EDISON

OSE Immunotherapeutics

Q418 update

A change of pace with three new clinical trials

Pharma & biotech

OSE has seen several positive developments in its pipeline over the past few months including the initiation of three new partnered clinical trials: a Phase I study with OSE-127 (Servier), a Phase I study with BI 765063 (previously OSE-172, Boehringer Ingelheim) and a Phase II study with Tedopi in pancreatic cancer (GERCOR). Two milestones were triggered totalling €19.5m, and an extra €7.5m is expected in H119 from BI. OSE also announced a new bispecific platform (pre-clinical), which it plans to feed with novel targets identified from a new collaboration with Léon Bérard Cancer Center. Our valuation is slightly higher at €190m or €12.8/share.

Year end	Revenue (€m)	PBT* (€m)	EPS* (€)	DPS (€)	P/E (x)	Yield (%)
12/17	6.7	(12.6)	(0.72)	0.0	N/A	N/A
12/18	24.5	4.8	0.38	0.0	N/A	N/A
12/19e	27.0	7.4	0.50	0.0	N/A	N/A
12/20e	0.0	(19.7)	(1.33)	0.0	N/A	N/A

Note: *PBT and EPS are normalised, excluding amortisation of acquired intangibles and exceptional items.

€19.5m in milestones triggered, further €7.5m in H119

Following the initiation of the Phase I study with OSE-127 in February 2019, Servier exercised the first step of the two-step option agreement triggering a €12m milestone payment (as expected). Results are expected in Q419. Additionally, OSE has received clinical trial authorisation to start its Phase I study with BI 765063 (previously OSE-172, partnered with Boehringer Ingelheim). The first patient is expected to be dosed in H119, which will trigger the full milestone payment of €15m. This would bring the total milestones received in H119 to €27m, as expected, which should extend cash reach into early 2021. The investigator-led Phase II study with Tedopi in pancreatic cancer initiated in Q418. First results are expected in 2020.

Full year 2018 results

OSE reported revenues of €24.5m in 2018 (vs €6.7m in 2017) and an operating profit of €4.8m in 2018 (vs a loss of €12.6m in 2017), largely in line with our expectations. This increase was mainly due to recognised income from the partnerships with BI and Servier. External 2018 R&D expenses were €15.1m versus €14.6m a year ago, which is made up mostly of the Tedopi Phase III NSCLC study. Net cash was €8m as of end-Q418, but including the milestone payment received from Servier and the partial milestone received from BI (approximately €7.5m) this is €19.5m, which should be sufficient to reach early 2021. With the full milestone payment expected from BI (€15m), cash should reach further into 2021.

Valuation: €190m or €12.8/share

Our OSE valuation is higher at €190m or €12.8/share, compared to €171m or €11.7/share, due to rolling our model forward (which includes the increased probability of the licensing payments received in 2019). All other assumptions for our rNPV model are unchanged. The first patient dosed in the Phase I BI 765063 study and any news on the updated strategy for FR104 are the nearest major catalysts for the share price.

17 April 2019

Price	**€4.0**
Market cap	**€59m**
Net cash (€m) as of end-Q418	8.0
Shares in issue	14.6m
Free float	24%
Code	OSE
Primary exchange	Euronext Paris
Secondary exchange	N/A

Share price performance

%	1m	3m	12m
Abs	(3.4)	9.9	(7.9)
Rel (local)	(5.6)	(3.9)	(10.4)
52-week high/low		€4.3	€3.0

Business description

OSE Immunotherapeutics is an immunotherapy company based in Nantes and Paris, France, and listed on the Euronext Paris exchange. OSE is currently developing immunotherapies for the treatment of solid tumours and autoimmune diseases and has established several partnerships with large pharma companies.

Next events

First patient dosed in Phase I BI 765063 study, triggering full €15m milestone	H119
Updated strategy for FR104	2019
Publication of H119 results	5 September 2019

Analysts

Jonas Peciulis +44 (0)20 3077 5728

Alice Nettleton +44 (0)20 3077 5700

healthcare@edisongroup.com

Edison profile page

Clinical pipeline progressing, milestones reached

OSE-127 option exercised by Servier triggers €12m milestone

On 7 February 2019, OSE announced that Servier had exercised the first step of the two-step option agreement (background to the deal is discussed in more detail in our initiation report). According to the agreement, this event triggers a €12m milestone payment.

