Karyopharm Announces Poster Presentation on Selinexor in Myelofibrosis at the 2025 European Hematology Association Annual Meeting

NEWTON, Mass., May 14, 2025 /PRNewswire/ -- Karyopharm Therapeutics Inc. (Nasdaq: KPTI), a commercial-stage pharmaceutical company pioneering novel cancer therapies, today announced its abstract has been selected for a poster presentation at the 2025 European Hematology Association Annual Meeting (EHA) being held June 12-15 in Milan, Italy. The abstract contains data on selinexor monotherapy in a hard-to-treat, heavily pretreated myelofibrosis patient population from the Phase 2 XPORT-MF-035 trial.

"We are encouraged by our new data in hard-to-treat myelofibrosis patients where we observed spleen volume reduction, symptom improvement, hemoglobin stabilization and evidence of disease modification with selinexor monotherapy, addressing all four hallmarks of the disease," said Reshma Rangwala, MD, PhD, Chief Medical Officer of Karyopharm. "This new data adds to our growing body of evidence highlighting selinexor's potential in patients with myelofibrosis."

The accepted abstract and data highlights are below.

- **Abstract number:** PS1821
- **Title:** A study to evaluate single-agent selinexor versus physician's choice in participants with previously treated myelofibrosis
- **Date/Time:** Saturday, June 14, 18:30-19:30 CEST
- **Presenter:** Alessandro Lucchesi, MD

Highlights

- Data from the XPORT-MF-035 (NCT04562870) Phase 2, randomized, open-label trial of selinexor versus physician's-choice (PC) in hard-to-treat patients with heavily pretreated myelofibrosis indicated signs of single-agent clinical activity with selinexor, including spleen volume reduction, hemoglobin stabilization, symptom improvement and evidence of disease modification.
- Patients were randomized 1:1 to either selinexor monotherapy or PC. Selinexor was administered at 80 mg weekly for the first two cycles and then decreased to 60 mg weekly from cycle 3 onwards. An optional crossover was available for PC treated patients if they met predefined spleen progression criteria.
- In total, 12 patients were randomized to the selinexor arm and 12 patients to the PC arm; 6 patients crossed over from PC to selinexor. Inclusive of crossover, spleen volume reduction of 25% or more (SVR25) at anytime was achieved in 8/12 (67%) efficacy evaluable selinexor treated patients versus 3/8 (38%) efficacy evaluable patients treated with PC. Spleen volume reduction of 35% or more (SVR35) at anytime was observed in 4/12 (33%) efficacy evaluable patients treated with selinexor versus 1/8 (13%) efficacy evaluable patients treated with PC.
- Patients treated with selinexor had higher mean hemoglobin levels throughout the study duration and lower rates of red blood cell transfusions than those treated with PC.
- Data on key cytokines that are relevant to myelofibrosis pathogenesis, symptom development, and anemia including IL-6, IL-8, TNFa, and hepcidin, demonstrated greater reductions at week 4 compared to baseline in patients treated with selinexor than patients treated with PC.
- Most common (≥25% overall) treatment emergent adverse events (TEAEs) in the randomized arms were decreased weight (selinexor: 50%; PC: 50%), anemia (25%; 58%), asthenia (42%; 25%), nausea (33%; 25%), thrombocytopenia (33%; 25%) and upper respiratory tract infection (25%; 33%). Most common (≥15% in any arm) Grade 3+ TEAEs were anemia (17%; 58%), cardiac failure (0%; 17%), decreased appetite (17%; 0%) and nausea (17%; 0%). No treatment discontinuations due to TEAEs were observed in the selinexor arm.

About XPOVIO® (selinexor)

XPOVIO is a first-in-class, oral exportin 1 (XPO1) inhibitor and the first of Karyopharm's Selective Inhibitor of Nuclear Export (SINE) compounds for the treatment of cancer. XPOVIO functions by selectively binding to and inhibiting the nuclear export protein XPO1. XPOVIO is approved in the U.S. and marketed by Karyopharm in multiple oncology indications, including: (i) in

