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Sumitomo Pharma America Presents New Investigational Data on Enzomenib and Nuvisertib at the 2025 American Society of Hematology Annual Meeting and Exposition

- *New investigational data from Phase 1/2 study of enzomenib (DSP-5336) in patients with relapsed/refractory acute myeloid leukemia (AML) show clinical activity in various leukemia subtypes driven by genomic alterations*
- *Promising preliminary data, particularly in patients without prior venetoclax or menin inhibitor exposure, seen in Phase 1 study of enzomenib in combination with venetoclax and azacitidine in patients with relapsed/refractory AML*
- *Preliminary data from Phase 1/2 study of nuvisertib (TP-3654) in combination with momelotinib in patients with relapsed/refractory myelofibrosis (MF) with anemia show treatment combination appears to be well tolerated with early clinical activity and improvements in spleen and symptom responses*

MARLBOROUGH, Mass., December 8, 2025 –Sumitomo Pharma America, Inc. (SMPA) today presented new clinical data supporting further development of enzomenib, an investigational, oral selective menin inhibitor being researched for the treatment of relapsed or refractory acute leukemia, and nuvisertib, an oral investigational highly selective small molecule PIM1 kinase inhibitor, being researched for the treatment of relapsed or refractory myelofibrosis (MF), at the 67th American Society of Hematology (ASH) Annual Meeting and Exposition.

Updated Data Shared with the Use of Enzomenib in Acute Myeloid Leukemia
Updated preliminary data were presented from the ongoing Phase 1/2 study of enzomenib monotherapy, which as of October 4, 2025, included 116 total patients with acute leukemia, most of whom (93.1%, 108/116) had acute myeloid leukemia (AML) with a median of two prior regimens. Genomic abnormalities of leukemia subtypes including KMT2A rearrangement (*KMT2A*r) were documented in 61 patients (52.6%), NPM1 mutation (*NPM1*m) in 34 patients (29.3%), and other *HOXA9*/*MEIS1*-driven abnormalities in 21 patients (17.7%).

Enzomenib was escalated from 40 mg twice a day (BID) to 400 mg BID with no dose-limiting toxicities (DLTs). Treatment-related adverse events (TRAEs) observed in at least 10% of patients were nausea (16.4%), and vomiting (11.2%). Differentiation syndrome (DS) was reported in 12.9% of patients and did not result in patient deaths, study discontinuations, or dose reductions of enzomenib. No treatment-related deaths were observed in the study. Dose-dependent increases in exposure were observed, particularly at doses greater than 140 mg BID. Little to no drug accumulation was observed, and CYP3A4 inhibitor azoles did not have a significant impact on exposure.

In patients with *KMT2Ar*, dose optimization of 200, 300, and 400 mg BID is complete, and the RP2D has been determined as 300 mg BID. At RP2D, in patients with *KMT2Ar* who had not received prior treatment with a menin inhibitor (n = 15), the objective response rate (ORR) was 73.3% and CR+CRh was 40%. Across the optimization dose levels, the duration of CR+CRh (n

= 11) was 12.5 months and in all optimization patients (n = 39) median overall survival (mOS) was 11.8 months.

For patients with *NPM1m* AML, dose optimization is ongoing at 200, 300, and 400 mg BID with a focus on 200 and 300 mg BID in patients who have not received a prior menin inhibitor. In the *NPM1m* dose optimization population (n=25, pts who received ≥ 200 mg BID), ORR is 52% and CR+CR is 44% with a duration of CR+CRh of 5.7 months. The mOS was 8.5 months.

"Despite improved understanding of the genetic factors of certain high-risk subtypes in acute leukemias, poor prognosis for patients remains a significant unmet need," said Naval G. Daver, M.D., professor and director of the Leukemia Research Alliance Program in the Department of Leukemia at MD Anderson Cancer Center in Houston. "The data from this ongoing Phase 1/2 study continue to show that enzomenib exhibits promising clinical activity, with encouraging overall and complete response rates, duration of response, and no significant drug interactions with azoles in patients with relapsed or refractory *KMT2A*r or *NPM1*m AML. As an intentionally designed oral therapy to inhibit menin and KMT2A protein interaction, these encouraging clinical results combined with a promising safety profile support the potential of enzomenib as a therapeutic option for relapsed or refractory acute leukemia patients with KMT2A-rearranged or NPM1-mutated subtypes of the disease."

