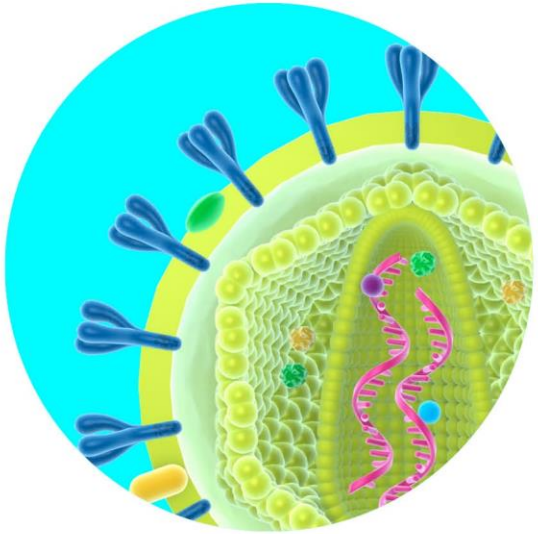
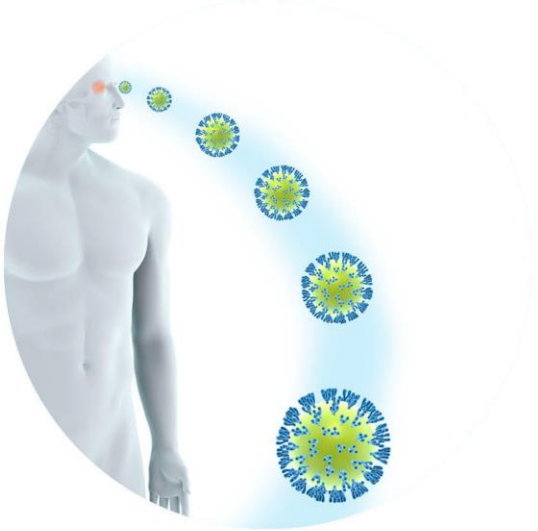


Leaders in gene and cell therapy

JEFFERIES AUTUMN 2015 GLOBAL HEALTHCARE CONFERENCE



OxfordBioMedica

Forward-looking statements

This presentation does not constitute an offer to sell or a solicitation of offers to buy Ordinary Shares (the "Securities"). Although reasonable care has been taken to ensure that the facts stated in this presentation are accurate and that the opinions expressed are fair and reasonable, the contents of this presentation have not been formally verified by Oxford BioMedica plc (the "Company") or any other person. Accordingly, no representation or warranty, expressed or implied, is made as to the fairness, accuracy, completeness or correctness of the information and opinions contained in this presentation, and no reliance should be placed on such information or opinions. Further, the information in this presentation is not complete and may be changed. Neither the Company nor any of its respective members, directors, officers or employees nor any other person accepts any liability whatsoever for any loss howsoever arising from any use of such information or opinions or otherwise arising in connection with this presentation.

This presentation may contain forward-looking statements that reflect the Company's current expectations regarding future events, its liquidity and results of operations and its future working capital requirements. Forward-looking statements involve risks and uncertainties. Actual events could differ materially from those projected herein and depend on a number of factors, including the success of the Company's development strategies, the successful and timely completion of clinical studies, securing satisfactory licensing agreements for products, the ability of the Company to obtain additional financing for its operations and the market conditions affecting the availability and terms of such financing.

