Verastem Oncology Doses First Patient in TARGET-D 202 Phase 2 Registration-Directed Trial of VS-7375 for KRAS G12D-Mutated Advanced Non-Small Cell Lung Cancer

July 22, 2026 at 4:01 PM EDT

TARGET-D 202 to evaluate VS-7375 as monotherapy at the RP2D of 900mg in patients with previously treated advanced non-small cell lung cancer

A cohort in TARGET-D 202 will also evaluate VS-7375 in non-small cell lung cancer patients with asymptomatic untreated brain metastases

Approximately 5% of patients with non-small cell lung cancer harbor a KRAS G12D mutation, yet no therapies specifically targeting KRAS G12D are FDA-approved for this patient population

BOSTON--(BUSINESS WIRE)--Jul. 22, 2026-- Verastem Oncology (Nasdaq: VSTM), a biopharmaceutical company committed to advancing new medicines for patients with RAS/MAPK pathway-driven cancers, today announced that the first patient has been dosed in the TARGET-D 202 Phase 2 registration-directed trial evaluating VS-7375, an investigational oral KRAS G12D (ON/OFF) inhibitor, in patients with previously treated KRAS G12D-mutated advanced non-small cell lung cancer (NSCLC). The initiation of TARGET-D 202 marks the second registration-directed Phase 2 clinical trial now underway for VS-7375, following first-patient dosing in the TARGET-D 201 metastatic pancreatic cancer study announced last month.

"Despite advances in RAS-targeted therapies, there are no FDA-approved therapies specifically designed to target KRAS G12D-mutated tumors. Among the many challenges facing patients with KRAS G12D-mutated lung cancer, they continue to experience some of the poorest outcomes with progression-free survival of approximately 11 months – shorter than those with other common KRAS mutations," said Michael Kauffman, M.D., Ph.D., president of development at Verastem Oncology. "We're making significant progress with the TARGET-D clinical trial programs, and once the first patient is dosed in the TARGET-D 203 Phase 2 study for advanced metastatic colorectal cancer, we will have registration-directed trials underway across the three most common KRAS G12D-driven tumor types. We believe we are well positioned to advance the broad clinical development of VS-7375 across multiple tumor types to selectively target KRAS G12D to maximize efficacy, allow for tolerable combinations, and avoid toxicities problematic with non-specific pan-RAS inhibitors."

TARGET-D 202 (NCT07659782) is a global, open-label, Phase 2 registration-directed trial evaluating VS-7375 monotherapy at the recommended Phase 2 dose (RP2D) of 900 mg daily (QD) in patients with unresectable locally advanced or metastatic KRAS G12D-mutated NSCLC whose disease has progressed following prior treatment with platinum-based chemotherapy and an anti-PD-(1) therapy. The trial is designed to evaluate the efficacy and safety of VS-7375 and support a potential registration strategy in this patient population. A cohort in the study will also evaluate VS-7375 in non-small cell lung cancer patients with asymptomatic untreated brain metastases.

In June 2025, Verastem initiated TARGET-D 101, its Phase 1/2 dose escalation, dose expansion, and combination clinical trial evaluating the safety and efficacy of VS-7375 in patients with KRAS G12D-mutated metastatic pancreatic ductal carcinoma (mPDAC), metastatic colorectal cancer (mCRC), NSCLC, and other solid tumor cancers. In a recent update, the Company shared that VS-7375 demonstrated encouraging anti-tumor activity across multiple KRAS G12D-driven tumor types, including mPDAC, mCRC, and advanced NSCLC, with evidence of dose-dependent activity, favorable PK supporting target exposure, and a favorable and manageable safety and tolerability profile. Patient follow-up continues to mature across monotherapy and combination cohorts, and the Company expects to share an update in the second half of 2026.

About Non-Small Cell Lung Cancer

Lung cancer remains the leading cause of cancer-related death worldwide, with non-small cell lung cancer (NSCLC) accounting for approximately 80–85% of all lung cancer diagnoses. Approximately 10,000 patients with NSCLC harbor a KRAS G12D mutation in the U.S. annually. Compared with other KRAS mutation variants, metastatic KRAS G12D NSCLC is associated with the shortest progression-free survival and has been linked to immune suppression and resistance to anti-PD-(L)1 therapies. KRAS G12D is the most common KRAS mutation among never-smokers, while also occurring in many patients with a history of smoking. Additionally, brain metastases remain a significant clinical challenge in metastatic NSCLC, affecting approximately 10–20% of patients at diagnosis and up to 40% during the course of disease. Despite these challenges and the significant unmet medical need, there are currently no approved therapies specifically targeting KRAS G12D-mutated NSCLC.

