

Zentek Announces Promising Preclinical Safety and Toxicity Results achieved by Triera Biosciences Ltd. for C19HBA

written by Raj Shah | March 25, 2024

March 25, 2024 ([Source](#)) – Zentek Ltd. (“Zentek” or the “Company”) (Nasdaq:ZTEK)(TSX-V:ZEN), announces that its wholly-owned subsidiary Triera Biosciences Ltd. (“Triera”) has completed testing demonstrating that its C19HBA SARS-CoV-2 universal aptamer built on the proprietary high-binding affinity aptamer platform has shown a promising safety and toxicity profile in preclinical testing. This is a critical step in the path towards the development of a human therapeutic.

Previously, the Company reported successful efficacy when C19HBA was tested as a [prophylaxis](#) and as a [therapeutic](#). In repeated trials against SARS-CoV-2 variants, C19HBA has matched or exceeded the clinical protection compared to a leading monoclonal antibody (LMA).

In a trial completed in February 2024 by the Miller lab at McMaster University, the safety and toxicity of C19HBA was assessed through a study that administered 258 µM of C19HBA intranasally to one cohort of mice with a similar-sized cohort receiving sham treatment. After two hours, half the mice from each cohort were sacrificed while the remaining mice were infected with a lethal challenge of the ancestral variant of SARS-CoV-2. After 24 hours all infected mice were sacrificed, and serum and BAL fluid samples were collected. These samples

were analyzed for inflammatory cell infiltration and full cytokine panel.

The inflammatory cell infiltration study demonstrated that mice treated with C19HBA had similar levels of macrophages, neutrophils, and monocytes as the naïve mice both at the two-hour mark after C19HBA administration and 24 hours after infection.

The cytokine panel analyzed 44 different biomarkers from the Bronchoalveolar Lavage ("BAL")

BAL fluid of sacrificed mice. The major cytokine markers, VEGF-A and TNF α were consistent between naïve mice and those treated with C19HBA.

In reviewing both reports, Dr. Miller concluded that, "C19HBA appears to be safe and well-tolerated in mice both before and after SARS-CoV-2 infection. Importantly, the therapeutic did not exacerbate the induction of any unexpected inflammatory cytokines or chemokines in the airways of treated mice, nor did they elicit any pathological recruitment of inflammatory innate immune cells."

"As we presented our results of C19HBA a main concern raised was whether the therapeutic/prophylactic was safe to use. Although further work is required, this data supports that our aptamer platform is safe and works in a manner that we expected. These results give us confidence as we continue to expand our pipeline into other infectious diseases like influenza and into the oncology space." said Greg Fenton, CEO of the Company and Triera. "When we find aptamers with therapeutic potential, we have a greater certainty from this study that the aptamers will be safe for human use."

About Triera Biosciences Ltd.

Triera holds an exclusive, worldwide royalty bearing license from McMaster University to use and practice all aptamer and DNAyme uses developed by McMaster University for the next 20 years. Triera and McMaster's combined expertise and capabilities in aptamer technology offer significant potential to reduce the cost and time required for the development of new treatments.

About Zentek Ltd.

Zentek is an ISO 13485:2016 certified intellectual property technology company focused on the research, development and commercialization of novel products seeking to give the Company's commercial partners a competitive advantage by making their products better, safer, and greener.

Zentek's patented technology platform ZenGUARD™, is shown to have 99-per-cent anti-microbial activity and to significantly increase the bacterial and viral filtration efficiency of both surgical masks and HVAC (heating, ventilation, and air conditioning) systems. Zentek's ZenGUARD™ production facility is located in Guelph, Ontario.

Zentek, through its wholly-owned subsidiary Triera Biosciences Ltd., has a global exclusive license to the aptamer-based platform technology developed by McMaster University, which is being jointly developed by Zentek and McMaster for both the diagnostic and therapeutic markets.

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

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To find out more about Zentek, please visit our website at www.Zentek.com. A copy of this news release and all material documents in respect of the Company may be obtained on Zentek's SEDAR+ profile at <http://www.sedarplus.ca/>.

Forward-Looking Statements

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