EDISON

Oncology Venture

Clinical update

Multiple programme updates

Pharma & biotech

Oncology Venture (OV) continues to provide regular response data from its ongoing LiPlaCis Phase II trial in patients with metastatic breast cancer (mBC). To date, 33% of the top one-third sub-population delineated by the drug response predictor (DRP) achieved partial remission (PR) or better. The data also suggested that tightening the LiPlaCis DRP threshold may increase response rates.

Year end	Revenue (DKKm)	PBT* (DKKm)	EPS* (DKK)	DPS (DKK)	P/E (x)	Yield (%)
12/17	5.1	(31.0)	(1.27)	0.0	N/A	N/A
12/18e	3.2	(29.2)	(0.57)	0.0	N/A	N/A
12/19e	1.9	(205.8)	(3.82)	0.0	N/A	N/A

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

More data from the LiPlaCis Phase II trial

OV provided an update from its current Phase II trial investigating LiPlaCis for the treatment of mBC. The company reported that four of 12 patients in the top one-third of DRP-selected patients achieved PR or better. Moreover, patients in the top one-third achieved a median time to progression of 18 weeks versus seven weeks in the middle third of patients. We note that the data reported here are lower than earlier reported data (November 2018), where five out of 10 patients in the top third achieved PR or better.

Shifting the DRP threshold increases response rate

OV also presented LiPlaCis data with the DRP threshold segmented by 20% for the first time. The response rate for the top 20% of DRP-selected patients was 40%, specifically in those who were cisplatin-naïve. OV may adjust this thresholding window in the future to optimise the response rate, which is a detail of active research.

Data mining for dovitinib DRP complete

OV recently completed its data mining process for the refinement of its dovitinib DRP biomarker to identify patients with renal cancer and endometrial cancer highly likely to respond to the drug. OV has stated that the dovitinib DRP companion diagnostic is guiding towards two- to four-fold higher response rates. This is an essential step in OV's business model and, once the DRP model is adequate, OV will likely move forward with running a clinical trial in those patients most likely to respond.

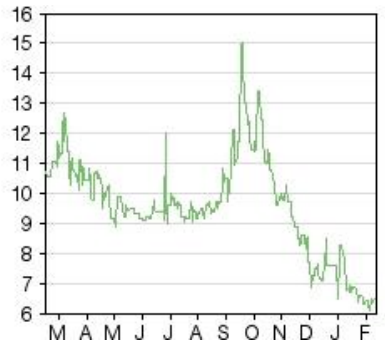
Valuation: SEK1,100.5m or SEK21.87 per share

Our valuation of OV remains unchanged at SEK1,100.5m or SEK21.87 per share (SEK20.52 per diluted share) based on a risk-adjusted NPV analysis of each in-licensed anticancer drug. We expect to make further adjustments to our valuation following feedback from the FDA regarding potential breakthrough therapy designation for LiPlaCis.

13 February 2019

Price	**SEK6.46**
Market cap	**SEK326m**
	US$0.16/DKK; US$0.11/SEK
Net debt (SEKm) at 30 September 2018	0.8
Shares in issue	50.4m
Free float	70%
Code	OV
Primary exchange	NASDAQ First North Stockholm
Secondary exchange	N/A

Share price performance



%	1m	3m	12m
Abs	(5.3)	(29.9)	(40.2)
Rel (local)	(10.0)	(31.9)	(42.4)
52-week high/low	SEK15.0		SEK6.1

Business description

Oncology Venture is a Denmark-based biopharmaceutical company focused on oncology. Its patent-protected mRNA-based drug response predictor platform enables the identification of patients with gene expression highly likely to respond to treatment. To date, the company has in-licensed six drug candidates with the intent to conduct focused Phase II clinical trials and then out-license the revamped drugs.

