Sound Pharma advances pivotal Phase 3 clinical trials in Meniere's Disease

Seattle, WA

Sound Pharmaceuticals is pleased to announce that the FDA has allowed its pivotal Phase 3 clinical protocol for SPI-1005 in the Treatment of Patients with Meniere's Disease (STOPMD-3). This is the first Phase 3 study of an investigational new drug for the treatment of Meniere's Disease (MD), a neurotologic disease involving hearing loss, tinnitus, and dizziness. To date, there are no FDA approved therapies involving MD, hearing loss, tinnitus, or dizziness. "This is a major development and regulatory achievement for our company and the field of neurotology" said Jonathan Kil, MD, Co-Founder and CEO. SPI's clinical data from two completed multi-center, randomized, placebo-controlled studies (Phase 1b and Phase 2b clinical trials) showed that oral delivery of SPI-1005 for 21 or 28 days improved sensorineural hearing loss and tinnitus in patients affected by MD. SPI competed an End-of-Phase 2 Meeting with the FDA late last year and will conduct the STOPMD-3 protocol at over 16 US sites.

About the SPI-1005 Phase 1b and Phase 2b clinical trials

The Phase 1b and Phase 2b trials randomized 39 and 126 subjects, respectively to placebo or active doses of SPI-1005, and treated for 21 or 28 days, respectively. Clinically relevant improvements in sensorineural hearing loss were determined using pure-tone audiometry (PTA) and the words-in-noise test (WINT), two validated measures of hearing sensitivity and specificity administered by an audiologist. Patient reported tinnitus and vertigo were assessed using the Tinnitus Functional Index (TFI) and Vertigo Symptoms Scale (VSS). Improvement in PTA/WINT and TFI/VSS scores from baseline were compared between SPI-1005 dose groups and the placebo group.

In the Phase 2b study, clinically relevant improvements were observed in low frequency hearing by PTA and WINT scores at 8 weeks after the start of study drug when compared to placebo. The percentage of subjects showing significant auditory improvements using PTA (≥10 dB gain at one low frequency) in the 400 mg dose group rose from 47% at 4 weeks to 61% at 8 weeks, while the percentage using WINT (≥20% increase in word recognition) rose from 57% at 4 weeks to 68% at 8 weeks. Additionally, SPI-1005 treatment reduced tinnitus perception or tinnitus loudness (TL) by a statistically significant difference (p-value <0.05 using Fisher's Exact test) when compared to placebo. Reductions in TL averaged 1.4 pts in the 400 mg group vs 0.7 pts in the placebo group (30% reduction vs 10% reduction, $p<0.02$). These Phase 2b data confirmed an initial finding of the Phase 1b data, that SPI-1005 can reduce tinnitus loudness by

clinically relevant levels. These improvements in auditory function further support the use of SPI-1005 to treat sudden hearing loss, noise-induced hearing loss, and age-related loss where sensorineural hearing loss and tinnitus are prominent features.

About Meniere's Disease (MD)

MD is diagnosed by episodic vertigo or dizziness, fluctuating hearing loss, and intermittent or constant tinnitus, and is thought to be due to a swelling or inflammation of the inner ear. The auditory symptoms of hearing loss and tinnitus often involve only one ear. MD patients are typically diagnosed between 40-65 years of age. In addition, some patients experience aural fullness or pressure that can also contribute to dizziness. As patients age, the hearing loss and/or tinnitus become progressively worse resulting in profound hearing loss or intractable tinnitus. For the definitive diagnosis of MD, the American Academy of Otolaryngology-Head & Neck Surgery guidance requires documentation of ≥30 dB of low frequency hearing loss in at least one ear using PTA. Loss of word recognition especially in noisy environments or when tinnitus is present is common in MD, and other forms of hearing loss. MD is managed with low salt diets, thiazide diuretics, and oral or locally injected steroids. Unfortunately, this type of medical management or standard of care has not been proven to be effective and are not FDA approved.

About SPI-1005

SPI-1005 is an investigational drug that contains ebselen, a small molecule that is a new chemical entity, or NCE, under FDA classification. Ebselen is a selenorganic compound that mimics and induces glutathione peroxidase (GPx) activity and represents a novel class of anti-inflammatory. GPx activity is critical to several cell types and tissues in the inner ear, retina, brain, lung and kidney, and is often reduced during exposures to environmental insults. Loss of GPx activity has been shown to result in sensorineural hearing loss in multiple animal models. SPI-1005 is given orally and is being tested in several neurotologic indications including noise induced hearing loss and two types of ototoxicity (hearing loss, tinnitus, dizziness or vertigo): due to aminoglycoside antibiotics (such as tobramycin) and due to platinum-based chemotherapy.

About Sound Pharmaceuticals

A privately held biotechnology company is testing SPI-1005 under four active Investigational New Drug Applications involving several neurotologic indications, including an ongoing Phase 2 clinical trial in Cystic Fibrosis patients receiving IV tobramycin for the treatment of pulmonary exacerbation. The company recently announced topline data from a Bipolar mania Phase 2

clinical trial in collaboration with the University of Oxford in England. Those positive data are being advanced in an upcoming multi-center Phase 2b clinical trial in the US and UK

Details of the SPI-1005 clinical trials can be viewed online at www.clinicaltrials.gov, or by visiting www.soundpharma.com.