



## Verastem Submits New Drug Application to U.S. FDA for Duvelisib for the Treatment of Patients with Relapsed or Refractory Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma and Follicular Lymphoma

February 7, 2018

BOSTON--(BUSINESS WIRE)--Feb. 7, 2018-- Verastem, Inc. (NASDAQ: VSTM), focused on discovering and developing drugs to improve the survival and quality of life of cancer patients, today announced it has submitted a New Drug Application (NDA) to the U.S. Food and Drug Administration (FDA) seeking full approval for its lead product candidate duvelisib, a first-in-class oral dual inhibitor of phosphoinositide-3-kinase (PI3K)-delta and PI3K-gamma, for the treatment of relapsed or refractory chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL/SLL) and accelerated approval for the treatment of relapsed or refractory follicular lymphoma (FL). Duvelisib has received Fast Track Designation from the FDA for patients with CLL or peripheral T-cell lymphoma (PTCL) who have received at least one prior therapy and for patients with FL who have received at least two prior therapies. In addition, duvelisib received orphan drug designation in the United States and the European Union for patients with CLL, SLL and FL.

"The submission of our first NDA for duvelisib is a major milestone for Verastem and is the culmination of substantial effort by our employees and the investigators who have dedicated themselves toward developing a potential treatment option for patients who are in need of additional therapies. We are immensely grateful to all of the patients that participated in the duvelisib clinical trial program over the last few years," said Robert Forrester, President and Chief Executive Officer of Verastem. "Oral duvelisib is the first PI3K inhibitor to show efficacy as a monotherapy in a randomized Phase 3 study in patients with relapsed or refractory CLL/SLL. Duvelisib monotherapy has also demonstrated significant clinical activity in patients with double-refractory FL. We believe duvelisib will offer a convenient oral treatment alternative. We look forward to working with the FDA during the review process and to a potential U.S. approval decision for duvelisib in early 2019."

The NDA is supported by clinical data from the randomized Phase 3 DUO™ study demonstrating significant efficacy, along with a consistent and manageable safety profile, of duvelisib monotherapy in patients with relapsed or refractory CLL/SLL. The DUO study met its primary endpoint with oral duvelisib monotherapy achieving a statistically significant improvement in progression-free survival (PFS) compared to ofatumumab in patients with relapsed or refractory CLL/ SLL (median PFS of 13.3 months versus 9.9 months, respectively; HR=0.52; p<0.0001), representing a 48% reduction in the risk of disease progression or death. The NDA is also supported by results from the Phase 2 DYNAMO™ study in patients with indolent non-Hodgkin's lymphoma that are double-refractory to both rituximab and chemotherapy or radioimmunotherapy, which also achieved its primary endpoint with an objective response rate (ORR) of 46% (p<0.0001). In the subset of patients enrolled in DYNAMO with double-refractory FL (n=83), duvelisib demonstrated an ORR of 41%.

### About Duvelisib

Duvelisib is a first-in-class investigational, dual inhibitor of phosphoinositide 3-kinase (PI3K)-delta and PI3K-gamma, two enzymes known to help support the growth and survival of malignant B-cells and T-cells. PI3K signaling may lead to the proliferation of malignant B- and T-cells and is thought to play a role in the formation and maintenance of the supportive tumor microenvironment.<sup>1,2,3</sup> Duvelisib was evaluated in late- and mid-stage extension trials, including DUO™, a randomized, Phase 3 monotherapy study in patients with relapsed or refractory chronic lymphocytic leukemia (CLL)/small lymphocytic lymphoma (SLL),<sup>4</sup> and DYNAMO™, a single-arm, Phase 2 monotherapy study in patients with refractory indolent non-Hodgkin lymphoma (iNHL).<sup>5</sup> Both DUO and DYNAMO achieved their primary endpoints and Verastem has submitted a New Drug Application (NDA) requesting the full approval of duvelisib for the treatment of patients with relapsed or refractory CLL/SLL, and accelerated approval for the treatment of patients with relapsed or refractory follicular lymphoma (FL). Duvelisib is also being developed by Verastem for the treatment of peripheral T-cell lymphoma (PTCL), and is being investigated in combination with other agents through investigator-sponsored studies.<sup>6</sup> Information about duvelisib clinical trials can be found on [www.clinicaltrials.gov](http://www.clinicaltrials.gov).