The option was exercised based on the initiation of the Phase I study with OSE-127, where the first healthy volunteer was dosed on 20 December 2018. This study will be a randomised, double-blind, placebo-controlled study with 63 healthy volunteers, and will investigate the safety and tolerability of single and multiple ascending doses of OSE-127 (intravenous and subcutaneous doses). Pharmacokinetics, pharmacodynamics and immunogenicity will also be evaluated as well as exploratory biomarkers.

OSE gets the go-ahead for Phase I with OSE-172; full €15m milestone will be triggered once first patient is dosed

On 5 March 2019, OSE announced that it has clinical trial authorisation by both French and Belgian health authorities to start its Phase I study with BI 765063 (previously OSE-172), which is partnered with Boehringer Ingelheim. The trial is being conducted by OSE but paid for by BI. The milestone payment was partially triggered on the clinical trial authorisation (we expect €7.5m), but the remaining amount of the expected €15m milestone payment will be triggered once the first patient is dosed in the study (H119). As per the press release the trial will investigate safety, pharmacokinetics, pharmacodynamics and preliminary efficacy in patients with advanced solid tumours. The trial will evaluate BI 765063 as a monotherapy and in combination with BI's own investigational PD-1 inhibitor BI 754091. Following this study, BI plans to carry out additional studies with BI 765063 (exclusive license to BI, no expense to OSE).

On 2 April 2019 at The American Association for Cancer Research Annual Meeting, OSE presented new preclinical data demonstrating the potential for SIRPα inhibition in combination with anti-PD-L1 therapy, supporting the rationale for the combination in the Phase I study described above. The presentation was entitled 'SIRPα blockade reinvigorates myeloid cells in the tumour microenvironment and reverses T-cell exclusion'. The preclinical study found that a monoclonal antibody against SIRPα combined with an anti-PD-L1 improved overall survival in a mouse model of hepatocellular carcinoma (n=18). Eleven of 18 mice went into remission. OSE hypothesises that the synergistic effect was achieved by modifying the tumour microenvironment leading to an increased entry of T cells, which are then able to attack and kill the tumour cells.

Meanwhile, the CD47/SIRP-α space is gathering momentum. In March 2019, private US company Arch Oncology raised $50m in series B funding. The company is developing AO-176, an antibody against CD47 for the treatment of solid tumours. The company's investors include Roche. The company has recently initiated a Phase I study in solid tumours (n=90). Forty Seven, the current leader in the CD47/SIRP-α space (in terms of having the most advanced clinical programmes), published positive data from a Phase Ib study evaluating Hu5F9-G4 in non-Hodgkin's lymphoma in combination with rituximab: an objective response rate of 50% (n=11/22), and a complete response rate of 36%. Forty Seven is now evaluating Hu5F9-G4 in a Phase II study. Relevant companies in the field presented at the recent CD47/SIRP-α Summit in April 2019, including BI and OSE.

GERCOR initiates Phase II trial with Tedopi in PC

At the end of 2018, OSE's partner GERCOR (a physician network) initiated a Phase II trial with Tedopi in combination with Opdivo in pancreatic cancer. This was earlier than expected (H119). The

trial information is available on clinicaltrials.gov and is detailed in Exhibit 1. Management will evaluate options for further development and commercialisation depending on results from this study, which is when we will also reassess the opportunity. The insights from this trial could lead to further development for pancreatic cancer or a Phase III trial in non-small cell lung cancer (NSCLC) in combination with a checkpoint inhibitor.

