

Form 51-102F3
Material Change Report

1. Name and Address of Company

AREV Life Sciences Global Corp. (the “Company”)

2. Date of Material Change

April 21, 2022

3. News Release

A press release was issued on April 21, 2022 and disseminated through Market News and Stockwatch.

4. Summary of the Material Change

AREV Life Sciences Global Corporation announces engagement of TransBIOTech to facilitate preclinical therapeutic pipeline development

5. Full Description of the Material Change

VANCOUVER, BC / April 21, 2022 / AREV Life Sciences Global Corp. (CSE: AREV) (OTC: AREVF) (“AREV” or the “Company”) AREV announced today its initial research engagement with TransBIOTech.

Created in 1999, TransBIOTech, a publicly-supported preclinical research organization that works in partnership with and is supported by the Canadian government through the Natural Sciences and Engineering Research Council (NSERC) in collaboration with the Canadian Institutes of Health Research (CIHR). TransBIOTech is also supported by the Canadian Foundation for Innovation and by the Government of Quebec. TransBIOTech is a member of Tech-Access Canada, a national organization of Technology Access Centres (TACs) as well as a member of Synchronex, a network of Quebec province College Centres for the Transfer of Technologies (CCTT). TransBIOTech laboratory facility utilizes more than \$16 million in state-of-the-art equipment and offers an animal facility accredited by the Council on Animal Care of Canada (source: <https://www.tbt.qc.ca/en/facilities/>).

TransBIOTech is a multi-sectional research facility with expertise in the life sciences sector, specializing in analytical chemistry, biochemistry, cell & molecular biology, and microbiology for pharmaceutical sciences. With capabilities in various project stages including in vitro, in cellulo, and in vivo functional assays (biomarkers, cytotoxicity, anti-inflammatory properties, and antimicrobial activity as well as analysis of pharmacological properties of molecules (permeability, metabolic stability, ADME and toxicology).

“TransBIOTech is engaging with AREV in its initial research on cannabinoids and other early-stage commercial research programs. Our agreement with TransBIOTech signals the initiation of a robust clinical initiative with numerous collaborators to facilitate data on some of the more promising phytomedicinal therapeutics currently relevant to today’s public health challenges.” said Mike Withrow.

Withrow also stated, “AREV Life Sciences is determined to enhance our scientific acumen by partnering with dynamic programs that will facilitate breakthrough discoveries of therapeutic innovation relevant to contemporary pandemic infectious disease and human nutrition. By leveraging our proprietary extraction technologies paired with the discovery capacities of TransBIOTech and other well-respected research institutions, we are laying the groundwork for initial animal studies to identify data sets that will satisfy regulatory authorities.”

Recent preclinical studies have purported that CBD modulates anti-inflammatory effects. Clinical studies have verified that CBD lowers the levels of pro-inflammatory cytokines, suppresses T cell proliferation, creates T cell apoptosis and lowers migration and adhesion of immune cells. It has also been discovered that this CBD driven anti-inflammatory action displays itself to be antagonized by both a CB2 antagonist and a CB2 receptor agonist (source: <https://www.frontiersin.org/articles/10.3389/fphar.2017.00144/full>). The TransBIOTech collaboration with AREV will also examine precise mechanisms of action attributed to the activation of CB2 as a novel therapeutic modality modulating inflammation characteristic of viral infections (source: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3005548/>).

The collaboration between AREV and TransBIOTech will facilitate further development of proprietary immune modulatory therapeutics derived from phytomedicinal research that addresses pandemic infectious disease affecting host responses to elevated cytokine expression.

The initial studies will set the groundwork for advancing further research allowing for distinctive understandings of AREV’s new chemical entity development including initial toxicity, pharmacokinetics and metabolism modeling essential for human studies and eventual commercialization. The reduction of pathogen mediated inflammation and subsequent immune hyperactivation by the inhibition of the mTOR/S6K-signaling progression which is affected by cannabinoids CB1 receptor also prohibits Jurkat cells from expressing regulation of immune responses (source: <https://www.nature.com/articles/4401660>). In vivo studies have demonstrated mTOR expression affected by cannabinoid regulatory mechanisms leading to autophagy in cancer cell pathways necessary for the antitumor actions (source: <https://www.jci.org/articles/view/37948>).

AREV, in conjunction with TransBIOTech, is also designing preclinical characterization studies to identify suspected therapeutic characteristics of other botanically-derived compounds identified in peer-reviewed literature including phytocannabinoids and *Cucumaria frondosa* leading to small molecule candidates for human studies.

Edouard Lauzer, of TransBioTech stated, “ Our preclinical characterization research with TransBIOTech is an important step in AREV’s efforts to deliver well-defined clinical insights into the multi-dimensional aspects of immune modulation associated with CBD and other compounds derived from phytomedicinal drug development. AREV’s efforts with TransBIOTech will include characterizing the mechanism-of-action of CBD as well as analysis of the structure-activity relationships of secondary metabolites through fragment-based lead discovery and *de novo* drug design, utilizing high throughput screening to identify structural-functional relations of AREV’s investigational compounds affecting pathogen-mediated inflammation and viral replication.

The initial studies being designed by TransBIOTech, in collaboration with members of the AREV Scientific Advisory Board (SAB), will provide correspondence of the subsequent published results of these studies to public research programs including The National Institute of Health’s Accelerating

Covid-19 Therapeutic Interventions and Vaccines (NIH ACTIV), AIDS Clinical Trial Groups (NIAID ACTGs) of the National Institute of Allergy and Infectious Diseases and President Biden's White House Cancer Cabinet.

6. **Reliance on subsection 7.1(2) or (3) of National Instrument 51 – 102**

Not applicable.

7. **Omitted Information**

Not applicable.

8. **Executive Officer**

Mike Withrow,
CEO and Director
Phone: (778) 379-8551

9. **Date of Report**

April 21, 2022