Karyopharm Reports Fourth Quarter and Full Year 2014 Financial Results and Highlights Recent Progress

Initiated Multiple Registration-directed Trials and Presented Positive Selinexor Clinical Data in 2014
Aggressive Selinexor Development Campaign Continues in 2015
Conference Call Scheduled for today at 8:30 a.m. ET

NEWTON, Mass., March 16, 2015 (GLOBE NEWSWIRE) -- Karyopharm Therapeutics Inc. (Nasdaq:KPTI), a clinical-stage pharmaceutical company, today reported financial results for the fourth quarter and year ended December 31, 2014 and commented on recent accomplishments and clinical development plans for selinexor, its lead product candidate.

"We made significant progress advancing the development of our lead product candidate, selinexor, a first-in-class, oral Selective Inhibitor of Nuclear Export / SINE™ compound across a number of hematologic and solid tumor indications in the fourth quarter of 2014," said Michael Kauffman, MD, PhD, CEO of Karyopharm. "We initiated two additional registration-directed clinical studies in hematologic malignancies, bringing our current total to three. We also presented positive clinical data demonstrating selinexor's anti-tumor activity, durable cancer control and tolerability across all non-Hodgkin's lymphoma types studied and high rates of durable responses in combination with dexamethasone and/or carfilzomib in patients with heavily pretreated multiple myeloma. In addition, we have now been awarded orphan drug designation for selinexor by both the U.S. and European regulatory authorities in multiple myeloma, acute myeloid leukemia (AML), diffuse large B-cell lymphoma (DLBCL), chronic lymphocytic leukemia (CLL) and small lymphocytic lymphoma (SLL), including Richter's transformation."

"Our aggressive selinexor development program continues in 2015 with plans to initiate potential registration-directed studies for selinexor in multiple myeloma and liposarcoma. We look forward to the presentation of selinexor clinical data updates in both solid and hematologic tumors at upcoming medical conferences later this year," said Sharon Shacham, PhD, Karyopharm's President and Chief Scientific Officer. "In addition to our own internal efforts, selinexor is being studied broadly alone and in combination with other therapies in a variety of investigator-sponsored trials across both hematologic and solid tumor indications and we look forward to reporting those results when available."

Conference Call Information:

To access the conference call, please dial (855) 437-4406 (US) or (484) 756-4292 (international) at least five minutes prior to the start time and refer to conference ID 97861837. A live audio webcast of the call will be available under "Events & Presentations" in the Investor section of Karyopharm's website, http://www.karyopharm.com, approximately two hours after the event.

Recent Corporate Accomplishments

- Selinexor (KPT-330) registration-directed studies:
    - Initiated a Phase 2b registration-directed study called SADAL, or Selinexor Against Diffuse Aggressive Lymphoma. This randomized, multi-center study is evaluating single-agent Selinexor with a target enrollment of approximately 200 patients with relapsed/refractory DLBCL in approximately 90 sites worldwide. Enrolled patients will be randomized to receive either 60 mg or 100 mg of selinexor twice weekly. Per the protocol, at least 50% of each arm of the study will have Germinal Center B-Cell (GCB) type. Overall response rate is the primary endpoint of this study.
    - Initiated a Phase 2 registration-directed study called SIRRT, or Selinexor in Relapsed/Refractory Richter's Transformation. This single-arm, open-label study is also evaluating selinexor as a single agent and will enroll approximately 50 patients with refractory and/or relapsed Richter's transformation in approximately 32 sites worldwide. Enrolled patients will receive 60 mg of Selinexor twice weekly. Overall response rate is the primary endpoint of this study.
    - A third, previously initiated registration-directed study called SOPRA, or Selinexor in Older Patients with Relapsed/Refractory AML, is also actively enrolling (with an interim data analysis targeted for the first quarter of 2016). Overall survival is the primary endpoint of this study, which has a target enrollment of 150 patients in approximately 80 sites worldwide. Patients are randomized in a two-to-one ratio to either selinexor or physician's choice in patients who are older than 60 years with relapsed or refractory AML after one line of therapy and are ineligible for intensive chemotherapy or transplantation.