Exhibit 1: Tedopi Phase II pancreatic cancer trial design, trial conducted by GERCOR (NCT03806309)

Summary design	A randomized non-comparative Phase II study of maintenance therapy with OSE2101 vaccine alone or in combination with nivolumab, or FOLFIRI after induction therapy with FOLFIRINOX in patients with locally advanced or metastatic pancreatic ductal adenocarcinoma (TEDOPaM - D17-01 PRODIGE 63 Study)
Number of patients	156
Treatment groups	A – Active comparator: maintenance with FOLFIRI (Intravenous (IV); folinic acid 400mg/m^2, irinotecan 180mg/m^2, 5-FU bolus 400mg/m^2 and continuous infusion 2,400mg/m^2) B – Experimental treatment arm: maintenance with OSE2101 (Tedopi) (subcutaneous injection on day 1, every 3 weeks for 6 doses then every 8 weeks for the remainder of year one and then every 3 months during year 2 as monotherapy, for a maximum treatment duration of 24 months) C – Experimental treatment arm: maintenance with OSE2101 (Tedopi) + nivolumab (Tedopi same regimen as in B, nivolumab – 360mg IV infusion on day 1 every 3 weeks for 6 doses, then 480mg every 4 weeks, f or a maximum treatment duration of 24 months)
Endpoints	Primary endpoint: OS Secondary endpoints: PFS, SSR, ORR, HRQoL, toxicity, treatment-related adverse events
Key inclusion criteria	HLA-A2 genotype Recurrent or advanced disease not amenable to surgery with curative intent (previous resection of primary tumour allowed) Stable disease or tumour response according to RECIST v1.1 after a 4-month (8 cycles) course of first-line FOLFIRINOX or modified FOLFIRINOX induction chemotherapy
Clinical trial sites	France
Sponsor	GERCOR
Collaborators	OSE Immunotherapeutics (Bristol-Myers Squibb supplying nivolumab)

Source: clinicaltrials.gov. Notes: PFS = progression free survival, SSR = rate of patients with success of the strategy, ORR = objective response rate, HRQoL = health related quality of life

Positive developments for Tedopi in NSCLC

Three Tedopi patient case reports presented at AACR

OSE presented results from three patients from its ongoing ATALANTE Phase III trial with Tedopi at AACR in Atlanta on 31 March 2019 (abstract and presentation are available). Out of 18 patients enrolled so far in the experimental arm, three patients were selected by clinicians for case reports(Exhibit 2). These patients all had advanced NSCLC – one patient had squamous-cell carcinoma (SCC) and two patients had non-squamous cell carcinoma (NSCC). Each had two previous lines of treatment; two of the patients were treated with an anti-PD1 and one patient had been treated with an anti-PD1 + anti-CTLA4.

OSE reported that the safety profile was manageable in these patients, no patients were withdrawn for toxicity, a partial response (PR) was seen in one patient and stable disease (SD) by RECIST 1.1 criteria in two patients.

Exhibit 2: Efficacy and safety of Tedopi in 3 patient case reports

	Patient 1	Patient 2	Patient 3	Patient 4 (control)
Best response to Tedopi	PR	SD > 9 mo	SD > 9 mo	PD
Treatment duration	3.7 mo	11.5 mo	16.9 mo	2.8 mo
Progression Free Survival	4.2 mo	11 mo	18.1 mo	2.1 mo
OS after Tedopi initiation	20.6+ mo	22.1+ mo	20.3+ mo	7.1+ mo
Immune–related adverse events	No side effects	Post-injection Cytokine release syndrome x 5; Local site induration; Hyperthyroidism	Hyperthyroidism	Hypothyroidism; Post-injection Fever x 2
Treatment after Tedopi	Yes (CT)	Yes (CT)	Yes (CT)	Yes (CT)

Source: OSE AACR presentation

These initial case reports are interesting, but presented from only three patients. The trial is still enrolling, which according to management is progressing as expected. The timelines are unchanged: interim data is expected at the end of 2019 (step 1, n=100). If the trial continues after this point (subject to independent data monitoring committee review), 225 additional patients will be enrolled, in which case final data is expected in 2021 (step 2, n=325).

