Verastem Oncology Announces U.S. IND Clearance of VS-7375, Oral KRAS G12D (ON/OFF) Inhibitor, Enabling Phase 1/2a Trial in Advanced Solid Tumors

April 23, 2025 at 4:05 PM EDT

Expect to initiate a Phase 1/2a trial in the U.S. in advanced KRAS G12D mutant solid tumors in mid-2025

Initial safety and efficacy results from the trial of VS-7375 by partner GenFleet Therapeutics to be presented at the 2025 ASCO Annual Meeting

BOSTON--(BUSINESS WIRE)--Apr. 23, 2025-- Verastem Oncology (Nasdaq: VSTM), a biopharmaceutical company committed to advancing new medicines for patients with RAS/MAPK pathway-driven cancers, today announced the U.S. Food and Drug Administration (FDA) has cleared the Investigational New Drug (IND) application of VS-7375, an oral KRAS G12D (ON/OFF) inhibitor for clinical evaluation. The Company expects to initiate a Phase 1/2a study in mid-2025 with plans for multiple expansion cohorts, including combinations, in advanced solid tumors, such as pancreatic cancer, colorectal cancer, and non-small cell lung cancer.

The Company also announced the acceptance of an abstract, by our partner GenFleet Therapeutics, for rapid oral presentation of the preliminary dose escalation phase of the Phase 1/2 study of VS-7375 (also known as GFH375) conducted by GenFleet at the upcoming 2025 American Society of Clinical Oncology (ASCO) Annual Meeting being held on May 30-June 3, 2025, in Chicago, IL. The abstract is under embargo until May 22, 2025, at 5:00 pm EDT, when additional data will be released.

“We’re excited to advance the clinical program for VS-7375 in the U.S. and build on the initial dose escalation work conducted by GenFleet in China that demonstrated oral bioavailability and no dose-limiting toxicities across six dose levels, with partial responses achieved among multiple patients with both pancreatic and advanced lung cancers,” said Dan Paterson, president and chief executive officer of Verastem Oncology. “We believe there remains a significant opportunity to improve on the efficacy seen to date with other KRAS G12D-selective agents. VS-7375’s dual inhibition of both the ON/OFF states has the potential to drive deep and durable cancer responses and allow for better combinability with other agents. We look forward to our partner GenFleet’s oral presentation that will include updated safety and efficacy data from the Phase 1 study at the ASCO annual meeting.”

The Phase 1/2a study will be conducted in the U.S., with the potential to expand globally, and will evaluate the safety and efficacy of VS-7375 in patients with advanced KRAS G12D mutant solid tumors. The starting dose for the Phase 1 study is based on an efficacious dose identified in the initial data from the GenFleet study to accelerate the trial’s progress. Verastem plans to dose escalate across levels where cancer responses were observed in GenFleet’s study and will assess in the Phase 2a portion the efficacy and safety of VS-7375, both as monotherapy and in combination, in patients with advanced solid tumors, such as pancreatic, colorectal, and non-small cell lung cancers.

ASCO 2025 Presentation Details:

The abstract is under embargo until May 22, 2025, at 5:00 pm EDT.

- **Title:** A First-in-Human Phase I/II Study of GFH375, a Highly Selective and Potent Oral KRAS G12D Inhibitor in Patients with KRAS G12D Mutant Advanced Solid Tumors
- **Abstract Number:** 3013
- **Session:** Rapid Oral Abstract Sessions: Developmental Therapeutics—Molecularly Targeted Agents and Tumor Biology
- **Session Date/Time:** Monday, June 2, 2025, from 8:00 am to 9:30 am CDT

About KRAS G12D

KRAS G12D represents 26% of all KRAS mutations, making it the most prevalent KRAS mutation in human cancers. The KRAS G12D mutation occurs most commonly in pancreatic (37%), colorectal (12.5%), endometrial (8%), and non-small cell lung (5%) cancers. Currently, no therapies are approved by the U.S. Food and Drug Administration specifically targeting KRAS G12D mutations in cancer.

