

## Press Release

# FDA Grants Priority Review for Daiichi Sankyo's New Drug Application for FLT3 Inhibitor Quizartinib for Treatment of Patients with Relapsed/Refractory *FLT3*-ITD AML

- Application based on results of pivotal phase 3 QuANTUM-R study of quizartinib in patients with relapsed/refractory *FLT3*-ITD AML and follows recent Breakthrough Therapy designation received from the U.S. Food and Drug Administration (FDA)
- Quizartinib is the first FLT3 inhibitor to demonstrate a survival benefit in a randomized phase 3 study in patients with relapsed/refractory *FLT3*-ITD AML
- Significant unmet medical need exists in the U.S. for AML with limited treatment options for patients with relapsed/refractory *FLT3*-ITD AML, a very aggressive form of the disease associated with poor prognosis
- Quizartinib marketing applications now under expedited review in the U.S., Japan and EU

**Tokyo, Munich and Basking Ridge, NJ – (November 21, 2018)** – Daiichi Sankyo Company, Limited (hereafter, Daiichi Sankyo) announced that the U.S. Food and Drug Administration (FDA) has accepted a New Drug Application (NDA) and granted Priority Review for quizartinib for the treatment of adult patients with relapsed/refractory *FLT3*-ITD acute myeloid leukemia (AML).

A Priority Review designation is granted by the FDA to drugs that, if approved, would be significant improvements in the safety or effectiveness of the treatment, diagnosis or prevention of serious conditions when compared to standard applications. Under Priority Review, the FDA aims to take action on an application within six months as compared to 10 months under standard review. The FDA is expected to make a decision on approval by May 25, 2019.

The NDA is based on results of the pivotal phase 3 QuANTUM-R study of quizartinib, which was the first randomized phase 3 study to show that a FLT3 inhibitor prolonged overall survival as an oral, single agent compared to chemotherapy in patients with relapsed/refractory *FLT3*-ITD AML. Topline results of the phase 3 QuANTUM-R study were presented during the plenary program at the 23<sup>rd</sup> Congress of the European Hematology Association in June 2018, and new analyses will be presented during an oral presentation at the 60<sup>th</sup> Annual Meeting of the American Society of Hematology on Monday, December 3.

“If approved, quizartinib has the potential to meaningfully advance treatment for patients with relapsed or refractory *FLT3*-ITD AML. Patients need more treatment options for this type of AML, which is particularly aggressive and difficult to treat. We are pleased that the FDA has filed our application for quizartinib for patients with relapsed or refractory *FLT3*-ITD AML, and granted priority review,” said Arnaud Lesegretain,

Vice President, Oncology Research and Development and Head, AML Franchise, Daiichi Sankyo. “Coupled with the recent acceptances of marketing applications for quizartinib in Japan and EU, we look forward to working with regulatory authorities in the U.S., Japan and EU to bring quizartinib to patients.”

In addition to FDA priority review, quizartinib is currently under expedited regulatory review with the Japan Ministry of Health, Labour and Welfare (MHLW) and the European Medicines Agency (EMA) for the treatment of adults with relapsed or refractory AML which is *FLT3*-ITD positive.

### **About the QuANTUM-R Study**

QuANTUM-R is a pivotal, global, phase 3, open-label randomized study that enrolled 367 patients with *FLT3*-ITD AML who were refractory to or in relapse with duration of remission of six months or less following standard first-line AML therapy with or without hematopoietic stem cell transplantation. Patients were randomized in a 2:1 ratio to receive either single agent oral quizartinib or salvage chemotherapy. The primary objective of the study was to determine whether single agent quizartinib prolonged overall survival compared to salvage chemotherapy. The study met its primary endpoint of improving overall survival.

In the QuANTUM-R study, the median treatment duration with quizartinib was 4 cycles of 28 days each versus 1 cycle in the salvage chemotherapy arm. Incidence of treatment-emergent adverse events was comparable between patients who received single agent quizartinib and those who received salvage chemotherapy. The most common adverse drug reactions (>30 percent, any Grade) in patients treated with quizartinib included infections, bleeding, nausea, asthenic conditions, pyrexia, febrile neutropenia and vomiting, and the most common Grade  $\geq 3$  adverse drug reactions (>20 percent) were infection and febrile neutropenia. The most common laboratory adverse reactions (incidence >50 percent) were decreased white blood cell count, decreased lymphocyte count, decreased hemoglobin, decreased neutrophil count and decreased platelet count. The safety profile observed in QuANTUM-R appears consistent with that observed at similar doses in the quizartinib clinical development program.