About KRAS G12D

KRAS G12D represents 26% of all KRAS mutations, making it the most prevalent KRAS mutation in human cancers. When the KRAS gene is mutated, it can promote cancer development and growth. Patients with KRAS G12D-mutant tumors often have poorer outcomes, underscoring the need for therapies designed specifically to inhibit this mutation potently and for a long duration. The KRAS G12D mutation occurs most commonly in pancreatic (40%), colorectal (15%), endometrial (8%), biliary tract (7-15%), and non-small cell lung (5%) cancers. Currently, no therapies are approved by the U.S. Food and Drug Administration (FDA) specifically targeting KRAS G12D mutations in cancer.

About VS-7375, an Oral KRAS G12D (ON/OFF) Inhibitor & TARGET-D Clinical Program

VS-7375 is a potential best-in-class, potent, and selective investigational oral KRAS G12D dual ON/OFF inhibitor. It is designed to uniquely bind to both the active (ON) and inactive (OFF) states of KRAS G12D, with the potential to inhibit KRAS G12D signaling and tumor growth more completely than compounds that block KRAS G12D only in the OFF state or only in the ON state.

In June 2025, Verastem initiated TARGET-D 101, a Phase 1/2 dose escalation, dose expansion, and combination clinical trial evaluating the safety

and efficacy of VS-7375 in patients with KRAS G12D-mutated metastatic pancreatic ductal carcinoma (mPDAC), metastatic colorectal cancer (mCRC), advanced non-small cell lung cancer (NSCLC), and other solid tumors. Verastem has further expanded the VS-7375 clinical program with the initiation of three Phase 2 registration-directed, open-label clinical trials: TARGET-D 201 (NCT07644559) in second-line advanced or metastatic PDAC, TARGET-D 202 (NCT07659782) in second/third-line advanced or metastatic NSCLC, and TARGET-D 203 (NCT07659795) in metastatic CRC. In June 2026, the company announced the first patient was dosed in the TARGET-D 201 trial.

In July 2025, U.S. Food and Drug Administration (FDA) granted Fast Track Designation (FTD) to VS-7375 for the first-line treatment of patients with KRAS G12D-mutated locally advanced or metastatic adenocarcinoma of the pancreas and for the treatment of patients with KRAS G12D-mutated locally advanced or metastatic pancreatic ductal carcinoma who have received at least one prior line of standard systemic therapy. In June 2026, the FDA also granted FTD to VS-7375 for the treatment of adult patients with KRAS G12D-mutated unresectable locally advanced or metastatic non-small cell lung cancer (NSCLC) who have received platinum-based chemotherapy and an anti-PD-(L)1 antibody either concurrently or sequentially.

In December 2023, Verastem selected VS-7375 as its lead program from its collaboration with GenFleet Therapeutics, which 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. In January 2025, Verastem exercised its license for VS-7375. The licenses would give Verastem development and commercialization rights outside the GenFleet markets of mainland China, Hong Kong, Macau, and Taiwan. GenFleet is developing VS-7375 as GFH375 in China.

About Verastem Oncology

Verastem Oncology (Nasdaq: VSTM) is a biopharmaceutical company committed to developing and commercializing new medicines to improve the lives of patients diagnosed with RAS/MAPK pathway-driven cancers. Verastem markets AVMAPKI® FAKZYNJA® CO-PACK in the U.S. 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 anticipated timing for any amendments to 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 we may not be successful in our continued commercialization of AVMAPKI FAKZYNJA CO-PACK; 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; risks associated with preliminary and interim data, which may not be representative of more mature data; risks associated with the regulatory and policy actions proposed and enacted by the current U.S. presidential administration that may adversely affect our business; risks associated with the current administration’s reductions to the FDA’s workforce and any subsequent reductions that may lead to disruptions and delays in the FDA’s review and oversight of our product candidates and impact the FDA’s ability to provide timely feedback on our development programs; 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, 2025, as filed with the Securities and Exchange Commission (SEC) on March 4, 2026, 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/20260722569516/en/

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

Source: Verastem Oncology