

HLS Therapeutics Announces that Amarin's Vascepa® (icosapent ethyl) Demonstrates 26% Reduction in Key Secondary Composite Endpoint of Cardiovascular Death, Heart Attack and Stroke in REDUCE-IT™, which Supports 25% Overall Reduction in Five-Point Major Adverse Cardiovascular Event Primary Composite Endpoint

- **Cardiovascular Death Reduced by 20%**
- **Fatal or Nonfatal Heart Attacks Reduced by 31%**
- **Fatal or Nonfatal Stroke Reduced by 28%**
- **Urgent or Emergent Coronary Revascularization Reduced by 35%**
- **Hospitalization for Unstable Angina Reduced by 32%**
- **Number Needed to Treat for Primary Composite Endpoint: 21**
- **HLS has the Exclusive Rights to Vascepa for the Canadian Market**

TORONTO, Nov. 12, 2018 /CNW/ - HLS Therapeutics Inc. ("HLS" or the "Company") (TSX-V:HLS) announces that Amarin Corporation plc (NASDAQ:AMRN) released primary results from the Vascepa® (icosapent ethyl) cardiovascular ("CV") outcomes trial, REDUCE-IT™, at the 2018 Scientific Sessions of the American Heart Association ("AHA") in Chicago, Illinois on Saturday November 10, 2018. REDUCE-IT primary results confirmed 25% relative risk reduction ("RRR") for the topline primary endpoint result with multiple robust demonstrations of efficacy, including 20% reduction in cardiovascular death. HLS has in-licensed the exclusive rights to Vascepa for the Canadian market. Vascepa has not been submitted to Health Canada for regulatory approval and is not approved for use in Canada.

Cardiovascular benefits appeared not to be influenced significantly by triglyceride ("TG") levels at baseline (135 mg/dL to 499 mg/dL baseline range) or as achieved at one year, suggesting mechanisms at work with use of Vascepa that are independent of triglyceride reduction. Results were robust across multiple subgroups, including in patients with and without diabetes at baseline. REDUCE-IT study results were simultaneously published in *The New England Journal of Medicine* and are available at nejm.org/doi/full/10.1056/NEJMoa1812792.

REDUCE-IT was a global study of 8,179 statin-treated adults with elevated CV risk. Many patients with well-managed LDL-C remain at high risk for cardiovascular events. No therapy is currently approved to treat the residual risk in REDUCE-IT patients. REDUCE-IT studied Vascepa 4 grams/day as compared to placebo over a median follow-up time of 4.9 years.

The results from the REDUCE-IT study presented by Amarin and the New England Journal of Medicine over the weekend are as follows:

Primary endpoint achieved: **25%** relative risk reduction (RRR) (hazard ratio (HR), 0.75; 95% confidence interval CI, 0.68-0.83; p<0.001) in first occurrence of major adverse CV events (MACE) in the intent-to-treat population consisting of a composite of cardiovascular death, nonfatal myocardial infarction (MI or heart attack), nonfatal stroke, coronary revascularization (procedures such as stents and by-pass) and unstable angina requiring hospitalization. Number needed to treat ("NNT") was **21** for the first occurrence of MACE in the 5-point primary composite endpoint.

Key secondary endpoint achieved: **26%** RRR (HR, 0.74; 95% CI, 0.65-0.83; p<0.001) in 3-point MACE in the intent-to-treat population consisting of a composite of cardiovascular death, nonfatal heart attack and nonfatal stroke.

