UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d) of the

Securities Exchange Act of 1934

Date of report (Date of earliest event reported): February 24, 2021

Verastem, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware (State or Other Jurisdiction of Incorporation) **001-35403** (Commission File Number) 27-3269467 (IRS Employer Identification No.)

117 Kendrick Street, Suite 500, Needham, MA (Address of Principal Executive Offices) **02494** (Zip Code)

Registrant's telephone number, including area code: (781) 292-4200 (Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

□ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

 \Box Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

		Name of each exchange on which
Title of each class	Trading Symbol(s)	registered
Common stock, \$0.0001 par value per share	VSTM	The Nasdaq Global Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company \Box

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 7.01. Other Events

On February 24, 2021, Verastem, Inc. posted its corporate presentation, a copy of which is furnished hereto as Exhibit 99.1.

Item 9.01. Financial Statements and Exhibits

Exhibit No.	Description
<u>99.1</u>	Corporate Presentation, dated February 24, 2021
104	Cover Page Interactive Data File (formatted in Inline XBRL and contained in Exhibit 101)

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: February 24, 2021

VERASTEM, INC.

By: /s/ Brian M. Stuglik

Brian M. Stuglik Chief Executive Officer



Safe Harbor Statement



This presentation includes forward-looking statements about, among other things, Verastem Oncology's products and product candidates, including anticipated regulatory submissions, approvals, performance and potential benefits of Verastem Oncology products and product candidates, that are subject to substantial risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. Applicable risks and uncertainties include the risks and uncertainties, among other things, regarding: the success in the development and potential commercialization of our product candidates, including defactinib in combination with VS-6766; the occurrence of adverse safety events and/or unexpected concerns that may arise from additional data or analysis or result in unmanageable safety profiles as compared to their levels of efficacy; or our ability to obtain, maintain and enforce patent and other intellectual property protection for our product candidates

Additional information regarding these factors can be found in Verastem Oncology's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and in any subsequent filings with the SEC, including in the sections thereof captioned "Risk Factors" and "Forward-Looking Information and Factors that May Affect Future Results," as well as in our subsequent reports on Form 8-K, all of which are filed with the U.S. Securities and Exchange Commission (SEC) and available at www.sec.gov and www.verastem.com.

The forward-looking statements in this presentation speak only as of the original date of this presentation, and we undertake no obligation to update or revise any of these statements.



We are a biopharmaceutical company committed to developing and commercializing new medicines for patients battling cancer

Well Positioned to Capitalize on Growth Opportunities



New lead clinical program has best-in-class potential	VS-6766 (RAF/MEKi) and defactinib (FAKi) are clinically active against RAS mutant cancers
Rapid development paths to market	Validating clinical results achieved in KRAS mutant low-grade serous ovarian cancer (LGSOC), strong signal in KRAS mutant G12V NSCLC; registration-directed trials initiated in 4Q 2020
Significant downstream market opportunity and blockbuster potential	30% of all human cancers are driven by mutations in RAS family of genes; VS-6766 combinations broadly applicable across a variety of tumor types
Strong balance sheet	Monetization of COPIKTRA® (duvelisib) provides funding until at least 2024
	Proforma Cash Balance of \$168.3 million, after Hercules Debt Repayment
	Starting in 2021, annual operating expense forecast \$50 million

2020 Highlights: A Transformative Year for Verastem Oncology





VS-6766 RAF/MEK Inhibitor Program Overview

VS-6766 is a differentiated, best-in-class asset potentially applicable across multiple patient populations



- Unique dual RAF/MEK targeting mechanism of action
- Best-in-class safety & tolerability profile relative to marketed MEK inhibitors, with potential for combinability with agents from multiple target classes
- Novel intermittent dosing schedule; convenient oral regimen
- Clear signals of clinical activity in various RAS-driven cancers, including in patients whose tumors previously progressed on other MEK inhibitors
- Strong preclinical and clinical synergy data in combination with other agents targeting RAS pathway and parallel pathways

VS-6766 is a Unique Small Molecule **RAF/MEK** Inhibitor





Vertical Blockade: Establishing VS-6766 as the backbone of therapy for RAS pathway-driven tumors





Current Challenges

- $\,\circ\,$ Blocking any single target in the pathway is insufficient for maximum depth and duration of anti-tumor efficacy
 - e.g.,, SHP2i, KRAS-G12Ci, RAFi, MEKi, ERKi
- Vertical inhibition concept is now well established
 Necessary to block more than 1 target in the pathway
- Many of these agents (e.g., SHP2i, MEKi) have poor tolerability as monotherapy and in combination

