

# Esperion Announces Positive Top-Line Results from Pivotal Phase 3 Bempedoic Acid / Ezetimibe Combination Pill Study

August 27, 2018

—Bempedoic Acid / Ezetimibe Combo Pill Achieved an Additional 35% LDL-C Lowering in Patients on Maximally Tolerated Statins —

—35% LDL-C Lowering Provides Potential for More Than 6 Million U.S. Patients to Reach LDL-C Levels of 70 mg/dL —

—Bempedoic Acid / Ezetimibe Combo Pill Appeared to be as Safe and Well-Tolerated as Ezetimibe Alone —

—Provided an Additional 34% hsCRP Reduction —

—Bempedoic Acid / Ezetimibe Combo Pill Achieved an Additional 43% LDL-C lowering in Patients Considered Statin Intolerant (post-hoc analysis) —

—Conference Call and Webcast on Monday, August 27 at 8:00 a.m. Eastern Time —

ANN ARBOR, Mich., Aug. 27, 2018 (GLOBE NEWSWIRE) -- Esperion (NASDAQ: ESPR) today announced positive top-line results from the pivotal Phase 3 bempedoic acid / ezetimibe combination pill study (1002-053). This trial was a randomized, double-blind, parallel group study conducted to evaluate the efficacy and safety of the bempedoic acid 180 mg / ezetimibe 10 mg combination pill compared to bempedoic acid, ezetimibe or placebo in patients treated with maximally tolerated statins.

This pivotal Phase 3, four-arm study design including a primary endpoint of LDL-C lowering, study statistics and an abbreviated 505(b)(2) regulatory pathway were discussed and agreed to with the U.S. Food and Drug Administration (FDA) in 2017.

The study included 382 high-risk patients taking maximally tolerated statins who required additional LDL-C lowering and met its key efficacy endpoints, including:

- On-treatment analysis LDL-C lowering of 35 percent for the combination pill at 12 weeks (p<0.001) compared to 3 percent for placebo, 24 percent for ezetimibe 10 mg (EZE) and 20 percent for bempedoic acid 180 mg (BA);
- In the intent to treat analysis, LDL-C lowering was 32 percent for the combination pill compared to 3 percent for placebo (p<0.001), 21 percent for EZE (p<0.001) and 18 percent for BA (p<0.001);
- Reduction of 34 percent for the FDC in high-sensitivity C-reactive protein (hsCRP), an important marker of the underlying inflammation associated with cardiovascular disease, compared with an increase in placebo of 4 percent and reductions of 20 percent for BA and 9 percent for EZE.
- In a post-hoc analysis of patients considered statin intolerant, the combination pill LDL-C lowering was 43 percent in the on-treatment analysis compared to a one percent increase for placebo;

"I'm pleased to see the positive safety and tolerability profile of the bempedoic acid / ezetimibe fixed-dose combination pill which was similar to that of ezetimibe alone," said Christie M. Ballantyne, M.D., chairman of Esperion's Phase 3 Executive Committee and Professor and Chief of Cardiology at Baylor College of Medicine in Houston. "The LDL-C lowering and hsCRP reductions seen with the combination are very important to physicians like me who see these challenging patients every day, and we need more options for them."

## Safety and Tolerability of Combination Pill Over 12 Weeks

In this 12-week study, the bempedoic acid / ezetimibe combo pill was observed to be safe and well-tolerated. The results showed no clinical differences between the FDC, BA, EZE and placebo patient groups in the occurrence of:

- Serious adverse events (SAEs) with 8 percent, 6 percent, 9 percent and 2 percent, respectively. No SAEs were considered
  to be related to study medication;
- Discontinuations due to AEs with 7 percent, 8 percent, 9 percent, and 4 percent, respectively;
- No elevations in liver function tests (ALT/AST) of greater than three times the upper limit of normal, repeated and confirmed were observed.

"These pivotal study results of the bempedoic acid / ezetimibe combination pill are highly compelling. As Lipid Management experts, we know that 35 percent LDL-C lowering could help more than six million ASCVD and/or HeFH patients on maximally tolerated statins achieve LDL-C levels of 70mg/dL or less, an elusive LDL-C target for most patients today. With a reduction in hsCRP as a key marker for CV risk reduction based on CANTOS, our 34 percent hsCRP reduction is truly exceptional," said Tim M. Mayleben, president and chief executive officer of Esperion. "With the combo pill we are confident physicians will have the treatment option they need to help the more than 12 million Americans with high LDL-C already taking maximally tolerated statin therapy, conveniently and cost-effectively achieve lower LDL-C levels."