Oxford BioMedica at a Glance

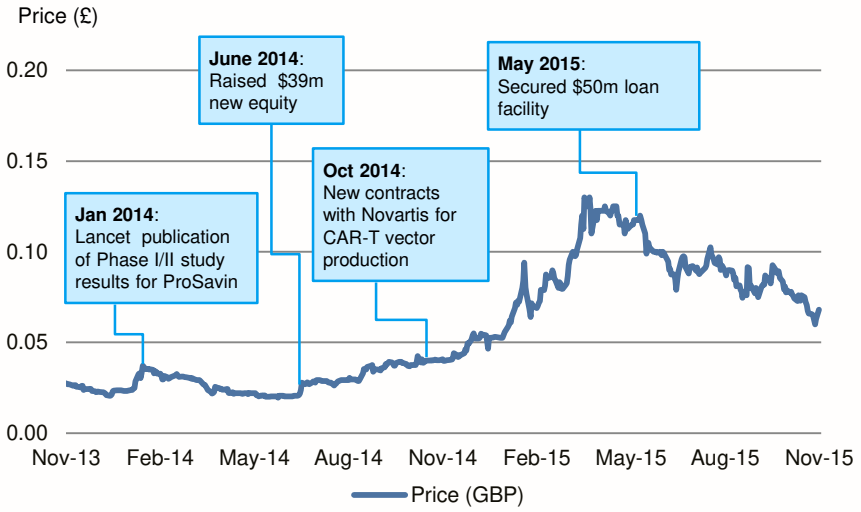
Company Facts

- Spun out of Oxford University in 1996
- IPO on LSE in April 2001 (OXB.L)
- $260 million raised to date
- Share price 7.95p (3 Nov 2015)
- Current market cap: £204 million / $314 million (3 Nov 2015)
- 213 employees
- Cash / Debt balance as at 30 October 2015
  - £15 million
  - $50 million loan facility
  - Headquartered in Oxford, UK

Shareholder Register(1)

Investor	Share
M&G Investments	17.9%
Vulpes Investment Management	17.5%
Joy Group	9.1%
Aviva	8.7%
Novartis	2.8%
Others	44.0%

Last 2-Year Share Price Performance



[1] As of 15 October 2015

Investment Highlights

Oxford BioMedica is a leading gene and cell therapy focused biotechnology company with strengths in products, development, manufacturing and IP

1. **Innovative diversified portfolio of unpartnered gene/cell therapy candidates**
   - 2 in ophthalmology
   - 2 in CNS
   - 2 in oncology
2. **Validating partnerships**
   - Sanofi – Licensed 2 ophthalmology gene therapy candidates (both in the clinic)
   - Novartis – Manufacturing and process development relationship for CTL-019
   - GSK, Novartis, Sanofi – Licence to operate under lentiviral IP
3. **Established, GMP-qualified, manufacturing facilities**
   - Process and product development expertise
4. **Multiple upcoming inflection points**
5. **Experienced team with proven track record of execution**

Oxford BioMedica's Business Model and Strategy

Business Model Overview

Product Development

- Proprietary
- Partnered (SANOFI)

+

OXB Solutions (NOVARTIS)

Lentiviral vector manufacture and process development

+

IP Ownership (GlaxoSmithKline, NOVARTIS)

Lentiviral vector patents and know-how

Revenues

- Manufacturing and process development
- Licence fees
- Milestones
- Royalties

Strategy

- Secure additional equity investment and use manufacturing revenue to fund development of product development portfolio in house rather than out-licence
- In-licence complementary product opportunities

- Complete expansion of manufacturing and laboratory capacity during 2016 and continue to develop manufacturing processes
- Sign up more "Novartis-like" process development and manufacturing contracts
- Start generating more significant profits from OXB Solutions business which should help offset Group overheads and, ultimately, to some extent, product development costs

- Patents – provide licence-to-operate rights to 3rd parties
- Know-how – tie in 3rd parties to long-term relationships using OXB's know how and proprietary materials

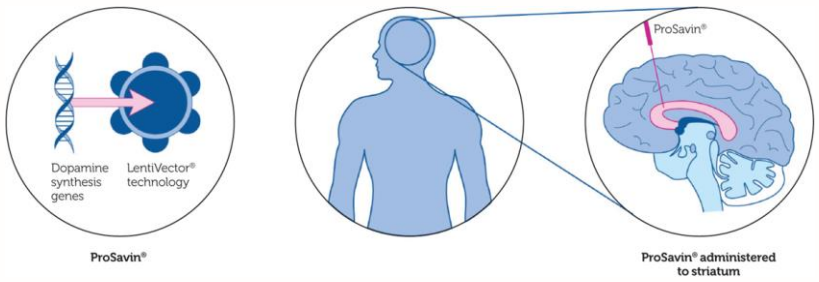
What Is Gene and Cell Therapy?

