EDISON

# OSE Immunotherapeutics

Company update

## Transforming into R&D powerhouse

Pharma & biotech

**Despite the ongoing pandemic and difficult times for most of the industry, OSE has managed to progress its R&D activities, which most recently culminated in an out-licensing deal. All this helped the share price to triple since the beginning of 2020. OSE carried out a successful private placement of €18.6m in November 2020 followed by a substantial loan from the European Investment Bank in February 2021, which gives OSE access to up to €25m. The funding provides visibility to Q222, which could be supplemented by potential milestone payments from its partners. Upcoming newsflow from the clinical and preclinical pipeline should provide continued catalysts and hence continue to support the share price. Our updated valuation is €291m or €16.2 per share.**

| Year end | Revenue (€m) | PBT* (€m) | EPS* (€) | DPS (€) | P/E (x) | Yield (%) |
|---|---|---|---|---|---|---|
| 12/19 | 26.0 | (1.2) | (0.30) | 0.0 | N/A | N/A |
| 12/20 | 10.4 | (18.5) | (1.02) | 0.0 | N/A | N/A |
| 12/21e | 16.0 | (14.1) | (0.85) | 0.0 | N/A | N/A |
| 12/22e | 0.0 | (30.4) | (1.69) | 0.0 | N/A | N/A |

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

## FR104 out-licensed, third partner on board

On 26 April 2021, OSE announced that it had out-licensed rights to FR104 in the organ transplantation market to Veloxis Pharmaceuticals. Veloxis plans to develop FR104 as a novel drug to prevent organ rejection after transplantation, while OSE retains the rights to develop FR104 in autoimmune diseases. According to the terms of the deal, OSE could receive up to €315m in milestone payments, which includes a €7m upfront payment and tiered royalties. We view the deal terms as attractive, as they are much better than those OSE had agreed with Janssen several years ago (which has since returned the rights) and Veloxis received rights only to a specific therapy area.

## Upcoming newsflow

OSE is now focusing on regulatory interactions and partnering discussions regarding its most advanced Phase III asset, Tedopi, a cancer vaccine for NSCLC. A Phase I study in partnership with Boehringer Ingelheim (BI) is evaluating BI 765063, antagonist of SIRPα, in solid tumours is ongoing and the first results are expected in H121. Two Phase II trials with OSE-127, an anti-IL-7Rα antibody, are underway in ulcerative colitis (sponsored by OSE, ongoing) and Sjögren's syndrome (sponsored by Servier, start in Q2/Q321). The new project CoVepiT, a potentially prophylactic vaccine against the SARS-CoV-2 virus, is progressing as well, with the Phase I study expected to start shortly.

## Valuation: €291m or €16.2 per share

Our updated valuation of OSE is €291m or €16.2 per share, compared to €240m or €16.0 per share previously. The main change to our model is the addition of milestone payments (risk-adjusted and discounted; royalties are not reflected for now) related to the Veloxis deal. The valuation per share is virtually unchanged as the uplift resulting from the deal was offset by the private placement in November.

**30 April 2021**

| | |
|---|---|
| **Price** | **€11.62** |
| **Market cap** | **€209m** |
| Gross cash (€m) at end-FY20 (government debt not included) | 22.9 |
| Shares in issue | 18.0m |
| Free float | 25% |
| Code | OSE |
| Primary exchange | Euronext Paris |
| Secondary exchange | N/A |

### Share price performance


| % | 1m | 3m | 12m |
|---|---|---|---|
| Abs | (10.3) | 36.7 | 119.2 |
| Rel (local) | (14.2) | 18.4 | 63.1 |
| 52-week high/low | €15.0 | | €5.5 |

### Business description

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

### Next events

| | |
|---|---|
| Additional NSCLC patient data from the Phase III Tedopi trial | Q221 |
| Initiation of Phase II trial with OSE-127 by Servier | Q2/Q321 |
| Start of CoVepiT Phase I trial | H121 |
| First clinical data from Phase I with BI 765063 | H121 |

