

Oxford Biomedica

OxBox investment to aid future growth

Oxford Biomedica (OXB) is a pioneer and global leader in the development and manufacture of commercial-scale lentiviral vectors (LVV), a critical component of cell and gene therapies. Ongoing investment in manufacturing capacity and R&D is imperative to reap economic returns in this highly innovative and potentially lucrative therapy area, which has witnessed a step up in investment globally. Multiple deals in 2019 included an expansion of its commercial supply agreement with Novartis by five years and R&D partnerships with Santen and Microsoft. We expect further platform deals to be announced in 2020, as OXB exploits its position as the only FDA-approved commercial-scale LVV manufacturer. In the long term, much value resides in OXB's ability to develop and monetise its own gene therapies. We value OXB at £692m.

Year end	Revenue (£m)	PBT* (£m)	EPS* (p)	DPS (p)	P/E (x)	Yield (%)
12/17	37.6	(13.1)	(16.7)	0.0	N/A	N/A
12/18	66.8	0.3	4.3	0.0	146.3	N/A
12/19e	76.9	(7.9)	(7.3)	0.0	N/A	N/A
12/20e	89.8	2.9	7.4	0.0	85.0	N/A

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

OxBox investment to attract partnerships

By mid-2020 OXB's commercial LVV production capacity will have increased via its investment in OxBox, an 84,000 sq ft state-of-the-art bioprocessing manufacturing facility. The extension of the Novartis commercial supply agreement (in December 2019) validates OXB's foresight to invest for growth as vector manufacturing capacity continues to be constrained globally. OXB is a leader in its field and its expertise in LVV development means it continues to remain extremely attractive to future and existing partners. In 2019 OXB signed two R&D collaborations with Santen (gene therapy for an inherited retinal disorder) and Microsoft (to improve the yield and quality of vectors using machine learning).

Debt removed, investment is key

Novo Holdings' equity investment (£53.5m) in May has enabled OXB to fully repay its costly revolving debt facility, leading to a much-improved debt-free balance sheet, and boosted cash for developing its platform and own portfolio of assets. We continue to expect ongoing growth in the top line, driven in the near term by Kymriah (Novartis), the progression of Sanofi/Bioverativ's haemophilia products to the clinic and the rapid advancement of its partnered products with Orchard and Axovant. OXB is in a growth phase and ongoing investments are necessary to ensure future growth. We expect OXB to remain at break even or positive operating income in the near term.

Valuation: £692m (£9.02 per share)

We value OXB at £692m (£9.02 per share). Our sales forecasts are unchanged and our core drivers remain OXB's partnerships, We reflect net cash of £26.1m at end June 2019 (excluding £11.5m Axovant milestone). For details of our valuation please see our outlook note, <u>In a cell and gene therapy sweet spot</u>.

Corporate update

Pharma & biotech

6 February 2020

Price 629p

\$:£0.8; €:£0.88; \$:€0.91

£483m

Net cash (£m) at 30 June 2019 (excluding £11.5m Axovant milestone)

Market cap

Shares in issue 76.8m

Free float 69%

Code OXB

Primary exchange LSE

Secondary exchange N/A

Share price performance



Business description

Oxford Biomedica's (OXB's) LentiVector technology underpins the company's strategy. OXB generates significant revenue from partners that use its technology, notably Novartis, Bioverativ (Sanofi), Orchard Therapeutics and Santen. OXB is implementing significant capacity upgrades to enable more partnering/out-licensing agreements.