OxfordBioMedica

The use of DNA to treat disease by delivering therapeutic DNA into patients' cells

In vivo development

Example: OXB-102 (Parkinson's disease)



Delivery of the new gene/DNA is achieved using "viral vectors"

- Most commonly used are based on adeno-associated virus (AAV) and lentivirus

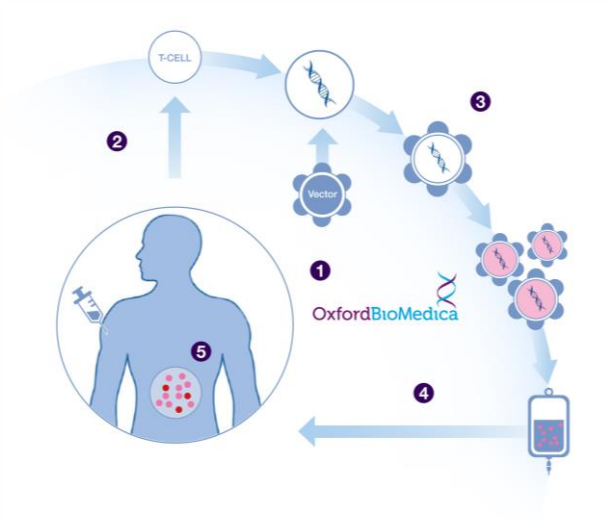
Lentiviral vector advantages over AAV

- Larger therapeutic payloads
- Permanent modification of dividing cells such as T-cells or stem cells
- No pre-existing immunity
- OXB's lentiviral vector administered directly to over 56 patients
- Cumulative safety data greater than 150 years

Offers potential for single application treatment giving long-term or even permanent efficacy

Ex vivo development

Example: Novartis' CTL019



1. OXB produces GMP lentiviral vector encoding CAR targeting CD19
2. White blood cells isolated from patients
3. Vector used to transduce expanded T-cells
4. The modified T-cells are infused back into the patient
5. Once inside the patient, the T-cells multiply, 'hunt' cancer cells and destroy them

Product Portfolio

OxfordBioMedica

Current Portfolio of Clinical Pipeline Products

OxfordBioMedica

	Field	Product	Indication	Research / Pre-Clinical	Phase I	Phase I/II	Phase II	Next inflection / Comment	Est. date	Rights
LentiVector® technology	***In Vivo* Programmes**									
	CNS	OXB-102	Parkinson's Disease	Phase I/II preparation				Start Phase I/II	H1 2016	Worldwide
	OPHTHALMOLOGY	OXB-201 (RetinoStat®)	Wet AMD	Phase I concluded (primary end point met)				Decision on next Phase	H1 2016	Worldwide
		SAR422459	Stargardt Disease	Phase I/II ongoing				End of Phase I/II	2017 / 2018	SANOFI
		SAR421869	Usher syndrome Type 1B	Phase I/II ongoing						
5T4	**ONCOLOGY**	OXB-301 (TroVax®)	Cancer (multiple)	Phase I, Phase I/II and Phase II investigator-led studies underway				End Phase II	2015/16	Worldwide

