HLS Therapeutics Inc.

HLS Therapeutics Reports Efficacy and Safety Results from Pilot Study Treating COVID-19 Infected Outpatients with Vascepa® (Icosapent Ethyl)

- ***Results presented in Late Breaker session at National Lipid Association Scientific Sessions 2020***
- ***Vascepa COVID-19 CardioLink-9 Randomized Trial suggests improvement in patient-reported COVID-19 symptoms while achieving its primary endpoint by demonstrating a 25% reduction in high-sensitivity C-reactive protein (hsCRP) with encouraging short-term safety and tolerability data using Vascepa loading dose***
- ***Vascepa administration resulted in a significant 52% reduction of the total patient-reported symptom outcome prevalence score as compared to a 24% reduction in the usual care group***
- ***Larger follow-on clinical studies have commenced of Vascepa as a therapeutic option in COVID-19 settings, anticipated to be completed in 2021***

TORONTO, Dec. 14, 2020 /CNW/ - HLS Therapeutics Inc. ("HLS" or the "Company") (TSX: HLS), a specialty pharmaceutical company focusing on central nervous system and cardiovascular markets, today announced the presentation of clinical results from the CardioLink-9 Trial, the first results of a study of Vascepa® (icosapent ethyl) in COVID-19 infected outpatients. The presentation, *"First Human Trial of a Loading Dose of Icosapent Ethyl in Patients with COVID-19: Primary Results of the Vascepa COVID-19 CardioLink-9 Randomized Trial"*, was made virtually as a Late Breaker at the National Lipid Association ("NLA") Scientific Sessions 2020, and was presented on behalf of all authors by Deepak L. Bhatt, M.D., M.P.H., Brigham and Women's Hospital, Harvard Medical School, Boston, MA.

"In the current environment, most COVID-19 positive patients remain outside of the clinical setting, following the advice of their doctor to stay home and quarantine unless absolutely necessary to enter the hospital," commented Subodh Verma, M.D., Ph.D., FRCSC, Professor and Cardiac Surgeon at University of Toronto and co-principal investigator of the COVID-19 CardioLink-9 Trial. "The large and significant improvement in patient-reported symptoms may provide a safe, well-tolerated, and relatively inexpensive option to impact upon COVID-19-related morbidity. The reduction in markers of inflammation with icosapent ethyl is also important given what we know about the pathobiology of COVID-19."

The Vascepa COVID-19 CardioLink-9 Trial was a randomized, open-label trial enrolling 100 SARS-CoV-2 positive and symptomatic outpatients displaying at least one of the following: fever, cough, sore throat, shortness of breath, myalgia. Patients in the Vascepa arm received a loading dose of 8 g/day for 3 days followed by 4 g/day for 11 days on top of usual care. Patients randomized to the non-active arm received usual care. Baseline characteristics were comparable between groups.

The primary biomarker endpoint of the study was within-group changes in high-sensitivity C-reactive protein (hsCRP), a measure of inflammation. Within-group changes in D-dimer were also examined. Vascepa administration resulted in a 25% reduction in hsCRP (p=0.011) as well as a reduction in D-dimer (p=0.048).

In addition to these biomarker changes, assessment was made of COVID-19 symptom changes from baseline to 14 days in the influenza patient-reported outcome (FLU-PRO) score, a validated patient-reported outcome measure designed to evaluate the presence, severity and duration of flu symptoms in clinical trials. Vascepa administration resulted in a significant 52% reduction of the total FLU-PRO prevalence score as compared to a 24% reduction in the usual care group (p=0.003 between groups), with reductions across individual score domains, including a significantly larger reduction compared to usual care in the body/systemic domain (54% vs. 26%; p=0.003). Significant reductions in the FLU-PRO symptom score compared to usual care were also observed in the total symptom score (p=0.003), as well as in the body/systemic (p=0.0007) and chest/respiratory (p=0.01) domains.

Vascepa CardioLink-9 Study is an investigator-initiated study supported by Amarin Corporation plc and by HLS. The principal investigators of the study were Subodh Verma, M.D., Ph.D., FRCSC, Professor and Cardiac Surgeon at University of Toronto and Deepak L. Bhatt, M.D., M.P.H., Executive Director of Interventional Cardiovascular Programs at Brigham and Women's Hospital and Professor of Medicine at Harvard Medical School.

Limitations of this study include the modest sample size, the unblinded nature of this randomized trial, and that the trial was not powered for clinical events. These results have not yet been published or reviewed by regulatory authorities. Additional study is needed.

This randomized trial represents the first human experience with an 8 g/day loading dose of icosapent ethyl and has suggested short-term safety and tolerability in a modest sample size. Regarding COVID-19, this study provides the first evidence of potential early anti-inflammatory effect of icosapent ethyl in symptomatic, COVID-

19 positive outpatients.

HLS added that the Vascepa COVID-19 CardioLink-9 trial is the first in a series of ongoing investigator-sponsored studies into the potential role of Vascepa therapy in COVID-19 settings. Other ongoing trials include PREPARE-IT: Prevention of COVID19 With EPA in Healthcare Providers at Risk - Intervention Trial sponsored by Estudios Clínicos Latino América, and A Pragmatic Randomized Trial of Icosapent Ethyl for High-Cardiovascular Risk Adults (MITIGATE) sponsored by Kaiser Permanente.

Gilbert Godin, CEO of HLS commented on the Cardiolink-9 trial: "We are pleased with the encouraging reports from this pilot study. We look forward to gathering results from other trials underway to understand the various ways that Vascepa may help in dealing with this condition."

AMARIN AUDIO WEBCAST INFORMATION
Amarin will host an audio webcast on Monday, December 14, 2020, at 8:00 a.m. EST to further discuss these and other Vascepa-related findings presented during the NLA Scientific Sessions 2020. To listen please register here, listen live on the investor relations section of the company's website at www.amarincorp.com, or via telephone by dialing 877-407-8033 within the United States, 201-689-8033 from outside the United States.

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. For more information, please visit: www.hlstherapeutics.com

ABOUT COVID-19
Current understanding of the biology of COVID-19 is that patients that have or are at high risk for developing atherosclerotic cardiovascular disease (ASCVD) are at higher risk of death and severe effects from infection, and that the morbidity and mortality associated with COVID-19 are due both to the direct toxicity of the virus as well as the body's robust inflammatory response leading to 'cytokine storm'.[1,2,3,4]

SCIENTIFIC RATIONALE FOR STUDY OF VASCEPA IN COVID-19 PATIENTS
Based on data related to the mechanism of action and effects of Vascepa, it is hypothesized that Vascepa may play a potential beneficial role in preventing SARS-CoV-2 infection and to potentially reduce clinical severity in patients infected by the virus.[4,5,6]

The clinical effects of Vascepa are multi-factorial. Multiple mechanisms of action associated with Vascepa based on clinical and mechanistic studies support the rationale to test its effects in patients with or at risk for COVID-19 disease. Some of these postulated mechanisms include the following:

- Potential antiviral/antimicrobial effects[7,8]
- Fibrosis and cardiac damage mitigation in animal models[9,10]
- Anti-inflammatory effects (acute) in pulmonary/lung tissue[11,12]

Ongoing preclinical and clinical research may provide further insights into the scientific and clinical understanding of these hypothetical effects of Vascepa in COVID-19 disease mitigation. Whereas vaccines are intended to help eradicate the virus from proliferating, other therapeutics under development and clinical testing such as antibodies or other medicines may play roles in the treatment of patients in various settings across the infection and recovery continuum.

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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 March 18, 2020 and Management's Discussion and Analysis dated November 4, 2020, both of which have 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.

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