Next events

Initiate 2X-121 Phase II in ovarian cancer	Q119
Phase II LiPlaCis trial top-line data	H119

Analysts

Nathaniel Calloway +1 646 653 7036

Briana Warschun +1 646 653 7031

healthcare@edisongroup.com

Edison profile page

Shifting the DRP threshold shows LiPlaCis responders

On 7 February 2019, OV provided an update on its ongoing single-arm, open-label Phase II trial investigating LiPlaCis for the treatment of heavily pre-treated mBC patients. Patients are administered 40mg/m^2 LiPlaCis, a liposomal version of cisplatin chemotherapy, intravenously (IV) in three-week cycles on days one and eight with efficacy evaluation every six weeks. The response rate was 33% (or four out of 12 patients) in the top one-third of DRP-selected patients. These patients achieved PR or better, which is defined as a 30% or greater reduction in tumour size measured in one dimension in a CT scan when treated with LiPlaCis. Moreover, the top one-third of patients also reached a median time to progression of 18 weeks versus seven weeks in the remaining enrolled patients (who had DRP scores between 33% and 67%, as those below 33% were excluded from the study). Interestingly, these response data are slightly lower than what was previously reported in the November 2018 clinical update, where five out of 10 patients (50%) in the top one-third of DRP-selected patients and six out of 25 patients (24%) in the upper two-thirds of DRP selected patients achieved PR or better. However, the data are still evolving.

Additionally, 40% of patients in the upper 20% of DRP-selected patients who have not previously received cisplatin also achieved PR or better,. This marks the first time that OV has presented data using a 20% DRP threshold, highlighting that thresholding is under active investigation. The company may shift the DRP threshold either up or down to optimise patient response to LiPlaCis. According to OV, these data may support obtaining breakthrough therapy designation from the US FDA, which could expedite the development and review of the LiPlaCis programme if it demonstrates considerable improvement over existing therapies on clinically significant endpoints. OV plans to update recruitment timelines for the trial following FDA approval of the IDE/IND application, which the company expects in H119. However, it is important to note the company did not comment on the overall number of patients included in the trial to date.

Dovitinib data mining in renal and endometrial cancer complete

Also in February, OV provided an update on the process of developing the DRP assay for dovitinib. With its data mining process for the refinement of its dovitinib DRP biomarker, the company had to identify patients highly likely to respond to the drug. As a reminder, OV in-licensed dovitinib, an oral TKI that inhibits fibroblast growth factor, vascular endothelial growth factor and platelet-derived growth factor receptors, from Novartis. As part of the agreement, OV also received an ample amount of biopsy and gene expression data from previous studies from Novartis. OV recently announced that its data mining process for dovitinib and its unique DRP is complete for two distinct indications, renal cancer and endometrial cancer, which is an essential step in OV's business model. Optimising the DRP is also important for identifying the patients most likely to respond. According to the company, the unique dovitinib DRP is guiding towards two- to four-fold higher response rates.

This is the first time OV has commented on the possibility of treating patients with endometrial cancer with dovitinib and its DRP companion diagnostic. Non-resectable endometrial cancer is typically treated either radiation therapy or chemotherapy.[1] Hormone therapies such as progestins and tamoxifen are used to treat late-stage or recurrent endometrial cancer in combination with surgery and radiation therapy.[1] TKIs are not typically used to treat this indication; however, it is possible that a specific subset of this population may respond to the drug. Moreover, in August 2018 the US FDA granted breakthrough therapy designation for Lenvima (lenvatinib, Eisai), an oral TKI, in combination with Keytruda (pembrolizumab, Merck), an anti-PD-1, for patients with

[1] American Cancer Society.

advanced and/or metastatic endometrial carcinoma. In the Phase Ib/II trial in 54 patients, the objective response rate at 24 weeks was 50%.

Valuation

Our valuation of OV remains unchanged at SEK1,100.5m or SEK21.87 per share (SEK20.52 per diluted share). Adjustments to our valuation of the LiPlaCis programme are contingent on FDA feedback regarding breakthrough therapy designation. According to the company, its three highest-priority assets are LiPlaCis, 2X-121 and dovitinib; based on our estimates, we value these assets at SEK5.20, SEK3.09 and SEK5.10 per share, respectively. We expect to make further adjustments to our valuation of OV following feedback from the company's six clinical programmes.