A trial that could be used as a benchmark for the Atalante 1 trial is Medimmune's Phase Ib trial with durvalumab and tremelimumab in patiesnts that had received up to three prior lines of therapy, including prior anti-PD-1 or anti-PD-L1 monotherapy (NCT02000947, ASCO 2018 abstract). Overall, the one-year survival rate was 34.1%, median progression free survival (PFS) was 1.8 months and median overall survival (OS) was 8.5 months. According to management, the one-year survival rate for the Tedopi study could be benchmarked against this study in order to determine whether it will progress to the second step of the trial, which means that OSE will need to show 34.1% one-year survival.

CPI + chemo combos becoming standard of care in 1L NSCLC

Recently, the European Society for Medical Oncology (ESMO) and National Comprehensive Cancer Network (NCCN) published updated sets of treatment guidelines for NSCLC.

Our main conclusion from reading these updated guidelines is that the standard of care is changing in first-line (1L) and second-line (2L) advanced NSCLC patients without an actionable mutation, whereby checkpoint inhibitor and chemotherapy combinations are being used more and more in 1L:

- **The ESMO guidelines** generally recommend 1L treatment with a platinum-based chemotherapy and checkpoint inhibitor in patients with performance status (PS) 0-1 and low PD-L1 (<50%). For patients with NCC pembrolizumab (or atezolizumab) in combination with pemetrexed and a platinum-based ChT is recommended as standard, and for patients with SCC pembrolizumab (or atezolizumab) and carboplatin with paclitaxel or nab-P as standard. A patient expressing high levels of PD-L1 (≥50%) will likely still be given pembrolizumab as a monotherapy first line, and a patient with a high tumour mutational burden might be given nivolumab + ipilimumab first line, but after progression these patients will receive a platinum-based chemotherapy.
- **The NCCN guidelines** also generally recommend for the 1L treatment with a platinum-based chemotherapy and checkpoint inhibitor in patients expressing low PD-L1 levels (<50%). For patients with NCC, they recommend pembrolizumab and carboplatin (or cisplatin) + pemetrexed, or atezolizumab + carboplatin + paclitaxel + bevacizumab (based on the IMpower150 study). For patients with SCC, pembrolizumab + carboplatin + paclitaxel or nab-P is recommended (based on the KEYNOTE-407 study).

The changing clinical practice will improve outcomes for patients, but at the same time, many will still progress to 2L/3L. Since patients are now receiving a checkpoint inhibitor and chemotherapy earlier in the treatment pathway, this should have the effect of increasing the addressable population for Tedopi and supports our original assumptions. We maintain our assumption that 90% of metastatic NSCLC patients will receive a checkpoint inhibitor and chemotherapy (across both histologies – squamous and non-squamous), and 50% will progress (addressable for Tedopi).

Additionally, there remains a significant unmet need in this 2L/3L setting that Tedopi is targeting. That is, patients who do not have an actionable mutation and who have progressed after treatment with a checkpoint inhibitor and platinum-based chemotherapy (as described in our recent initiation report). The updated guidelines do not describe any new options for these patients. A popular option is a ramucirumab and docetaxel combination (based on the REVEL study). Since this patient population remains an area of unmet need, we maintain our original assumption of 25% peak penetration for Tedopi.

A notable close competitor in this space is AstraZeneca, which is carrying out a Phase II study with multiple treatment arms (NCT03334617, ASCO 2018 abstract), with results expected in 2021.

New bispecific CPI platform technology 'BiCKI' introduced

On 7 March 2019 at the World Immunotherapy Congress in San Diego, OSE announced its new technology called Bispecific Checkpoint Inhibitor Platform (BiCKI). This technology is a proprietary anti-PD-1 bispecific technology.

The BiCKI platform is a bispecific fusion protein built on an engineered anti-PD-1 mAb key backbone. The bispecific will therefore target both PD-1 and an additional target, such as IL-7.

The company plans to focus on developing this platform and candidates from it while other trials are ongoing. In this platform novel targets are identified from a new collaboration with Léon Bérard Cancer Center.

