

## Press Release

# Comprehensive Analyses from Pivotal Phase 3 QuANTUM-R Study Demonstrate Consistent Overall Survival Benefit of Daiichi Sankyo's FLT3 Inhibitor Quizartinib in Patients with Relapsed/Refractory *FLT3*-ITD AML

- Quizartinib is the first FLT3 inhibitor to demonstrate a survival benefit in a randomized phase 3 study in patients with *FLT3*-ITD AML, which was refractory or relapsed within six months of first remission, a very aggressive subtype of the disease associated with poor prognosis
- Pre-specified sensitivity analyses of overall survival and event-free survival as well as predefined subgroup analyses are consistent with the primary analysis of overall survival
- Analyses of key exploratory endpoints from QuANTUM-R study also support the primary analysis
- Quizartinib marketing applications are currently under expedited review in the U.S., Japan and EU

**Munich and Basking Ridge, NJ – (December 3, 2018)** – Daiichi Sankyo Company, Limited (hereafter, Daiichi Sankyo) announced comprehensive analyses of overall survival from the pivotal QuANTUM-R phase 3 study of single agent quizartinib compared to salvage chemotherapy in patients with *FLT3*-ITD acute myeloid leukemia (AML), which was refractory or relapsed within six months of first remission, were presented today during an oral presentation at the 60th Annual Meeting of the American Society of Hematology (ASH) in San Diego.

Pre-specified sensitivity analyses of overall survival and event-free survival as well as predefined subgroup analyses from the QuANTUM-R study of quizartinib were found to be consistent with the primary analysis of overall survival. Analyses of key exploratory endpoints such as composite complete remission (CRc), duration of CRc and hematopoietic stem cell transplant (HSCT) rate also were consistent with, and supportive of, the primary overall survival benefit demonstrated in QuANTUM-R.

“The results seen across these sensitivity and subgroup analyses further demonstrate the consistency and robustness of the treatment effect seen in the QuANTUM-R study with quizartinib,” said Jorge E. Cortes, MD, Deputy Chair of the Department of Leukemia in the Division of Cancer Medicine at The University of Texas MD Anderson Cancer Center. “Additionally, these new analyses further support the value of targeting the *FLT3*-ITD driver mutation with a highly selective and potent FLT3 inhibitor such as quizartinib to help reduce leukemic burden and potentially allow patients to live longer as compared to salvage chemotherapy.”

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.

“These findings further build upon the QuANTUM-R results presented at EHA 2018 and underscore our belief that quizartinib may be an important new treatment option for patients with relapsed/refractory *FLT3*-ITD AML,” said Arnaud Lesegretain, Vice President, Oncology Research and Development and Head, AML Franchise, Daiichi Sankyo. “Regulatory marketing applications for quizartinib are currently under expedited review in the U.S, Japan and EU, and we are collaborating closely with regulatory authorities to bring quizartinib to patients as quickly as possible.”

### **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 HSCT. Patients were randomized in a 2:1 ratio to receive either single agent oral quizartinib (60 mg, with 30 mg lead-in) 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 (HR = 0.76, P=0.0177, 95% CI 0.58-0.98); median overall survival was 6.2 months (95% CI 5.3-7.2) for patients treated with quizartinib and 4.7 months (95% CI 4.0-5.5) for patients receiving salvage chemotherapy.

Three pre-specified sensitivity analyses of overall survival in QuANTUM-R were conducted, which included using a per-protocol set (randomized and treated patients without major protocol deviations), an analysis censoring for the effect of transplant, and another analysis censoring for subsequent use of non-study *FLT3* inhibitors. Predefined subgroup analyses included evaluation of varying allelic ratio, prior HSCT, AML risk score and response to prior therapy.

### **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 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 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.

Quizartinib has been granted Priority Review and 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 *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 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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