Solutions offered by VS-6766

- Vertical inhibition (RAF and MEK blockade) in a single drug
- Best-in-class tolerability with established twice weekly dosing regimen
 Should enable tolerable combinations
- Compelling synergy data (preclinical) emerging for VS-6766 combinations (e.g., with KRAS-G12C inhibitors)

References: ¹ Chen, Mol Cancer Res 2018; ² Banerji, BTOG Dublin, Jan 23, 2019

Parallel Pathway Blockade: Establishing VS-6766 as the backbone of therapy for RAS pathway-driven tumors





Robust Pipeline Targeting the RAS Pathway and Multiple Growth Opportunities



		PRECLINICAL	PHASE 1 / 1B	PHASE 2	PHASE 3	MARKET
	Combinations					
	FRAME study in advanced LGSOC ^{1,2} with defactinib					
	FRAME study in advanced KRAS mt NSCLC ^{1,2} with defactinib					
	FRAME study in advanced CRC ^{1,2} with defactinib					
	FRAME study in advanced KRAS-G12V mt NSCLC ^{1,2} with defactinib					
VS-6766 (RAF/MEK inhibition) FRAME study in advanced pancreatic cancer with defactinib FRAME study in advanced KRAS mt endometrial cancer ^{1,2} with defactinib	FRAME study in advanced pancreatic cancer ^{1,2} with defactinib					
	FRAME study in advanced KRAS mt endometrial cancer ^{1,2} with defactinib			•		
	RAMP registration-directed study in recurrent LGSOC ³ monotherapy and in combination with defactinib					
	RAMP registration-directed study in recurrent KRAS mt NSCLC ⁴ monotherapy and in combination with defactinib					
	Metastatic uveal melanoma ¹ with defactinib					
	KRAS mt NSCLC ¹ VS-6766 + everolimus					

*Pre-clinical studies ongoing in multiple KRAS mutant tumors

¹ Investigator-sponsored trial ² NCT03875820 ³ NCT04625270 ⁴ NCT04620330



VS-6766 +/- Defactinib in Low-Grade Serous Ovarian Cancer

Verastem Oncology

What is Low-Grade Serous Ovarian Cancer (LGSOC)? Verastem





LGSOC: Limited Treatment Options With High Unmet Need





Favorable Tolerability Profile with Novel Intermittent Dosing Regimen



Summary of Adverse Events Grade \geq 3 Occurring in \geq 5% of patients

	VS-6766 monotherapy Daily at MTD N=6 28-day cycle	RP2D VS-6766 monotherapy 4mg twice weekly N=26 28-day cycle	RP2D (VS-6766 3.2mg twice weekly + defactinib 200mg twice daily) N=38 21 days of 28-day cycle
Treatment Related Adverse Event	Grade ≥3	Grade ≥3	Grade ≥3
Rash	3 (50%)	5 (19%)	2 (5%)
CK elevation (Creatine phosphokinase)	1 (17%)	2 (8%)	2 (5%)

¹ Chenard-Poirier, *et al.* ASCO 2017 References: Banerji, Q4 2020 report; Data on file **R**P2D: recommended phase 2 dosing

VS-6766 3.2 mg + Defactinib 200 mg Selected as RP2D

Treatment Related Adverse Events Occurring in ≥ 10 Patients (Total) Q4 2020 Update

Treatment Related Adverse Events Details* (≥10% patients in cohort 3.2mg 6766 and Def	VS-6766 3.2mg Def 400mg Cohort 2b n=3		VS-6766 4mg Def 200mg Cohort 2a n=23		RP2D VS-6766 3.2mg Def 200mg n=38		
200mg)	Gr1/2	Gr3/4	Gr1/2	Gr3/4	Gr1/2	Gr3/4	
Rash	3		18	3	32	2	
CK Elevation	1		10	4	19	2	
AST Elevation	1		11	1	13		
Hyperbilirubinemia	1		8	1	14	1	
Visual Disturbance	2		7		9		
ALT Elevation	1		10		5		
Diarrhoea	1		6		14	1	
Fatigue			10		8	1	
Oral Mucositis^			7	2	11		
Nausea	2		9		5		
Peripheral Edema			6		10		
Thrombocytopenia			4		6		
Pruritus			3	1	5		