### Analyst

Jonas Peciulis +44 (0)20 3077 5728

Dr Sean Conroy +44 (0)20 3077 5700

healthcare@edisongroup.com

Edison profile page

## Veloxis deal terms are attractive

Veloxis Pharmaceuticals is a Danish biotech that was acquired for $1.3bn in 2019 by Japanese Asahi Kasei Group (market capitalisation of c $14.8bn). Since Veloxis is owned by a large group, we do not expect a granular development plan for FR104, but the chief scientific officer of the company indicated that as the first step it will aim to develop FR104 as novel alternative to calcineurin inhibitors (CNIs) for immunosuppression in kidney transplantation. CNIs (cyclosporine A and tacrolimus) are the cornerstone in this setting and have been used in renal transplant recipients for more than 20 years, which indicates a lack of treatment changing novel therapeutics.

FR104 is a CD28 antagonist. CD28 acts as co-receptor in the T-cell receptor (TCR) and delivers stimulatory signals from antigen-presenting cells to T-cells. An antagonist of CD28 has potential clinical applications in multiple autoimmune diseases and transplantation where T-cells are involved.

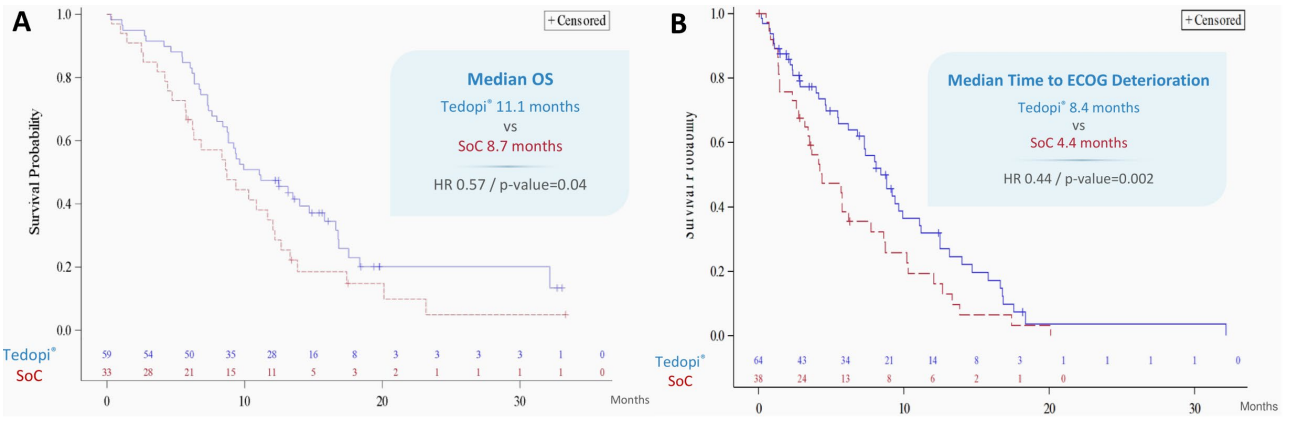
It is worth remembering that FR104 was previously out-licensed to Janssen which, after portfolio reprioritisation, returned the rights to OSE in 2018. The terms of that deal stipulated milestone payments of up to €155m plus royalties, including €10m as an upfront payment (this and the upfront payment from Veloxis mean that OSE has already received €17m from this asset). However, Janssen had rights to develop the drug candidate in autoimmune diseases and transplantation, while Veloxis gained rights in transplantation only. So, all in all, we view the deal terms as attractive. To reflect the value of the Veloxis deal, we have included risk-adjusted and discounted milestone payments to OSE's valuation in our model.