combination with VELCADE® (bortezomib) and dexamethasone (XVd) in adult patients with multiple myeloma after at least one prior therapy; (ii) in combination with dexamethasone in adult patients with heavily pre-treated multiple myeloma; and (iii) under accelerated approval in adult patients with diffuse large B-cell lymphoma (DLBCL), including DLBCL arising from follicular lymphoma, after at least two lines of systemic therapy. XPOVIO® (also known as NEXPOVIO® in certain countries) has received regulatory approvals in various indications in a growing number of ex-U.S. territories and countries, including but not limited to the European Union, the United Kingdom, Mainland China, Taiwan, Hong Kong, Australia, South Korea, Singapore, Israel, and Canada. XPOVIO®/NEXPOVIO® is marketed in these respective ex-U.S. territories by Karyopharm's partners: Antengene, Menarini, Neopharm, and FORUS. Selinexor is also being investigated in several other mid- and late-stage clinical trials across multiple high unmet need cancer indications, including in endometrial cancer and myelofibrosis.

For more information about Karyopharm's products or clinical trials, please contact the Medical Information department at: Tel: +1 (888) 209-9326; Email: medicalinformation@karyopharm.com

XPOVIO® (selinexor) is a prescription medicine approved:

- In combination with bortezomib and dexamethasone for the treatment of adult patients with multiple myeloma who have received at least one prior therapy (XVd).
- In combination with dexamethasone for the treatment of adult patients with relapsed or refractory multiple myeloma who have received at least four prior therapies and whose disease is refractory to at least two proteasome inhibitors, at least two immunomodulatory agents, and an anti-CD38 monoclonal antibody (Xd).
- For the treatment of adult patients with relapsed or refractory diffuse large B-cell lymphoma (DLBCL), not otherwise specified, including DLBCL arising from follicular lymphoma, after at least two lines of systemic therapy. This indication is approved under accelerated approval based on response rate. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory trial(s).

SELECT IMPORTANT SAFETY INFORMATION

Warnings and Precautions

- Thrombocytopenia: Monitor platelet counts throughout treatment. Manage with dose interruption and/or reduction and supportive care.
- Neutropenia: Monitor neutrophil counts throughout treatment. Manage with dose interruption and/or reduction and granulocyte colony-stimulating factors.
- Gastrointestinal Toxicity: Nausea, vomiting, diarrhea, anorexia, and weight loss may occur. Provide antiemetic prophylaxis. Manage with dose interruption and/or reduction, antiemetics, and supportive care.
- Hyponatremia: Monitor serum sodium levels throughout treatment. Correct for concurrent hyperglycemia and high serum paraprotein levels. Manage with dose interruption, reduction, or discontinuation, and supportive care.
- Serious Infection: Monitor for infection and treat promptly.
- Neurological Toxicity: Advise patients to refrain from driving and engaging in hazardous occupations or activities until neurological toxicity resolves. Optimize hydration status and concomitant medications to avoid dizziness or mental status changes.
- Embryo-Fetal Toxicity: Can cause fetal harm. Advise females of reproductive potential and males with a female partner of reproductive potential, of the potential risk to a fetus and use of effective contraception.
- Cataract: Cataracts may develop or progress. Treatment of cataracts usually requires surgical removal of the cataract.

Adverse Reactions

- The most common adverse reactions (≥20%) in patients with multiple myeloma who receive XVd are fatigue, nausea, decreased appetite, diarrhea, peripheral neuropathy, upper respiratory tract infection, decreased weight, cataract and vomiting. Grade 3-4 laboratory abnormalities (≥10%) are thrombocytopenia, lymphopenia, hypophosphatemia, anemia, hyponatremia and neutropenia. In the BOSTON trial, fatal adverse reactions occurred in 6% of patients within 30 days of last treatment. Serious adverse reactions occurred in 52% of patients. Treatment discontinuation rate due to adverse reactions was 19%.
- The most common adverse reactions (≥20%) in patients with multiple myeloma who receive Xd are thrombocytopenia, fatigue, nausea, anemia, decreased appetite, decreased weight, diarrhea, vomiting, hyponatremia, neutropenia, leukopenia, constipation, dyspnea and upper respiratory tract infection. In the STORM trial, fatal adverse reactions occurred in 9% of patients. Serious adverse reactions occurred in 58% of patients. Treatment discontinuation rate due to adverse reactions was 27%.
- The most common adverse reactions (incidence ≥20%) in patients with DLBCL, excluding laboratory abnormalities, are fatigue, nausea, diarrhea, appetite decrease, weight decrease, constipation, vomiting, and pyrexia. Grade 3-4 laboratory abnormalities (≥15%) are thrombocytopenia, lymphopenia, neutropenia, anemia, and hyponatremia. In the SADAL trial, fatal adverse reactions occurred in 3.7% of patients within 30 days, and 5% of patients within 60 days of last treatment; the most frequent fatal adverse reactions was infection (4.5% of patients). Serious adverse reactions occurred in 46% of patients; the most frequent serious adverse reaction was infection (21% of patients). Discontinuation due to adverse reactions occurred in 17% of patients.

