



KalVista Pharmaceuticals Presents Data at the American Academy of Allergy, Asthma & Immunology (AAAAI) Annual Meeting 2019

February 25, 2019

– KVD900 600 mg Provides >90% Inhibition of Plasma Kallikrein Within 30 Minutes of Dosing –

– Single 600 mg Dose of KVD900 Provides Protection of HK Cleavage for at Least 10 Hours –

CAMBRIDGE, Mass. & SALISBURY, England--(BUSINESS WIRE)--Feb. 25, 2019-- KalVista Pharmaceuticals, Inc. (NASDAQ:KALV), a clinical stage pharmaceutical company focused on the discovery, development, and commercialization of small molecule protease inhibitors, announced data from a poster presentation given Saturday, February 23, at the American Academy of Allergy, Asthma & Immunology (AAAAI) Annual Meeting 2019 in San Francisco, CA.

"We are pleased to provide additional data on KVD900, showcasing a potentially ideal profile for oral on-demand treatment of hereditary angioedema, or HAE," said Andrew Crockett, Chief Executive Officer of KalVista. "Both formulations tested were rapidly and highly absorbed, driving a very fast onset of plasma kallikrein inhibition. The tablet formulation we plan to use commercially showed even faster uptake, with high levels of plasma kallikrein inhibition maintained for a long period and KVD900 was generally safe and well tolerated. Our Phase 2 study of KVD900 in HAE patients is expected to provide data late this year."

KVD900 was evaluated in a randomized, double-blind, placebo-controlled Phase 1 single ascending dose study. 64 healthy male participants (n=6 active, 2 placebo per cohort, 8 cohorts) were administered single doses of KVD900 5, 10, 20, 40, 80, 160, 300 or 600 mg in a capsule. 8 participants were administered 100 mg KVD900 in a crossover study of the capsule and a tablet formulation. 12 participants were administered 600 mg KVD900 in a food effect crossover study.

- Orally administered KVD900 achieved rapid and dose-dependent plasma exposure over the range of doses tested from 5 mg to 600 mg
- A single 600 mg dose provided >90% plasma kallikrein inhibition and protection of high molecular weight kininogen (HK) cleavage from dextran sulphate-stimulated cleavage shown by capillary-based immunoassay. HK cleavage is the process by which plasma kallikrein is released during the inflammatory cascade that causes HAE attacks.
- The pharmacodynamic effects of KVD900 inhibition of HK cleavage was maintained for over 10 hours at the 600 mg dose level
- All doses of KVD900 over 80 mg provided complete inhibition of plasma kallikrein

About KalVista Pharmaceuticals, Inc.

KalVista Pharmaceuticals, Inc. is a pharmaceutical company focused on the discovery, development, and commercialization of small molecule protease inhibitors for diseases with significant unmet need. The initial focus is on inhibitors of plasma kallikrein, which is an important component of the body's inflammatory response and which, in excess, can lead to increased vascular permeability, edema and inflammation. KalVista has developed a proprietary portfolio of novel, small molecule plasma kallikrein inhibitors initially targeting hereditary angioedema (HAE) and diabetic macular edema (DME). The Company has created a structurally diverse portfolio of oral plasma kallikrein inhibitors and is advancing multiple drug candidates for HAE as well as DME. The Company has selected KVD900 as its program to be advanced as an on-demand therapy for HAE attacks and commenced a Phase 2 proof-of-concept study in HAE patients in late 2018. In DME, KalVista's most advanced program, an intravitreally administered plasma kallikrein inhibitor known as KVD001, began a Phase 2 clinical trial in 2017 that is anticipated to complete in the second half of 2019.

For more information, please visit www.kalvista.com.

Forward-Looking Statements

This press release contains "forward-looking" statements within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements can be identified by words such as: "anticipate," "intend," "plan," "goal," "seek," "believe," "project," "estimate," "expect," "strategy," "future," "likely," "may," "should," "will" and similar references to future periods. These statements are subject to numerous risks and uncertainties that could cause actual results to differ materially from what we expect. Examples of forward-looking statements include, among others, available funding, our cash runway and future clinical trial timing and results. Further information on potential risk factors that could affect our business and its financial results are detailed in the annual report on Form 10-K filed on July 30, 2018 and other reports as filed from time to time with the Securities and Exchange Commission. We undertake no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

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