## Evaluating strategic options for Tedopi

As a reminder, on 21 September 2020, OSE presented additional data from step one of the Phase III Atalante 1 trial at the virtual ESMO conference. The totality of data points to a favourable benefit/risk ratio of Tedopi treatment in patients with locally advanced or metastatic non-small cell lung cancer (NSCLC) after failed checkpoint inhibitor treatment. One the most interesting details was that median overall survival (mOS) reached statistical significance in the Tedopi vs chemotherapy arm of the per-protocol (mPP) analysis (Exhibit 1A). This is particularly encouraging as, due to the early end of the trial, the cross-arm comparison is limited. The time to ECOG deterioration (general health status of a patient) was also significantly longer in the Tedopi group, indicating better quality of life (Exhibit 1B). Our detailed analysis is in our previously published report.

The Phase III trial evaluated Tedopi as second- or third-line treatment versus standard of care (docetaxel or pemetrexed) in HLA-A2-positive patients (c 45% of the total population) with locally advanced (stage IIIB), or metastatic (stage IV) NSCLC. Patients who have failed post-checkpoint inhibitor treatment represent an area where no novel treatment has been approved yet.

**Exhibit 1: Selected data from step one of Phase III trial with Tedopi – overall survival and quality of life benefit**




Source: OSE, ESMO 2020

Due to the COVID-19 pandemic, OSE has decided to terminate enrolment into step two of the trial, as NSCLC patients are vulnerable to coronavirus infections and there was therefore a substantial risk of data loss. However, the company expects to collect data from those patients who were randomised into step two before the termination, which is around 100 subjects. This means that data from a total of c 200 patients should be available by end-Q321.

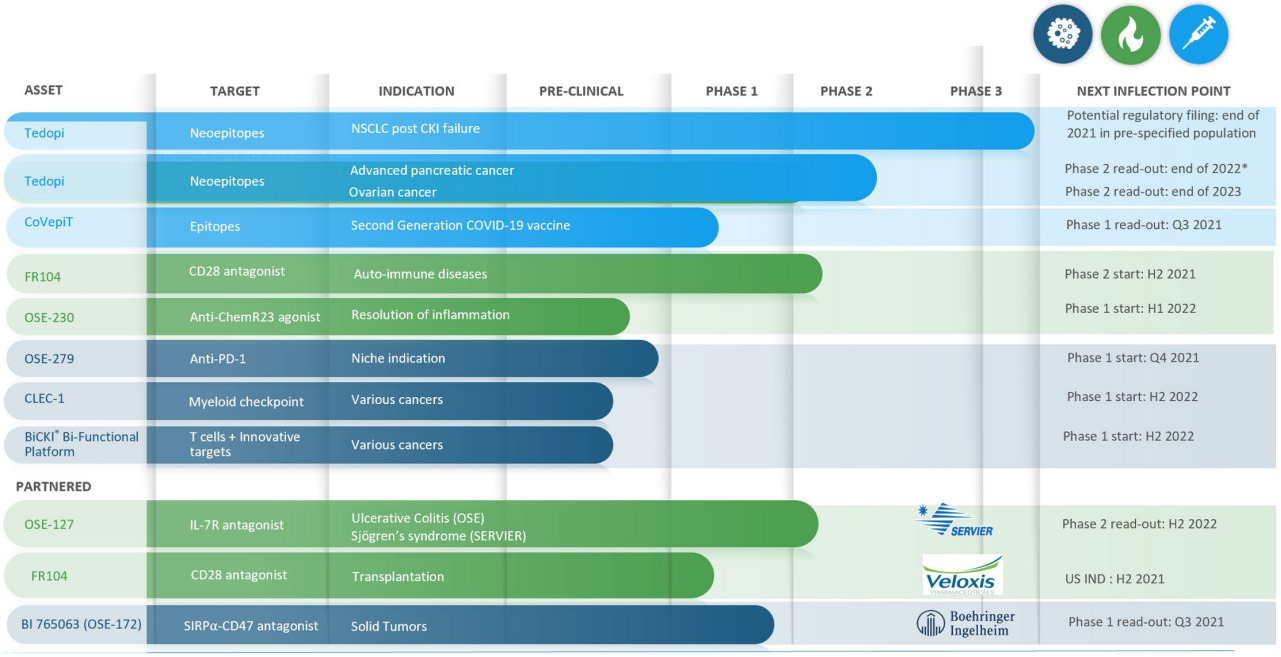
OSE is now focusing on regulatory interactions and partnering discussions. As is typical in these situations, the timelines for any partnership deals are uncertain. The company expects regulatory filing to be achievable by the end of 2021.