Next events

FY 2019 results March 2020

New out-licence or partnership H120

OTL-101 BLA/MAA rolling H1 2020 submission

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Edison profile page

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The 2019 foundations are set for 2020 growth

OXB is a leader in its field, as one of the world's premier developers and manufacturers of commercial-scale, GMP-approved LVVs. The announcement on the extension of the Novartis commercial supply agreement reinforces the need to continue investing in the growth of OXB (capacity, yield improvements, development of own gene therapies). As vector manufacturing capacity continues to be constrained globally, companies such as OXB are in a strong position to drive value for their platforms. Additionally, OXB's expertise in lentiviral development means it continues to remain extremely attractive to future and existing partners. Partner Axovant is rapidly progressing clinical development of AXO-Lenti-PD. The 12-month data published early this year from the first two patients in the ongoing Phase I/II dose-escalation study (SUNRISE-PD) in advanced Parkinson's disease (PD) patients are encouraging and serve as validation of OXB's internal pipeline; in the long term, much value resides in OXB's ability to develop and monetise its own gene therapies

Novartis committed to CAR-T as programmes expand

OXB has expanded its commercial supply agreement with Novartis by five years, effectively removing uncertainty around the future of the partnership. The expanded agreement serves as validation of OXB's investment in OxBox. OXB is now working on five different LVVs for use in Novartis's CAR-T products. Although the targets are undisclosed by OXB, we assume (based on Novartis's recent R&D day) they are focused on CD19, BCMA, CD22, IL3RA and EGFRvIII. We note that the \$75m minimum revenue announced in the expanded commercial partnership is for vector batches only. As a result, OXB will benefit separately from development revenue for these new assets, which could provide substantial upside to our current assumptions.

Partnerships advancing through financial milestones

Partner Axovant has swiftly accelerated AXO-Lenti-PD into the clinic, with a Phase I/II dose-escalation study (SUNRISE-PD) in advanced PD patients ongoing. Following positive early data in the lowest dose cohort (n=2), a second dose cohort is enrolling (OXB received a \$15m milestone payment on enrolment of first patient) for which data are expected mid-2020. In January 2020 Axovant reported 12 month post-dosing data, which demonstrated an average 22-point change from baseline (represents a 37% improvement) in motor function as assessed by the UPDRS Part III 'OFF' score. These data are encouraging (although restricted to two patients) as they expand from the 17-point change from baseline (29% improvement) seen at 6 months on the same scale. We anticipate further milestone payments (OXB has guided up to \$55m in development milestones in the medium term, of which \$15m have been received) as progress continues. The haemophilia development partnership with Sanofi (previously Bioverativ) is progressing towards clinical development material in the coming 12 months, which could lead to an increase in payments to OXB (the total deal value is up to \$100m in product development and regulatory and sales-related milestones).

Balance sheet strengthened

The equity investment in May of £53.5m by Novo Holdings (for 10.1% of the outstanding share capital) has enabled OXB to fully repay the £43.6m debt facility with Oaktree Capital Management. This is a welcome move as the debt cost was substantial (as shown by the H119 interest payment of £4.8m) and its removal will allow OXB to fully focus its cash resources on growing the business. Additionally on 4 February, OXB sold 635,000 ADS of its Orchard equity stake raising gross cash proceeds of \$8.4m, further strengthening its balance sheet. We continue to expect ongoing growth in OXB's top line, driven in the near term by Kymriah (Novartis), progression of Sanofi's (previously



Bioverativ) haemophilia products to the clinic (via development milestone payments) and the rapid advancement of OXB's partnered products with Orchard (notably OTL-101, where a biologics licence application/marketing authorisation rolling submission is expected in H120) and AXO-Lenti-PD. Early-stage collaborations with Santen and Boehringer Ingelheim and the UK Cystic Fibrosis Gene Therapy Consortium will continue to contribute a growing share of the top line as OXB undertakes development work.