Research/Pre-clinical Pipeline Products

OxfordBioMedica

LentiVector® platform technology

5T4

Field	Product	Indication	Research	Preclinical	Phase I/II	Phase II	Next inflection / Comment	Est. date	Rights
***Ex Vivo* Programmes**									
ONCOLOGY	OXB-302 (CAR-T 5T4)	Cancer (multiple)					End preclinical	H2 2016	Worldwide
OPHTHALMOLOGY	OXB-202 (EncorStat®)	Corneal graft rejection					First patient Phase I/II	2016	Worldwide
***In Vivo* Programmes**									
CNS	OXB-103 (MoNuDin®)	ALS or Lou Gehrig's Disease or Motor Neuron Disease					End preclinical	H1 2016	Worldwide

OXB Solutions

OxfordBioMedica

Novartis Contract – CTL-019/Other CAR-T Products

OxfordBioMedica

NOVARTIS

Overview

- Non-exclusive licence to OXB's IP
- Initial 3 year manufacturing contract (with minimum offtake commitments) for clinical supply for Novartis CTL019 programme – potential to extend
- Process development collaboration
- Financial terms include:
  - $14m up front, including an equity investment and IP licence
  - Up to $76m over 3 year manufacturing and process development
  - Royalties on CTL019 and other CAR-T products

OXB Provides a Key Link in the CTL-019 Supply Chain

- Novartis licensed CAR-T technology from University of Pennsylvania
- Novartis to develop the CTL019 product (*and other CAR-T products*)
- Complex supply chain / manufacturing process:
  - OXB produces GMP lentiviral vector encoding CAR targeting CD19
  - White blood cells isolated from patients
  - Vector used to transduce expanded T-cells
  - The modified T-cells are infused back into the patient
  - Once inside the patient, the T-cells multiply, 'hunt' cancer cells and destroy them

Facilities

Novartis contract and expectation of further manufacturing and process development led to decision to expand manufacturing and laboratory facilities

Windrush Court

Corporate Headquarters & Laboratories (owned)
71,955 sq. ft (6,684 sq m)
Laboratory renovation expected to complete first few months of 2016

2015/2016 capital expenditure on committed capacity expansion expected to be in region of £20m

Harrow House

(GMP1/GMP2/GMP3 & Fill/Finish)
Owned API manufacturing facility
32,000 sq.ft (2,980 sq.m)
GMP2 and enhanced enabling services under construction. Expected to be available for production first few months of 2016. GMP3 and Fill/Finish yet to be commissioned

Yarnton *(GMP4)*

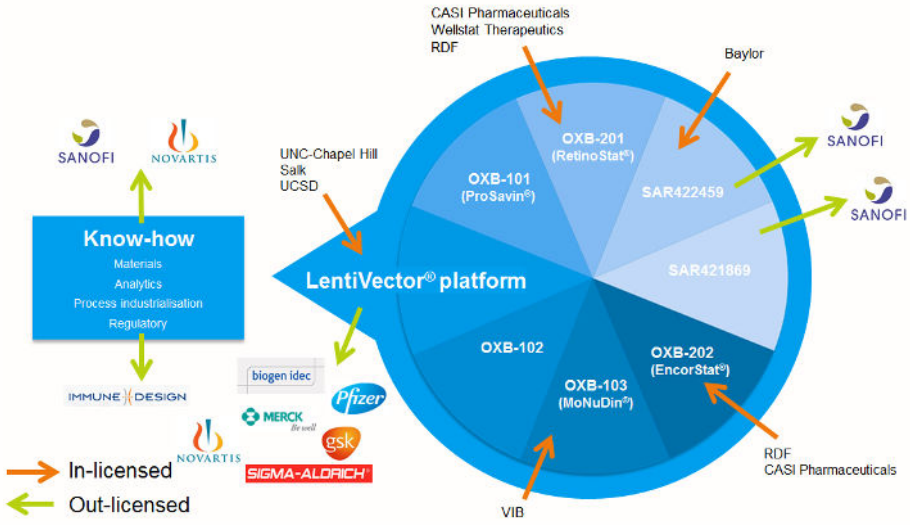
New leased API manufacturing facility
18,300 sq. ft (1,700 sq. m)
Handed over by contractors October 2015, validation currently underway.
Expected to be in production first few months of 2016