### **Guidance Updates**

Topline data from Study 2 (1002-047) are now expected in October 2018 (prior guidance end-of-September 2018). NDAs will be submitted during the

first quarter of 2019.

#### Design of Pivotal Phase 3 Study 3 (1002-053)

The 12-week, pivotal Phase 3 randomized, double-blind, parallel group, multicenter study to evaluate the efficacy and safety of bempedoic acid 180 mg / ezetimibe 10 mg combination pill compared to bempedoic acid, ezetimibe or placebo in high-risk patients with ASCVD and/or heterozygous familial hypercholesterolemia or with multiple risk factors for ASCVD being treated with maximally tolerated statins. The study was conducted at 78 sites in North America. A total of 382 patients were randomized 2:2:2:1 to receive bempedoic acid 180 mg / ezetimibe 10 mg combination pill, bempedoic acid 180 mg, ezetimibe 10 mg or placebo. The secondary objectives included assessments of high-sensitivity C-reactive protein (hsCRP), non-HDL-C, total cholesterol (TC), and apolipoprotein B (apoB) after 12 weeks of treatment as well as characterizing the safety and tolerability of the combination pill versus placebo alone, BA alone, and EZE alone.

### **Conference Call and Webcast Information**

Esperion's Lipid Management Team will host a conference call and webcast today, Monday, August 27, 2018, at 8:00 a.m. Eastern Time to discuss these Phase 3 study results. The call can be accessed by dialing (877) 312-7508 (domestic) or (253) 237-1184 (international) five minutes prior to the start of the call and providing access code 3893846. A live audio webcast can be accessed on the investors and media section of the Esperion website at investor.esperion.com. Access to the webcast replay will be available approximately two hours after completion of the call and will be archived on the Company's website for approximately 90 days.

## About Esperion's Global Pivotal Phase 3 LDL-C Lowering Program

Esperion initiated its global, pivotal, Phase 3 clinical development program in January 2016 to evaluate the safety, tolerability and consistent, complementary LDL-C-lowering efficacy of bempedoic acid and the bempedoic acid / ezetimibe combination pill in patients with atherosclerotic cardiovascular disease (ASCVD), or who are at a high risk for ASCVD, with hypercholesterolemia who continue to have elevated levels of LDL-C despite the use of maximally-tolerated statins and ezetimibe, leaving them at high risk for cardiovascular events. The program includes five studies in approximately 4,000 patients, four for bempedoic acid and one for the bempedoic acid / ezetimibe combination pill.

- Two pivotal studies evaluating bempedoic acid (Studies 1 & 2) in 3,009 patients with ASCVD on maximally-tolerated statins, with top-line results reported in May 2018, and expected in October 2018, respectively;
- Two pivotal studies evaluating bempedoic acid (Studies 3 & 4) in 614 patients with ASCVD, or at a high risk for ASCVD, considered statin intolerant, with top-line results reported in May and March 2018, respectively;
- One pivotal study evaluating the bempedoic acid / ezetimibe combination pill (053 Study) in 382 patients with ASCVD, or at high risk for ASCVD, on maximally tolerated statins, with top-line results reported in this press release.

Esperion plans to submit New Drug Applications (NDAs) to the U.S. Food and Drug Administration (FDA) for bempedoic acid and the bempedoic acid / ezetimibe combination pill for LDL-C-lowering indications during the first quarter of 2019. Additionally, Esperion plans to submit Marketing Authorization Applications (MAAs) to the European Medicines Agency (EMA) during the second quarter of 2019.

### **Bempedoic Acid / Ezetimibe Combination Pill**

Through the complementary mechanisms of action of inhibition of cholesterol synthesis (bempedoic acid) and inhibition of cholesterol absorption (ezetimibe), the bempedoic acid / ezetimibe combination pill is our lead, non-statin, orally available, once-daily, LDL-C lowering therapy. Inhibition of ATP Citrate Lyase (ACL) by bempedoic acid reduces cholesterol biosynthesis and lowers LDL-C by up-regulating the LDL receptor. Inhibition of Niemann-Pick C1-Like 1 (NPC1L1) by ezetimibe results in reduced absorption of cholesterol from the gastrointestinal tract, thereby reducing delivery of cholesterol to the liver, which in turn upregulates the LDL receptors. Phase 3 data demonstrated that this safe and well tolerated combination results in a 35 percent lowering of LDL-C, and a 34 percent reduction in high sensitivity C-reactive protein (hsCRP).

