

## Press Release

# **Daiichi Sankyo Announces Clinical Trial Collaboration with AstraZeneca to Evaluate Patritumab Deruxtecan (U3-1402) in Combination with TAGRISSO in EGFR-Mutated Non-Small Cell Lung Cancer**

**Tokyo, Basking Ridge, N.J. and Munich – (August 6, 2020)** – Daiichi Sankyo Company, Limited (hereafter, Daiichi Sankyo) announced that it has entered into a clinical trial collaboration with AstraZeneca (LSE/STO/NYSE: AZN) to evaluate the combination of patritumab deruxtecan (U3-1402), a HER3 directed DXd antibody drug conjugate (ADC), and TAGRISSO (osimertinib), an epidermal growth factor receptor (EGFR) tyrosine kinase inhibitor (TKI), in patients with EGFR-mutated advanced or metastatic non-small cell lung cancer (NSCLC).

There are no HER3 directed therapies approved for the treatment of NSCLC or any cancer. The frequency of HER3 overexpression in EGFR-mutated NSCLC has been reported to be as high as 75 percent, and there is evidence that HER3 expression may be associated with resistance to TKIs.<sup>1,2</sup>

“The majority of patients with activating mutations of EGFR, or EGFR-mutated NSCLC, overexpress the HER3 protein in the cancer cells, and there is evidence that HER3 expression is a passenger marker of resistance to TKIs. Clinical and preclinical data, as well as biomarker expression and resistance mechanism research, support the further evaluation of patritumab deruxtecan and TAGRISSO as a treatment combination for patients with EGFR-mutated NSCLC who have progressed after treatment with a TKI, typically TAGRISSO,” said Gilles Gallant, BPharm, PhD, FOPQ, Senior Vice President, Global Head, Oncology Development, Oncology R&D, Daiichi Sankyo. “This clinical trial collaboration supports our goal to optimize development of patritumab deruxtecan in patients with EGFR-mutated metastatic NSCLC to further improve current standards of care. Daiichi Sankyo is pleased to begin this focused collaboration with AstraZeneca on this important aspect of patritumab deruxtecan development.”

“In this trial, we will explore a new potential way to treat patients with advanced disease by combining TAGRISSO with patritumab deruxtecan, a HER3 directed ADC,” said Cristian Massacesi, Senior Vice President, Head of Late Stage Development Oncology R&D, AstraZeneca. “This combination approach represents one of our strategies of addressing tumor resistance. As we work to continue maximizing the benefit TAGRISSO can bring to patients, we look forward to collaborating with Daiichi Sankyo in this new area of study.”

## **About the Study**

Under the terms of the agreement, Daiichi Sankyo will sponsor and conduct a multicenter, open-label, two-part phase 1 study evaluating patritumab deruxtecan and TAGRISSO as both a first-line and second-line combination treatment in patients with advanced or metastatic NSCLC with an EGFR exon 19 deletion or L858R mutation.

The first part of the study (dose escalation) will assess the safety and tolerability of different dosing combinations of patritumab deruxtecan and TAGRISSO to determine the recommended combination dose. The second part of the study (dose expansion) will include a first-line and second-line cohort that will further evaluate the anti-tumor activity and safety of the combination. Patients enrolled in the first-line cohort will receive patritumab deruxtecan and TAGRISSO combination treatment, and patients in the second-line cohort will be randomized 1:1 to receive treatment with patritumab deruxtecan alone or in combination with TAGRISSO. Up to 258 patients will be enrolled into the study, which will be conducted in North America, Europe, and Asia including Japan.

The primary study objectives for the dose escalation part of the study include the assessment of the safety and tolerability of patritumab deruxtecan and TAGRISSO. The primary objective for the dose expansion part of the study for both cohorts is the assessment of anti-tumor activity as measured by objective response rate (ORR) and as assessed by independent central review.