- Most Adverse Events (AE) were Grade 1/2
 - All changes were reversible
- No DLTs in Cohort 1 or 2a
- DLTs Cohort 2b: Gr 2 rash in 2/3 of patients; MTD not reached
- Chronic Grade 2 AEs in patients on treatment > 6 months
- To date, <u>no patients have</u> discontinued due to AEs in expansion <u>phase</u> (cohort 3.2mg VS-6766 and Def 200mg)

RP2D

VS-6766 3.2 mg oral twice wkly (3 wks of every 4 wks)

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• Defactinib 200 mg oral BID (3 wks of every 4 wks)

*AEs were graded by NCI CTC v4; highest grade only recorded for each patient; AEs presented in ≥10% Patient (cohort 3.2mg 6766 and Def 200mg) data preliminary and subject to change; ^also includes glossitis/mouth ulcers References: Banerji, Q4 2020 report; Data on file

VS-6766 in Combination with Defactinib Shows Robust ORR with Durability in Refractory LGSOC with Expanded Number of Patients (n=17)





KRAS Mutated (mt) and Wild Type (wt), Phase 2, Recurrent LGSOC Adaptive Design for Potential Accelerated Approval





FDA Was Supportive of Development Strategy and Adaptive Design

This Registration-directed Phase 2 Study Commenced in November 2020 with an estimated Primary Completion Date for the Expansion Phase of June 2023 (clinicaltrials.gov)

Selection Phase - KRAS mt only

** Expansion Phase – final sample size to be adjusted based on adaptive design



VS-6766 +/- Defactinib in NSCLC

Verastem Oncology

High Unmet Need in Refractory KRASm NSCLC Adenocarcinoma



19





Pre-PD-(L)1 era, chemotherapy response rate ~10% in recurrent • disease; 12w PFS of 30-45%

- Globocan, 2018
 <u>https://www.ncbi.nlm.nih.gov/books/NBK519578/</u>
 TCGA PanCancer Atlas (cBioPortal analysis)
 4 www.thelanect.com Vol 389 January 21, 2017
 Adapted from NCCN Non-small cell lung cancer guidelines Version 3.2020

VS-6766 Inhibits CRAF - The key driver of KRAS-G12V Verastem mutant NSCLC

A Precision Approach to KRAS-G12V Driven NSCLC



Strong Signal Identified in KRAS^{G12V} to Be Further Validated



VS-6766 ± Defactinib Has a Confirmed 57% ORR in KRAS^{G12V} NSCLC in Integrated Analysis



Preclinical evidence suggests combination with Defactinib may improve efficacy in KRAS^{G12V} Activity of VS-6766 as a single agent and in combo with Defactinib in KRAS^{G12V}

Source: ¹ Guo, et al Lancet Oncology 2020 ² Banerji, AACR VM 1, April 27, 2020, CT143

NSCLC Clinical Strategy: KRAS Mutant (mt), Enriched G12V, Phase 2, Recurrent NSCLC for Potential Accelerated Approval





² VS-6766 4.0 mg PO 2x/wk (21/28 days)



Future Opportunities: VS-6766 as Backbone of RAS Therapy

Vertical Blockade: Preclinical synergy in combination with several promising targets





Preclinical synergy of VS-6766 + G12C inhibitors in KRAS G12C mt models



Parallel Pathway Blockade: Two synergistic combinations already progressed to clinical stage





High Priority Lead Indications with Multiple Growth Opportunities







Corporate

Key Financial Statistics



As of September 30, 2020

Cash, cash equivalents & short-term investments as of 9/30/2020	\$205.7M
Shares fully diluted as of 9/30/2020	190.2M
Hercules Term Loan Facility as of 9/30/2020	\$35.0M
5.00% Convertible Senior Notes Due 2048 (2018 Notes) as of 9/30/2020	\$28.3M
Insider ownership (outstanding / vested) as of 9/30/2020	9.2% / 5.0%
Revised to include Hercules Debt Repayment	
Proforma Cash after Hercules Repayment	\$168.3M
5.00% Convertible Senior Notes Due 2048 as of 11/09/2020	\$28.3M



Backup Slides

www.verastem.com

High Unmet Needs in RAS/RAF/MEK/ERK-Driven Cancers





mutated cancers

Challenges with conventional approaches

· Modest progress; limited number of approved therapies

Single agent therapies (e.g., MEK inhibitors) associated with resistance
Tolerable combination regimens with MEK inhibitors have been challenging