About VS-7375, an Oral KRAS G12D (ON/OFF) Inhibitor

VS-7375 is a potential best-in-class, potent, and selective oral KRAS G12D dual ON/OFF inhibitor. VS-7375 is the lead program from the Verastem Oncology discovery and development collaboration with GenFleet Therapeutics. Verastem announced in April 2025 that the U.S. Investigational New Drug (IND) application for VS-7375 was cleared and plans to initiate a Phase 1/2a clinical trial in mid-2025. GenFleet’s IND for VS-7375 (known as GFH375 in China) was approved in China in June 2024, and the first patient was dosed in a Phase 1/2 study in July 2024.

About the GenFleet Therapeutics Collaboration

The collaboration with GenFleet Therapeutics aims to advance three oncology discovery programs related to RAS/MAPK pathway-driven cancers. The collaboration provides Verastem with an exclusive option to obtain a license for each of the three compounds in the collaboration after the successful completion of pre-determined milestones in a Phase 1 trial. Verastem selected VS-7375 (also known as GFH375), an oral KRAS G12D (ON/OFF) inhibitor, as its lead program in December 2023 and the license for VS-7375 that was exercised in January 2025 is the first one from this collaboration. The licenses would give Verastem development and commercialization rights outside the GenFleet markets of mainland China, Hong Kong, Macau, and Taiwan.

About Verastem Oncology

Verastem Oncology (Nasdaq: VSTM) is a late-stage development biopharmaceutical company committed to the development and commercialization of new medicines to improve the lives of patients diagnosed with RAS/MAPK pathway-driven cancers. Our pipeline is focused on novel small molecule drugs that inhibit critical signaling pathways in cancer that promote cancer cell survival and tumor growth, including RAF/MEK inhibition, FAK inhibition and KRAS G12D inhibition. For more information, please visit www.verastem.com and follow us on LinkedIn.

Forward-Looking Statements

This press release includes forward-looking statements. These forward-looking statements generally can be identified by the use of words such as "anticipate," "expect," "plan," "could," "may," "believe," "estimate," "forecast," "goal," "project," and other words of similar meaning. Such forward-looking statements address various matters about, among other things, Verastem Oncology's programs and product candidates, strategy, future plans and prospects, including statements related to the potential for and timing of commercialization of product candidates, the status of the IND application for VS-7375/GFH375, the expected outcome and benefits of the Company's collaboration with GenFleet Therapeutics (Shanghai), Inc., the timing of commencing and completing trials and compiling data, the expected timing of the presentation of data by the Company and the potential clinical value of various of the Company's clinical trials. Each forward-looking statement contained in this press release is subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statement. Applicable risks and uncertainties include, among others: the uncertainties inherent in research and development, such as the possibility of negative or unexpected results of clinical trials; that we may not see a return on investment on the payments we have and may continue to make pursuant to the collaboration and option agreement with GenFleet, or that GenFleet may fail to fully perform under the agreement; that the development and commercialization of our product candidates may take longer or cost more than planned, including as a result of conducting additional studies or our decisions regarding execution of such commercialization; that data may not be available when expected; the risk that our preliminary and interim data may not be representative of more mature data; that our product candidates may not receive regulatory approval, become commercially successful products, or result in new treatment options being offered to patients; and the risks identified under the heading "Risk Factors" as detailed in the Company's Annual Report on Form 10-K for the year ended December 31, 2024, as filed with the Securities and Exchange Commission (SEC) on March 20, 2025, as well as the other information we file with the SEC, are possibly realized. We caution investors not to place considerable reliance on the forward-looking statements contained in this press release. You are encouraged to read our filings with the SEC, available at www.sec.gov, for a discussion of these and other risks and uncertainties. The forward-looking statements in this press release speak only as of the date of this press release, and we undertake no obligation to update or revise any of these statements. Our business is subject to substantial risks and uncertainties, including those referenced above. Investors, potential investors, and others should give careful consideration to these risks and uncertainties.

View source version on businesswire.com: https://www.businesswire.com/news/home/20250423863470/en/

For Investor and Media Inquiries:
Julissa Viana
Vice President,
Corporate Communications,
Investor Relations & Patient Advocacy
investors@verastem.com or
media@verastem.com

Source: Verastem Oncology