Revive Therapeutics Provides Update on FDA Phase 3 Clinical Trial for Bucillamine in COVID-19

TORONTO, Oct. 26, 2020 -- Revive Therapeutics Ltd. ("Revive" or the "Company") (CSE: RVV, USA: RVVTF), a specialty life sciences company focused on the research and development of therapeutics for medical needs and rare disorders, is pleased to announce an update on the Company's U.S. Food & Drug Administration ("U.S. FDA") Phase 3 clinical trial (the "Study") to evaluate the safety and efficacy of Bucillamine in patients with mild-moderate COVID-19. The Company has committed to ten clinical sites across Florida, Texas, Nevada, Arizona and California, and it is estimated that over 200 patients will have completed the Study for the interim analysis by the end of December 2020. The interim analysis will determine the better performing Bucillamine dose arm for the remainder of the trial and future complementary studies evaluating it in more severe cases, thus making Bucillamine a potential treatment option.

"We are one of a few life sciences companies evaluating an investigational drug in a Phase 3 clinical trial for COVID-19 and with the rising prevalence of cases throughout the U.S., we are confident that our targets will be achieved to support the potential FDA approval and commercialization of Bucillamine for the treatment of the virus," said Michael Frank, Revive's Chief Executive Officer.

The recent publication of the potential of N-acetyl-cysteine ("NAC") in the treatment of COVID-19[1] serves as further validation for Bucillamine. NAC has been shown to significantly attenuate clinical symptoms in respiratory viral infections in animals and humans, primarily via donation of thiols to increase antioxidant activity of cellular glutathione.

In comparison, Bucillamine, with its well-established safety record in over 30 years of use in the treatment of rheumatoid arthritis, has been shown to be 16 times more potent as a thiol donor *in vivo* than NAC. Bucillamine also has the potential, via increasing glutathione activity and other antioxidant and anti-inflammatory activities,[2] to lessen the destructive consequences of more advanced SARS CoV2 infections, and attenuate the clinical course of severe COVID-19.

About the Phase 3 Clinical Trial

The Phase 3 confirmatory clinical trial titled, "A Multi-Center, Randomized, Double-Blind, Placebo-Controlled Study of Bucillamine in Patients with Mild-Moderate COVID-19", will enroll up to 1,000 patients that will be randomized 1:1:1 to receive Bucillamine 100 mg three times a day ("TID"), Bucillamine 200 mg TID or placebo TID for up to 14 days. The primary objective is to compare the frequency of hospitalization or death in patients with mild-moderate COVID-19 receiving Bucillamine therapy with those receiving placebo. The primary endpoint is the proportion of patients meeting a composite endpoint of hospitalization or death from the time of the first dose through Day 28 following randomization. Efficacy will be assessed by comparing clinical outcomes (death or hospitalization), disease severity using the 8-category NIAID COVID ordinal scale, supplemental oxygen use, and progression of COVID-19 between patients receiving standard-of-care plus Bucillamine (high dose and/or low dose) and patients receiving standard-of-care plus placebo. Safety will be assessed by reported pre-treatment adverse events and treatment-emergent adverse events (including serious adverse events and adverse events of special interest), laboratory values (hematology and serum chemistry), vital signs (heart rate, respiratory rate, and temperature), and peripheral oxygen saturation.

An interim analysis will be performed by an Independent Data and Safety Monitoring Board ("DSMB") after 210 patients have been treated and followed up for 28 days after randomization. The better performing Bucillamine dose at the interim analysis will be selected and patients will then be randomized 2:1 to the selected Bucillamine dose or placebo. Additional interim analyses will be performed after 400, 600, and 800 patients have reached this same post-treatment timepoint. The independent DSMB will actively monitor interim data for the ongoing safety of patients and will recommend continuation, stopping or changes to the conduct of the study based on the interim analysis reports.

The Company is not making any express or implied claims that its product has the ability to eliminate or cure COVID-19 (SARS-2 Coronavirus) at this time.

Scientific Rationale of Bucillamine for COVID-19

Preclinical and clinical studies have demonstrated that reactive oxygen species contribute to the destruction and programmed cell death of pulmonary epithelial cells.[3] N-acetyl-cysteine (NAC) has been shown to significantly attenuate clinical symptoms in respiratory viral infections in animals and humans, primarily via donation of thiols to increase antioxidant activity of cellular glutathione.[4-7] Bucillamine (N-(mercapto-2-methylpropionyl)-l-cysteine) has a well-known safety profile and is prescribed in the treatment of rheumatoid arthritis in Japan and South Korea for over 30 years. Bucillamine, a cysteine derivative with two thiol groups, has been shown to be 16 times more potent as a thiol donor in vivo than NAC.[2] The drug is non-toxic with high cellular permeability. The basis of the clinical study will analyze if Bucillamine has the potential, via increasing glutathione activity and other antioxidant and anti-inflammatory activity, to lessen the destructive consequences of SARS-CoV2 infection in the lungs and attenuate the clinical course of COVID-19.