· Current RAS inhibitors in development address only a minority of all RAS

Breadth of potential opportunity

 30% of all human cancers are driven by mutations of the RAS family of genes

Established prognostic significance

 Patients with mutations of the RAS family have an overall worse prognosis

Incidence Sources:

References: References:

McCornick F Clin Cancer Res 15April2015; Adderley H et al. EBioMedicine 01Mar2019; Papke B et al. Science 17Mar2017; Ryan M et al. Nature Reviews Clinical Oncology 01Oct2018; NIH cancer.gov/research/key-initiatives/ras

KRAS G12V and G12D Represent ~50% of KRAS Mutations across Human Cancers Veraster Oncolog 32





VS-6766 and FAK inhibitor combination leads to more robust anti-tumor efficacy *in vivo*







Overcoming Key Resistance Mechanisms to MEK Inhibitors





Pharmacokinetic Profiles of VS-6766 + Defactinib in Combination Similar to that seen in Single Agent Studies

Veraster Oncolog 35

VS-6766

Cohort	Dose (mg)	Ν	Subject	AUC _{0-24h} (h*ng/mL)	C _{max} (ng/mL)
4	3.2	2	Mean	6179	354
1	(with 200mg VS)	3	CV%	32.1	30.4
0.	4	-	Mean	5353	289
Za	(with 200mg VS)	5	CV%	15.8	16.0
2b	3.2 (with 400mg VS)	1	FRA101-007	3302	229

Defactinib

Cohort	Dose (mg)	N	Subject	AUClast (h*ng/mL)	Cmax (ng/mL)
	200		Mean	2071	273
1	(with 3.2mg RO)	3	CV%	103	80
			Mean	2252	318
2a	200 (with 4mg RO)	5	CV%	124	117
			Mean	2807	360
2b	400 (with 3.2mg RO)	3	CV%	31	32

Reference: Banerji, AACR VM 1, April 27, 2020, CT14

VS-6766 in Combination with Defactinib Shows Robust ORR with Durability in Refractory LGSOC at Phase 2 Dose Level

All patients on RP2D: 3.2 mg VS-6766 (2x/wk) + 200 mg Defactinib (BID) q3/4 wks



Status: Combination of VS-6766 with Everolimus (mTOR inhibitor)

Synergy
Antagonism

NSCLC



- Synergy of VS-6766 + everolimus observed broadly across cancer cell lines with various KRAS mutation variants
- A well-tolerated RP2D for VS-6766 + everolimus has been established with intermittent dosing of both agents (twice weekly; 3 wks on/1 wk off)
- KRAS mutant NSCLC expansion cohort is currently ongoing with VS-6766 + everolimus



Presented at RAS-Targeted Drug Discovery (February 23-25, 2021)

VS-6766 upregulates MHC Class I antigens on tumor cells: a mechanism for potentiation of I/O efficacy







Cell Line	Tumor type	RAS/RAF mutation status
A549	Lung	KRASmut G12S
TOV21g	Ovarian	KRASmut G13C
SKMEL5	Melanoma	BRAFmut V600E
IGR-1	Melanoma	BRAFmut V600E
WM115	Melanoma	BRAFmut V600E

VS-6766 @ 1 μM (except SKMEL5 and IGR-1, 300 nM)

Strong Patent Protection for VS-6766 ± Defactinib

- COM for VS-6766 to 2027 & defactinib to 2028, Hatch Waxman should extend to 2032
- VS-6766 intermittent dosing regimen until 2038 if granted
- FAK/MEK combination to 2035
- VS-6766/defactinib combination until 2040 if granted
- Method of manufacture for VS-6766 to 2032
- Other activity related to patent protection is ongoing and will continue into the future

Experienced Senior Management Team





Brian Stuglik Chief Executive Officer

- Global VP & Chief Marketing Officer - Lilly Oncology
- Founding Member Proventus Health Solutions



- **Daniel Paterson** President and Chief Operating Officer
 - CEO The DNA Repair Co. (now On-Q-ity)
 - PharMetrics (now IMS), Axion



Rob Gagnon Chief Business and Financial Officer

• CFO - Harvard Bioscience, **Clean Harbors**

• VP of Finance - Biogen Idec



Cathy Carew Chief People & Organizational Strategy Officer

- Principal HR Collaborative
- Ironwood, ActiveBiotics, Dynogen, Tufts Health Plan





Hagop Youssoufian, MSc, M.D. Head of Medical Strategy

- CMO, BIND Therapeutics, EVP, Progenics,
- CMO & EVP, Ziopharm Oncology, SVP, Imclone