



## **Axovant Announces Negative Results for Intepirdine in Phase 2b HEADWAY and Pilot Phase 2 Gait and Balance Studies; Positive Trends in Efficacy Seen in Pilot Phase 2 Nelotanserin Study**

January 8, 2018

*-- Intepirdine Program to be Discontinued Based on MINDSET, HEADWAY, and Gait and Balance Study Results --  
-- Company to Advance to Larger Confirmatory Nelotanserin DLB Study Focused on Motor Function and Psychosis --  
-- Conference Call Today at 8:00 a.m. EST --*

BASEL, Switzerland, Jan. 08, 2018 (GLOBE NEWSWIRE) -- Axovant Sciences (NASDAQ:AXON) today announced that its investigational drug intepirdine did not meet its primary efficacy endpoints in the Phase 2b HEADWAY and pilot Phase 2 Gait and Balance studies. Separately, the Company's investigational drug nelotanserin met its prespecified primary endpoint of safety in the pilot Phase 2 Visual Hallucination study. In addition, in this exploratory study, nelotanserin treatment resulted in a positive trend in efficacy in a prespecified intent to treat (ITT) analysis of the motor function scale, the Unified Parkinson's Disease Rating Scale (UPDRS) Part III. Nelotanserin treatment also resulted in an efficacy signal in a post-hoc subset analysis of patients with higher baseline scores on the Scale for the Assessment of Positive Symptoms - Parkinson's Disease (SAPS-PD).

In the HEADWAY study of intepirdine in patients with dementia with Lewy bodies (DLB), neither 35 mg nor 70 mg of intepirdine resulted in statistically significant improvements after 24 weeks of treatment compared with placebo-treated patients. In motor function, as measured by the UPDRS Part III, 35 mg of intepirdine caused a 2.01 point worsening versus placebo ( $p=0.158$ ) and 70 mg of intepirdine caused a 0.74 point improvement versus placebo ( $p=0.607$ ). In cognition, as measured by the Alzheimer's Disease Assessment Scale-Cognitive Subscale (ADAS-Cog), 35 mg of intepirdine caused a 0.47 point worsening versus placebo ( $p=0.653$ ) and 70 mg of intepirdine caused a 0.67 point improvement versus placebo ( $p=0.527$ ). In global function, as measured by the Clinician Interview-Based Impression of Change plus caregiver interview (CIBIC+), 35 mg of intepirdine caused a 0.15 point improvement versus placebo ( $p=0.395$ ) and 70 mg of intepirdine caused a 0.07 point improvement versus placebo ( $p=0.701$ ).

Previously defined co-primary endpoints for the HEADWAY study were the CIBIC+ and a computerized cognitive battery (CCB). Intepirdine did not achieve statistical significance on the CCB, with 35 mg of intepirdine resulting in a composite z-score of a 0.38 worsening versus placebo ( $p=0.452$ ) and 70 mg of intepirdine resulting in a composite z-score of a 0.36 improvement versus placebo ( $p=0.471$ ).

In the study of intepirdine in patients with dementia and gait impairment, 35 mg of intepirdine did not result in any improvement in gait speed (1.90 cm per second worsening versus placebo,  $p=0.357$ ). Intepirdine was generally well tolerated in these studies.

In the pilot study of nelotanserin in patients with DLB and Parkinson's disease dementia (PDD) who were experiencing visual hallucinations, the primary endpoint was safety, including an assessment of symptoms as measured by the UPDRS. On this primary endpoint, nelotanserin was generally well tolerated. A number of exploratory efficacy assessments were conducted, including the UPDRS Part III; the Scale for the Assessment of Positive Symptoms (SAPS); SAPS-PD; the Patient Global Impression of Change of Visual Hallucinations (PGIC-VH); and an internally developed patient diary. In a prespecified ITT analysis, nelotanserin treatment versus placebo ( $n=27$ ) resulted in a 3.12 point improvement in the UPDRS Part III with a positive trend ( $p=0.075$ , unadjusted). Notably, in a prespecified analysis of the DLB patient subset ( $n=19$ ), nelotanserin improved the UPDRS Part III by 4.00 points ( $p=0.041$ , unadjusted).

