

Press Release

TROPION-Breast02 Phase 3 Trial of Datopotamab Deruxtecan Initiated in Patients with Previously Untreated Metastatic Triple Negative Breast Cancer

Tokyo and Basking Ridge, NJ – (June 13, 2022) – Daiichi Sankyo (TSE: 4568) today announced that the first patient was dosed in the global **TROPION-Breast02** phase 3 trial evaluating the efficacy and safety of datopotamab deruxtecan (Dato-DXd) versus investigator’s choice of chemotherapy in patients with previously untreated locally recurrent inoperable or metastatic triple negative breast cancer (TNBC) not eligible to receive PD-1/PD-L1 inhibitor therapy.

Datopotamab deruxtecan is a specifically designed TROP2 directed DXd antibody drug conjugate (ADC) being jointly developed by Daiichi Sankyo and AstraZeneca (LSE/STO/Nasdaq: AZN).

Approximately 10 to 15% of breast cancers are considered triple negative, the most aggressive subtype of breast cancer.^{1,2,3} Compared to patients with other breast cancer subtypes, the prognosis for patients with metastatic TNBC is generally worse, with five-year survival rates estimated at 12% and median overall survival generally less than two years.^{3,4} TNBC is defined by tumors that test negative for estrogen and progesterone hormone receptors (HRs) as well as human epidermal growth factor 2 receptor (HER2), as determined by an IHC test and/or an ISH test; HER2 negative cancers are currently defined as IHC 0, IHC 1+ or IHC 2+/ISH-.^{3,5}

“Patients with metastatic triple negative breast cancer who are not able to receive PD-1/PD-L1 inhibitor treatment often experience recurrence following chemotherapy, so additional options in the first-line treatment setting are needed,” said Gilles Gallant, BPharm, PhD, FOPQ, Senior Vice President, Global Head, Oncology Development, Oncology R&D, Daiichi Sankyo. “The TROPION-Breast02 trial will build on the preliminary efficacy and safety profile seen in the relapsed or refractory triple negative breast cancer arm of the TROPION-PanTumor01 trial to evaluate whether datopotamab deruxtecan may be a more effective treatment than chemotherapy for patients in the first line setting.”

“Initial results of datopotamab deruxtecan in patients with pretreated metastatic triple negative breast cancer, a group with a significant unmet need, have been encouraging,” said Cristian Massacesi, MD, Chief

Medical Officer and Oncology Chief Development Officer, AstraZeneca. “We are building on these early results by moving forward with the TROPION-Breast02 trial, the second pivotal trial of datopotamab deruxtecan in breast cancer, to determine if this antibody drug conjugate may potentially be used earlier in the treatment of metastatic triple negative breast cancer.”

About TROPION-Breast02

TROPION-Breast02 is a global, randomized, open-label, two-arm, multicenter study assessing the efficacy and safety of datopotamab deruxtecan (6 mg/kg) compared with investigator’s choice of chemotherapy (paclitaxel, nab-paclitaxel, capecitabine, carboplatin or eribulin) in patients with previously untreated locally recurrent inoperable or metastatic TNBC. TNBC is defined as HR negative, meaning tumors test negative for estrogen and progesterone hormone receptors, and HER2 negative, determined by an IHC test and/or an ISH test.^{3,5} HER2 negative cancers are currently defined as IHC 0, IHC 1+ or IHC 2+/ISH-.⁵ Patients must not be candidates for PD-1/PD-L1 inhibitor therapy and must be eligible for one of the investigator’s choice of chemotherapy options.

The dual primary endpoints of TROPION-Breast02 are progression-free survival (PFS) assessed by blinded independent central review and overall survival. Secondary endpoints include PFS assessed by investigator, objective response rate, duration of response, disease control rate, pharmacokinetics and safety.

TROPION-Breast02 will randomize approximately 600 patients with TNBC at sites in Asia, Africa, Europe and North America. For more information visit [ClinicalTrials.gov](https://clinicaltrials.gov).

