

Vanda to Present Tradipitant Phase II Atopic Dermatitis Data at World Congress of Itch

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WASHINGTON, Oct. 2, 2017 /PRNewswire/ -- Vanda Pharmaceuticals Inc. (VANDA) (NASDAQ: VNDA) today announced that data from the results of the Phase II study of tradipitant in atopic dermatitis will be presented at the 9th World Congress of Itch in Wroclaw Poland as a late breaking entry in the scientific poster forum on October 16 and 17. On September 13, 2017, Vanda announced that tradipitant improved both itch and disease severity in patients with atopic dermatitis.

About Atopic Dermatitis and Chronic Pruritus

Atopic dermatitis is a chronic, relapsing inflammatory skin disorder characterized by the symptom of intense and persistent pruritus or itch. Other clinical features include erythema, excoriation, edema, lichenification, oozing and xerosis.

Atopic dermatitis is a common skin disorder affecting millions of people worldwide. Currently there are very few safe systemic treatments available for atopic dermatitis, representing a significant unmet medical need in this population.

About the Neurokinin-1 Receptor and Substance P

The NK-1R is expressed throughout different tissues of the body, with major activity found in neuronal tissue. SP and NK-1R interactions in neuronal tissue regulate neurogenic inflammation locally and the pain perception pathway through the central nervous system. Other tissues, including endothelial cells and immune cells, have also exhibited SP and NK-1R activity (2). The activation of NK-1R by the natural ligand SP is involved in numerous physiological processes, including the perception of pain, behavioral stressors, cravings and the processes of nausea and vomiting (1,2,3). An inappropriate over-expression of SP, either in nervous tissue or peripherally, could result in pathological conditions such as substance dependence, anxiety, nausea/vomiting and pruritus (1,2,3,4). An NK-1R antagonist may possess the ability to reduce this over-stimulation of the NK-1R, and as a result address the underlying pathophysiology of the symptoms in these conditions.

About Tradipitant

Tradipitant is an NK-1R antagonist licensed by Vanda from Eli Lilly and Company (Lilly) in 2012. Tradipitant is currently in clinical development for atopic dermatitis and gastroparesis. The patent describing tradipitant as a new chemical entity is expected to expire in the United States in June 2029 based on an anticipated Hatch-Waxman patent term extension. Tradipitant is an investigational drug that is not currently approved for use in any indication.

About Vanda

Vanda is a global biopharmaceutical company focused on the development and commercialization of innovative therapies to address high unmet medical needs and improve the lives of patients. For more on Vanda Pharmaceuticals Inc., please visit <u>www.vandapharma.com</u>.

Abbreviations

NK-1R Neurokinin-1 Receptor SP Substance P

References

1. George DT, Gilman J, Hersh J, Thorsell A, Herion D, Geyer C, Peng X, Keilbasa W, Rawlings R, Brandt JE, Gehlert DR, Tauscher JT, Hunt SP, Hommer D, Heilig M. Neurokinin 1 receptor antagonism as a possible therapy for alcoholism. Science. 2008; 319(5869):1536-9.

2. Almeida TA, Rojo J, Nieto PM, Pinto FM, Hernandez M, et al. Tachykinins and tachykinin receptors: structure and activity relationships. Current Medicinal Chemistry. 2004;11:2045-2081.

3. Hargreaves R, Ferreira JC, Hughes D, Brands J, Hale J, Mattson B, Mill S. Development of aprepitant, the first neurokinin-1 receptor antagonist for the prevention of chemotherapy-induced nausea and vomiting. Annals of the New York Academy of Sciences. 2011; 1222:40-48.

4. Staender S, Weisshaar E, Luger A. Neurophysiological and neurochemical basis of modern pruritus treatment. Experimental Dermatology. 2007;17:161-69.

FORWARD LOOKING STATEMENTS

Various statements in this release are "forward-looking statements" under the securities laws. Forward-looking statements are based upon current expectations that involve risks, changes in circumstances, assumptions and uncertainties. Important factors that could cause actual results to differ materially from those reflected in Vanda's forward-looking statements include, among others: the ability of NK-1R inhibition to provide benefit in the treatment of atopic dermatitis; Vanda's ability to obtain patent term extension under the Hatch-Waxman Act for the new chemical entity patent covering tradipitant and other factors that are described in the "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of Vanda's annual report on Form 10-K for the fiscal year ended December 31, 2016 and quarterly report on Form 10-Q for the quarter ended June 30, 2017, which are on file with the SEC and available on the SEC's website at www.sec.gov. In addition to the risks described above and in Vanda's annual report on Form 10-K and quarterly reports on Form 10-Q, other unknown or unpredictable factors also could affect Vanda's results. There can be no assurance that the actual results or developments anticipated by Vanda will be realized or, even if substantially realized, that they will have the expected consequences to, or effects on, Vanda. Therefore, no assurance can be given that the outcomes stated in such forward-looking statements and estimates will be achieved.

All written and verbal forward-looking statements attributable to Vanda or any person acting on its behalf are expressly qualified in their entirety by the cautionary statements contained or referred to herein. Vanda cautions investors not to rely too heavily on the forward-looking statements Vanda makes or that are made on its behalf. The information in this release is provided only as of the date of this release, and Vanda undertakes no obligation, and specifically declines any obligation, to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

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