## Tedopi beyond lung cancer: Investigator-led TEDOPaM and TEDOVA trials

Outside of its own Phase III trial, OSE collaborates with other investigators to collect as much data on Tedopi as possible. OSE was approached by GERCOR, an association of physicians, to carry out an exploratory Phase II TEDOPaM study with Tedopi in combination with nivolumab (Opdivo) in pancreatic cancer. The recruitment of new patients to this trial was interrupted by the COVID-19 pandemic and temporarily suspended in March 2020. The study is set to resume recruiting patients in Q221, but after the evaluation of interim data by the independent data monitoring committee, patients will no longer be treated with Opdivo. Going forward, the trial will focus on the combination of Tedopi plus chemotherapy (FOLFIRI) vs standalone chemotherapy. As this is an investigator-led trial, OSE has little influence on decisions. However, it is still a cost-effective opportunity to accumulate data with Tedopi. The primary endpoint remains a one-year survival rate and a preliminary readout is expected by end-2022.

The newest addition to Tedopi's R&D programme is an investigator-led trial with Tedopi alone or in combination with pembrolizumab (Keytruda, Merck & Co) as maintenance treatment in ovarian cancer patients after chemotherapy versus standard of care (so a three-arm trial). This trial is also sponsored by an investigator, ARCAGY-GINECO, while Merck & Co will provide Keytruda. As with the study in pancreatic cancer, the new TEDOVA trial is a cost-effective way for OSE to evaluate Tedopi in another cancer indication. Moreover, Merck & Co is providing Keytruda for free, so there is at least one large pharma with significant interest in the study.

**Exhibit 2: OSE's R&D pipeline**




Source: OSE. Note: *Affected by COVID-19 pandemic.

## BI 765063: First clinical data expected in H121

BI 765063 (OSE-172) is a SIRP-α antagonist for solid tumours. The CD47/SIRP-α space continues to attract significant interest from large pharma and biotech companies. BI 765063 is expected to work in a similar way to T-cell immune checkpoint inhibitors in the tumour microenvironment, but instead of T-cells, it inhibits the checkpoints between tumour cells and myeloid cells: myeloid-derived suppressor cells (MDSCs) and tumour-associated macrophages (TAMs). It binds to signal regulatory peptide alpha (SIRPα) on myeloid cells, which inhibits SIRPα/CD47 interaction (CD47 on the surface of cancer cells). CD47 acts as a 'don't eat me' signal to macrophages of the immune system, so when blocked this increases the likelihood that the myeloid cell recognises the cancer cell as foreign, then attacks and digests the cancer cell. Phagocytosis leads to presentation of cancer antigens on the surface, which stimulates the immune system.

The most recent fundamental discovery was that in addition to being inhibited in the tumour microenvironment, the macrophages no longer secrete chemokines, small protein mediators which attract immune cells (Gauttier et al, October 2020). So, by expressing CD47, tumours not only induce a 'don't eat me' signal to macrophages, but also send a 'don't find me' signal. As a result, T-cells are no longer attracted to the tumour microenvironment (so called T-cell exclusion). BI 765063 was able to reverse this mechanism, which led to T-cell migration into the tumour.

A Phase I study in solid tumours is ongoing in partnership with BI, where BI 765063 is combined with BI's own T-cell checkpoint inhibitor PD-1 antagonist. The first results are expected in H121. OSE has received a total of €30m in licence payments from BI. Up to €1.1bn is still potentially due plus royalties on sales.