Although nelotanserin did not significantly improve the SAPS-PD ( $n=27$ ) in the entire efficacy evaluable population (0.88 point improvement,  $p=0.519$ , unadjusted), in a post-hoc subset analysis of patients with a baseline SAPS-PD score greater than 8.0 ( $n=19$ ), indicating greater severity, nelotanserin treatment at 40 mg for two weeks followed by 80 mg for two weeks resulted in a 1.21 point improvement ( $p=0.011$ , unadjusted). Further analyses of these data will be conducted which could yield new insights into the effects of nelotanserin.

No other trends of improvement were seen on the full SAPS, PGIC-VH, or in the patient diary.

"Based on the totality of intepirdine data to date, there is no evidence to support its further development. We are incredibly disappointed and saddened for the millions of people living with these difficult conditions, and are deeply grateful to the patients, caregivers and investigators who participated in our trials," said David Hung, M.D., chief executive officer of Axovant. "For nelotanserin, we are encouraged by the positive trend in motor improvement observed on the UPDRS, especially in patients with DLB, and by the efficacy signal in patients with more severe SAPS-PD scores at baseline, particularly given the short treatment period at what we believe is the correct therapeutic dose. Therefore, we intend to discuss a larger confirmatory nelotanserin study with the FDA that is focused on DLB patients with motor deficits and more severe baseline psychotic symptoms. Separately, we will be working with Roivant to build our pipeline to develop other new therapies for patients with neurological conditions who so desperately need them."

"We at Roivant remain fully supportive of Axovant and its mission," said Vivek Ramaswamy, founder and chief executive officer of Roivant Sciences and director of Axovant. "We appreciate the continued commitment of David and his team to finding and developing therapies to help patients in need, and Roivant is equally committed to finding ways to assist Axovant in executing on attractive strategic options."

Axovant will work with investigators to appropriately conclude the HEADWAY and MINDSET extension studies.

### **About the Intepirdine HEADWAY Study**

This global, multi-center, randomized, double-blind, placebo-controlled, parallel-group Phase 2b HEADWAY study evaluated the efficacy, safety and tolerability of two doses of intepirdine (35 mg and 70 mg) over a 24-week treatment period in 269 patients with DLB. Individuals receiving stable background therapy for DLB were allowed to participate in the study. The primary efficacy endpoint was the change from baseline to week 24 in motor function as measured by the UPDRS Part III. The co-secondary endpoints were the change from baseline to week 24 in cognition as measured by the ADAS-Cog and the change in baseline in global function as measured by the CIBIC+. Individuals who completed the HEADWAY study were eligible to receive intepirdine in an extension study.

### **About the Intepirdine Gait and Balance Study**

This multi-center, randomized, double-blind, placebo-controlled, crossover pilot Phase 2 study evaluated the safety of intepirdine 35 mg daily and its effect on gait and balance in 38 patients with Alzheimer's disease, DLB or PDD who were experiencing gait impairment. All study participants were on stable background cholinesterase inhibitor therapy for at least six weeks prior to screening. The study evaluated quantitative measures of gait and balance that are clinically-relevant predictors of fall risk. The primary efficacy endpoint was gait speed on an electronic walkway system after two weeks of treatment. Exploratory endpoints assessed the effects of intepirdine 35 mg compared with placebo on gait variability, balance and freezing of gait, using a variety of standardized tests. With the crossover study design, every patient received double-blind placebo for two weeks and double-blind intepirdine for two weeks in a randomized order.

#### **About the Nelotanserin Visual Hallucinations Study**

This multi-center, randomized, double-blind, placebo-controlled, pilot Phase 2 crossover study evaluated the safety, tolerability, and efficacy of nelotanserin over a four-week treatment period and enrolled 30 patients with DLB and PDD who were experiencing frequent and recurrent visual hallucinations. With the crossover design, every patient received placebo for four weeks and nelotanserin for four weeks (two weeks of a 40 mg dose followed by two weeks of an 80 mg dose). Study participants were allowed to be on stable antipsychotic treatments, stable anti-Parkinson's disease treatments, and stable background cholinesterase inhibitor therapy for at least four weeks prior to screening.