Scientific Presentations and Publications:

- Presented positive data for selinexor including anti-tumor activity, durable cancer control and tolerability across all non-Hodgkin's lymphoma types studied and high rates of durable responses in combination with approved multiple myeloma therapies at the American Society of Hematology (ASH) 2014 annual meeting.
    - In an ongoing Phase 1 clinical trial, selinexor in patients with heavily pre-treated, progressive non-Hodgkin's lymphoma (NHL), including aggressive B-cell NHL such as DLBCL, Richter's transformation, Burkitt lymphoma, mantle cell lymphoma, T-cell lymphoma and follicular/indolent lymphoma, demonstrated a 37% overall response rate (partial response or better) and a 73% disease control rate (stable disease or better) in 52 evaluable patients. Responses included five complete responses, four in patients with DLBCL and one in a patient with T-cell lymphoma. In the patients with heavily pretreated DLBCL, selinexor demonstrated a median duration of response (DOR), which measures time from response to progression, of approximately seven months. Clear activity was observed across all DLBCL subtypes evaluated, including a 36% overall response rate in patients with GCB and a 50% response rate and 75% disease control rate among four patients with double-hit DLBCL. One of these patients with double hit DLBCL has a durable complete response in excess of 14 months and a second patient with a partial response was on study for approximately eight months.
    - In an ongoing Phase 1 clinical trial, selinexor dosed twice weekly at 45mg/m2 in combination with low-dose dexamethasone demonstrated a 67% overall response rate (partial response or better) and an 89% clinical benefit rate (minimal response or better) in nine evaluable patients with heavily pre-treated and refractory multiple myeloma. Six of these patients remained on study for at least 16 weeks and the overall median DOR among patients with a partial response or better was approximately seven months.
    - In a separate ongoing Phase 1/2 study, selinexor in combination with the proteasome inhibitor carfilzomib (Kyprolis®) and low-dose dexamethasone induced responses in all three of the patients enrolled to date: one very good partial response (VGPR) and two partial responses (PR) with good tolerability. All of these patients had received carfilzomib in their most recent regimen and their disease was refractory to it.

- Published data in the journal *Nature Neuroscience* reporting that Karyopharm's first-in-class oral Selective Inhibitor of Nuclear Export, or SINE™, compounds reduce the progression of multiple sclerosis in preclinical models. In the paper, scientists from Icahn School of Medicine at Mount Sinai and Karyopharm describe the ability of SINE exportin 1 (XPO1) inhibitors to decrease neurodegenerative symptoms and disease progression in multiple sclerosis by reducing neuronal inflammation and preventing toxic factors in the brain from attacking and destroying the neuronal myelin coating.

Regulatory and Intellectual Property Updates:

- Received orphan drug designation for selinexor from the U.S. Food and Drug Administration (FDA) for the treatment of multiple myeloma. Orphan designation was created to encourage the development of drugs which may provide significant benefit to patients suffering from rare diseases. Selinexor has previously received orphan designation in multiple myeloma from the European Medicines Agency (EMA). Orphan designation has also been granted in AML and DLBCL from both the FDA and the EMA. In addition, the EMA has previously granted orphan designation of selinexor for the treatment of CLL and SLL, including Richter's transformation.
- Received U.S. patent allowance covering composition of matter for selinexor. Once issued, this patent will provide patent protection for selinexor and pharmaceutical compositions comprising Selinexor through the middle of 2032.

Business Updates:

- Completed an underwritten public offering in January 2015 of 2,950,000 shares of common stock at a price of $33.00 per share, before underwriting discounts and commission and estimated offering expenses, with net proceeds to Karyopharm of approximately $90.9 million.
- Selected for addition to the NASDAQ Biotechnology Index which is designed to track the performance of the securities of NASDAQ-listed companies classified as either biotechnology or pharmaceuticals according to industry classification benchmarks.

