OSE Immunotherapeutics Reports 2020 Financial Results and Provides Business Update

- **Major expansion of clinical portfolio including initiation of clinical trials with Tedopi® in ovarian cancer, OSE-127/S95011 in ulcerative colitis, FR104 in renal transplant and an upcoming phase 1/2 for CoVepiT, a multi-variant vaccine against COVID-19.**
- **Positive Tedopi® results for Step-1 of Phase 3 in non-small cell lung cancer post checkpoint inhibitors failure.**
- **Strong progress on preclinical assets OSE-230, a novel antibody therapeutic promoting the resolution of inflammation, BiCKI®, a bi-specific platform and CLEC-1 antagonist, a new myeloid "Don't Eat Me" signal, in immuno-oncology.**
- **Financial visibility extended to Q2 2022 through €18.6 million equity raise in November 2020, €7 million non-dilutive loan guaranteed by the French State in May 2020, €5.2 million granted by Bpifrance for the clinical development of CoVepiT and up to €25 million financing agreement with the European Investment Bank.**

Nantes, France, March 26, 2021 6:00PM CET – OSE Immunotherapeutics (ISIN: FR0012127173; Mnemo: OSE) today reported its consolidated annual financial results for 2020 and provided an update on key achievements, as well as the Company's outlook for 2021 for its immunotherapies in T-cell vaccines, immuno-oncology and auto-immunity and inflammation.

Alexis Peyroles, CEO of OSE Immunotherapeutics commented: *"2020 was a year of strong achievements and transformation for OSE, creating a clear momentum for the Company's next phase of growth and reinforcing its status as a key player in immunotherapy. We strengthened and broadened our clinical portfolio with numerous important indications and developed a multi-variant COVID-19 vaccine, parallel to reinforcing our financial position.*

Our neoepitope approach with Tedopi® was validated in the Step-1 of Phase 3 study in non-small cell lung cancer patients after failure of checkpoint inhibitor treatments. This confirms the clinical benefit Tedopi® can provide to patients who need new therapeutic options for this indication. At the same time, we expand Tedopi®'s clinical development to ovarian cancer alone and in combination with a checkpoint inhibitor.

Our clinical portfolio made great progress with the launch of clinical trials for three products: a Phase 2 with IL-7 receptor antagonist OSE-127/S95011 in ulcerative colitis, a Phase 1/2 with CD28 antagonist FR104 in renal transplant and a Phase 2 to evaluate Tedopi® alone or combined with Keytruda® as a maintenance treatment in ovarian cancer. An upcoming Phase 1/2 with CoVepiT, our COVID-19 vaccine, is currently subject to regulatory authorizations. Our preclinical pipeline has also developed and includes new highly innovative programs such as CLEC-1 and BiCKI®-IL-7 in immuno-oncology and OSE-230 in the resolution of inflammation.

In parallel, we strengthened our cash position through an equity raise, non-dilutive loans and a COVID-19 specific funding, extending our cash runway to Q2 2022. This strong financial position allows us to further enhance our differentiated and diversified pipeline in immuno-oncology and autoimmune diseases as well as the clinical development of our CoVepiT vaccine."

2020 KEY ACHIEVEMENTS

Major clinical progress

Tedopi®, a combination of 10 neoepitopes intended to induce specific T-lymphocyte activation: Positive results of Step-1 Phase 3 in non-small cell lung cancer, initiation of Phase 2 in ovarian cancer

- Positive results for the Step-1 of the 'Atalante-1' Phase 3 including benefit in overall survival and good safety profile in non-small cell lung cancer (NSCLC) patients after failure with immune checkpoint inhibitor therapies compared to chemotherapy. Based on these positive data, OSE Immunotherapeutics will engage with U.S. and European health authorities to evaluate the best regulatory strategy for this indication.
- Initiation of a Phase 2 clinical trial, called 'TEDOVA', evaluating Tedopi® in patients with recurrent ovarian cancer. The trial will evaluate Tedopi® alone and in combination with Merck's Keytruda® (pembrolizumab), an immune checkpoint inhibitor relieving the brakes that prevent optimal T lymphocyte activation, compared to best supportive care.
- Tedopi® is also in a Phase 2 clinical trial for pancreatic cancer patients called 'TEDOPaM', sponsored by the GERCOR cooperative group in oncology. Due to the COVID-19 pandemic, accrual of new patients had been temporarily suspended in March 2020. After reviewing data collected until the end of March 2020 and based on the initial protocol (Tedopi® in combination with Opdivo® or alone versus chemotherapy by FOLFIRI) trial`s independent committee of scientific experts (IDMC, "Independent Data Monitoring Committee") recommended to stop the evaluation of treatment with Opdivo® in combination with Tedopi® and to integrate the chemotherapy (FOLFIRI) in combination with Tedopi®. GERCOR has consequently modified the treatment design and the new inclusions (subject to the COVID-19 pandemic impact) are expected in Q2 2021 with an amended protocol comparing Tedopi® in combination with FOLFIRI chemotherapy versus FOLFIRI, after treatment with FOLFIRINOX. The primary endpoint of the trial remains the one-year survival rate.

