Announcement of Research for New Compounds

OncoTherapy Science, Inc. (President & CEO: Junichi Shimada; hereinafter, "OncoTherapy") announces that OncoTherapy decided to start research on new compounds.

1. Research background

According to a research paper published in the first half of 2022, a protein kinase with new mechanism of action was suggested as a potential therapeutic target for organ fibrosis, and it is revealed that several strongly inhibitory compounds exist in the OncoTherapy's compound library. These compounds were obtained during the progress of another projects, and kinase profiling has already been completed by a third party. Since there is no need to search for hit compounds or synthesize new compounds, we will conduct research and evaluation by checking reproducibility of the paper in approximately 6 months. However, since we have been developing mostly for cancer and do not have development know-how for organ fibrosis, it will be not an independent development, but we consider out-licensing approaches in the future. In addition, if the reproducibility of the paper is not validated, it will be ended and licensing activities will not be followed. In that case, we will inform immediately.

2. Overview of research project and target disease

All of compounds are obtained from our own compound library and have novel chemical structures as designed in-house. Kinase profiling results already showed that the candidate compounds have potent and selective inhibitory activity against the therapeutic target kinase (e.g., 98.6% inhibition rate against enzymatic activity at 100nM, and the best selectivity among 371 kinases). Therefore, we will conduct cell-and animal-based examination to obtain the POC (proof of concept) and to increase the value of compounds.

<Organ fibrosis>

Organ fibrosis is a disease with high unmet medical needs, few of therapeutic drugs, and expectation for sales in huge market. Organ fibrosis is a pathological condition in which fibrosis progresses due to excessive deposition of extracellular matrix during the repair process of damaged organs, which eventually causes dysfunction of organ. It occurs in various organs such as lung, liver, and kidney, and when organs become fibrous, "cancer" often develops subsequently, thus organ fibrosis can be regarded as pre-cancer lesion.

Examples include idiopathic pulmonary fibrosis (IPF), liver cirrhosis, chronic hepatitis (non-alcoholic steatohepatitis (NASH), alcoholic hepatitis, viral hepatitis), renal fibrosis, etc.

3. Future outlook

The estimated cost for starting this research is only 1.3 million JPY for the fiscal year ending March of 2023, because the compounds were already identified. If drug efficacy and pharmacological tests are continued by company, the additional cost is expected to be 6 million to 10 million JPY for the fiscal year ending March of 2024.