## **Unmet Need in Non-Small Cell Lung Cancer (NSCLC)**

Lung cancer is the most common cancer and is the leading cause of cancer mortality worldwide with an estimated 2.1 million new cases of lung cancer in 2018 and 1.8 million deaths.<sup>3</sup> Non-small cell lung cancer (NSCLC) accounts for 80 to 85 percent of all lung cancers.<sup>4</sup>

Mutations in the epidermal growth factor receptor (EGFR) gene are among the most frequently observed genomic alterations in NSCLC, affecting approximately 14 to 30 percent of patients with NSCLC.<sup>5</sup> For patients with EGFR-mutated NSCLC, targeted therapy with EGFR TKIs offers higher response rates, overall survival and progression-free survival compared to chemotherapy.<sup>6</sup> However, most patients eventually develop resistance to the TKIs, and new treatment approaches including combination strategies designed to overcome TKI resistance are needed.<sup>7</sup>

## **About HER3**

HER3 is a member of the EGFR family of tyrosine kinase receptors, which are associated with normal as well as aberrant cell proliferation and survival.<sup>2</sup> HER3 expression has been associated with an increased incidence of metastases and reduced survival in patients with NSCLC with expression frequency reported to

be as high as 75 percent.<sup>1</sup> A majority of EGFR-mutated NSCLCs show some level of HER3 expression.<sup>8,9</sup> Currently, no HER3 directed therapies are approved for NSCLC or any cancer.

### **About Patritumab Deruxtecan (U3-1402)**

Patritumab deruxtecan (U3-1402) is one of three lead DXd antibody drug conjugates (ADC) in the oncology pipeline of Daiichi Sankyo.

ADCs are targeted cancer medicines that deliver cytotoxic chemotherapy ("payload") to cancer cells via a linker attached to a monoclonal antibody that binds to a specific target expressed on cancer cells. Designed using Daiichi Sankyo's proprietary DXd ADC technology, patritumab deruxtecan is comprised of a human anti-HER3 antibody attached to a topoisomerase I inhibitor payload by a tetrapeptide-based linker. It is designed to target and deliver chemotherapy inside cancer cells that express HER3 as a cell surface antigen.

Patritumab deruxtecan is currently being evaluated in a [phase 1 study](#) in previously treated patients with metastatic or unresectable NSCLC. Patritumab deruxtecan is also being evaluated in a [phase 1/2 study](#) in patients with HER3 expressing metastatic breast cancer.

Patritumab deruxtecan 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](http://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](http://www.daiichisankyo.com).

**Media Contacts:**

**Global/US:**

Victoria Amari  
Daiichi Sankyo, Inc.  
[vamari@dsi.com](mailto:vamari@dsi.com)  
+1 908 900 3010 (mobile)

**Japan:**

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

**EU:**

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

**Investor Relations Contact:**

[DaiichiSankyoIR@daiichisankyo.co.jp](mailto:DaiichiSankyoIR@daiichisankyo.co.jp)

---

References:

- <sup>1</sup> Muller-Tidow C, et al. *Cancer Res* 2005; 65:1778-1772.
- <sup>2</sup> Mishra R, et al. *Oncology Reviews* 2018;12:355.
- <sup>3</sup> Bray F, et al. *CA: Cancer J. Clin* 2018;68:394-424. Global Cancer Statistics 2018.
- <sup>4</sup> American Cancer Society. Types of Non-Small Cell Lung Cancer. 2019.
- <sup>5</sup> Skoulidis F, et al. *Nat Rev Cancer*. 2019; 19:495-509.
- <sup>6</sup> Planchard D, et al. *Ann of Onc* 29(Supp4): iv192–237 2018. Updated Jan 2019.
- <sup>7</sup> Morgillo F, et al. *ESMO Open* 2016; 1:e000060
- <sup>8</sup> Yi, et al. *Mod Pathol*. 1997;10:142-148.
- <sup>9</sup> Kawano, et al. *J Surg Res*. 2008;146:43-48.