Exhibit 1: Valuation of OV

Development Program	Indication	Clinical stage	Prob. of success	Launch year	Launch pricing	Peak sales ($m)	rNPV (SEKm)	% owned by OV	OV rNPV (SEKm)
LiPlaCis	Metastatic breast cancer and metastatic prostate cancer	Phase II	25%	2023	$91,000	259.8	670.7	39%	261.6
Irofulven	Metastatic prostate cancer	Phase Ib/II	20%	2023	$129,000	52.6	60.1	100%	60.1
APO010	Multiple myeloma	Phase Ib/II	20%	2023	$143,000	80.9	98.1	100%	98.1
2X-121	Metastatic breast cancer and ovarian cancer	Phase II	25%	2023	$132,000	116.4	168.9	92%	155.4
2X-111	Glioblastoma and brain metastases from breast cancer	Phase Ib/II	25%	2024	$169,000	212.6	293.0	92%	269.6
Dovitinib	Renal and liver cancer	Phase Ib/II	35%	2024	$145,000	152.0	466.4	55%	256.5
Total									1,101.3
Net debt (at 30 September 2018) (SEKm)									(0.8)
Total firm value (SEKm)									**1,100.5**
Total shares (m)									50.3
Value per basic share (SEK)									**21.87**
Warrants and options (m)									3.3
Fully diluted shares in issue (m)									53.6
Fully diluted value per share (SEK)									**20.52**

Source: Edison Investment Research

Financials

Our financial forecasts of OV remain unchanged. We continue to expect OV to require DKK430m in R&D expenditure, which we record as illustrative debt, to bring all six of its anticancer programmes to Phase III out-licensing (Exhibit 2). We assume that all six of OV's assets will move forward; however, costs may be brought down if the development programmes do not progress as we expect.

Exhibit 2: Financial summary

DKK000s	2017	2018e	2019e
Year end 31 December	IFRS	IFRS	IFRS
PROFIT & LOSS			
Revenue	5,145	3,192	1,876
Cost of Sales	0	0	0
Gross Profit	5,145	3,192	1,876
EBITDA	(23,848)	(38,438)	(204,616)
Operating Profit (before amort. and except.)	(23,848)	(37,589)	(203,767)
Intangible Amortisation	0	0	0
Exceptionals/Other	0	0	0
Operating Profit	(23,848)	(37,589)	(203,767)
Net Interest	(7,132)	8,358	(2,015)
Other (change in fair value of warrants)	0	0	0
Profit Before Tax (norm)	(30,980)	(29,231)	(205,782)
Profit Before Tax (IFRS)	(30,980)	(29,231)	(205,782)
Tax	590	557	3,914
Deferred tax	0	0	0
Profit After Tax (norm)	(30,390)	(28,674)	(201,868)
Profit After Tax (IFRS)	(30,390)	(28,674)	(201,868)
Average Number of Shares Outstanding (m)	24.3	50.3	52.8
EPS - normalised (ore)	(127.00)	(56.99)	(382.13)
EPS - IFRS (DKK)	(1.25)	(0.57)	(3.82)
Dividend per share (ore)	0.0	0.0	0.0
BALANCE SHEET			
Fixed Assets	4,883	205,109	205,109
Intangible Assets	135	205,149	205,149
Tangible Assets	4,424	(40)	(40)
Other	324	0	0
Current Assets	8,102	29,463	63,138
Stocks	1,048	805	805
Debtors	3,048	5,758	20,222
Cash	3,326	5,797	21,093
Other	680	17,103	21,018
Current Liabilities	(10,540)	(6,019)	(29,314)
Creditors	(10,540)	(6,019)	(29,314)
Short-term borrowings	0	0	0
Long-term Liabilities	0	(81,693)	(293,693)
Long-term borrowings	0	(49,302)	(261,302)
Other long-term liabilities	0	(32,391)	(32,391)
Net Assets	2,445	146,860	(54,760)
CASH FLOW			
Operating Cash Flow	(10,702)	(58,158)	(195,855)
Net Interest	(170)	(252)	0
Tax	2,527	69	0
Capex	0	0	(849)
Acquisitions/disposals	(784)	14,457	0
Financing	7,478	177	0
Dividends	0	0	0
Other	(308)	(3,197)	0
Net Cash Flow	(1,959)	(46,904)	(196,704)
Opening net debt/(cash)	(5,488)	(3,326)	43,505
HP finance leases initiated	0	0	0
Exchange rate movements	(203)	(73)	0
Other	0	146	0
Closing net debt/(cash)	(3,326)	43,505	240,209

Source: Oncology Venture reports, Edison Investment Research

General disclaimer and copyright

This report has been commissioned by Oncology Venture and prepared and issued by Edison, in consideration of a fee payable by Oncology Venture. 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
1,185 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