***Investigative Endocannabinoid Modulator Appears to Reduce Tics/Urges in Tourette’s Syndrome***

April 27, 2018

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LOS ANGELES -- April 27, 2018 -- The investigative endocannabinoid modulator ABX-1431 appears to significantly reduce the number of tic episodes experienced by individuals diagnosed with Tourette’s syndrome, according to results of a phase 1b crossover study presented at the 2018 Annual Meeting of the American Academy of Neurology (AAN).

“Our data suggest that modulation of the endocannabinoid system by selective inhibition of monoacylglycerol lipase improves tics in Tourette’s syndrome,” reported co-author Ewgeni Jakubovski, MA, doctoral candidate, Hannover Medical School, Hannover, Germany, speaking here on April 20.

Treatment with ABX-1431 was associated with a statistically significant reduction in the Yale Global Tic Severity Scale Total Tic Score (YGTTS-TTS) at 8 hours (*P* = .0385), and in the Adult Tic Questionnaire Intensity (*P* = .0002); and in the Premonitory Urge for Tics Scale (*P* = .0442). At baseline, subjects had a moderate tic severity of 26.7 on the YGTTS-TTS.

Treatment with a single dose of ABX-1431 demonstrated a consistently clear treatment effect, the researchers noted.

Jakubovski and colleagues randomised 20 adult patients (16 men; average age: 33.7 years) to receive either a single 40-mg dose of ABX-1431 or placebo. The researchers monitored all subjects for 8 hours afterward, with assessments taken at 4 hours.

After a 2-week washout period, subjects were crossed over in treatment and were reassessed.

The team observed no serious adverse events. The most commonly observed adverse events with headache, somnolence, and fatigue.

Research has suggested that the endocannabinoid system and Tourette’s syndrome are intertwined, as there are large numbers of the central cannabinoid receptors in the basal ganglia. Monoacylglycerol breaks down the central cannabinoid ligand.

The researchers concluded that ABX-1431 may play a role in preventing that breakdown, and preventing the cascade of molecular events that emerges as tic activity. “ABX-1431 may provide a unique treatment profile for Tourette’s syndrome, and holds promise as a novel mechanism to treat movement disorders and neuropsychiatric conditions,” Jakubovski stated.

Funding for this trial was sponsored by Abide Therapeutics, San Diego, California.

*[Presentation title: ABX-1431, A First-in-Class Endocannabinoid Modulator, Improves Tics in Adult Patients with Tourette Syndrome. Abstract 002]*