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Otsuka and Lundbeck will initiate a third Phase 3 trial to evaluate brexpiprazole in the treatment of agitation in patients with dementia of the Alzheimer's type

Tokyo, Japan and Valby, Denmark, November 1, 2017 - Otsuka Pharmaceutical Co., Ltd. (Otsuka) and H. Lundbeck A/S (Lundbeck) announce that the two companies will initiate a third clinical phase 3 study for brexpiprazole in the treatment of agitation in patients with dementia of the Alzheimer's type. The trial is expected to commence during the first half of 2018.

The decision to initiate a third trial follows discussions with the U.S. Food and Drug Administration (FDA) regarding two phase 3 clinical trials for the agitation indication that were completed by Otsuka and Lundbeck earlier this year. Top-line results for the two completed trials were announced in May 2017.

About Alzheimer's disease and related agitation

Of the 5.5 million people in the US with dementia, it is estimated that 60-80% have Alzheimer's disease.[1] Behavioral symptoms develop in the majority of people with Alzheimer's disease and many of these symptoms are clinically diagnosed as agitation, including wandering, restlessness, significant emotional distress, aggressive behaviors, and irritability. It is estimated that agitation symptoms affect nearly 50% or more of patients with Alzheimer's disease observed over a multiyear period.[2]

Symptoms of agitation place a serious burden on the people afflicted with the disease and their caregivers, significantly affecting the quality of life for all concerned. Agitation is often a determining factor in the decision to place patients in high-level residential care facilities, contributing to the roughly USD 259 billion cost burden of Alzheimer's disease in the U.S. for 2017.[1]

About brexpiprazole

Brexpiprazole was approved by the U.S. Food and Drug Administration in July 2015 to treat patients with schizophrenia and as an adjunctive treatment for patients with major depressive disorder (MDD). Brexpiprazole was also approved earlier in 2017 by Health Canada, and by the Department of Health in Australia for the treatment of schizophrenia. In all three countries brexpiprazole is distributed and marketed under the brand name REXULTI®.

Brexpiprazole was discovered by Otsuka and is being co-developed by Otsuka and Lundbeck. The

mechanism of action for brexpiprazole in the adjunctive treatment of major depressive disorder or schizophrenia is not fully understood. However, the efficacy of brexpiprazole may be mediated through a combination of partial agonist activity at serotonin 5-HT_{1A} and dopamine D_2 receptors, and antagonist activity at serotonin 5-HT_{2A} receptors. Brexpiprazole exhibits high affinity (sub-nanomolar) for these receptors as well as for noradrenaline $alpha_{1B/2C}$ receptors.

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1 Alzheimer's Association. 2017 Alzheimer's disease facts and figures. 2017;13:325-373

2 Bergh, S.and Selbæk, G. The prevalence and the course of neuropsychiatric symptoms in patients with dementia. Norsk Epidemiologi 2012; 22 (2): 225-232.