## CoVepiT: Prophylactic COVID-19 vaccine ready to enter clinical development

CoVepiT is a new project announced in May 2020, which is focused on a vaccine against the pandemic virus SARS-CoV-2. OSE is using its expertise in the selection and optimisation of peptides and their formulation. After scanning thousands of potential neo-epitopes, OSE selected 11 proteins of coronaviruses with a very low level of mutation, but high potential for immunogenicity and broad coverage including all initial and novel SARS-CoV-2 variants identified globally to date. In preclinical and human ex vivo studies, the vaccine candidate showed the ability to induce T-cells against the SARS-CoV-2 virus. OSE has received authorisation to start the Phase I/II trial (n=48), which will begin enrolling patients shortly. This project is supported by a grant of up to €200k from Nantes Metropole and a funding budget of up to €5.2m from Bpifrance.

## OSE-127/S95011: Two Phase II trials and a milestone payment

Following a positive Phase I in Q419 and a slight delay caused by the pandemic, OSE-127, an IL-7Rα antagonist, is moving into Phase II development, which consists of two Phase II trials, one in ulcerative colitis (sponsored by OSE) and one in Sjögren's syndrome (sponsored by OSE's partner Servier). OSE started to enrol ulcerative colitis patients who had not responding to other treatments in December 2020. Meanwhile, Servier has indicated that regulatory authorisations have been received and the trial in Sjögren's syndrome should start by end-Q221 or early Q321.

OSE is developing OSE-127 in partnership with Servier, which has a two-step option to in-license it after completion of the Phase II trials. A €5m milestone payment from Servier is expected as soon as the first patient is recruited to the Phase II trial in Sjögren's syndrome. So far, OSE has received a total of €20.3m. Up to €252m in milestone payments is still potentially due plus royalties.

OSE-127 is a humanised monoclonal antibody against IL-7Rα, specifically CD127, a cytokine that controls the proliferation, apoptosis and activation of CD4 and CD8 T-cells in humans. It is a novel and differentiated mechanism of action as OSE-127/S95011 is the only full antagonist of IL-7R.

## Expanding preclinical R&D pipeline

In addition to making progress with a fairly diversified clinical R&D pipeline, OSE continues to innovate and grow its preclinical pipeline. In a previous report, we introduced two projects: one focusing on **C-type lectin receptor (or CLEC-1) inhibition** and another involving OSE's **Bispecific Antibody Checkpoint Inhibitor (BiCKI) platform**. At this year's AACR conference (10–15 April), the company presented more preclinical data on these projects and introduced a new project, OSE-230, which is an **anti-ChemR23 antibody** aimed at modulating inflammation. This target is known as chemerin chemokine-like receptor 1 (CMKLR1), a G-protein coupled receptor (GPCR) expressed on myeloid immune cells. The new OSE-230 is a first-in-class therapeutic drug candidate that has potential to resolve chronic inflammation. The drug candidate can be developed in various chronic inflammation indications, which includes both autoimmune diseases and tumour-associated inflammation. It can therefore be developed as an anti-cancer drug as well, which was in fact the focus of the AACR poster presentation. Although all these projects are preclinical, they represent cutting-edge science and indicate OSE's striking internal capability to innovate. The company will likely explore multiple paths to obtain the best return from these assets, which could range from early licensing to moving into clinical development.

## Significant EIB loan indicates external validation

The most recent positive news was the loan facility of up to €25m from the European Investment Bank announced in February 2021. The loan is divided into three tranches (two tranches of €10m each and a third tranche of €5m). The first tranche is unconditional and OSE indicated that it will request it before the end May 2021. According to OSE, this extends funding visibility until Q222. The remaining two tranches are conditional on specific clinical milestones being achieved.

The loan carries fixed annual interest of 5% and each drawdown matures in five years. OSE has also committed to issue warrants to the EIB after the first (850,000) and the second (550,000) drawdowns, which give the right to subscribe to one share of OSE. However, they will become exercisable only after the end of the tranche's maturity period. The loan also has an anti-dilution clause.

