

## Press release

### **Oxford Biomedica and Santen enter R&D collaboration and Option & Licence Agreement for development of gene therapy vectors for inherited retinal disease**

June 26, 2019, Oxford, UK and Osaka Japan—Oxford Biomedica plc (LSE:OXB), a leading gene and cell therapy group, and Santen Pharmaceutical Co., Ltd. (Santen), the market leader for prescription ophthalmic pharmaceuticals in Japan with a global presence in over 60 countries, today announced that they have entered into an R&D collaboration and Option & Licence Agreement to research and develop gene therapy products for the treatment of an inherited retinal disease. Inherited retinal diseases are a group of rare disorders caused by one of more than 260 different genes, where mutation results in vision loss or blindness, often disproportionately affecting children and young adults<sup>1</sup>.

Inherited retinal diseases are ideal candidates for gene therapy because many of the responsible genetic mutations have already been identified. In addition, the eye is a readily accessible organ conducive to direct delivery of gene therapy vectors to the diseased tissue. A key advantage with lentiviral vectors is their ability to deliver large therapeutic genes, which is technically challenging with other vector systems.

The aim of the R&D collaboration is to generate pre-clinical proof of concept to treat an inherited retinal disease with lentiviral vectors developed and manufactured by OXB. The collaboration includes a licence to use OXB's LentiVector® platform and access to its industrial-scale manufacturing capabilities. Oxford Biomedica is entitled to an undisclosed milestone payment on exercise of the option to the LentiVector® platform as well as development milestones and up to a 10% royalty on net sales. Santen has worldwide commercial rights to the programme, while OXB retains an option to co-fund and participate in development and commercialisation in the US and Europe.

#### **John Dawson, Chief Executive Officer of Oxford Biomedica, said:**

*"We are delighted to have formed our first collaboration in Japan. Santen is a leading, multi-national ophthalmology company developing an innovative gene therapy product for the treatment of a significant inherited retinal disease affecting patients with few or no therapy options. We believe that our LentiVector® platform is particularly well-suited to the delivery of large genes to the eye. We look forward to working together with Santen in a true partnership that will bring to bear our respective capabilities in gene therapy vectors and inherited retinal diseases to maximise the value of this important R&D programme."*

#### **Naveed Shams, M.D., Ph.D., Chief Scientific Officer and Head of Global R&D at Santen, said :**

*"We are excited to partner with Oxford Biomedica and leverage their lentiviral vector platform to develop innovative therapeutics for an inherited retinal disease. A gene therapy approach to treating inherited retinal diseases will allow Santen to meet the needs of patients suffering from inherited retinal dystrophies. This important collaboration builds on Santen's ongoing research efforts as part of the CiCLE Programme from the Japan Agency for Medical Research and Development, and further strengthens our commitment to addressing challenges in ophthalmic care. "*

<sup>1</sup>Source: US National Library of Medicine National Institutes of Health  
Translational Vision & Science Technology <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6052953/>

**-Ends-**

**Enquiries:****Oxford Biomedica plc**

John Dawson, Chief Executive Officer  
Stuart Paynter, Chief Financial Officer  
Catherine Isted, Head of Corporate Development & IR  
Sarah MacLeod, Head of Communications

T: +44 (0)1865 783 000  
T: +44 (0)1865 783 000  
T: +44 (0)1865 954 161 / E: [ir@oxb.com](mailto:ir@oxb.com)  
T: +44 (0)7747 602 739 / E: [media@oxb.com](mailto:media@oxb.com)

**Consilium Strategic Communications (financial PR for OXB)**

Mary-Jane Elliott/Matthew Neal

T: +44 (0)20 3709 5700

**Santen Pharmaceutical Co., Ltd.**

Christopher Hohman, General Manager,  
Corporate Communications Group

T: +81-6-4802-9360 / E: [ir@santen.com](mailto:ir@santen.com)

**Notes to editors****About Santen**

As a specialised company dedicated to ophthalmology, Santen carries out research, development, marketing and sales of pharmaceuticals, over-the-counter products, and medical devices. Santen is the market leader for prescription ophthalmic pharmaceuticals in Japan and its products now reach patients in over 60 countries. With scientific knowledge and organisational capabilities nurtured over a nearly 130-year history, Santen provides products and services to contribute to the well-being of patients, their loved ones and consequently to society. For more information, visit [www.santen.com](http://www.santen.com).

**About Oxford Biomedica**

Oxford Biomedica (LSE:OXB) is a leading gene and cell therapy group focused on developing life changing treatments for serious diseases. Oxford Biomedica and its subsidiaries (the "Group") have built a sector leading lentiviral vector delivery platform (LentiVector®), which the Group leverages to develop in vivo and ex vivo products both in-house and with partners. The Group has created a valuable proprietary portfolio of gene and cell therapy product candidates in the areas of oncology, ophthalmology and CNS disorders. The Group has also entered into a number of partnerships, including with Novartis, Sanofi, Axovant Gene Therapies, Orchard Therapeutics, Boehringer Ingelheim, the UK Cystic Fibrosis Gene Therapy Consortium and Imperial Innovations, through which it has long-term economic interests in other potential gene and cell therapy products. Oxford Biomedica is based across several locations in Oxfordshire, UK and employs more than 430 people. For more information, visit [www.oxb.com](http://www.oxb.com)