Also presented were preliminary results of a Phase 1 study of enzomenib at dose levels of 140 mg, 200 mg, and 300 mg BID in combination with azacitidine and venetoclax (VEN/AZA) in patients with relapsed or refractory AML with *KMT2A*r or *NPM1*m. VEN was administered on days 1-14 of a 28-day study cycle, AZA on days 1-7, and enzomenib was administered on days 1-28 with and without azole antifungal agents.

A total of 40 patients were enrolled, of which 18 had *KMT2Ar* (45%) and 22 (55%) had *NPM1m*. The median number of prior regimens was 2, with 15 patients having received prior venetoclax (37.5%) and 11 patients (27.5%) a prior menin inhibitor.

There were no DLTs observed in the 40 patients enrolled. Hematologic TRAEs related to any regimen component observed in at least 15% of patients included thrombocytopenia (45%), leukopenia (35%), neutropenia (30%), anemia (22.2%), and lymphopenia (15%). Non-hematologic TRAEs were nausea (25%), diarrhea (20%), and AST increased and constipation (15% each). Any-cause QT interval prolongation was reported in 4 patients (10%) with no grade 3 or higher events; no cases were considered related to enzomenib. There were also 4 events of non-serious DS with 0 events grade 3 or higher. Pharmacokinetic data indicated that there were no significant drug-drug interactions between enzomenib and VEN.

As of the clinical data cutoff on October 4, 2025, clinical activity data is available for 26 of the 40 total patients as 11 patients were still in Cycle 1 (n = 9) or Cycle 2 (n = 2), and 3 patients had cutaneous leukemia without measurable disease in the bone marrow (bone marrow blasts <5%).

Promising preliminary clinical activity has been observed, particularly in patients without prior VEN or menin inhibitor exposure (N=13). The ORR is 85% (11/13) and the composite complete remission (CRc) rate is 62% (8/13). Local MRD assessments were available in 9 patients and 7/9 (78%) achieved MRD negativity as of the cut-off.

These data support evaluating enzomenib with VEN/AZA in patients with newly diagnosed AML. Study arms are being added to investigate the combination regimen for patients with newly diagnosed disease. Enzomenib will be administered at 200 mg or 300 mg BID using VEN/AZA administered according to the FDA label. Enrollment of newly diagnosed patients with *KMT2Ar* or *NPM1m* AML will begin in early 2026.

Nuvisertib in Patients with Relapsed or Refractory (R/R) MF
For the first time, clinical data were presented from the ongoing global Phase 1/2 study evaluating the safety and efficacy of nuvisertib in combination with momelotinib (MMB) in 18 patients with R/R MF with anemia. All enrolled patients in the study had previously been treated with a JAK inhibitor, the current standard of care for patients with MF, and 61% of patients had high molecular risk mutation. Preliminary data showed that the treatment with nuvisertib and MMB combination appeared well tolerated, with early clinical activity observed, including ≥50% total symptom score reduction (TSS50 response) in 58% of patients with an absolute reduction in all individual symptoms, a spleen volume reduction ≥ 25% (SVR25 response) in 50% of patients, anemia improvement, and cytokine modulation in patients with relapsed or refractory MF with anemia. These preliminary data, collected as of October 15, 2025, support further development of nuvisertib in combination with MMB as a potential treatment option for patients with MF.

Additionally, data presented from the ongoing global Phase 1/2 study of nuvisertib in patients with relapsed or refractory MF (N=77) showed that nuvisertib monotherapy continued to be well tolerated with no DLTs and limited myelosuppression. The results showed that treatment with nuvisertib monotherapy led to SVR25 response in 20% of patients, TSS50 response in 45% of patients with absolute reduction in all individual symptoms. Data also showed that treatment with nuvisertib resulted in significant cytokine modulation over time, correlating with spleen and symptom responses and one-year overall survival rate of 81%.

“Patients living with myelofibrosis with anemia usually have a dismal prognosis, still continue to face limited treatment options,” said John Mascarenhas, M.D., Director of the Center of Excellence for Blood Cancers and Myeloid Disorders, Icahn School of Medicine at Mount Sinai, New York. “The promising preliminary results from the combination of nuvisertib and momelotinib underscore the urgent need for new therapeutic approaches that may offer meaningful clinical benefits to a difficult to treat disease.”

“We are excited to present the first-ever myelofibrosis data with a momelotinib-based combination, specifically nuvisertib in combination with momelotinib. The development of

innovative therapies—both alone and in combination with other treatments—are critical for physicians and patients with blood cancers such as AML or MF who are in urgent need of new effective therapies," said Jatin Shah, M.D., Chief Medical Officer, Oncology, SMPA. "Based on these updated preliminary data presented at ASH, which continue to show promising clinical activity and safety profiles for both enzomenib and nuvisertib, we remain committed to accelerate the clinical development in these programs with the ultimate goal of improving patient outcomes."