Intellectual Property

LentiVector® Platform IP & Key Intellectual Property

OxfordBioMedica

- Multi-layered IP portfolio
- LentiVector® platform is covered by >100 patents and patent applications



Know-how

- Extensive and deep know-how relating to lentiviral vector manufacturing processes, cell and vector engineering, and proprietary analytics

Product Portfolio Protection

- Data exclusivity
- Market exclusivity relating to orphan products

Patent Portfolio

- Extensive patent estate with out-licences with several major pharmaceutical companies

Summary

Near-term Catalysts

OxfordBioMedica

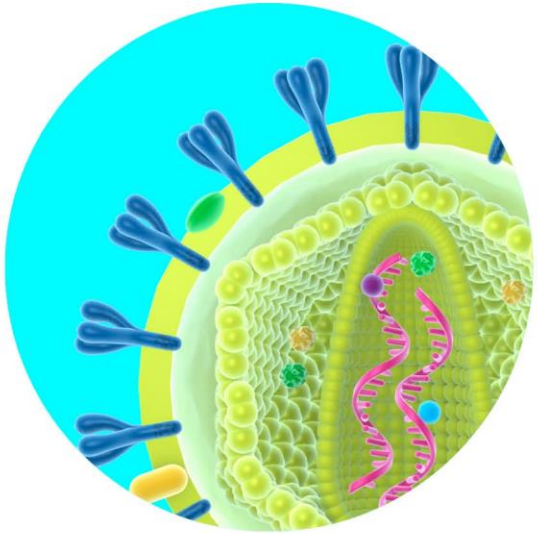
Key Upcoming Milestones

Ongoing	• Further IP licences / manufacturing / process development contracts
H1 2016	• H1: First Patient In ("FPI") OXB-102 clinical study • OXB-201 development pathway decision made • Results from OXB-301 Phase II mesothelioma studies
H2 2016	• H2: FPI OXB-202 clinical study • OXB-302 pre-clinical results

Investment Highlights

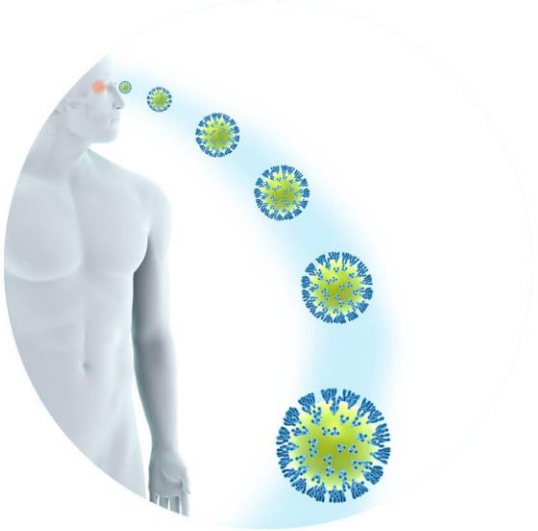
Oxford BioMedica is a leading gene and cell therapy focused biotechnology company with strengths in products, development, manufacturing and IP

1. **Innovative diversified portfolio of unpartnered gene/cell therapy candidates**
   - 2 in ophthalmology
   - 2 in CNS
   - 2 in oncology
2. **Validating partnerships**
   - Sanofi – Licensed 2 ophthalmology gene therapy candidates (both in the clinic)
   - Novartis – Manufacturing and process development relationship for CTL-019
   - GSK, Novartis, Sanofi – Licence to operate under lentiviral IP
3. **Established, GMP-qualified, manufacturing facilities**
   - Process and product development expertise
4. **Multiple upcoming inflection points**
5. **Experienced team with proven track record of execution**



Leaders in gene and cell therapy

JEFFERIES AUTUMN 2015 GLOBAL HEALTHCARE CONFERENCE



OxfordBioMedica