Clinical Development Plans:

- Karyopharm is actively enrolling patients in three registration-directed clinical studies evaluating selinexor in older patients with relapsed/refractory AML (SOPRA study), in patients with relapsed/refractory DLBCL (SADAL study) and in patients with relapsed/refractory Richter's transformation (SIRRT study). Preliminary top-line data from all three studies are anticipated in the second half of 2016.
- Karyopharm met with the FDA during the fourth quarter of 2014 to discuss the criteria and study design for potential accelerated approval of selinexor in patients with relapsed/refractory multiple myeloma. Based on that meeting, Karyopharm plans to initiate a single-arm trial in multiple myeloma called STORM, Selinexor Treatment of Refractory Myeloma, in the first half of 2015, which will initially include 80 patients. If the data from the initial 80 patients is promising, the study may be expanded to potentially support accelerated approval.
- Karyopharm is also actively enrolling patients in four Phase 2 solid tumor studies evaluating selinexor in gynecologic malignancies (SIGN Study), glioblastoma multiforme (KING Study), metastatic prostate cancer (SHIP Study) and squamous head and neck, lung and esophageal cancers (STARRS Study). Karyopharm hopes to present interim data from SIGN and KING at an oncology meeting in mid-2015.
- Karyopharm plans to initiate a pivotal Phase 3 study of selinexor to treat liposarcoma in the second half of 2015.
- In addition, a number of investigator-sponsored (ISTs) or company-sponsored clinical studies evaluating the potential of selinexor in combination with either chemotherapy or targeted agents are currently ongoing or planned.

Fourth Quarter and Year End December 31, 2014 Financial Results

Cash, cash equivalents and investments as of December 31, 2014, including restricted cash, totaled $214.8 million, compared to $156.0 million as of December 31, 2013. In addition, Karyopharm raised $90.9 million in a common stock follow-on offering which closed in January 2015.

For the year ended December 31, 2014, research and development expense was $60.1 million compared to $28.5 million for the year ended December 31, 2013. For the year ended December 31, 2014, general and administrative expense was $15.9 million, compared to $5.9 million for the year ended December 31, 2013. The increase in research and development expenses resulted primarily from the increase in expenses related to the significantly expanded clinical development activities for our lead drug candidate, selinexor. The increase in general and administrative expense resulted primarily from an increase in personnel costs including headcount and stock-based compensation expense and the costs of operating as a public company.

Karyopharm reported a net loss of $75.8 million, or $2.43 per share, for the year ended December 31, 2014, compared to a net loss of $33.9 million, or $5.59 per share, for the year ended December 31, 2013. Net loss includes stock-based compensation expense of $14.2 million and $3.8 million for the years ended December 31, 2014 and 2013, respectively. The weighted average number of shares of common stock outstanding increased to 31.1 million for the year ended December 31, 2014 from 6.1 million for the year ended December 31, 2013 as a result of our initial public offering in November 2013 and follow-on offering in July 2014.

For the quarter ended December 31, 2014, research and development expense was $20.0 million compared to $9.7 million for the quarter ended December 31, 2013. For the quarter ended December 31, 2014, general and administrative expense was $5.9 million compared to $2.5 million for the quarter ended December 31, 2013. The increase in research and development expenses resulted primarily from the increase in expenses related to the continued clinical development of selinexor. The increase in general and administrative expense resulted primarily from the costs of being a public company and an increase in stock-based compensation.

Karyopharm reported a net loss of $25.9 million, or $0.79 per share, for the quarter ended December 31, 2014, compared to a net loss of $12.1 million, or $0.72 per share, for the quarter ended December 31, 2013. Net loss includes stock-based compensation expense of $4.6 million and $2.0 million for the quarters ended December 31, 2014 and December 31, 2013, respectively.

Financial Outlook

Based on current operating plans, Karyopharm expects that its existing cash and cash equivalents will fund its research and development programs and operations into 2018, including moving registration-directed clinical studies to their next data inflection points. Karyopharm expects to end 2015 with greater than $200 million in cash, cash equivalents and investments.

About Karyopharm Therapeutics

Karyopharm Therapeutics Inc. (Nasdaq:KPTI) is a clinical-stage pharmaceutical company focused on the discovery and development of novel first-in-class drugs directed against nuclear transport targets for the treatment of cancer and other major diseases. Karyopharm's Selective Inhibitor of Nuclear Export / SINE™ compounds function by binding with and inhibiting the nuclear export protein XPO1 (or CRM1). The inhibition of XPO1 by Karyopharm's lead drug candidate, Selinexor (KPT-330), a first-in-class, oral SINE™ compound, leads to the accumulation of tumor suppressor proteins in the cell nucleus, which subsequently reinitiates and amplifies their tumor suppressor function. SINE™ compounds have shown biological activity in models of cancer, inflammation, autoimmune disease, certain viruses, and wound-healing. Karyopharm was founded by Dr. Sharon Shacham and is located in Newton, Massachusetts. For more information about Karyopharm, please visit www.karyopharm.com.