Use In Specific Populations

Lactation: Advise not to breastfeed.

For additional product information, including full prescribing information, please visit**www.XPOVIO.com.**

To report SUSPECTED ADVERSE REACTIONS, contact Karyopharm Therapeutics Inc. at 1-888-209-9326 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

About Karyopharm Therapeutics
Karyopharm Therapeutics Inc. (Nasdaq: KPTI) is a commercial-stage pharmaceutical company whose dedication to pioneering novel cancer therapies is fueled by a belief in the extraordinary strength and courage of patients with cancer. Since its founding, Karyopharm has been an industry leader in oral compounds that address nuclear export dysregulation, a fundamental mechanism of oncogenesis. Karyopharm's lead compound and first-in-class, oral exportin 1 (XPO1) inhibitor, XPOVIO® (selinexor), is approved in the U.S. and marketed by the Company in three oncology indications. It has also received regulatory approvals in various indications in a growing number of ex-U.S. territories and countries, including Europe and the United Kingdom (as NEXPOVIO®) and China. Karyopharm has a focused pipeline targeting indications in multiple high unmet need cancers, including in multiple myeloma, endometrial cancer, myelofibrosis, and diffuse large B-cell lymphoma (DLBCL). For more information about our people, science and pipeline, please visit www.karyopharm.com, and follow us on LinkedIn and on X at @Karyopharm.

Forward-Looking Statements
This press release contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. Such forward-looking statements include those regarding the ability of selinexor to treat patients with multiple myeloma, endometrial cancer, myelofibrosis, diffuse large B-cell lymphoma and other diseases; and expectations with respect to the clinical development plans and potential regulatory submissions of selinexor. Such statements are subject to numerous important factors, risks and uncertainties, many of which are beyond Karyopharm's control, that may cause actual events or results to differ materially from Karyopharm's current expectations. For example, there can be no guarantee that Karyopharm will successfully commercialize XPOVIO or that any of Karyopharm's drug candidates, including selinexor, will successfully complete necessary clinical development phases or that development of any of Karyopharm's drug candidates will continue. Further, there can be no guarantee that any positive developments in the development or commercialization of Karyopharm's drug candidate portfolio will result in stock price appreciation. Management's expectations and, therefore, any forward-looking statements in this press release could also be affected by risks and uncertainties relating to a number of other factors, including the following: the adoption of XPOVIO in the commercial marketplace, the timing and costs involved in commercializing XPOVIO or any of Karyopharm's drug candidates that receive regulatory approval; the ability to obtain and retain regulatory approval of XPOVIO or any of Karyopharm's drug candidates that receive regulatory approval; Karyopharm's results of clinical trials and preclinical trials, including subsequent analysis of existing data and new data received from ongoing and future trials; the content and timing of decisions made by the U.S. Food and Drug Administration and other regulatory authorities, investigational review boards at clinical trial sites and publication review bodies, including with respect to the need for additional clinical trials; the ability of Karyopharm or its third party collaborators or successors in interest to fully perform their respective obligations under the applicable agreement and the potential future financial implications of such agreement; Karyopharm's ability to enroll patients in its clinical trials; unplanned cash requirements and expenditures; substantial doubt exists regarding Karyopharm's ability to continue as a going concern; development or regulatory approval of drug candidates by Karyopharm's competitors for products or product candidates in which Karyopharm is currently commercializing or developing; the direct or indirect impact of the COVID-19 pandemic or any future pandemic on Karyopharm's business, results of operations and financial condition; and Karyopharm's ability to obtain, maintain and enforce patent and other intellectual property protection for any of its products or product candidates. These and other risks are described under the caption "Risk Factors" in Karyopharm's Quarterly Report on Form 10-Q for the quarter ended March 31, 2025, which was filed with the Securities and Exchange Commission (SEC) on May 12, 2025, and in other filings that Karyopharm may make with the SEC in the future. Any forward-looking statements contained in this press release speak only as of the date hereof, and, except as required by law, Karyopharm expressly disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

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