Exhibit 3: OSE Immunotherapeutics' R&D pipeline

Product	Indication, status	Deal comments, upcoming events
Tedopi *Peptide vaccine*	NSCLC (Phase III)	■ OSE is fully funding the Phase III study and plans to out-license after its completion. ■ **Phase III study ongoing, first data expected in H219, final data 2021.**
Tedopi *Peptide vaccine*	Pancreatic cancer (Phase II)	■ Phase II study sponsored by GERCOR, a physician network. No financial commitment from OSE. ■ **Phase II study initiated, first results expected 2020.**
FR104 *CD28 antagonist*	Rheumatoid arthritis (Phase II-ready)	■ Janssen had worldwide development and commercialisation rights in autoimmune diseases and transplantation for €155m in potential milestone payments + royalties (includes €10m upfront payment as option exercise fee received in August 2016), but returned the rights to OSE on 2 November 2018. ■ **OSE has received all data back from Janssen, and is considering options for further development.**
OSE-127 (Effi-7) *IL-7Rα (CD127) antagonist*	Ulcerative colitis, Sjögren's syndrome (Phase I)	■ Licence option agreement between OSE and Servier in December 2016. Worldwide licence option agreement in autoimmune diseases. €272m total deal value including €10.3m upfront payment (received 2016), two-step €30m option exercise fee (if option is exercised) and development and commercial milestones. Plus double-digit royalties on sales. ■ OSE is developing the asset until Phase II, which is currently financed by a Bpifrance grant of €9.1m. Servier will continue the development of the asset afterwards. OSE study OSE-127 in ulcerative colitis and Servier will develop OSE-127 in Sjögren's syndrome. ■ **Phase I initiated, results expected Q419.** ■ **First step of option agreement exercised in Q119, €12m fee triggered.**
OSE-172 (Effi-DEM) *Myeloid checkpoint inhibitor*	Multiple cancer indications (preclinical)	■ Licence agreement with Boehringer Ingelheim in April 2018. Worldwide rights in multiple cancer indications. €1.1bn potential development and commercial milestones, including €15m upfront payment (received April 2018) and up to €15m milestone payment on initiation of Phase I study. Plus royalties on worldwide net sales. ■ Boehringer Ingelheim bears all R&D costs (including Phase I). OSE will finish the Phase I study (Phase Ia/Ib) and Boehringer Ingelheim will take over for the subsequent trials and commercialisation. ■ **Up to €15m milestone payment on initiation of Phase I study (first half of this milestone payment was triggered by clinical trial authorisations, second half expected after dosing of first patient in H119).**
OSE-703 (Effi-3) *IL-7R Mab*	Solid tumours (preclinical)	■ Cytotoxic monoclonal antibody against IL-7R being developed in collaboration with the Memorial Sloan Kettering Cancer Center (CAR-T expertise). ■ OSE-703 is engineered to improve three types of antibody mediated cytotoxicity: Antibody Dependent Cell-mediated Cytotoxicity (ADCC), Antibody-dependent cellular phagocytosis (ADCP) and Complement-dependent cytotoxicity (CDC). ■ **Next step: development strategy in solid tumours.**
BiCKI *Bispecific anti-PD-1 & innovative targets*	Various cancers	■ OSE has introduced a new platform technology. ■ **Next step: pre-clinical proof of concept.**

Source: Edison Investment Research; OSE Immunotherapeutics

Valuation

We value OSE based on a risk-adjusted NPV using a 12.5% discount rate and including net cash at end-Q418, which results in a value of €190m or €12.8/share, vs €171m or €11.7/share previously. This increase is due to rolling our model forward. The 2019 milestone payments that have been triggered (total €19.5m) are no longer risk adjusted, and the second half of the BI milestone €7.5m is risk adjusted with a high probability of 95%. We make no other changes to our assumptions, described in detail in our initiation report.

We include Tedopi NSCLC, FR104, OSE-127 and OSE-172 in our valuation. Although GERCOR has initiated the Phase II study with Tedopi in pancreatic cancer, we still do not include this indication in the valuation since the commercial strategy in this indication has not been confirmed – OSE will evaluate this based on the Phase II results. We do not include the new bispecific platform in the valuation since it is still in pre-clincial stage.