### Use of proceeds

The first tranche will be used to expand the development of Tedopi in additional cancer indications in combination with a checkpoint inhibitor; and the initiation of a Phase I/II trial with OSE-279 in a niche oncology indication. OSE-279 is OSE's proprietary checkpoint inhibitor and the benefits of investing in its development go beyond this single project. For example, OSE-279 could be combined with OSE's other anticancer drugs instead of third-party CPIs. OSE plans to use subsequent tranches to accelerate the development of other projects, in particular FR104 and the new asset OSE-230.

## Financials and valuation

Total FY20 operating expenses were €29.4m (of which €22.4m related to R&D) versus €27.4m in FY19. R&D spending was somewhat ahead of our estimates, and we have therefore increased our 2021 operating loss estimate to €20.7m from €14.1m previously.

As of end-2020, OSE had cash, cash equivalents and financial assets of €29.4m, which is sufficient to fund operations until Q222, according to the company. This included the proceeds from a private placement of €18.6m in November 2020. The balance sheet also includes debt of €16.6m, which is mainly government loans or debt guaranteed by the government. As described above, the cash position will be further strengthened by the expected first drawdown of the EIB loan, which we include in our model and €5.1m in 2020 research tax credits.

Our updated valuation of OSE is €291m or €16.2 per share, compared to €240m or €16.0 per share previously. The valuation per share is virtually unchanged as the uplift resulting from the inclusion of milestones arising from the Veloxis deal was offset by the private placement in November 2020. We do not include royalties at this stage as there is no development visibility at present. We aim to update our model when we get more information.

To reflect the value of the Veloxis deal, we have included the potential milestone payments in our rNPV model, so they are spread out over a number of years in line with standard drug development timelines. We adjusted these milestones with standard success probabilities (15%) and discounted to the present time. Because this was a full out-licensing deal and Veloxis is owned by a large corporation, the granularity of the development details is not yet known, and we therefore do not have enough visibility for a bottom-up approach to calculate potential peak sales. So, our approach is conservative as it does not capture the expected royalties, which will be based on the sales achieved by the drug candidate.

**Exhibit 2: 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 | 340.0 | 18.9 | 25% | 85.0 | 4.7 |
| OSE-127 – ulcerative colitis | 2027 | 843 | 208.0 | 11.6 | 15% | 41.0 | 2.3 |
| OSE-172 – multiple cancer indications (TNBC) | 2027 | 1,801 | 311.3 | 17.3 | 10% | 44.1 | 2.5 |
| FR104 – rheumatoid arthritis | 2026 | 1,056 | 256.2 | 14.2 | 15% | 48.5 | 2.7 |
| | | | | | | | |
| FR104 - Veloxis deal milestones | | | 112.7 | 6.3 | 15% | 35.5 | 2.0 |
| | | | | | | | |
| Cash, last reported* | | | 36.4 | 2.0 | 100% | 36.4 | 2.0 |
| **Valuation** | | | **1,264.5** | **70.3** | | **290.5** | **16.2** |

Source: Edison Investment Research. Note: WACC = 12.5% for product valuations. Note: *OSE's debt, not shown above, consists of government loans, which are typically repayable on commercial success only.

