



Revive Therapeutics Expands Bucillamine Research to Treat Omicron Variant and Adds Inflammatory Markers to FDA Phase 3 Clinical Trial

- *Expanding the potential of Bucillamine as an effective treatment for Omicron variant (B.1.1.529)*
- *Bucillamine shown to inhibit SARS-CoV-2 infection in vitro for the Delta variant (B.1.617.2)*
- *Adding inflammatory markers along with viral load testing to current Phase 3 clinical study for COVID-19 aiming to strengthen Bucillamine's profile as both an anti-viral and anti-inflammatory agent for infectious diseases*

TORONTO, Dec. 03, 2021 (GLOBE NEWSWIRE) -- Revive Therapeutics Ltd. ("Revive" or the "Company") (OTCQB: RVVTF) (CSE: RVV) (FRANKFURT: 31R), a specialty life sciences company focused on the research and development of therapeutics for medical needs and rare disorders, is pleased to announce that the Company has decided to expand research with Bucillamine, an oral drug shown to have promising anti-viral and anti-inflammatory capabilities and is being evaluated in a current Phase 3 clinical study for COVID-19, as a potential treatment for the Omicron variant (B.1.1.529).

The expansion to explore Bucillamine's therapeutic potential for the Omicron variant is supported from a recent research study published, titled "Thiol drugs decrease SARS-CoV-2 lung injury in vivo and disrupt SARS-CoV-2 spike complex binding to ACE2 in vitro" from the University of California, San Francisco, which revealed that potent thiol drugs, like Bucillamine, inhibit SARS-CoV-2 infection in vitro, specifically the Delta variant (B.1.617.2) and also reduces SARS-CoV-2-related lung injury in vivo and provides a strong rationale for trials of systemically delivered thiol drugs as COVID-19 treatments. In addition, thiol-based drugs, like Bucillamine, have been shown in research models to decrease the binding of SARS-CoV-2 spike protein to its receptor, decrease the entry efficiency of SARS-CoV-2 spike pseudotyped virus, and inhibit SARS-CoV-2 live virus infection. The Company supported recent research to explore the utility of thiol-based drugs under its sponsored research agreement with the University of California, San Francisco ("UCSF") in the laboratory of Dr. John Fahy.

In a study that evaluated the role of pro-inflammatory cytokines that are highly upregulated in patients with COVID-19 in inducing inflammatory cell death, inflammation, tissue and organ damage, and mortality showed that the specific combination of tumor necrosis factor α (TNF- α) and interferon γ (IFN- γ) is critical for these processes. Furthermore, it was found that inhibiting TNF- α and IFN- γ protected against death in SARS-CoV-2 infection and models of sepsis, hemophagocytic lymphohistiocytosis (HLH), and cytokine shock, suggesting that this pathway can be applicable beyond COVID-19 in infectious and inflammatory diseases where TNF- α and IFN- γ -mediated inflammatory cell death drive the pathology (Karki, Rajendra et al. 2020).

There is evidence that Bucillamine inhibits pro-inflammatory cytokine production and transendothelial T-cell migration, both of which could further dampen disease course in COVID-19 (Horowitz LD. 2003, Munakata Y. 2000). As a result of the research and the rise of the Delta variant and Omicron variant, the Company has decided that in addition to incorporating viral load testing, it will also be adding inflammatory markers to complement the ongoing Phase 3 clinical trial ([ClinicalTrials.gov Identifier: NCT04504734](https://clinicaltrials.gov/ct2/show/study/NCT04504734)) evaluating the safety and efficacy of Bucillamine in patients with mild to moderate COVID-19. These inflammatory markers will allow the Company to understand Bucillamine's potential as an anti-inflammatory agent in the treatment course and provide confidence in the potential utility and effectiveness of Bucillamine in COVID-19.

Michael Frank, CEO of the Company, commented, "Bucillamine has thus far shown in published research to be agnostic as a potential treatment to certain COVID-19 variants, including the Delta variant, and with the rise of the Omicron variant, we are motivated in expanding research with Bucillamine to explore its therapeutic utility for the Omicron variant. In addition, we are incorporating inflammatory markers to complement the viral load testing to our remaining patients in our ongoing Phase 3 study to support Bucillamine as a safe and effective anti-inflammatory and anti-viral oral agent for mild to moderate COVID-19."

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.

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 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.

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