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Press Release

Daiichi Sankyo Initiates Phase 1 Trial with Immuno-Oncology Therapy DS-1055 Targeting GARP on Activated Regulatory T Cells

- First-in-human phase 1 study to evaluate DS-1055 as a new type of immune intervention for patients with relapsed/refractory advanced or metastatic solid tumors
- Daiichi Sankyo combines novel technologies with expertise in antibody biology to create innovative clinical candidate

Tokyo, Munich and Basking Ridge, NJ - (October 22, 2020) – Daiichi Sankyo Company, Limited (hereafter, Daiichi Sankyo) announced today that the first patient has been dosed in a first-in-human global phase 1 study evaluating DS-1055, a GARP directed immuno-oncology therapy, in patients with advanced or metastatic solid tumors who have progressed on standard treatments including checkpoint inhibitors.

Immune checkpoint inhibitors have significantly impacted the treatment paradigm for several cancers over the past decade with improved survival for subsets of patients, but the majority of patients do not respond to current therapies or eventually develop resistance.[1] GARP is highly expressed on activated regulatory T cells (Tregs) and contributes to their immunosuppressive activity.[2] Research suggests that targeting GARP on Tregs may be a promising new immune intervention strategy.[2] There are no GARP directed therapies currently approved for cancer treatment.

"We are pleased to initiate clinical development to further evaluate the novel mechanism behind DS-1055, which was specifically designed to decrease the number of GARP expressing regulatory T cells and restore antitumor immune response," said Arnaud Lesegretain, Vice President, Global Oncology Development, Alpha Portfolio, Daiichi Sankyo. "Evidence suggests that DS-1055 could serve as a new type of immune-based therapy for patients with various cancers, including those resistant or refractory to checkpoint inhibitors."

About the Study

The first-in-human, global, multi-center, open-label phase 1 dose escalation study will evaluate the safety, tolerability and preliminary efficacy of DS-1055 in adult patients with relapsed/refractory advanced or metastatic head and neck, gastric and esophageal cancers and other tumor types. The purpose of this study is to determine the maximum tolerated dose and recommended dose of DS-1055 for further study.

The study will evaluate safety endpoints including dose-limiting toxicities and adverse events. Efficacy endpoints include objective response rate, disease control rate, duration of response, time to response, progression-free survival and overall survival. Pharmacokinetic, immunogenicity and biomarker endpoints will also be assessed.

Approximately 40 patients will be enrolled in the U.S. and Japan. For more information visit ClinicalTrials.gov (NCT04419532).

About DS-1055

DS-1055 is a monoclonal antibody designed to target GARP (Glycoprotein-A Repetitions Predominant), a transmembrane protein expressed on the surface of activated Tregs in the tumor microenvironment. DS-1055 was designed to promote antitumor immunity through the depletion of GARP positive Tregs.

Tregs are involved in immune tolerance and have strong immunosuppressive activity.[3] Tregs are accumulated in the tumor microenvironment, where they are activated and inhibit antitumor immunity through various mechanisms leading to suppression of effector T cells with antitumor activity.[3] Tregs also cause resistance to immune checkpoint inhibitors.[1] High Treg presence in the tumor microenvironment is associated with poor prognosis in various types of cancer.[4]

Targeting GARP, which is selectively expressed on activated Tregs and contributes to the function of Tregs, may be a way to decrease the number of functional Tregs in the tumor microenvironment and restore antitumor immunity.[2] Preclinical evidence has shown that depletion of Tregs results in antitumor activity.[5]

DS-1055 is an investigational agent that has not been approved for any indication in any country. Safety and efficacy have not been established.

About Daiichi Sankyo Cancer Enterprise

The mission of Daiichi Sankyo Cancer Enterprise is to leverage our world-class, innovative science and push beyond traditional thinking to create meaningful treatments for patients with cancer. We are dedicated to transforming science into value for patients, and this sense of obligation informs everything we do. Anchored by our DXd antibody drug conjugate (ADC) technology, our powerful research engines include biologics, medicinal chemistry, modality and other research laboratories in Japan, and Plexxikon Inc., our small molecule structure-guided R&D center in Berkeley, CA. For more information, please visit: www.DSCancerEnterprise.com.

About Daiichi Sankyo

Daiichi Sankyo Group is dedicated to the creation and supply of innovative pharmaceutical therapies to improve standards of care and address diversified, unmet medical needs of people globally by leveraging our world-class science and technology. With more than 100 years of scientific expertise and a presence in more than 20 countries, Daiichi Sankyo and its 15,000 employees around the world draw upon a rich legacy of innovation and a robust pipeline of promising new medicines to help people. In addition to a strong portfolio of medicines for cardiovascular diseases, under the Group's 2025 Vision to become a "Global Pharma Innovator with Competitive Advantage in Oncology," Daiichi Sankyo is primarily focused on providing novel therapies in oncology, as well as other research areas centered around rare diseases and immune disorders. For more information, please visit: www.daiichisankyo.com.

Media Contacts:

Global/US:
Jennifer Brennan
Daiichi Sankyo, Inc.
jbrennan2@dsi.com
+1 908 992-6631 (office)
+1 908 900-3183 (mobile)

Japan:
Masashi Kawase
Daiichi Sankyo Co., Ltd.
kawase.masashi.a2@daiichisankyo.co.jp
+81 3 6225 1126 (office)

EU:
Lydia Worms
Daiichi Sankyo Europe GmbH
lydia.worms@daiichi-sankyo.eu
+49 (89) 7808751 (office)
+49 176 11780861 (mobile)

Investor Relations Contact:
DaiichiSankyoIR@daiichisankyo.co.jp

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