### **About *FLT3*-ITD Acute Myeloid Leukemia**

AML is an aggressive blood and bone marrow cancer that causes uncontrolled growth and accumulation of malignant white blood cells that fail to function normally and interfere with the production of normal blood cells.<sup>1</sup> In the U.S. this year, it is estimated that there will be more than 19,000 new diagnoses of AML and more than 10,000 deaths from AML.<sup>2</sup> The five-year survival rate of AML reported from 2005 to 2011 was approximately 26 percent, which was the lowest of all leukemias.<sup>1</sup>

*FLT3* gene mutations are one of the most common genetic abnormalities in AML.<sup>3</sup> *FLT3*-ITD is the most common *FLT3* mutation, affecting approximately one in four patients with AML.<sup>4,5,6,7</sup> *FLT3*-ITD is a driver mutation that presents with high leukemic burden and has poor prognosis and a significant impact on disease management for patients with AML.<sup>5,8</sup>

Patients with *FLT3*-ITD AML have a worse overall prognosis, including an increased incidence of relapse, an increased risk of death following relapse and a higher likelihood of relapse following hematopoietic stem cell transplantation as compared to those without this mutation.<sup>9,10</sup>

### **About Quizartinib**

Quizartinib, the lead investigational agent in the AML Franchise of the Daiichi Sankyo Cancer Enterprise, is an oral selective FLT3 inhibitor currently in phase 3 development for adults with relapsed/refractory *FLT3*-ITD AML ([QuANTUM-R](#)) in the U.S. and EU; phase 3 development for newly-diagnosed *FLT3*-ITD AML ([QuANTUM-First](#)) in the U.S., EU and Japan; phase 2 development for relapsed/refractory *FLT3*-ITD AML in Japan; and, phase 1 development in combination with an investigational MDM2 inhibitor, milademetan, for relapsed/refractory *FLT3*-ITD AML and newly-diagnosed *FLT3*-ITD AML unfit for intensive chemotherapy in the U.S., EU and Japan.

In addition to Priority Review designation, quizartinib has been granted Breakthrough Therapy designation for the treatment of adult patients with relapsed/refractory *FLT3*-ITD AML, and Fast Track designation for the treatment of relapsed/refractory AML by the U.S. Food and Drug Administration (FDA). Quizartinib also has been granted accelerated assessment by the European Medicines Agency (EMA) for the treatment of adults with relapsed or refractory AML which is *FLT3*-ITD positive, and granted Orphan Drug designation by both the FDA and the European Commission (EC) for the treatment of AML and by the Japan Ministry of Health, Labour and Welfare (MHLW) for the treatment of *FLT3*-mutated AML.

Quizartinib and milademetan are investigational agents that have 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 three pillars including our investigational Antibody Drug Conjugate Franchise, Acute Myeloid Leukemia Franchise and Breakthrough Science, we aim to deliver seven distinct new molecular entities over eight years

during 2018 to 2025. Our powerful research engines include two laboratories for biologic/immuno-oncology and small molecules in Japan, and Plexxikon Inc., our small molecule structure-guided R&D center in Berkeley, CA. Compounds in pivotal stage development include: [fam-] trastuzumab deruxtecan, an antibody drug conjugate (ADC) for HER2 expressing breast, gastric and other cancers; quizartinib, an oral selective FLT3 inhibitor, for newly-diagnosed and relapsed/refractory *FLT3*-ITD acute myeloid leukemia (AML); and pexidartinib, an oral CSF1R inhibitor, for tenosynovial giant cell tumor (TGCT). 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 products to address diversified, unmet medical needs of patients in both mature and emerging markets. With over 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 hypertension and thrombotic disorders, under the Group's 2025 Vision to become a "Global Pharma Innovator with Competitive Advantage in Oncology," Daiichi Sankyo research and development is primarily focused on bringing forth novel therapies in oncology, including immuno-oncology, with additional focus on new horizon areas, such as pain management, neurodegenerative diseases, heart and kidney diseases, and other rare diseases. For more information, please visit: [www.daiichisankyo.com](http://www.daiichisankyo.com).

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