Exhibit 4: Sum-of-the-parts OSE valuation

Product	Launch	Peak sales ($m)	Unrisked NPV (€m)	Unrisked NPV/share (€)	Probability (%)	rNPV (€m)	rNPV/share (€)
Tedopi – NSCLC	2023	657	255.4	17.2	25%	55.8	3.8
FR104 – rheumatoid arthritis	2026	1,056	217.9	14.7	15%	52.5	3.5
OSE-127 – ulcerative colitis	2027	843	170.8	11.5	10%	31.3	2.1
OSE-172 – multiple cancer indications (TNBC)	2027	1,801	258.0	17.4	7.5%	42.0	2.8
net cash at end-2018			8.0	0.5	100%	8.0	0.5
Valuation			**910.1**	**61.4**		**189.5**	**12.8**

Source: Edison Investment Research. Note: WACC = 12.5% for product valuations.

Financials

With its full year 2018 financial results OSE reported revenues of €24.5m (vs €6.7m in 2017) and an operating profit of €4.8m (vs a loss of €12.6m in 2017), which were largely in line with our expectations. The increase in revenues and operating profit in 2018 was mainly due to the upfront payment from BI (received in April 2018) and recognising income from the upfront payment from Servier (upfront payment received in 2016 but recognised over a longer period of time).

Total operating expenses for 2018 were €19.5m vs €19.3m in 2017. R&D expenses are the company's largest expense: €15.1m in 2018 vs €14.6m in 2017. The largest contributor is the Tedopi Atalante 1 Phase III study. We expect R&D costs to remain largely stable at €15m per annum until the end of the trial in 2021. This is because we expect other clinical trials to be fully financed by the partner and grants for the cost will be relatively low for the preclinical and some clinical work. In the nearest future we do not expect OSE to initiate its own Phase II study with FR104, recently returned from Janssen, so we do not factor in any costs relating to future studies in our financial model, as we expect the company to seek a partner. OSE will start to focus more on its new bispecific platform, however we do not expect this to become a significant part of R&D expense for now since it is still in pre-clinical stage. Overhead expenses were €4.4m in 2018 vs €4.7m in H117. OSE's operations are currently funded through its partnerships and Bpifrance grants, where some grants relate to a particular R&D project.

As of 31 December 2018, OSE had cash, cash equivalents and financial assets of €12.4m (includes 'current financial assets'). Last reported (FY18) results also include debt of €4.5m, which is mainly government loans. Since end-2018, OSE has received a €12m milestone payment from Servier (first step of the option exercise) and a €7.5m milestone payment from BI (approximately, our estimation due to the milestone being partially met). According to management, current cash burn is around €15m per year. Therefore, current cash including the cash received since end-2018 is expected to last into early 2021. If the full €15m milestone from BI is received H119, the cash

runway should extend further into 2021. If this payment is not received, OSE may have to raise funds in another way or adjust its R&D activities. We assign a very high probability that OSE will receive the second half of the milestone payment from BI (95%), since OSE now has clinical trial authorisation and is likely to dose the first patient in the coming months.

Our 2019 revenue estimates have increased to €27m from €0m, which represents the milestone payments that were not previously included. €19.5 has now been triggered and €7.5m has a very high probability of being received in 2019 so we now include these in the P&L. Overhead forecasts are slightly lower at 8% since the 2018 figure was lower than our expectations.