The prespecified primary endpoint of the pilot study was safety including assessment of extrapyramidal symptoms as measured by the change in UPDRS scores. In addition, there were multiple exploratory efficacy assessments in the study that included UPDRS Part III, SAPS, SAPS-PD, PGIC-VH and an internally developed patient diary, that evaluated the effects of nelotanserin over a four-week treatment period. Individuals who completed this study were eligible to receive nelotanserin in an extension study.

#### **About DLB**

Dementia with Lewy bodies (DLB) is a progressive neurodegenerative disorder characterized by the aggregation of Lewy bodies, abnormal deposits of a protein called alpha-synuclein. Lewy bodies build up in areas of the brain that regulate behavior, cognition and movement. DLB is the second most prevalent cause of neurodegenerative dementia in elderly patients. Approximately 1.1 million patients in the United States have DLB. Patients with DLB can present with a range of symptoms including fluctuations in cognition, attention and alertness; Parkinson's symptoms; visual hallucinations; and REM sleep behavior disorder (RBD), in which people physically act out their dreams, impacting their quality of life and endangering their bed partners. No therapies are approved for the treatment of DLB in the United States or Europe.<sup>i</sup>

#### **About Nelotanserin**

Nelotanserin is a selective inverse agonist of the 5-HT<sub>2A</sub> receptor<sup>ii</sup> that was discovered by Arena Pharmaceuticals, Inc.

#### **Teleconference/Webcast Details**

To participate in the live conference call today, January 8, at 8:00 a.m. EST, please dial 1-833-652-5918 from the U.S. and Canada or +1 409-767-9227 internationally, and use the passcode 3467829. The live call is being webcast and can be accessed on the "Events and Presentations" page of the "Investors" section of the Company's website at <http://investors.axovant.com>. A replay of the webcast will be available for 30 days following the live event.

#### **About Axovant Sciences**

Axovant is a clinical-stage biopharmaceutical company focused on developing and commercializing innovative medicines to broadly address multiple forms of dementia and related neurological disorders. Axovant is developing a pipeline of product candidates that focuses on the cognitive, functional and behavioral aspects of debilitating conditions such as Alzheimer's disease, Lewy body dementia and other neurological disorders. For more information, visit [www.axovant.com](http://www.axovant.com).

#### **Forward-Looking Statements**

This press release contains forward-looking statements, including statements regarding Axovant's plans for the development of nelotanserin, the discontinuation of intepirdine development, the conclusion of the HEADWAY and MINDSET extension studies, and the development of its pipeline. Forward-looking statements can be identified by the words "believe," "anticipate," "continue," "estimate," "project," "expect," "plan," "potential," "intends," "will," "would," "could," "should" or the negative or plural of these words or other similar expressions that are predictions or indicate future events, trends or prospects. Forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially and reported results should not be considered as an indication of future performance. These risks and uncertainties include, but are not limited to: risks associated with the success, cost and timing of our product development activities and clinical trials, increased regulatory requirements, and interim results or other preliminary analyses do not ensure that later or final results in a clinical trial or in related or similar clinical trials will replicate those interim results. There can be no assurance that any of our product candidates will ever receive regulatory approval or be successfully commercialized. For a further description of the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to Axovant's business in general, see the "Risk Factors" section of our quarterly report on Form 10-Q filed with the Securities and Exchange Commission (SEC) on November 2, 2017, and other filings that Axovant makes with the SEC from time to time. These forward-looking statements are based on information available to Axovant as of the date of this press release and speak only as of the date of this release. Axovant disclaims any obligation to update these forward-looking statements, except as may be required by law.

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<sup>i</sup>Alzheimer's Association. Dementia with Lewy bodies. <http://www.alz.org/dementia/dementia-with-lewy-bodies-symptoms.asp>. Accessed January 7, 2018.

<sup>ii</sup>The Journal of Pharmacology and Experimental Therapeutics. Nelotanserin, a novel selective human 5-hydroxytryptamine<sub>2A</sub> inverse agonist for the treatment of insomnia. <http://www.ncbi.nlm.nih.gov/pubmed/19841476>. 2010 Jan;332(1):281-90. doi: 10.1124/jpet.109.160994. Epub 2009 Oct 19.

 [Primary Logo](#)

Source: Axovant Sciences Ltd.