Karyopharm to Present Results from Phase 3 SENTRY Trial of Selinexor Plus Ruxolitinib in Myelofibrosis in Late-Breaking Oral Presentation at ASCO 2026 with Simultaneous Publication in the Journal of Clinical Oncology

– Selinexor in Combination with Ruxolitinib Demonstrated a Rapid and Near Doubling of Patients Achieving SVR35 at Week 24, versus Ruxolitinib, with a Consistent SVR35 Benefit Observed Across Prespecified Subgroups –

– Similar Symptom Improvement Was Observed Across the Two Arms Relative to Baseline; Reductions in Symptoms Were Consistent Across Each Domain –

– Promising Overall Survival Signal with >50% Reduction of Risk of Death versus Ruxolitinib, with Early Separation of the Kaplan-Meier Curves –

– Evidence of Potential Disease Modification with More Patients Achieving ≥20% Reductions in VAF as Early as Week 24 versus Ruxolitinib –

NEWTON, Mass., June 2, 2026 /PRNewswire/ -- Karyopharm Therapeutics Inc. (Nasdaq: KPTI), a commercial-stage pharmaceutical company pioneering novel cancer therapies, will present the results of its Phase 3 SENTRY trial in a late-breaking oral presentation titled: *Selinexor plus ruxolitinib in JAK inhibitor-naïve myelofibrosis: Phase 3 SENTRY trial*(LBA6500) at the 2026 American Society of Clinical Oncology (ASCO) Annual Meeting today. The presentation will open the *Hematologic Malignancies—Leukemia, Myelodysplastic Syndromes, and Allotransplant* session at 9:45 a.m. CT. The SENTRY results were also published this morning in the peer-reviewed Journal of Clinical Oncology (JCO).

"The Phase 3 SENTRY results represent a meaningful advance for patients with myelofibrosis and underscore the promise of combining selinexor with ruxolitinib," said Dr. John Mascarenhas, Professor of Medicine at the Icahn School of Medicine at Mount Sinai and Director of the Center of Excellence for Blood Cancers and Myeloid Disorders. "What is particularly compelling is the rapid, deep and sustained spleen volume reduction observed in the trial, as spleen response remains one of the most clinically relevant treatment goals in myelofibrosis. The OS Kaplan-Meier curves presented at ASCO demonstrate an early and sustained separation between treatment arms, reinforcing the potential of selinexor plus ruxolitinib to meaningfully improve outcomes for patients."

Key Highlights:

- **Spleen Volume Reduction:** The combination of selinexor plus ruxolitinib demonstrated a statistically significant improvement in the co-primary endpoint of spleen volume reduction of 35% or more (SVR35), with rapid, deep and sustained spleen volume reduction seen in the combination arm and a consistent benefit observed across prespecified subgroups. At week 24, SVR35 was achieved in 49.8% of patients randomized to the selinexor combination versus 28.0% of patients randomized to ruxolitinib alone (odds ratio 2.58; 95% CI [1.60 to 4.17]; p<0.0001). Responses occurred early and were sustained, with SVR35 rates of 49.4% in the selinexor combination arm versus 20.3% for ruxolitinib alone at week 12 and 46.9% versus 23.0% at week 36, respectively. SVR35 was achieved at any time in 67.7% of patients randomized to the selinexor combination versus 44.9% randomized to ruxolitinib alone. The mean percent change in spleen volume at week 24 was a reduction of 40.0% for the selinexor combination versus a reduction of 26.7% for ruxolitinib alone. In the selinexor combination, the median selinexor dose was 51.7 mg/week and the median ruxolitinib dose was 23.0 mg/day. Notably, at week 24, superior spleen volume reduction was achieved by the selinexor combination, regardless of the ruxolitinib dose, including by patients receiving less than 15 mg of ruxolitinib per day.

- **Absolute Total Symptom Score (Abs-TSS):** Similar symptom improvement from baseline was observed with the selinexor combination compared to ruxolitinib alone as measured by Abs-TSS at week 24. A mean (95% CI) reduction of 9.9 points (–11.2 to –8.6) was observed in patients randomized to the selinexor combination versus a reduction of 10.9 points (–12.6 to –9.1) in patients randomized to ruxolitinib alone. Symptom reductions were consistent across each of the six domains measured. The adjusted mean difference of 0.97 points (95% CI [-1.07 to 3.02]; p=0.825) in Abs-TSS, a co-primary endpoint, did not meet statistical significance.

- **Overall Survival:** A promising overall survival signal, a pre-specified secondary endpoint, was observed with the selinexor combination compared to ruxolitinib alone. As of February 20, 2026, 224 (95.3%) patients randomized to the selinexor combination and 106 (89.8%) randomized to ruxolitinib alone were alive. With a median follow-up of 11.6 and 12.6

months, respectively, overall survival favored the selinexor combination with a hazard ratio of 0.43 (95% CI [0.19 to 1.00]; nominal one-sided p=0.022) with separation of Kaplan–Meier curves occurring around month 9.

- **Variant Allele Frequency (VAF) Reduction:** Potential disease modification from a pre-specified exploratory endpoint was observed as early as week 24 from baseline in the combination arm. VAF reduction ≥20% at week 24 occurred in 32.0% of patients receiving the selinexor combination versus 23.9% of patients receiving ruxolitinib alone and correlated with SVR35 response.

- **Circulating Peripheral Blast Counts:** Circulating peripheral blasts are a poor prognostic factor and potential marker of disease burden. A post-hoc analysis showed that more patients who received the selinexor combination and who had no detectable circulating peripheral blasts at baseline maintained no detectable blasts through the course of treatment compared to patients who received ruxolitinib alone. For patients with circulating peripheral blasts at baseline, more patients who received the selinexor combination had no detectable blasts through the course of treatment compared to patients who received ruxolitinib alone.