Additional secondary endpoints achieved: Seven secondary endpoints were achieved below the key secondary endpoint, as follows (in order of sequential statistical testing within the prespecified hierarchy):

- Cardiovascular death or nonfatal heart attack: **25%** RRR (HR, 0.75; 95% CI, 0.66-0.86; p<0.001)
- Fatal or nonfatal heart attack: **31%** RRR (HR, 0.69; 95% CI, 0.58-0.81; p<0.001)
- Urgent or emergent revascularization: **35%** RRR (HR, 0.65; 95% CI, 0.55-0.78; p<0.001)
- Cardiovascular death: **20%** RRR (HR, 0.80; 95% CI, 0.66-0.98; p=0.03)
- Hospitalization for unstable angina: **32%** RRR (HR, 0.68; 95% CI, 0.53-0.87; p=0.002)
- Fatal or nonfatal stroke: **28%** RRR (HR, 0.72; 95% CI, 0.55-0.93; p=0.01)
- Total mortality, nonfatal heart attack or nonfatal stroke: **23%** RRR (HR, 0.77; 95% CI, 0.69-0.86; p<0.001)

The next prespecified secondary endpoint in the hierarchy, and the only such endpoint that did not achieve statistical significance, is as follows:

- Total mortality, which includes mortality from non-cardiovascular and cardiovascular events: 13% RRR (HR, 0.87; 95% CI, 0.74-1.02; p=0.09)

Baseline demographics: Patients qualified to enroll in REDUCE-IT had LDL-C between 41-100 mg/dL (median baseline LDL-C 75 mg/dL) controlled by statin therapy and various cardiovascular risk factors including persistent elevated triglycerides (TGs) between 135-499 mg/dL (median baseline 216 mg/dL) and either established cardiovascular disease (secondary prevention cohort) or age 50 or more with diabetes mellitus and at least one other CV risk factor (primary prevention cohort). Approximately 59% of the patients had diabetes at baseline and approximately 71% of the patients had established cardiovascular disease at time of enrollment.

Safety: Excluding the major adverse CV events (MACE) results described above, the overall adverse event rates reported by Amarin in REDUCE-IT were similar across the statin plus Vascepa and the statin plus placebo treatment groups. There were no significant differences between treatments in the overall rate of treatment emergent adverse events or serious adverse events leading to withdrawal of study drug. The one serious adverse event occurring at a frequency of $\geq 2\%$ was pneumonia which occurred at a numerically higher rate in the statin plus placebo treatment group (2.9%) than in the statin plus Vascepa treatment group (2.6%). Adverse events occurring in 5% or greater of patients and more frequently with Vascepa than placebo were peripheral edema (6.5% Vascepa patients versus 5.0% placebo patients), constipation (5.4% Vascepa patients versus 3.6% placebo patients), and atrial fibrillation (5.3% Vascepa patients versus 3.9% placebo patients). There were numerically more serious adverse events related to bleeding in the statin plus Vascepa treatment group although overall rates were low with no fatal bleeding observed in either group and no significant difference in adjudicated hemorrhagic stroke or serious central nervous system or gastrointestinal bleeding events between treatments.

Subgroups and other REDUCE-IT information reported by Amarin: Positive REDUCE-IT results were consistent across various patient subgroups, including female/male, diabetic/non-diabetic and secondary/primary prevention. At baseline, approximately 59% and 71% of the patients had diabetes and established cardiovascular disease, respectively. Approximately 71% of the patients studied were classified as Westernized with the largest cohort from the United States. Vital status was obtained for 99.8% of the patients randomized supporting robust trial results.

"We have known for many years that controlling LDL-cholesterol levels reduces the risk of major cardiovascular events which is why it was important to study patients who are stabilized on statin medications, and yet still have residual risk factors such as high triglycerides," said Dr. Jean-Claude Tardif, Director of the Montreal Heart Institute Research Centre and Steering Committee member for the REDUCE-IT[®] clinical trial. "The REDUCE-IT[®] study gives us new evidence that icosapent ethyl (EPA) can further contribute to the prevention of a major cardiovascular event in these patients."

"I want to congratulate the entire team at Amarin for having run an exceptional trial that has generated positive results which we believe will deliver benefits to millions of cardiac patients for years to come," said Greg Gubitza, CEO of HLS Therapeutics. "Cardiovascular disease is the leading cause of death worldwide, so we look forward to bringing this important and proven preventative medication to the many patients in Canada who stand to benefit from it."