CoVepiT, a 2nd generation multi-target vaccine against COVID-19, developed using SARS-CoV-2 optimized epitopes: Upcoming initiation of Phase 1/2

- In May 2020, OSE Immunotherapeutics announced its commitment to the fight against COVID-19 with a prophylactic vaccine, named CoVepiT, using optimized epitopes selected after screening more than 67,000 global SARS-CoV-2 genomes, as well as those of previous human-infective CoVs, SARS and MERS, to identify vaccine targets with the lowest chance of natural mutation. CoVepiT demonstrated generation of sentinel memory T cells with long- term protective effect against COVID-19 in preclinical and human ex vivo studies. Targeting 11 virus proteins including Spike, M, N and non-structural proteins, this second-generation vaccine covers all initial and novel SARS-CoV-2 variants identified globally to date.
- OSE will initiate a Phase 1/2 clinical trial to evaluate the safety and immunogenicity of CoVepiT in healthy volunteers and in subjects at risk of severe COVID-19 as soon as it obtains the regulatory authorizations to start the clinical trial.

- Associated with this program, OSE received a grant of up to €200,000 from Nantes Metropole, the metropolitan area of Nantes community (July 2020) and has obtained funding of €5.2 million under the PSPC-COVID call for projects, operated by Bpifrance on behalf of the French Government (December 2020) for the upcoming clinical development in a Phase 1/2.

BI 765063 (OSE-172), a myeloid checkpoint inhibitor being developed in partnership with Boehringer Ingelheim: Ongoing Phase 1

- BI 765063 is in an ongoing Phase 1 clinical trial in advanced solid tumors. The study is a first-in-human dose finding study of BI 765063 administered as a single agent and in combination with Boehringer Ingelheim's monoclonal PD-1 antibody antagonist, BI 754091, a T lymphocyte checkpoint inhibitor. The trial aims to characterize safety, pharmacokinetics, pharmacodynamics and preliminary efficacy of the immunotherapy in patients with advanced solid tumors.
- In October 2020, data supporting additional new mechanism of action for selective antagonist of SIRPα-mediated "Don't Eat Me" signal BI 765063 were published in the *Journal of Clinical Investigation*. Based on translational and preclinical studies in rodent *in vivo* and human *ex vivo* models characterizing the efficacy and mechanism of action of BI 765063, OSE R&D team has identified a complementary SIRPα-mediated "Don't Find Me" mechanism by which tumors evade immune detection by preventing T lymphocytes from entering the tumor core. This is the first time this mechanism was identified, and such new anti-SIRPα strategy reverses this major mechanism of resistance named 'T-cell exclusion' by releasing the break on T lymphocyte chemotaxis and migration into the heart of the tumors.

OSE-127/S95011, a monoclonal antibody antagonist of the interleukin-7 (IL-7) receptor being developed in partnership with Servier: Initiation of Phase 2 in ulcerative colitis

- In December 2020, the first patient with ulcerative colitis was enrolled in a Phase 2 clinical trial evaluating the efficacy and safety of OSE-127/S95011 versus placebo in patients with moderate to severe active ulcerative colitis who have previously failed, lost response or were intolerant to previous treatment(s). This trial is sponsored by OSE, while Servier is sponsoring a Phase 2a study with OSE-127/S95011 in patients with Sjögren's syndrome with first enrolled patient now expected by the end of Q2 / early Q3 2021.
- In March 2020, OSE and Servier signed an amendment to the two-step global licensing option agreement for OSE-127/S95011. The 2nd Step in the option agreement was amended, splitting the €20 million payment from Servier into two. First €5 million milestone payment will be paid upon the enrollment of the first patient in the Phase 2a clinical study in Sjögren's syndrome. The remaining €15 million will be paid upon exercise of an option at the completion of both Phase 2 clinical trials (the previous version of the agreement had the full €20 million milestone payment due upon completion of Phase 2 clinical study in ulcerative colitis).