- **Safety and Tolerability:** The combination demonstrated a manageable safety and tolerability profile consistent with the known profile of selinexor and ruxolitinib individually. No new safety signals were observed. Treatment emergent adverse events (TEAEs) occurred in 99.1% of patients receiving the selinexor combination and in 97.4% of patients receiving ruxolitinib alone. The five most common all-grade TEAEs in the selinexor combination arm were thrombocytopenia (selinexor plus ruxolitinib arm: 59%; placebo plus ruxolitinib arm: 43%), anemia (57%; 58%), nausea (57%; 17%), constipation (32%; 36%) and neutropenia (27%; 9%) (n=234; n=116). The rate of grade 3+ TEAEs was 70% in the selinexor combination arm compared to 50% in the placebo plus ruxolitinib arm, and were primarily hematologic in nature. The percentage of patients treated with the combination who experienced TEAEs leading to death occurred in 0.9% of patients receiving the combination compared to 2.6% of patients receiving ruxolitinib alone. Confirmed leukemic transformation was 1.7% in each arm.

"We believe the results presented at ASCO today highlight selinexor's differentiated mechanism of action and its potential to offer a complementary approach to JAK inhibition," said Reshma Rangwala, MD, PhD, Chief Medical Officer and Head of Research of Karyopharm. "Importantly, these findings reinforce the opportunity to target biological pathways beyond JAK signaling to further advance outcomes for patients with myelofibrosis."

The abstract "Selinexor plus ruxolitinib in JAK inhibitor–naïve myelofibrosis: Phase 3 SENTRY trial" (abstract number LBA6500) is available on ASCO's website. A copy of the SENTRY presentation being delivered at ASCO will be available under Publications and Presentations in the Investors & Media section of the Company's website at approximately 11:00 a.m. ET today. Finally, the peer-reviewed publication discussing the results from the Phase 3 SENTRY trial was published this morning in the Journal of Clinical Oncology and is available on JCO's website.

About the Phase 3 SENTRY Trial

SENTRY (XPORT-MF-034; NCT04562389) is a Phase 3 clinical trial evaluating a once-weekly dose of 60 mg of selinexor in combination with ruxolitinib compared to placebo plus ruxolitinib in JAKi-naïve myelofibrosis patients with platelet counts ≥100 x 10^9/L (N=353). Patients were randomized 2-to-1 to the selinexor arm. The co-primary endpoints for this trial are spleen volume reduction ≥ 35% (SVR35) at week 24 and the average change in absolute total symptom score (Abs-TSS) over 24 weeks relative to baseline.

About Myelofibrosis

Myelofibrosis is a rare blood cancer that affects approximately 20,000 patients in the United States and 17,000 patients in the European Union[1]. The disease causes bone marrow fibrosis (scarring in the bone marrow), which makes it difficult for the bone marrow to make healthy blood cells, splenomegaly (enlarged spleen), progressive anemia which often leads to symptoms like fatigue and weakness, and other disease associated symptoms including abdominal discomfort, pain under the left ribs, early satiety, night sweats and bone pain. The only approved class of therapies to treat myelofibrosis are JAK inhibitors, including ruxolitinib.

[1.] Clarivate/DRG (2023)

About XPOVIO® (selinexor)

XPOVIO is a first-in-class, oral exportin 1 (XPO1) inhibitor compound for the treatment of cancer. XPOVIO functions by selectively binding to and inhibiting the nuclear export protein XPO1. XPOVIO is approved and marketed by Karyopharm in the U.S. 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; and (ii) in combination with dexamethasone in adult patients with heavily pre-treated multiple myeloma. 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 myelofibrosis and endometrial cancer.

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).

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%.

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 is a commercial-stage pharmaceutical company pioneering the science of nuclear export inhibition to develop differentiated therapies for patients with cancer. The Company's lead therapy, XPOVIO® (selinexor), is a first-in-class inhibitor of exportin 1 (XPO1). XPOVIO is marketed by the Company in the U.S. for adults with relapsed or refractory multiple myeloma and is approved as XPOVIO or NEXPOVIO® in more than 50 ex-U.S. countries and territories. Building on its leadership in XPO1 biology, Karyopharm is advancing selinexor's potential in hematologic and solid tumor cancers, including in myelofibrosis and TP53 wild-type endometrial cancer. The Company is also exploring opportunities to evaluate XPO1

inhibition across myeloproliferative neoplasms and TP53 wild-type driven solid tumors using next-generation compounds, including eltanexor. Headquartered in Newton, Massachusetts, Karyopharm has an established, efficient and scalable commercial infrastructure to bring novel therapeutic options to patients with cancer. For more information, visit www.karyopharm.com and follow Karyopharm 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 Karyopharm's beliefs about the market opportunity and annual peak revenue opportunities for selinexor; expectations with respect to commercialization efforts; expectations regarding the timing of reporting topline data, publications or compendia listing related to ongoing clinical trials; the ability of selinexor and eltanexor to treat patients with multiple myeloma, endometrial cancer, myelofibrosis, and other diseases; expectations with respect to the clinical development plans and potential regulatory submissions of selinexor; and the potential inclusion of the combination of selinexor plus ruxolitinib in relevant compendia. 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; 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, 2026, which was filed with the Securities and Exchange Commission (SEC) on May 14, 2026, 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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https://investors.karyopharm.com/2026-06-02-Karyopharm-to-Present-Results-from-Phase-3-SENTRY-Trial-of-Selinexor-Plus-Ruxolitinib-in-Myelofibrosis-in-Late-Breaking-Oral-Presentation-at-ASCO-2026-with-Simultaneous-Publication-in-the-Journal-of-Clinical-Oncology