About Triple Negative Breast Cancer

Approximately 10 to 15% of breast cancers are considered triple negative, the most aggressive subtype of breast cancer.^{1,2,3} Compared to patients with other breast cancer subtypes, the prognosis for patients with metastatic TNBC is generally worse, with five-year survival rates estimated at 12% and median overall survival generally less than two years.^{3,4} TNBC is defined by tumors that test negative for estrogen and progesterone hormone receptors (HRs) as well as human epidermal growth factor 2 receptor (HER2), as determined by an IHC test and/or an ISH test; HER2 negative cancers are currently defined as IHC 0, IHC 1+ or IHC 2+/ISH-.^{3,5}

About TROP2

TROP2 (trophoblast cell-surface antigen 2) is a transmembrane glycoprotein overexpressed in several types of solid tumors, including breast cancer.⁶ TROP2 expression has been detected in a wide range of breast

cancer subtypes, including approximately 80% of patients with TNBC.^{7,8,9} High TROP2 expression is an unfavorable prognostic factor for overall survival in all types of breast cancer.⁷

About Datopotamab Deruxtecan (Dato-DXd)

Datopotamab deruxtecan (Dato-DXd) is an investigational TROP2 directed ADC. Designed using Daiichi Sankyo's proprietary DXd ADC technology, datopotamab deruxtecan is one of three leading ADCs in the oncology pipeline of Daiichi Sankyo, and one of the most advanced programs in AstraZeneca's ADC scientific platform. Datopotamab deruxtecan is comprised of a humanized anti-TROP2 IgG1³ monoclonal antibody, developed in collaboration with Sapporo Medical University, attached to a number of topoisomerase I inhibitor payloads, an exatecan derivative, via tetrapeptide-based cleavable linkers.

A comprehensive development program called TROPION is underway globally with trials evaluating the efficacy and safety of datopotamab deruxtecan across multiple solid tumors, including TNBC, HR positive/HER2 negative breast cancer, non-small cell lung cancer, small cell lung cancer, urothelial, gastric and esophageal cancer. Trials in combination with other anticancer treatments, such as immunotherapy, also are underway.

About the Daiichi Sankyo and AstraZeneca Collaboration

Daiichi Sankyo Company, Limited (referred to as Daiichi Sankyo) and AstraZeneca entered into a global collaboration to jointly develop and commercialize datopotamab deruxtecan in [July 2020](#), except in Japan where Daiichi Sankyo maintains exclusive rights. Daiichi Sankyo is responsible for the manufacturing and supply of datopotamab deruxtecan.

About Daiichi Sankyo

Daiichi Sankyo is dedicated to creating new modalities and innovative medicines by leveraging our world-class science and technology for our purpose "to contribute to the enrichment of quality of life around the world." In addition to our current portfolio of medicines for cancer and cardiovascular disease, Daiichi Sankyo is primarily focused on developing novel therapies for people with cancer as well as other diseases with high unmet medical needs. With more than 100 years of scientific expertise and a presence in more than 20 countries, Daiichi Sankyo and its 16,000 employees around the world draw upon a rich legacy of innovation to realize our 2030 Vision to become an "Innovative Global Healthcare Company Contributing to the Sustainable Development of Society." For more information, please visit: www.daiichisankyo.com.

Media Contacts:

Japan:

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

Global/US:

Rose Talarico
Daiichi Sankyo, Inc.
rtalarico@dsi.com
+1 973 775 0838 (mobile)

Investor Relations Contact:

DaiichiSankyoIR@daiichisankyo.co.jp

References

- ¹ American Cancer Society. [Breast Cancer Hormone Receptor Status](#). Accessed May 2021.
- ² O'Reilly D, et al. *World J Clin Oncol*. 2021; 12(3):164-182
- ³ National Cancer Institute. [SEER cancer stat facts: female breast cancer subtypes](#). Accessed May 2022
- ⁴ Bergin A, et al. *F1000Res*. 2019; doi:10.12688/f1000research.18888
- ⁵ Iqbal N, et al. *Mol Biol Int*. 2014;852748
- ⁶ Goldenberg D, et al. *Oncotarget*. 2018;9(48): 28989-29006.
- ⁷ Ambrogi F, et al. *PLoS One*. 2014;9(5):e96993.
- ⁸ Vidula N, et al. *Journal of Clinical Oncology*. 2017; 35:15_suppl, 1075-1075.
- ⁹ Zaman S, et al. *Oncotargets Ther*. 2019;12:1781-1790.