About Leukemia
Leukemia is a type of cancer that forms in blood-forming tissue, characterized by the uncontrolled growth of blood cells, usually white blood cells, in the bone marrow. Acute leukemia, a form of leukemia, requires immediate treatment as blood cells multiply rapidly leading to a sudden onset of symptoms.[1] Approximately 30% of patients with AML have NPM1 mutations,[2] and 5%-10% of patients with AML have KMT2A rearrangements.[3]

About Myelofibrosis (MF)
MF is a rare type of blood cancer that is characterized by the buildup of fibrous tissue in the bone marrow, which can affect the production of blood cells. This buildup is caused by dysregulation in the JAK signaling pathway. MF is a serious and rare disease with 0.7 new cases per 100,000 people worldwide each year.[4]

About Enzomenib (DSP-5336)
Enzomenib is an investigational, oral, small molecule inhibitor of the menin and Lysine (K)-specific methyltransferase 2A (KMT2A) protein interaction, a key interaction in acute leukemia and other tumor cell proliferation and growth. Menin is a scaffold nuclear protein, which plays key roles in gene expression and protein interactions involved in many biological pathways, including cell growth, cell cycle, genomic stability, and hematopoiesis.[5,6] In preclinical studies, enzomenib has shown selective growth inhibition in human acute leukemia cell lines with KMT2A rearrangements or NPM1 mutations.[5,7] Enzomenib reduced the expression of the leukemia-associated genes *HOXA9* and *MEIS1* and increased the expression of the differentiation gene *CD11b* in human acute leukemia cell lines with KMT2A rearrangements and NPM1 mutation.[8,9] The safety and efficacy of enzomenib is currently being clinically evaluated in a Phase 1/2 dose-escalation/dose-expansion study in patients with relapsed or refractory acute leukemia (NCT04988555). Additionally, the registrational Phase 2 Horizen-1 R/R mono AML/ALL (*KMT2Ar* + *NPM1m*) study is now open for enrollment. The FDA granted Orphan Drug Designation for enzomenib for the indication of acute myeloid leukemia in June 2022. The FDA granted Fast Track Designation for enzomenib for the indication of relapsed or refractory acute myeloid leukemia with *KMT2A*r or *NPM1*m in June 2024. Japan's Pharmaceuticals and Medical Devices Agency (PMDA) granted Orphan Drug Designation for enzomenib for the indication of relapsed or refractory acute myeloid leukemia with *KMT2A*r or *NPM1*m in September 2024.

About Nuvisertib (TP-3654)
Nuvisertib is an oral investigational selective inhibitor of PIM1 kinase, which has shown potential

antitumor and antifibrotic activity through multiple pathways, including induction of apoptosis in preclinical models.[10,11] Nuvisertib was observed to inhibit proliferation and increase apoptosis in murine and human hematopoietic cells expressing the clinically relevant *JAK2* V617F mutation.[10] Nuvisertib alone and in combination with ruxolitinib showed white blood cell and neutrophil count normalization and reduced spleen size and bone marrow fibrosis in *JAK2* V617F and *MPLW515L* murine models of myelofibrosis.[11] The safety and efficacy of nuvisertib is currently being clinically evaluated in a Phase 1/2 study in patients with intermediate- and high-risk myelofibrosis (NCT04176198). The FDA granted Orphan Drug Designation to nuvisertib for the indication of myelofibrosis in May 2022. The Japan Ministry of Health, Labour and Welfare (MHLW) granted Orphan Drug Designation to nuvisertib for the treatment of myelofibrosis in November 2024. The FDA granted Fast Track Designation to nuvisertib for the indication of myelofibrosis in July 2025.

About Sumitomo Pharma

Sumitomo Pharma Co., Ltd. is a global pharmaceutical company based in Japan with key operations in the U.S. (Sumitomo Pharma America, Inc.) and Canada (Sumitomo Pharma Canada, Inc.) focused on addressing patient needs in oncology, urology, women's health, rare diseases, cell & gene therapies and CNS. With several marketed products in the U.S., Canada, and Europe, and a diverse pipeline of early- to late-stage investigational assets, we aim to accelerate discovery, research, and development to bring novel therapies to patients sooner. For more information on SMPA, visit our website https://www.us.sumitomo-pharma.com or follow us on LinkedIn.

For a copy of this release, visit Sumitomo Pharma America's website at www.us.sumitomo-pharma.com.

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