Verastem Doses First Patient in Phase 1 Clinical Trial Evaluating VS-5584 in Combination with VS-6063 in Mesothelioma

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-Study Builds Upon Encouraging Clinical Progress for Both VS-6063 and VS-5584-

-Synergistic Activity of VS-6063 and VS-5584 Demonstrated in Preclinical Models of Mesothelioma-

BOSTON--(BUSINESS WIRE)--Jan. 20, 2015-- Verastem, Inc. (NASDAQ:VSTM), focused on discovering and developing drugs to treat cancer by the targeted killing of cancer stem cells, today announced dosing of the first patient in a new clinical trial evaluating the combination of VS-5584, its dual mTORC1/2 and PI3K inhibitor, in combination with VS-6063, the Company's lead focal adhesion kinase (FAK) inhibitor, in patients with relapsed mesothelioma.

The Phase 1 open-label, dose escalation and schedule finding study is designed to assess safety, pharmacokinetics, pharmacodynamics and initial observations of clinical activity. The study is expected to enroll up to 56 patients at clinical sites in the UK and US.

"We are very pleased to initiate the first ever Phase 1 trial combining a dual mTORC1/2 and PI3K inhibitor (VS-5584) with a FAK inhibitor (VS-6063)," said Udai Banerji, MD, PhD, FRCP, Reader in Molecular Cancer Pharmacology and Honorary Consultant in Medical Oncology at The Royal Marsden Hospital and The Institute of Cancer Research London. "This study builds on robust synergy data from pre-clinical mesothelioma models presented by Verastem at the recent iMiG meeting. The trial is enrolling patients with relapsed mesothelioma: a patient population in dire need of new treatment options."

"Mesothelioma is a devastating disease and Verastem is committed to the development of new treatment options," said Dr. Joanna Horobin, Chief Medical Officer of Verastem. "This is the third study we have initiated with VS-6063 in patients with mesothelioma. We are very pleased with the progress of the multinational COMMAND study evaluating VS-6063 as a switch maintenance therapy following frontline chemotherapy in patients with malignant pleural mesothelioma. As reported in October at the 2014 iMIG, we are encouraged by the biomarker response and intriguing tumor shrinkage observed after 12 days of single agent VS-6063 administration in patients with untreated mesothelioma, prior to planned surgery. In this new study of VS-6063 in combination with VS-5584, building on the synergy seen in pre-clinical models, we hope to extend the potential benefit to patients with mesothelioma that has relapsed following initial therapy."

VS-5584 is currently in a Phase 1 study in advanced solid tumors where the compound has been generally well tolerated and preliminary activity has been observed, including in mesothelioma. Some patients have been on study for over 6 months and the maximum tolerated dose of VS-5584 has not been reached.

The combination clinical trial is supported by preclinical work demonstrating the synergistic activity of VS-6063 and VS-5584 in mesothelioma models *in vitro* and *in vivo*. In this preclinical research, the combination of VS-6063 and VS-5584 displayed synergistic reduction in cell viability based on multiple combination analysis models. When tested *in vivo* for reduction of mesothelioma tumor growth, VS-6063 and VS-5584 were each active as single agents and demonstrated synergistic antitumor efficacy when used in combination.

About Mesothelioma

Mesothelioma is an aggressive form of cancer that occurs in the mesothelium, the thin layer of tissue that covers the lungs and other organs. Mesothelioma is associated with exposure to asbestos in most cases. According to the World Health Organization, there are a total of 59,000 cases of mesothelioma worldwide each year. Most mesotheliomas begin as one or more nodules that progressively grow to form a solid coating of tumor surrounding the lung leading to eventual suffocation and death. A high percentage of mesotheliomas contain cancer stem cells which are generally resistant to the currently available treatment options for mesothelioma. Current treatment in the front line setting consists of 4-6 cycles of Alimta (pemetrexed) in combination with platinum-based therapy. Alimta is the only approved treatment for mesothelioma and there are no approved therapies for relapsed mesothelioma. Relapsed mesothelioma is highly aggressive with a median time to disease progression of only 6 weeks.

About VS-6063

VS-6063 (defactinib) is an orally available compound designed to target cancer stem cells through the potent inhibition of focal adhesion kinase (FAK). Cancer stem cells are an underlying cause of tumor resistance to chemotherapy, recurrence and ultimate disease progression. Research by Robert Weinberg, Ph.D., scientific cofounder and chair of Verastem's Scientific Advisory Board, and Verastem has demonstrated that FAK activity is critical for the growth and survival of cancer stem cells. VS-6063 is currently being studied in the registration-directed COMMAND trial in mesothelioma (www.COMMANDmeso.com), a "Window of Opportunity" study in patients with mesothelioma prior to surgery, a Phase 1/1b study in combination with paclitaxel in patients with ovarian cancer, a trial in patients with Kras-mutated non-small cell lung cancer and a trial evaluating the combination of VS-6063 and VS-5584 in patients with relapsed mesothelioma. VS-6063 has been granted orphan drug designation in the U.S. and EU for use in mesothelioma.

About VS-5584

VS-5584 is an orally available compound that has demonstrated potent and highly selective activity against class 1 PI3K enzymes and dual inhibitory actions against mTORC1 and mTORC2. In preclinical studies, VS-5584 has been shown to reduce the percentage of cancer stem cells and induce tumor regression in chemotherapy-resistant models. Verastem is currently conducting a dose escalation trial of VS-5584 in patients with advanced solid tumors as a single agent and a combination trial of VS-5584 and VS-6063 in patients with relapsed mesothelioma. VS-5584 has been granted

orphan drug designation in the EU for use in mesothelioma.

About Verastem, Inc.

Verastem, Inc. (NASDAQ:VSTM) is discovering and developing drugs to treat cancer by the targeted killing of cancer stem cells. Cancer stem cells are an underlying cause of tumor recurrence and metastasis. Verastem is developing small molecule inhibitors of signaling pathways that are critical to cancer stem cell survival and proliferation: FAK, PI3K/mTOR and Wnt. For more information, please visit www.verastem.com.

Forward-looking statements:

This press release includes forward-looking statements about the Company's strategy, future plans and prospects, including statements regarding the development and activity of the Company's product candidates, VS-6063 and VS-5584, and the Company's FAK and PI3K/mTOR programs generally, the timeline for clinical development and regulatory approval of the Company's product candidates, and the structure of the Company's pending clinical trials. The words "anticipate," "appear," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "target," "potential," "will," "would," "could," "should," "continue," and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Each forward-looking statement is subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statement. Applicable risks and uncertainties include the risks that the preclinical testing of the Company's product candidates and preliminary or interim data from clinical trials may not be predictive of the results or success of ongoing or later clinical trials, including the combination trial of VS-6063 and VS-5584, that data may not be available when we expect it to be, that enrollment will take longer than expected, that our product candidates will cause unexpected safety events, that the Company will be unable to successfully complete the clinical development of its product candidates, that the development of the Company's product candidates will take longer or cost more than planned, and that the Company's product candidates will not receive regulatory approval or become commercially successful products. Other risks and uncertainties include those identified under the heading "Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2013 and in any subsequent SEC filings. The forward-looking statements contained in this press release reflect the Company's current views with respect to future events, and the Company does not undertake and specifically disclaims any obligation to update any forward-looking statements.

Source: Verastem, Inc.

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