About Revive Therapeutics Ltd.

Revive is a life sciences company focused on the research and development of therapeutics for infectious diseases and rare disorders, and it is prioritizing drug development efforts to take advantage of several regulatory incentives awarded by the FDA such as Orphan Drug, Fast Track, Breakthrough Therapy and Rare Pediatric Disease designations. Currently, the Company is exploring the use of Bucillamine for the potential treatment of infectious diseases, with an initial focus on severe influenza and COVID-19. With its recent acquisition of Psilocin Pharma Corp., Revive is advancing the development of Psilocybin-based therapeutics in various diseases and disorders. Revive's cannabinoid pharmaceutical portfolio focuses on rare inflammatory diseases and the company was granted FDA orphan drug status designation for the use of Cannabidiol (CBD) to treat autoimmune hepatitis (liver disease) and to treat ischemia and reperfusion injury from organ transplantation. For more information, visit **www.ReviveThera.com**.

For more information, please contact:

Michael Frank
Chief Executive Officer
Revive Therapeutics Ltd.
Tel: 1 888 901 0036
Email: **mfrank@revivethera.com**
Website: **www.revivethera.com**

Neither the Canadian Securities Exchange nor its Regulation Services Provider have reviewed or accept responsibility for the adequacy or accuracy of this release.

Cautionary Statement

*This press release contains 'forward-looking information' within the meaning of applicable Canadian securities legislation. These statements relate to future events or future performance. The use of any of the words "could", "intend", "expect", "believe", "will", "projected", "estimated" and similar expressions and statements relating to matters that are not historical facts are intended to identify forward-looking information and are based on Revive's current belief or assumptions as to the outcome and timing of such future events. Forward looking information in this press release includes information with respect to the Offering, including the intended use of proceeds. Forward-looking information is based on reasonable assumptions that have been made by Revive at the date of the information and is subject to known and unknown risks, uncertainties, and other factors that may cause actual results or events to differ materially from those anticipated in the forward-looking information. Given these risks, uncertainties and assumptions, you should not unduly rely on these forward-looking statements. The forward-looking information contained in this press release is made as of the date hereof, and Revive is not obligated to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by applicable securities laws. The foregoing statements expressly qualify any forward-looking information contained herein. Reference is made to the risk factors disclosed under the heading "Risk Factors" in the Company's annual MD&A for the fiscal year ended June 30, 2019, which has been filed on SEDAR and is available under the Company's profile at **www.sedar.com**.*

References

1. H Ibrahim et al, Therapeutic blockade of inflammation in severe COVID-19 infection with intravenous N-acetylcysteine., Clinical Immunology. Volume 219, October 2020, 108544.

2. LD Horwitz, Bucillamine: a potent thiol donor with multiple clinical applications, Cardiovasc Drug Rev. 2003 Summer;21 (2):77-90).

3. S Ye et al, Inhibition of Reactive Oxygen Species Production Ameliorates Inflammation Induced by Influenza A Viruses via Upregulation of SOCS1 and SOCS3., American Society for Microbiology. 2015 Mar;89(5):2672-2683).

4. L. Carati et al, Attenuation of influenza-like symptomatology and improvement of cell-mediated immunity with long-term N-acetylcysteine treatment., Eur Respir J. 1997 Jul;10(7):1535-41).

5. M Mata et al, N-acetyl-L-cysteine (NAC) inhibit mucin synthesis and pro-inflammatory mediators in alveolar type II epithelial cells infected with influenza virus A and B and with respiratory syncytial virus (RSV)., Biochem Pharmacol. 2011 Sep;82 (5):548-55.

6. D Ungheri et al, Protective effect of n-acetylcysteine in a model of influenza infection in mice., Int J Immunopathol Pharmacol. 2000 Sep-Dec;13(3):123-128.

7. RH Zhang et al, N-acetyl-l-cystine (NAC) protects against H9N2 swine influenza virus-induced acute lung injury., Int Immunopharmacol. 2014 Sep;22(1):1-8).