



Daiichi Sankyo, Mitsubishi UFJ Capital and Nagoya Institute of Technology Announce Open Innovation Research on Gene Therapy to Restore Vision

Tokyo, Japan (April 13, 2020) - Daiichi Sankyo Company, Limited (Representative Director, President and CEO: Sunao Manabe; head office: Chuo-ku, Tokyo; hereinafter, “Daiichi Sankyo”), Mitsubishi UFJ Capital Co., Ltd. (President: Shinsuke Sakamoto; head office: Chuo-ku, Tokyo; hereinafter, “Mitsubishi UFJ Capital”) and Nagoya Institute of Technology (Executive Director: Takatoshi Kinoshita; Showa-ku, Nagoya, Aichi; hereinafter, NITech) today announced that they have commenced open innovation research (“the research”) concerning a gene therapy for restoring vision.

In a project under TaNeDS^{*1}, Daiichi Sankyo’s open competition grant program for joint drug discovery research, the laboratory led by Professor Hideki Kandori of Life Science and Applied Chemistry, Graduate School of Engineering, Nagoya Institute of Technology discovered that a highly active, novel photo-responsive protein^{*2} (hereinafter, “GtCCR4”) could be applied to the restoration of vision. In the research, the performance of GtCCR4 will be further enhanced and its applicability in gene therapy verified, with the aim of developing an innovatory gene therapy for patients who have lost their vision due to retinitis pigmentosa^{*3}, for which there is a high unmet medical need.

To carry out the research, which will be a NITech-certified venture, a new company called OiDE OptoEye, Inc. (head office: Chuo-ku, Tokyo; hereinafter, “OptoEye”) has been established and wholly funded by the OiDE Fund Investment Limited Partnership (“OiDE Fund”)^{*4} operated by Mitsubishi UFJ Capital.

If the pre-agreed goals of the three-year joint research are achieved, Daiichi Sankyo will purchase all of the stock of OptoEye in order to continue research for the project on its own. After a successful product launch, Daiichi Sankyo will pay considerations to NITech in the form of royalties.

Daiichi Sankyo and Mitsubishi UFJ Capital plan to continue to carry out further open innovation projects to develop new drug discovery platform technologies.

*1 TaNeDS (**T**ake a **N**ew challenge for **D**rug **d**iscovery)

TaNeDS is a drug discovery project aimed at researchers of Japanese universities and public research organizations that Daiichi Sankyo has been carrying out as part of its open innovation program since FY2011. The scope of the project spans all stages from research on the seeds of potential future therapies to that in preparation for commercial launches, and Daiichi Sankyo invite proposals for collaborative research from researchers working in a wide range of areas.

*2 Photoresponsive protein

A photoresponsive protein is a protein that functions when activated by light. GtCCR4 belongs to the rhodopsin family of photoresponsive proteins. When activated by light in cells, it functions as an ion channel for signal transmission. Proteins acting as ion channels play important roles in information transmission in optic nerve cells and central nerves as well as in muscle contraction.

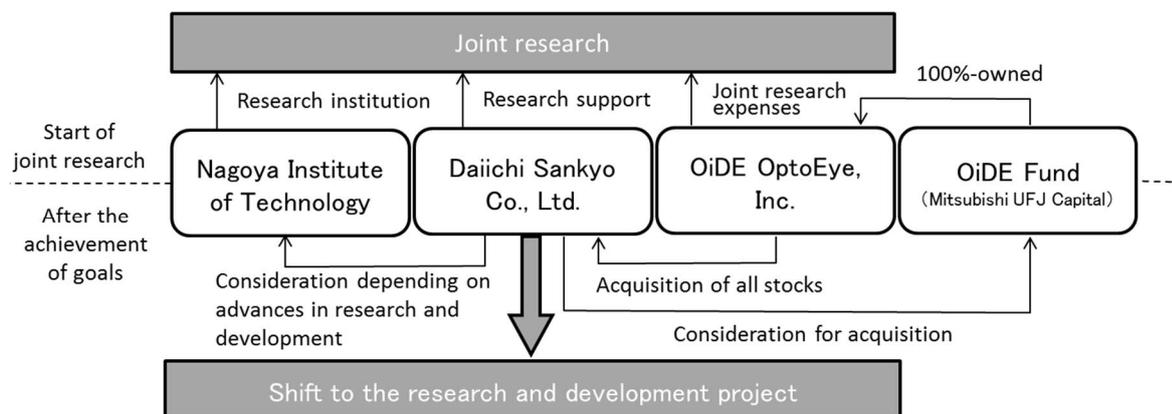
*3 Retinitis pigmentosa

Retinitis pigmentosa is a progressive genetic disease that causes abnormalities in retinal photoreceptors and is a designated intractable disease in Japan. As the disease progresses, it causes a decrease in QOL, including narrowing of the visual field, abnormal color vision and impaired visual acuity, leading to blindness. Although many causative genes have been identified, at present there is no curative therapy and only symptomatic treatments, such as using shaded glasses or taking vitamin A orally, are available. Therefore, a new therapy is highly desired.

*4 OiDE (**O**pen **i**nnovation for the **D**evelopment of **E**merging technologies) Fund

A fund jointly established by Mitsubishi UFJ Capital, Daiichi Sankyo and other investors in 2013, and operated by Mitsubishi UFJ Capital as a general partner.

[Schematic View]



Contact Information	
Corporate Communications Department, Daiichi Sankyo Company, Limited	TEL: 03-6225-1126
Corporate Planning Department, Mitsubishi UFJ Capital Co., Ltd.	TEL: 03-5205-8581
Organization for Co-Creation Research and Social Contributions, Nagoya Institute of Technology	TEL: 052-735-5627 E-mail: c-socc@adm.nitech.ac.jp