### About Verastem, Inc.

Verastem, Inc. (NASDAQ:VSTM) is a biopharmaceutical company focused on discovering and developing drugs to improve outcomes for patients with cancer. Verastem is currently developing duvelisib, a dual inhibitor of PI3K-delta and PI3K-gamma, which has successfully met its primary endpoint in a Phase 2 study in iNHL and a Phase 3 clinical trial in patients with CLL/SLL. In addition, Verastem is developing the FAK inhibitor defactinib, which is currently being evaluated in three separate clinical collaborations in combination with immunotherapeutic agents for the treatment of several different cancer types, including pancreatic cancer, ovarian cancer, non-small cell lung cancer, and mesothelioma. Verastem's product candidates seek to treat cancer by modulating the local tumor microenvironment, enhancing anti-tumor immunity, and reducing cancer stem cells. For more information, please visit [www.verastem.com](http://www.verastem.com).

### Verastem, Inc. forward-looking statements notice:

This press release includes forward-looking statements about Verastem's strategy, future plans and prospects, including statements regarding the development and activity of Verastem's investigational product candidates, including duvelisib and defactinib, and Verastem's PI3K and FAK programs generally, the structure of our planned and pending clinical trials and the timeline and indications for clinical development and regulatory submissions. The words "anticipate," "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 acceptance or approval of the NDA will not occur on the expected timeframes or at all; that even if data from clinical trials is positive, regulatory authorities may require additional studies for approval and

the product may not prove to be safe and effective; that the preclinical testing of Verastem'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; that the full data from the DUO study will not be consistent with the previously presented results of the study; that data may not be available when expected, including for the Phase 3 DUO™ study; that the degree of market acceptance of product candidates, if approved, may be lower than expected; that the timing, scope and rate of reimbursement for our product candidates is uncertain; that there may be competitive developments affecting our product candidates; that data may not be available when expected; that enrollment of clinical trials may take longer than expected; that our product candidates will cause unexpected safety events or result in an unmanageable safety profile as compared to their level of efficacy; that duvelisib will be ineffective at treating patients with lymphoid malignancies; that Verastem will be unable to successfully initiate or complete the clinical development of its product candidates; that the development of Verastem's product candidates will take longer or cost more than planned; that Verastem may not have sufficient cash to fund its contemplated operations; that Verastem or Infinity Pharmaceuticals, Inc. (Infinity) will fail to fully perform under the duvelisib license agreement; that Verastem may be unable to make additional draws under its debt facility or obtain adequate financing in the future through product licensing, co-promotional arrangements, public or private equity, debt financing or otherwise; that Verastem will not pursue or submit regulatory filings for its product candidates, including for duvelisib in patients with CLL/SLL or iNHL; and that Verastem's product candidates will not receive regulatory approval, become commercially successful products, or result in new treatment options being offered to patients. Other risks and uncertainties include those identified under the heading "Risk Factors" in Verastem's Annual Report on Form 10-K for the year ended December 31, 2016 and in any subsequent filings with the U.S. Securities and Exchange Commission. The forward-looking statements contained in this press release reflect Verastem's views as of the date of this release, and Verastem does not undertake and specifically disclaims any obligation to update any forward-looking statements.

## References

- <sup>1</sup> Winkler et al. PI3K-delta and PI3K-gamma inhibition by IPI-145 abrogates immune responses and suppresses activity in autoimmune and inflammatory disease models. *Chem Biol* 2013; 20:1-11.
- <sup>2</sup> Reif et al. Cutting Edge: Differential roles for phosphoinositide 3 kinases, p110-gamma and p110-delta, in lymphocyte chemotaxis and homing. *J Immunol* 2004;173:2236-2240.
- <sup>3</sup> Schmid et al. Receptor tyrosine kinases and TLR/IL1Rs unexpectedly activate myeloid cell PI3K, a single convergent point promoting tumor inflammation and progression. *Cancer Cell* 2011;19:715-727.
- <sup>4</sup> [www.clinicaltrials.gov](http://www.clinicaltrials.gov), NCT02004522
- <sup>5</sup> [www.clinicaltrials.gov](http://www.clinicaltrials.gov), NCT01882803
- <sup>6</sup> [www.clinicaltrials.gov](http://www.clinicaltrials.gov), NCT02783625, NCT02158091

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Source: Verastem, Inc.

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