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Gene Techno Science Co., Ltd.

Code: 4584 (TSE Mothers)

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GENE TECHNO SCIENCE filed international/PCT patent application of Anti-RAMP2 (Receptor Activity Modifying Protein 2) antibodies which inhibit the formation of new blood vessels with a new mechanism

We successfully created anti-RAMP2 antibody (GND-004), which is one of candidates for a breakthrough new antibody drug inhibiting the formation of new blood vessels with a new mechanism and filed the patent application last year. Now, we have filed an international/PCT patent application as follows:

1. Summary of invention

We have been collaborating with Professor Takayuki Shindo, School of Medicine, Shinsyu University and successfully created anti-RAMP2 antibodies which inhibit the formation of new blood vessels promoted by binding of adrenomedullin to RAMP2, a cell surface protein.

Adrenomedullin is a peptide that has variety of bioactivity such as formation of new blood vessels. It is secreted in tumor tissue under the condition of hypoxia and plays an important role of the growth of tumor by activating formation of new blood vessels, that is, it binds RAMP2 expressed on surface of vascular endothelial cells and stimulates growth of a new blood vessel.

We have developed antibodies against RAMP2 that are a new candidate of therapeutic antibody for the disease caused by formation of new blood vessels and expect that these antibodies have therapeutic effect for the patients with the wet age-related macular degeneration, the number of which has increased recent years due to aging population. In addition, we expect these antibodies to have anti-tumor effect to the cancer patients. The number of those patients also has dramatically increased over the past decade.

This anti RAMP2 antibody project is one of our new biologics pipeline which has the high possibility of novel mechanism different from VEGF inhibitor.

A global VEGF inhibitor market in 2017 is expected to be 1 trillion yen for ophthalmologic field and 750 billion yen for oncology. ^(Note) By developing a new biologics using this antibody, we will be able to provide more therapeutic options to both new patients with an ophthalmologic disease or oncology and to patients who have not been treated well with currently available VEGF inhibitors and have been waiting for new treatment options and believes this should create a tremendous value.

Recognizing a various range of business development potential in this antibody, we will proceed with research and development such as drug efficacy study and aim for licensing out to pharmaceutical company early while securing intellectual property.

(Note) This is calculated by us based on FY2017 financial information of each company which sells these products.

2. Financial impact

A financial impact on FY2018 is expected to be minimal.