Exhibit 5: Financial summary

€000s	2017	2018	2019e	2020e
Year end 31 December	IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS				
Revenue	6,682	24,456	27,000	0
Cost of Sales	0	0	0	0
Gross Profit	6,682	24,456	27,000	0
Research and development	(14,641)	(15,057)	(15,000)	(15,000)
EBITDA	(12,502)	4,963	7,533	(19,613)
Operating Profit (before amort. and except.)	(12,625)	4,847	7,442	(19,694)
Intangible Amortisation	0	0	0	0
Exceptionals	0	0	0	0
Other	0	0	0	0
Operating Profit	(12,625)	4,847	7,442	(19,694)
Net Interest	0	0	(1)	(6)
Profit Before Tax (norm)	(12,625)	4,847	7,441	(19,700)
Profit Before Tax (reported)	(12,625)	4,847	7,441	(19,700)
Tax	2,238	783	0	0
Profit After Tax (norm)	(10,387)	5,630	7,441	(19,700)
Profit After Tax (reported)	(10,387)	5,630	7,441	(19,700)
Average Number of Shares Outstanding (m)	14.4	14.6	14.8	14.8
EPS - normalised (€)	(0.72)	0.38	0.50	(1.33)
EPS - normalised fully diluted (€)	(0.72)	0.36	0.50	(1.33)
EPS - reported (€)	(0.72)	0.38	0.50	(1.33)
Dividend per share (€)	0.0	0.0	0.0	0.0
Gross Margin (%)	100.0	100.0	100.0	N/A
EBITDA Margin (%)	N/A	20.3	27.9	N/A
Operating Margin (before GW and except.) (%)	N/A	19.8	27.6	N/A
BALANCE SHEET				
Fixed Assets	53,367	53,879	53,789	53,707
Intangible Assets	52,600	52,600	52,600	52,600
Tangible Assets	429	904	814	732
Investments	338	375	375	375
Current Assets	12,655	14,687	22,737	3,539
Stocks	0	0	0	0
Debtors	127	2,253	2,253	2,253
Cash	9,646	9,573	17,623	1,286
Other	2,882	2,861	2,861	0
Current Liabilities	(14,497)	(9,075)	(9,075)	(9,075)
Creditors	(13,908)	(8,447)	(8,447)	(8,447)
Short term borrowings	(589)	(628)	(628)	(628)
Long Term Liabilities	(7,409)	(6,075)	(6,075)	(6,075)
Long term borrowings	(4,296)	(3,832)	(3,832)	(3,832)
Other long term liabilities	(3,113)	(2,243)	(2,243)	(2,243)
Net Assets	44,116	53,416	61,376	42,097
CASH FLOW				
Operating Cash Flow	(7,995)	1,860	8,378	(18,768)
Net Interest	0	0	(1)	(6)
Tax	0	(783)	0	0
Capex	(353)	(593)	(325)	(424)
Acquisitions/disposals	0	0	0	0
Financing	(50)	(37)	0	0
Other	58	(95)	(1)	2,861
Dividends	0	0	0	0
Net Cash Flow	(8,340)	352	8,050	(16,337)
Opening net debt/(cash)	(13,101)	(4,761)	(5,113)	(13,163)
HP finance leases initiated	0	0	0	0
Other	0	(0)	0	0
Closing net debt/(cash)	(4,761)	(5,113)	(13,163)	3,174

Source: OSE Immunotherapeutics accounts, Edison Investment Research. Note: closing net cash in 2019e shown as €5.1m does not include other 'current financial assets' of €2.9m.

EDISON

General disclaimer and copyright

This report has been commissioned by OSE Immunotherapeutics and prepared and issued by Edison, in consideration of a fee payable by OSE Immunotherapeutics. Edison Investment Research standard fees are £49,500 pa for the production and broad dissemination of a detailed note (Outlook) following by regular (typically quarterly) update notes. Fees are paid upfront in cash without recourse. Edison may seek additional fees for the provision of roadshows and related IR services for the client but does not get remunerated for any investment banking services. We never take payment in stock, options or warrants for any of our services.

Accuracy of content: All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report and have not sought for this information to be independently verified. Opinions contained in this report represent those of the Edison analyst at the time of publication. Forward-looking information or statements in this report contain information that is based on assumptions, forecasts of future results, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current expectations.

Exclusion of Liability: To the fullest extent allowed by law, Edison shall not be liable for any direct, indirect or consequential losses, loss of profits, damages, costs or expenses incurred or suffered by you arising out or in connection with the access to, use of or reliance on any information contained on this note.

No personalised advice: The information that we provide should not be construed in any manner whatsoever as, personalised advice. Also, the information provided by us should not be construed by any subscriber or prospective subscriber as Edison's solicitation to effect, or attempt to effect, any transaction in a security. The securities described in the report may not be eligible for sale in all jurisdictions or to certain categories of investors.