**Exhibit 3: Financial summary**

| €'000s | 2019 | 2020 | 2021e | 2022e |
|---|---|---|---|---|
| December | IFRS | IFRS | IFRS | IFRS |
| **PROFIT & LOSS** | | | | |
| Revenue | 25,952 | 10,431 | 16,000 | 0 |
| Cost of Sales | 0 | 0 | 0 | 0 |
| Gross Profit | 25,952 | 10,431 | 16,000 | 0 |
| Research and development | (21,655) | (22,355) | (22,400) | (22,400) |
| EBITDA | (897) | (18,109) | (13,583) | (29,811) |
| Operating Profit (before amort. and except.) | (1,220) | (18,533) | (13,678) | (29,896) |
| Intangible Amortisation | (251) | (457) | 0 | 0 |
| Exceptionals | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 |
| Operating Profit | (1,471) | (18,990) | (13,678) | (29,896) |
| Net Interest | 8 | 0 | (375) | (500) |
| Profit Before Tax (norm) | (1,212) | (18,533) | (14,053) | (30,396) |
| Profit Before Tax (reported) | (1,463) | (18,990) | (14,053) | (30,396) |
| Tax | (3,188) | 2,692 | 0 | 0 |
| Profit After Tax (norm) | (4,400) | (15,841) | (14,053) | (30,396) |
| Profit After Tax (reported) | (4,651) | (16,298) | (14,053) | (30,396) |
| Average Number of Shares Outstanding (m) | 14.9 | 15.6 | 16.5 | 18.0 |
| EPS - normalised (€) | (0.30) | (1.02) | (0.85) | (1.69) |
| EPS - normalised fully diluted (€) | (0.31) | (1.05) | (0.85) | (1.69) |
| EPS - reported (€) | 0.38 | (0.31) | 0.0 | 0.0 |
| Dividend per share (€) | 0.0 | 0.0 | | |
| Gross Margin (%) | 100.0 | 100.0 | 100.0 | N/A |
| EBITDA Margin (%) | N/A | N/A | N/A | N/A |
| Operating Margin (before GW and except.) (%) | N/A | N/A | N/A | N/A |
| **BALANCE SHEET** | | | | |
| Fixed Assets | 55,871 | 57,141 | 57,046 | 56,961 |
| Intangible Assets | 52,600 | 52,600 | 52,600 | 52,600 |
| Tangible Assets | 1,009 | 947 | 852 | 767 |
| Investments | 2,262 | 3,594 | 3,594 | 3,594 |
| Current Assets | 26,589 | 30,442 | 31,662 | 3,138 |
| Stocks | 0 | 0 | 0 | 0 |
| Debtors | 747 | 1,074 | 1,074 | 1,074 |
| Cash | 25,842 | 29,368 | 30,588 | 2,064 |
| Other | 0 | 0 | 0 | 0 |
| Current Liabilities | (14,330) | (14,128) | (14,128) | (14,128) |
| Creditors | (13,782) | (14,078) | (14,078) | (14,078) |
| Short term borrowings | (548) | (50) | (50) | (50) |
| Long Term Liabilities | (16,067) | (21,481) | (31,481) | (31,481) |
| Long term borrowings | (9,211) | (16,552) | (26,552) | (26,552) |
| Other long-term liabilities | (6,856) | (4,929) | (4,929) | (4,929) |
| Net Assets | 52,063 | 51,974 | 43,099 | 14,490 |
| **CASH FLOW** | | | | |
| Operating Cash Flow | 5,989 | (16,807) | (15,406) | (28,024) |
| Net Interest | 0 | 273 | (375) | (500) |
| Tax | 3,148 | (2,742) | 0 | 0 |
| Capex | (336) | (210) | 0 | 0 |
| Acquisitions/disposals | 0 | 0 | 0 | 0 |
| Financing | 0 | 17,427 | 0 | 0 |
| Other | 2,624 | (1,258) | 0 | 0 |
| Dividends | 0 | 0 | 0 | 0 |
| Net Cash Flow | 11,425 | (3,317) | (8,780) | (28,524) |
| Opening net debt/(cash) | (5,113) | (16,083) | (12,766) | (3,986) |
| HP finance leases initiated | 0 | 0 | 0 | 0 |
| Other | (455) | 0 | 0 | 0 |
| Closing net debt/(cash) | (16,083) | (12,766) | (3,986) | 24,538 |

Source: OSE Immunotherapeutics, Edison Investment Research

## 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 research department of Edison 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 Crown Wealth Group Pty Ltd who holds an Australian Financial Services Licence (Number: 494274). 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

This document is prepared and provided by Edison for information purposes only and should not be construed as an offer or solicitation for investment in any securities mentioned or in the topic of this document. A marketing communication under FCA Rules, this document has not been prepared in accordance with the legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research.

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.

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

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
1185 Avenue of the Americas
3rd Floor, New York, NY 10036
United States of America

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