Accounts: IFRS, year-end: December, £000s	2016	2017	2018	2019e	2020
NCOME STATEMENT					
Total revenues	27,776	37,590	66,778	76,907	89,79
Cost of sales	(11,835)	(18,442)	(22,763)	(24,240)	(26,807
Gross profit	15,941	19,148	44,015	52,667	62,99
Administrative expenses	(5,957)	(7,276)	(7,433)	(10,035)	(13,547
R&D and bioprocessing costs	(24,299)	(21,611)	(29,714)	(44,264)	(46,532
Other income/(expense)	3,002	1,774	1,064	0	
Exceptionals and adjustments	0	2,297	5,983	(1,411)	
Operating profit/(loss)	(11,313)	(5,668)	13,915	(3,043)	2,91
Finance income/(expense)	(8,994)	(6,093)	(8,901)	(6,238)	
Reported PBT	(20,307)	(11,761)	5,014	(9,280)	2,91
ncome tax expense (includes exceptionals)	3,666	2,744	2,527	2,653	2,78
Reported net income	(16,641)	(9,017)	7,541	(6,627)	5,70
Basic average number of shares, m	56	62	65	71	7
Basic EPS (p)	(29.9)	(14.6)	11.6	(9.3)	7.
Adjusted EBITDA	(6,773)	(2,645)	13,535	5,333	10,86
Adjusted EBIT	(10,448)	(7,020)	9,178	(1,632)	2,91
Adjusted PBT	(19,442)	(13,113)	277	(7,869)	2,91
Adjusted EPS (p)	(28.4)	(16.7)	4.3	(7.3)	7.
BALANCE SHEET	,	, ,		` '	
Property, plant and equipment	27,514	25,370	31,791	51,119	58,42
ntangible assets	1,330	97	117	113	10
Other non-current assets	657	2,954	10,966	0	
Total non-current assets	29,501	28,421	42,874	51,232	58,53
Cash and equivalents	15,335	14,329	32,244	8,532	1,25
nventories	2,202	3,332	4,251	4,527	5,00
Trade and other receivables	6,904	17,088	30,585	37,927	44,28
Other current assets	3,000	2,232	2,446	13,619	13,75
Total current assets	27,441	36,981	69,526	64,605	64.29
Non-current loans and borrowings	34,389	36,864	41,153	0	,
Contract liabilities and deferred income	0	0	6,434	6,434	6,43
Other non-current liabilities	622	630	1,566	9,735	9,73
Total non-current liabilities	35,011	37,494	49,153	16,169	16,16
Trade and other payables	6,003	8,690	11,422	12,163	13,45
Contract liabilities and deferred income	3,313	13,072	17,084	17,084	17,08
Total current liabilities	9,316	21,762	28,506	29,247	30,53
Equity attributable to company	12,615	6,146	34,741	70,420	76,12
CASH FLOW STATEMENT	,	-,	,	,	,
Operating profit/(loss)	(11,313)	(5,668)	13,915	(3,043)	2,91
Depreciation and amortisation	3,675	4,375	4,357	6,964	7,95
Share based payments	865	945	1,246	0,001	1,00
Other adjustments	(579)	(1,326)	(8,012)	0	
Movements in working capital	1,423	141	(2,292)	(6,876)	(5,549
ncome taxes paid	4,081	4,512	3,654	2,446	2,65
Cash from operations (CFO)	(1,848)	2,979	12,868	(509)	7,97
Capex	(6,458)	(1,969)	(10,148)	(26,288)	(15,25
Other investing activities	47	38	52	43	(10,200
Cash used in investing activities (CFIA)	(6,411)	(1,931)	(10,096)	(26,245)	(15,249
Net proceeds from issue of shares	17,497	385	19,808	50,475	(10,24
Movements in debt	0	8,361	0	(41,153)	
nterest paid	(3,258)	(10,800)	(4,665)	(6,280)	
Other financing activities	(3,230)	(10,000)	(4,003)	(0,200)	
Cash from financing activities (CFF)	14,239	(2,054)	15,143	3,042	
ncrease/(decrease) in cash and equivalents		(2,054)	17,915		
ncrease/(decrease) in cash and equivalents Currency translation differences and other	5,980 0	(1,006)	17,915	(23,712)	(7,27
· · · · · · · · · · · · · · · · · · ·	·				0.53
Cash and equivalents at beginning of period	9,355	15,335	14,329	32,244	8,53
Cash and equivalents at end of period	15,335	14,329	32,244	8,532	1,25
Net (debt)/cash	(19,054)	(22,535)	(8,909)	8,532	1,25



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