Investment in securities mentioned: Edison has a restrictive policy relating to personal dealing and conflicts of interest. Edison Group does not conduct any investment business and, accordingly, does not itself hold any positions in the securities mentioned in this report. However, the respective directors, officers, employees and contractors of Edison may have a position in any or related securities mentioned in this report, subject to Edison's policies on personal dealing and conflicts of interest.

Australia

Edison Investment Research Pty Ltd (Edison AU) is the Australian subsidiary of Edison. Edison AU is a Corporate Authorised Representative (1252501) of Myonlineadvisers Pty Ltd who holds an Australian Financial Services Licence (Number: 427484). This research is issued in Australia by Edison AU and any access to it, is intended only for "wholesale clients" within the meaning of the Corporations Act 2001 of Australia. Any advice given by Edison AU is general advice only and does not take into account your personal circumstances, needs or objectives. You should, before acting on this advice, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs. If our advice relates to the acquisition, or possible acquisition, of a particular financial product you should read any relevant Product Disclosure Statement or like instrument.

New Zealand

The research in this document is intended for New Zealand resident professional financial advisers or brokers (for use in their roles as financial advisers or brokers) and habitual investors who are "wholesale clients" for the purpose of the Financial Advisers Act 2008 (FAA) (as described in sections 5(c) (1)(a), (b) and (c) of the FAA). This is not a solicitation or inducement to buy, sell, subscribe, or underwrite any securities mentioned or in the topic of this document. For the purpose of the FAA, the content of this report is of a general nature, is intended as a source of general information only and is not intended to constitute a recommendation or opinion in relation to acquiring or disposing (including refraining from acquiring or disposing) of securities. The distribution of this document is not a "personalised service" and, to the extent that it contains any financial advice, is intended only as a "class service" provided by Edison within the meaning of the FAA (i.e. without taking into account the particular financial situation or goals of any person). As such, it should not be relied upon in making an investment decision.

United Kingdom

Neither this document and associated email (together, the "Communication") constitutes or form part of any offer for sale or subscription of, or solicitation of any offer to buy or subscribe for, any securities, nor shall it or any part of it form the basis of, or be relied on in connection with, any contract or commitment whatsoever. Any decision to purchase shares in the Company in the proposed placing should be made solely on the basis of the information to be contained in the admission document to be published in connection therewith.

This Communication is being distributed in the United Kingdom and is directed only at (i) persons having professional experience in matters relating to investments, i.e. investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "FPO") (ii) high net-worth companies, unincorporated associations or other bodies within the meaning of Article 49 of the FPO and (iii) persons to whom it is otherwise lawful to distribute it. The investment or investment activity to which this document relates is available only to such persons. It is not intended that this document be distributed or passed on, directly or indirectly, to any other class of persons and in any event and under no circumstances should persons of any other description rely on or act upon the contents of this document (nor will such persons be able to purchase shares in the placing).

This Communication is being supplied to you solely for your information and may not be reproduced by, further distributed to or published in whole or in part by, any other person.

United States

The Investment Research is a publication distributed in the United States by Edison Investment Research, Inc. Edison Investment Research, Inc. is registered as an investment adviser with the Securities and Exchange Commission. Edison relies upon the "publishers' exclusion" from the definition of investment adviser under Section 202(a) (11) of the Investment Advisers Act of 1940 and corresponding state securities laws. This report is a bona fide publication of general and regular circulation offering impersonal investment-related advice, not tailored to a specific investment portfolio or the needs of current and/or prospective subscribers. As such, Edison does not offer or provide personal advice and the research provided is for informational purposes only. No mention of a particular security in this report constitutes a recommendation to buy, sell or hold that or any security, or that any particular security, portfolio of securities, transaction or investment strategy is suitable for any specific person.

Frankfurt +49 (0)69 78 8076 960
Schumannstrasse 34b
60325 Frankfurt
Germany

London +44 (0)20 3077 5700
280 High Holborn
London, WC1V 7EE
United Kingdom

New York +1 646 653 7026
295 Madison Avenue, 18th Floor
10017, New York
US

Sydney +61 (0)2 8249 8342
Level 4, Office 1205
95 Pitt Street, Sydney
NSW 2000, Australia