FR104, a monoclonal antibody antagonist of CD28: Initiation of Phase 1/2 in renal transplant

- In November 2020, OSE and the Nantes University Hospital announced that the French National Agency for Medicines and Health Products Safety (ANSM), and the French Central Ethics Committee (CPP) approved the initiation of a Phase 1/2 trial evaluating first administration of FR104, a monoclonal antibody CD28 antagonist, in patients undergoing renal transplant. This study will be conducted as part of a collaboration agreement between OSE Immunotherapeutics and the University Hospital of Nantes.

- The purpose of this Phase 1/2 clinical trial, sponsored by the Nantes University Hospital, is to investigate the safety, tolerability, pharmacokinetics, pharmacodynamics and efficacy of FR104 in renal transplant patients. A long-term follow up assessment will be performed one year after the end of the study. Long term safety and efficacy will be evaluated in terms of renal function, incidence of rejection and all suspected FR104 related adverse events.
- Since FR104 showcased a strong development potential in a number of indications, OSE is working in parallel on a new FR104 Phase 2 study in an autoimmune disease indication.

Expansion of preclinical portfolio: novel approaches in cancer immunotherapy and a disruptive concept in the resolution of inflammation

New data on CLEC-1, BiCKI® and BiCKI-IL-7 presented at the 2020 AACR (American Association of Cancer Research) Annual Meeting in June 2020 and at the SITC (Society for Immunotherapy of Cancer) in November 2020

- Identification and characterization of a new myeloid checkpoint target CLEC-1 (a C type lectin receptor) and of the first monoclonal antibody antagonists of CLEC-1 blocking the "Don't Eat Me" signal represent a novel approach in cancer immunotherapy. These findings come from a research program conducted by OSE's R&D team in collaboration with Dr. Elise Chiffoleau *(Center for Research in Transplantation and Immunology, UMR1064, INSERM, Nantes University at Nantes University Hospital).*
- Preclinical progress has confirmed that bispecific platform BiCKI®, and especially bifunctional therapy targeting PD-1 and IL-7, BiCKI-IL-7, have the potential to overcome resistance mechanisms to anti-PD(L)-1 therapies and could potentially address the needs of a patient population in immune escape from checkpoint inhibitor treatment.

First presentation of new data characterizing OSE-230, the anti-ChemR23 antibody at the FOCIS (Federation of Clinical Immunology Societies) Annual Meeting in October 2020

- Preclinical efficacy results were disclosed for novel agonist monoclonal antibody therapy, OSE-230, in chronic inflammatory preclinical and ex vivo models. The data presented showed that OSE-230 is the first agonist monoclonal antibody triggering the activation of specialized receptors of resolution to restore tissue homeostasis, integrity and functions. These findings provide strong evidence for the therapeutic potential of OSE-230 to be developed in various chronic inflammation and autoimmune pathologies.

2020 FINANCIAL RESULTS

A meeting of the Board of Directors of OSE Immunotherapeutics was held on March 26, 2021 according to the ordinance n° 2020-321 as amended. Following the Audit Committee opinion, the Board approved the annual and consolidated financial statements prepared under IFRS on 31 December 2020.

The key figures of the 2020 consolidated annual results are reported below (and presented in the attached tables):

In K€	December 31, 2020	December 31, 2019
Current operating result	(18,989)	(1,469)
Operating result	(18,989)	(1,472)

Net result	(16,555)	(4,652)
Available cash*	29,368	25,842
Consolidated balance sheet	96,973	88,933

As of December 31, 2020, the Company's available cash* amounted to €29.4 million, providing financial visibility to Q2 2022.

In 2020, OSE secured:

- A successful € 18.6 million equity private placement;
- A €7 million non-dilutive loan agreement, with a pool of French banks, guaranteed by the French State.
- A grant of €200,000 from Nantes Metropole, the metropolitan area of Nantes community.

This available cash will be reinforced by:

- A loan facility of up to €25 million from the European Investment Bank (EIB), divided into three tranches including two tranches of €10 million each and a third tranche of €5 million. The first tranche will be drawn before end of May 2021, and a prospectus to be approved by the *Autorité des marches financiers* will be released prior to the drawdown in relation to the issue of 850,000 warrants to the EIB;
- A €5.2 million funding under the PSPC-COVID call for projects, operated by Bpifrance on behalf of the French Government dedicated to the development of the Company's prophylactic COVID-19 vaccine CoVepiT;
- €5.1 million of 2020 Research Tax Credit.