For more information on Vascepa and the REDUCE-IT trial, please see the press release issued November 10, 2018, by Amarin, which can be found at: <http://investor.amarincorp.com/press-releases>

REGULATORY PATHWAY

Vascepa has not been approved for use in Canada, and its safety and effectiveness are still under investigation. HLS intends to submit a New Drug Submission to Health Canada in early 2019 seeking approval for Vascepa based on the results of the REDUCE-IT study and other previous trials.

ABOUT CARDIOVASCULAR DISEASE

Worldwide, cardiovascular disease (CVD) remains the #1 killer of men and women.

Multiple [primary and secondary prevention](#) trials have shown a significant reduction of 25% to 35% in the risk of [cardiovascular events](#) with [statin](#) therapy, leaving significant persistent residual risk despite the achievement of target LDL-C levels.¹

Beyond the cardiovascular risk associated with LDL-C, genetic, epidemiologic, clinical and real-world data suggest that patients with elevated triglycerides (TG) (fats in the blood), and TG-rich lipoproteins, are at increased risk for cardiovascular disease.^{2, 3, 4, 5}

IMPORTANT CAUTIONARY INFORMATION ABOUT REDUCE-IT PRIMARY RESULTS

Further REDUCE-IT data assessment and data release could yield additional useful information to inform greater

understanding of the trial outcome. Further detailed data assessment by Amarin and regulatory authorities will continue and take several months to complete and record. The final evaluation of the totality of the efficacy and safety data from REDUCE-IT may include some or all of the following, as well as other considerations: new information affecting the degree of treatment benefit on studied endpoints; study conduct and data robustness, quality, integrity and consistency; additional safety data considerations and risk/benefit considerations; consideration of REDUCE-IT results in the context of other clinical studies.

ABOUT HLS THERAPEUTICS INC.

Formed in 2015, HLS is a specialty pharmaceutical company focused on the acquisition and commercialization of late stage development, commercial stage promoted and established branded pharmaceutical products in the North American markets. HLS's focus is on products targeting the central nervous system and cardiovascular therapeutic areas. HLS's management team is composed of seasoned pharmaceutical executives with a strong track record of success in these therapeutic areas and at managing products in each of these lifecycle stages.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

FORWARD LOOKING INFORMATION

This release includes forward-looking statements regarding HLS and its business. Such statements are based on the current expectations and views of future events of HLS's management. In some cases the forward-looking statements can be identified by words or phrases such as "may", "will", "expect", "plan", "anticipate", "intend", "potential", "estimate", "believe" or the negative of these terms, or other similar expressions intended to identify forward-looking statements, including, among others, statements with respect to HLS's pursuit of additional product and pipeline opportunities in certain therapeutic markets, statements regarding growth opportunities and expectations regarding financial performance. The forward-looking events and circumstances discussed in this release may not occur and could differ materially as a result of known and unknown risk factors and uncertainties affecting HLS, including risks relating to the specialty pharmaceutical industry, risks related to the regulatory approval process, economic factors and many other factors beyond the control of HLS. Forward-looking statements and information by their nature are based on assumptions and involve known and unknown risks, uncertainties and other factors which may cause HLS's actual results, performance or achievements, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statement or information. Accordingly, readers should not place undue reliance on any forward-looking statements or information. A discussion of the material risks and assumptions associated with this release can be found in the Company's Annual Information Form dated October 26, 2018, which has been filed on SEDAR and can be accessed at www.sedar.com. Accordingly, readers should not place undue reliance on any forward-looking statements or information. Except as required by applicable securities laws, forward-looking statements speak only as of the date on which they are made and HLS undertakes no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events, or otherwise.

REFERENCES

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SOURCE HLS Therapeutics Inc.

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[Heart-Attack-and-Stroke-in-REDUCE-IT-TM-which-Supports-25-Overall-Reduction-in-Five-Point-Ma](#)