## **Bempedoic Acid**

With a targeted mechanism of action, bempedoic acid is a first-in-class, complementary, orally available, once-daily ATP Citrate Lyase (ACL) inhibitor that reduces cholesterol biosynthesis and lowers LDL-C by up-regulating the LDL receptor. Similar to statins, bempedoic acid also reduces hsCRP, a key marker of inflammation associated with cardiovascular disease. Completed Phase 2 and Phase 3 studies conducted in almost 4,800 patients, and approximately 2,900 patients treated with bempedoic acid, have produced LDL-C lowering results of up to 30 percent as monotherapy, 35 percent in combination with ezetimibe on maximally tolerated statins, 48 percent in combination with ezetimibe as monotherapy, and an additional 20 percent on maximally tolerated statins.

The effect of bempedoic acid on cardiovascular morbidity and mortality has not yet been determined. The company initiated a global cardiovascular outcomes trial (CVOT) to assess the effects of bempedoic acid on the occurrence of major cardiovascular events in patients with, or at high risk for, cardiovascular disease (CVD) who are only able to tolerate less than the lowest approved daily starting dose of a statin and considered "statin intolerant." The CVOT — known as Cholesterol Lowering via Bempedoic Acid, an ACL-inhibiting Regimen (CLEAR) Outcomes — is an event-driven, global, randomized, double-blind, placebo-controlled study expected to enroll approximately 12,600 patients with hypercholesterolemia and high CVD risk at up to 1,000 sites in approximately 30 countries.

## **Esperion's Commitment to Patients with Hypercholesterolemia**

High levels of LDL-C can lead to a build-up of fat and cholesterol in and on artery walls (known as atherosclerosis), potentially leading to cardiovascular events, including heart attack or stroke. In the U.S., 78 million people, or more than 20 percent of the population, have elevated LDL-C; an additional 73 million people in Europe and 30 million people in Japan also live with elevated LDL-C. There are approximately 13 million people in the U.S. with atherosclerotic cardiovascular disease (ASCVD) who live with elevated levels of LDL-C despite taking maximally-tolerated lipid-modifying therapy — including individuals considered statin intolerant — leaving them at high risk for cardiovascular events. More than 6 million patients with ASCVD and/or HeFH on maximally tolerated statins require less than 30 percent additional LDL-C lowering to achieve treatment goals.

Esperion's mission as the Lipid Management Company is to deliver once-daily, oral therapies that complement existing oral drugs to provide the

additional LDL-C lowering that these patients need.

#### The Lipid Management Company

Esperion is the Lipid Management Company passionately committed to developing and commercializing convenient, complementary, cost-effective, once-daily, oral therapies for the treatment of patients with elevated LDL-C. Through scientific and clinical excellence, and a deep understanding of cholesterol biology, the experienced Lipid Management Team at Esperion is committed to developing new LDL-C lowering therapies that will make a substantial impact on reducing global cardiovascular disease; the leading cause of death around the world. Bempedoic acid and the company's lead product candidate, the bempedoic acid / ezetimibe combination pill, are targeted therapies that have been shown to significantly lower elevated LDL-C levels in patients with hypercholesterolemia, including patients inadequately treated with current lipid-modifying therapies. For more information, please visit <a href="https://twitter.com/EsperionInc">www.esperion.com</a> and follow us on Twitter at <a href="https://twitter.com/EsperionInc">https://twitter.com/EsperionInc</a>.

### **Forward-Looking Statements**

This press release contains forward-looking statements that are made pursuant to the safe harbor provisions of the federal securities laws, including statements regarding the regulatory approval pathway for the bempedoic acid / ezetimibe combination pill and bempedoic acid and the therapeutic potential of, clinical development plan for, the bempedoic acid / ezetimibe combination pill and bempedoic acid, including Esperion's timing, designs, plans and announcement of results regarding its global pivotal Phase 3 clinical development program for bempedoic acid and the bempedoic acid / ezetimibe combination pill, Esperion's timing and plans for submission of NDAs to the FDA and MAAs to the EMA and Esperion's expectations for the market for therapies to lower LDL-C, including the market adoption of bempedoic acid and the bempedoic acid / ezetimibe combination pill, if approved. Any express or implied statements contained in this press release that are not statements of historical fact may be deemed to be forward-looking statements. Forward-looking statements involve risks and uncertainties that could cause Esperion's actual results to differ significantly from those projected, including, without limitation, delays or failures in Esperion's studies, that positive results from a clinical study of bempedoic acid may not be sufficient for FDA or EMA approval or necessarily be predictive of the results of future or ongoing clinical studies, that existing cash resources may be used more quickly than anticipated, and the risks detailed in Esperion's filings with the Securities and Exchange Commission. Esperion disclaims any obligation or undertaking to update or revise any forward-looking statements contained in this press release, other than to the extent required by law.

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