These financing enable the Company to support clinical development and R&D costs for earlier stage products until Q2 2022.

During 2020, the Company recorded a consolidated operating loss of (€19) million. Current operating expenses were €29.4 million (€27.4 million in 2019) of which 76% related to R&D. R&D expenses amounted to €22.4 million.

**Available cash and cash equivalents*

ABOUT OSE Immunotherapeutics

OSE Immunotherapeutics is an integrated biotechnology company focused on developing and partnering therapies to control the immune system for immuno-oncology and autoimmune diseases. The company's immunology research and development platform is focused on three areas: T-cell-based vaccination, Immuno-Oncology (focus on myeloid targets), Auto-immunity & Inflammation. Its balanced first-in-class clinical and preclinical portfolio has a diversified risk profile:

Vaccine platform

- **Tedopi®** (innovative combination of neoepitopes): the company's most advanced product; positive results for Step-1 of the Phase 3 trial (Atalante 1) in Non-Small Cell Lung Cancer post checkpoint inhibitor failure.
  In Phase 2 in pancreatic cancer (TEDOPaM, sponsor GERCOR)
  In Phase 2 in ovary cancer (TEDOVA, sponsor ARCAGY-GINECO)
  Due to the COVID-19 crisis, accrual of new patients in TEDOPaM should restart in 2021.
- **CoVepiT**: a prophylactic second-generation vaccine against COVID-19, developed using SARS-CoV-2 optimized epitopes against multi variants. Positive preclinical and human ex vivo results in August 2020, clinical trial expected to start in Q1 2021.

Immuno-oncology platform

- **BI 765063** (OSE-172, anti-SIRPα mAb on SIRPα/CD47 pathway): developed in partnership with Boehringer Ingelheim; myeloid checkpoint inhibitor in Phase 1 in advanced solid tumors.
- **CLEC-1** (novel myeloid checkpoint target): identification of mAb antagonists of CLEC-1 blocking the "Don't Eat Me" signal that increase both tumor cell phagocytosis by macrophages and antigen capture by dendritic cells.

- **BiCKI®**: bispecific fusion protein platform built on the key backbone component anti-PD-1 (OSE-279) combined with new immunotherapy targets; 2nd generation of PD-(L)1 inhibitors to increase antitumor efficacity.

Auto-immunity and inflammation platform

- **FR104** (anti-CD28 monoclonal antibody): positive Phase 1 results; ongoing Phase 1/2 in renal transplant, Phase 2-ready asset in a niche indication in autoimmune diseases.
- **OSE-127/S95011** (humanized monoclonal antibody targeting IL-7 receptor): developed in partnership with Servier; positive Phase 1 results; in Phase 2 in ulcerative colitis (OSE sponsor) and an independent Phase 2a planned in Sjögren's syndrome (Servier sponsor).
- **OSE-230** (ChemR23 agonist mAb): first-in-class therapeutic agent with the potential to resolve chronic inflammation by driving affected tissues to tissue integrity.

For more information:
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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 15 April 2020, including the annual financial report for the fiscal year 2019, 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.

APPENDICES

CONSOLIDATED PROFIT & LOSS

P&L IN K€	**December 31, 2020**	**December 31, 2019**
Turnover	10 418	25 952
Other operating income	13	0
Total Revenues	**10 432**	**25 952**
Research and development expenses	(22 355)	(21 655)
Overhead expenses	(4 783)	(3 898)
Expenses related to shares payments	(2 283)	(1 868)
OPERATING PROFIT/LOSS - CURRENT	**(18 989)**	**(1 469)**
Other operating products (badwill)	0	0
Other operating expenses	0	(2)
OPERATING PROFIT/LOSS	**(18 989)**	**(1 472)**
Financial products	31	221
Financial expenses	(288)	(213)
PROFIT/LOSS BEFORE TAX	**(19 246)**	**(1 464)**
Income Tax	2 692	(3 188)
NET PROFIT/LOSS	**(16 555)**	**(4 652)**
Of which consolidated net result attributable to shareholders	***(16 555)***	***(4 652)***
Net earnings attributable to shareholders		
Weighted average number of shares outstanding	**15 556 046**	**14 892 496**
Basic earnings per share	**(1,06)**	**(0,31)**
Diluted earnings per share	**(1,06)**	**(0,31)**

