Karyopharm Therapeutics Announces Multiple Publications on Selective Inhibitors of Nuclear Export (SINE) CRM1 Antagonists in Cancer

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Karyopharm Therapeutics Inc., leading the new field of nuclear transport modulators, announces the publication of several articles covering its SINE compounds in a variety of cancers. Because SINE CRM1 antagonists return multiple tumor suppressor proteins (TSPs) to the nucleus, activating their anti-cancer functions, they show broad activity across multiple tumor types. In addition to the publications in Acute Myeloid Leukemia announced earlier this year from the laboratories of Drs. Romero Garzon at the Ohio State University (Ranganathan, 2012, Blood) and Thomas Look at the Dana Farber Cancer Center (Etchin, 2012, Leukemia), collaborators have published the following papers covering both solid and hematologic malignancies:

Dr. Ramzi Mohammed's laboratory at Wayne State University (Detroit) demonstrated the activity of SINEs against pancreatic cancer both in vitro and in vivo, including in two orthotopic models (Amzi, 2012, Gastroenterology).

Dr. John Byrd's laboratory at Ohio State University (Columbus) demonstrated the activity of SINEs in Chronic Lymphocytic Leukemia including marked ability of SINEs to kill leukemic, but not normal, lymphocytes in vitro and in vivo (Lapolombella, 2012, Blood).

Dr. Robert Weiss' laboratory at the University of California (Davis) demonstrated the activity of SINE compounds against kidney cancers in vitro and in vivo (Inoue, 2012, Journal of Urology).

Drs. Richard Ford and Michael Wang's laboratories at the MD Anderson Cancer Center (Houston) demonstrated the activity of SINE compounds against mantle cell lymphoma, an aggressive form of Non-Hodgkin's Lymphoma both in vitro and in vivo (Zhang, 2012, Experimental Hematology).

In addition, Karyopharm has published its first paper describing the novel technology, "Consensus Induced Fit Docking, cIFD," the company used to design and optimize its proprietary oral SINE compounds (Kalid, 2012, Journal of Computational Aided Molecular Design).

Dr. Sharon Shacham, Karyopharm's founder, Chief Scientific Officer, and head of research and development commented, "This broad and growing list of publications demonstrates the potential for our novel, oral CRM1 antagonists – SINEs – to restore the body's own anti-cancer TSPs to the cell nucleus, where they can carry out their tumor killing function. Because SINEs restore over ten different TSPs to the nucleus, these unique compounds show very broad anticancer activity, largely independent of both tumor type and specific genetic abnormalities." This breadth of activity is being evaluated in two ongoing Phase 1 studies in advanced solid tumor and hematologic malignancies.

About Karyopharm Therapeutics Inc.
Karyopharm Therapeutics Inc. has emerged as a leader in the new field of nuclear transport modulators. The company's selective inhibitors of nuclear export (SINE) function by trapping multiple tumor suppressor proteins in the nucleus, resulting in anti-cancer activity across many tumor types. In collaboration with several academic laboratories, SINEs, targeting the major nuclear exporter CRM1, exert robust anti-cancer activity in diverse preclinical models of cancer. The lead SINE KPT-330 is now in Phase 1 clinical studies for advanced solid tumor and hematologic malignancies. The related SINE KPT-335 is being evaluated as an oral treatment for dogs with Non-Hodgkin's Lymphoma, one of the most common canine cancers. The Company is also testing SINEs in autoimmune, viral and dermatologic disorders. Karyopharm Therapeutics is located in Natick, Massachusetts.