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 therapeutic potential of and potential clinical development plans for Karyopharm's drug candidates, including the timing of initiation of certain trials and of the reporting of data from such trials. Such statements are subject to numerous important factors, risks and uncertainties that may cause actual events or results to differ materially from the company's current expectations. For example, there can be no guarantee that any of

Karyopharm's SINE™ compounds, including Selinexor (KPT-330) or any PAK4 inhibitor, or any other drug candidate that Karyopharm is developing will successfully complete necessary preclinical and 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 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: Karyopharm's results of clinical trials and preclinical studies, including subsequent analysis of existing data and new data received from ongoing and future studies; 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; Karyopharm's ability to obtain and maintain requisite regulatory approvals and to enroll patients in its clinical trials; unplanned cash requirements and expenditures; development of drug candidates by Karyopharm's competitors for diseases in which Karyopharm is currently developing its drug candidates; and Karyopharm's ability to obtain, maintain and enforce patent and other intellectual property protection for any drug candidates it is developing. These and other risks are described under the caption "Risk Factors" in Karyopharm's Annual Report on Form 10-K for the year ended December 31, 2014, which is on file with the Securities and Exchange Commission (SEC) as of March 13, 2015. Any forward-looking statements contained in this press release speak only as of the date hereof, and Karyopharm expressly disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

Karyopharm Therapeutics Inc.
Consolidated Balance Sheets

(in thousands, except share and per share amounts)

(unaudited)

	December 31, 2014	December 31, 2013
ASSETS		
Current assets:		
Cash and cash equivalents	$150,609	$155,974
Short-term investments	55,115	—
Prepaid expenses and other current assets	2,027	1,982
Total current assets	207,751	157,956
Property and equipment, net	2,754	240
Long-term investments	8,658	—
Other assets	774	30
Restricted cash	400	—
Total assets	$220,337	$158,226
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$6,288	$1,740
Accrued expenses	5,825	1,168
Deferred revenue	—	79
Deferred rent	126	—
Other current liabilities	62	305
Total current liabilities	12,301	3,292
Deferred rent, net of current portion	1,242	—
Total liabilities	13,543	3,292
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.0001 par value; 5,000,000 shares authorized; none issued and outstanding	—	—
Common stock, $0.0001 par value; 100,000,000 shares authorized at December 31, 2014 and 2013, respectively; 32,699,380 and 29,587,258 shares issued and outstanding at December 31, 2014 and 2013, respectively	3	3
Additional paid-in capital	345,166	217,500
Accumulated other comprehensive loss	(29)	—
Accumulated deficit	(138,346)	(62,569)
Total stockholders' equity	206,794	154,934
Total liabilities and stockholders' equity	$220,337	$158,226

Karyopharm Therapeutics Inc.
Consolidated Statements of Operations

(in thousands, except share and per share amounts)

(unaudited)

	For the Quarter Ended December 31,		For the Year Ended December 31,	
	2014	2013	2014	2013
Contract and grant revenue	$16	$21	$229	$387
Operating expenses:				
Research and development	20,038	9,689	60,127	28,452
General and administrative	5,920	2,480	15,948	5,885
Total operating expenses	25,958	12,169	76,075	34,337
Loss from operations	(25,942)	(12,148)	(75,846)	(33,950)
Other income (expense):				
Interest income	42	2	97	3
Interest expense	(1)	—	(1)	—
Other expense	(27)	—	(27)	—
Total other income (expense)	14	2	69	3
Net loss	$(25,928)	$(12,146)	$(75,777)	$(33,947)
Net loss per share applicable to common stockholders-basic and diluted	$(0.79)	$(0.72)	$(2.43)	$(5.59)
Weighted-average number of common shares outstanding used in net loss per share applicable to common stockholders- basic and diluted	32,668,705	16,973,108	31,135,694	6,067,679

CONTACT: Justin Renz

(617) 658-0574

jrenz@karyopharm.com

Gina Nugent

(617) 460-3579

nugentcomm@aol.com

Source: Karyopharm Therapeutics