IN K€	**2020**	**2019**
NET RESULT	**(16 555)**	**(4652)**
Amounts to be recycled in the income statement:		
Unrealized gains on securities available for sale, net of tax		
Currency conversion difference	(4)	(43)
Amounts not to be recycled in the income statement:	(3)	(37)
Other comprehensive income in the period	**(7)**	**(80)**
GLOBAL PROFIT/LOSS	**(16 561)**	**(4 732)**

CONSOLIDATED BALANCE SHEET

ASSETS IN K€	December 31, 2020	December 31, 2019
Intangible assets	52 600	52 600
Tangible assets	947	1 009
Right-of-use assets	2 848	1 692
Financial assets	581	287
Differed tax assets	165	283
TOTAL NON CURRENT ASSETS	***57 141***	***55 871***
Trade receivables	1 074	747
Other current assets	9 390	6 474
Tax accounts receivables	0	0
Current financial assets	0	0
Cash and cash equivalents	29 368	25 842
TOTAL CURRENT ASSETS	***39 832***	***33 062***
TOTAL ASSETS	**96 973**	**88 933**

EQUITY & LIABILITIES IN K€	December 31, 2020	December 31, 2019
SHAREHOLDERS' EQUITY		
Stated capital	3 597	3 001
Share premium	38 622	21 670
Merger premium	26 827	26 827
Treasury stock	(93)	(148)
Reserves and retained earnings	8 966	11 838
Consolidated result	(16 555)	(4 652)
TOTAL SHAREHOLDERS' EQUITY	***61 364***	***58 536***
NON-CURRENT DEBTS		
Non-current financial liabilities	16 552	9 211
Non-current lease liabilities	2 318	1 413
Non-current deferred tax liabilities	2 080	5 066
Non-current provisions	531	377
TOTAL NON-CURRENT DEBTS	***21 481***	***16 067***
CURRENT DEBTS		
Current financial liabilities	50	548
Current lease liabilities	594	309
Trade payables	10 286	6 918
Corporate income tax liabilities	2	20
Social and tax payables	2 108	1 723
Other debts and accruals	1 088	4 812
TOTAL CURRENT DEBTS	***14 128***	***14 330***
TOTAL LIABILITIES	**96 973**	**88 933**

CONSOLIDATED CASH FLOW STATEMENT

In K€		December 31, 2020	December 31, 2019
	CONSOLIDATED RESULT	**(16 555)**	**(4 652)**
+/-	Depreciation, amortization and provision expenses	424	323
+	Amortization on "right-of-use"	457	251
+/-	Shares based payments (1)	1 787	1 511
	CASH FLOW BEFORE TAX	**(13 888)**	**(2 568)**
+	Financial charges	273	30
-	Income tax expenses	(2 692)	3 188
-	Tax paid	(50)	(70)
+/-	Working capital variation (2)	(2 920)	8 555
	CASH FLOW FROM OPERATING ACTIVITIES (A)	**(19 277)**	**9 135**
-	Tangible assets increase	(210)	(336)
+/-	Financial assets variation	0	2 861
+/-	Mutual finds units accounted in current financial assets	0	34
+/-	Loans and advances variation	(294)	(184)
	CASH FLOW FROM INVESTING ACTIVITIES (B)	**(504)**	**2 375**
+	Capital increase (including share premium)	17 427	0
+/-	Own shares transactions		0
+	Warrant subscription		0
+	Loan subscription	6 960	5 628
-	Loan repayment	(325)	(455)
-	Lease debt repayment (3)	(482)	(251)
-	Financial charges	(273)	(164)
	CASH FLOW FROM FINANCING ACTIVITIES (C)	**23 306**	**4 759**
+/-	Currency translation transactions (D)	0	0
	CASH VARIATION E = (A + B + C + D)	**3 526**	**16 269**
	CASH OPENING BALANCE (F)	25 842	9 573
	CASH CLOSING BALANCE (G)	29 368	25 842
	DIFFERENCE: E (G-F)	0	0

(1) Warrants and free shares awards granted in 2020 and valuated for 1 787 K€

(2) Mainly explained by:

- *Increase of trade receivable for 327 K€*
- *Increase of other current assets for 2 916 K€*
- *Increase of trade accounts payable for 3 368 K€*
- *Increase of social and tax payable for 385 K€*
- *Decrease of other debts for 3 724 K€*

(3) Explained by IFRS16 application, which corresponds to reimbursement of lease debt for 482 K€

As of December 31, 2020, the available cash is as follows:

In K€	December 31, 2020	December 31, 2019
Cash & equivalents according to IAS 7	29 368	25 842
Current financial assets	0	0
AVAILABLE CASH	**29 368**	**25 842**