
- Positive preclinical efficacy with antagonist anti-CLEC1 mAb.

OSE-230 PROGRAM IN INFLAMMATION DISEASE

FOCIS 2023 ANNUAL MEETING - 20-23 JUNE, BOSTON

Date: June 20

Presenter: Vanessa Gauttier, Researcher, OSE Immunotherapeutics

Tu 220 - ***"Agonist anti-ChemR23 mAb inhibits NETosis and neutrophil-mediated inflammation"***

(1) *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).*

(2) *NETosis is a program for formation of neutrophil extracellular traps (NETs), which consists of modified chromatin decorated with bactericidal proteins from granules and cytoplasm. Recent research has highlighted that neutrophils, and in particular NETs that can be released upon activation, have central roles in the initiation and perpetuation of systemic autoimmune disorders and trigger complex and chronic inflammatory responses that lead to organ damage and fibrosis.*

(3) *Connolly K A et al. Sci Immunol. 2021, A reservoir of stem-like CD8+ T cells in the tumor-draining lymph node preserves the ongoing anti-tumor immune response*

ABOUT OSE Immunotherapeutics

OSE Immunotherapeutics is a biotech company dedicated to developing first-in-class assets in immuno-oncology and immuno-inflammation. The Company's current well-balanced first-in-class clinical pipeline includes:

- **Tedopi®** (immunotherapy activating tumor specific T-cells, off-the-shelf, neoepitope-based): this cancer vaccine is the Company's most advanced product; positive results from the Phase 3 trial (Atalante 1) in Non-Small Cell Lung Cancer patients in secondary resistance after checkpoint inhibitor failure. Other Phase 2 trials, sponsored by clinical oncology groups, of Tedopi® in combination are ongoing in solid tumors.
- **OSE-279** (anti-PD1): ongoing Phase 1/2 in solid tumors or lymphomas (first patient included). OSE-279 is the backbone therapy of the BiCKI® platform.
- **OSE-127** - *lusvertikimab* (humanized monoclonal antibody antagonist of IL-7 receptor); ongoing Phase 2 in Ulcerative Colitis (sponsor OSE Immunotherapeutics); ongoing preclinical research in leukemia (OSE Immunotherapeutics).
- **FR-104/VEL-101** (anti-CD28 monoclonal antibody): developed in partnership with Veloxis Pharmaceuticals, Inc. in transplantation; ongoing Phase 1/2 in renal transplant (sponsor Nantes University Hospital); Phase 1 ongoing in the US (sponsor Veloxis Pharmaceuticals, Inc.).
- **OSE-172/BI 765063** (anti-SIRPα monoclonal antibody on CD47/SIRPα pathway) developed in partnership with Boehringer Ingelheim in advanced solid tumors; positive Phase 1 dose escalation results in monotherapy and in combination, in particular with anti-PD-1 antibody ezabenlimab; international Phase 1b ongoing clinical trial in combination with ezabenlimab alone or with other drugs in patients with recurrent/metastatic head and neck squamous cell carcinoma (HNSCC) and hepatocellular carcinoma (HCC).

OSE Immunotherapeutics expects to generate further significant value from its two proprietary drug discovery platforms, which are central to its ambitious goal to deliver next-generation first-in-class immunotherapeutics:

- **BiCKI® platform** focused on immuno-oncology (IO) is a bispecific fusion protein platform built on the key backbone component of anti-PD1 combined with a new immunotherapy target to increase anti-tumor efficacy. BiCKI-IL-7 is the most advanced BiCKI® candidate targeting anti-PD1xIL-7.
- **Myeloid platform** focused on optimizing the therapeutic potential of myeloid cells in IO and immuno-inflammation (I&I). **OSE-230** (ChemR23 agonist mAb) is the most advanced candidate generated by the platform, with the potential to resolve chronic inflammation by driving affected tissues to tissue integrity.

Additional information about OSE Immunotherapeutics assets is available on the Company's website: www.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 Universal Registration Document filed with the AMF on May 2, 2023, including the annual financial report for the fiscal year 2022, 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.