



ME THERAPEUTICS HOLDINGS INC. PROVIDES AN OVERVIEW AND UPDATE ON CURRENT RESEARCH AND DEVELOPMENT PROGRAMS

VANCOUVER, BC – December 5, 2023 – ME Therapeutics Holdings Inc. (METX:CSE), a preclinical stage biotechnology company working on novel cancer fighting drugs in the field of Immuno-Oncology, is pleased to provide an overview and update on our current research and development programs. ME Therapeutics has two drug development programs and one drug discovery program currently underway. Our two development programs include our anti-G-CSF antibody candidate and our myeloid targeted prodrug candidates and we are engaged in the early stages of a discovery program centered around novel lipid nanoparticle (LNP) formulations. All three programs target distinct areas of myeloid cell biology in order to inhibit the suppressive effects of suppressive myeloid cells on the anti-cancer immune response. These drug candidates are being developed to target pathways of myeloid cell biology that we believe are not currently being targeted effectively. The Company is developing both biological and small molecule drug candidates in order to diversify risks inherent to either class of drug.

G-CSF Antibody Candidate Update

ME Therapeutics anti-G-CSF antibody candidate (h1B11-12) is our most advanced preclinical asset. The antibody is a humanized, high affinity, antibody that binds to and blocks the function of human G-CSF and we have applied for patent protection to cover the composition and use of this antibody to treat cancer. On March 9, 2023, the Company was granted a patent right in China for the composition and use of our lead anti-G-CSF antibody candidate by the China National Intellectual Property Administration. The Company is still awaiting the final examination of this patent by patent offices in the United States, Europe, and Canada.

ME Therapeutics existing data has demonstrated that h1B11-12 binds and neutralizes human G-CSF both in vitro and in vivo (animal models). In March 2023, the Company announced the publication of their joint research on the role of G-CSF in breast and colorectal cancer in the peer-reviewed scientific journal, *Cancer Research Communications*. The joint research was a collaboration between ME Therapeutics Inc. and Dr. Kenneth Harder's laboratory at the University of British Columbia (UBC) and was funded in part by an Innovation to Commercialization Competition Award from the Michael Smith Foundation for Health Research. The next step for continuing the development of h1B11-12 will be to conduct preliminary safety studies on the antibody candidate in the most appropriate animal model, namely, non-human primates (NHPs). This testing is planned to be carried out in order to de-risk future investigational new drug (IND)-enabling studies which require the use of h1B11-12 manufactured under good manufacturing practices (GMP) and for animal safety studies to be carried out under good laboratory practices (GLP), both of which are costly and time consuming. The Company worked with the National Research Council Canada's (NRC) Human Health Therapeutics division to manufacture and test a non-GMP production of h1B11-12 for preliminary safety testing. In November 2023, the Company successfully produced sufficient h1B11-12 to send to our contract testing partner, Bioduro-Sundia, for the planned NHP safety studies. The Company

anticipates the first preliminary safety study to be initiated in the coming weeks with the final results to become available in early 2024.

Myeloid Prodrug Candidate Update

Our myeloid targeted prodrug is an earlier stage preclinical asset which we are working on testing preclinically. In December 2017, ME Therapeutics conducted a high throughput small molecule drug screen used to test 2,850 small molecule drug candidates for their ability to reverse the suppression of cancer killing T cells by myeloid cells from tumours. Several small molecule drug candidates were discovered and subsequently, ME Therapeutics' team tested and confirmed the activity of the drug candidates in their lab. This confirmatory testing was carried out using several in vitro immunology models. In addition, ME Therapeutics reviewed the scientific literature around the small molecule drug candidates to determine if there was existing evidence to support the discovered ability to reverse T cell suppression by myeloid cells. The results of the studies and scientific review led to the development of a shortlist of the most promising drug candidates. ME Therapeutics chose a lead drug candidate and decided that developing a prodrug of this candidate would create the most value for ME Therapeutics by improving the drug characteristics and from the development of intellectual property around the composition of the drug. The Company had discussions with Integrated Nanotherapeutics Inc. (INT) in order to explore a potential collaboration between the companies to develop a prodrug version of our lead drug candidate. INT, a company in the business of drug formulation, owns technology for the generation of lipid nanoparticle (LNP) based prodrugs, which ME Therapeutics management believed to be the most promising way of developing a novel prodrug for use in cancer. ME and INT entered into the Collaborative Research Agreement which outlines the cost of developing the prodrug candidates and the co-ownership of any prodrug candidates developed under the agreement. Via this collaboration, 2 potential prodrug candidates were developed (D094 and D099) and tested at the BC Cancer Agency through a contract research agreement for their ability to release the active drug and induce the death of 2 different breast cancer cell lines in vitro. Subsequently, the Company worked with the BC Cancer Agency to determine the maximum tolerated dose of D094 and D099 for use in mouse cancer efficacy studies. The results of the first in vivo studies helped to determine doses of D094 and D099 to use in upcoming cancer efficacy studies. In October 2023, the Company announced that it will be receiving advisory services and up to \$50,000 in research and development funding from the National Research Council of Canada Industrial Research Assistance Program ("NRC IRAP") to support the preclinical testing of our myeloid targeted prodrug candidates. The funding will support the manufacture and testing of the prodrug candidates in selected mouse cancer models. Also in October 2023, the Company initiated the first in vivo mouse cancer efficacy study at the BC Cancer Agency. This study was designed to test the safety and anti-cancer efficacy of D094 and D099 in the syngeneic 4T1 mouse breast cancer model. The results of this study are expected in December 2023 and will be used to determine the next steps for advancing the myeloid prodrug candidate program.

Novel LNP Formulation Update

Use of lipid nanoparticles (LNPs) to deliver nucleic acids (i.e. mRNAs, siRNAs, gRNAs) to specific myeloid populations for immunization or gene therapy is a promising addition to the IO repertoire. LNPs generally contain an ionizable lipid, a helper phospholipid, cholesterol and PEG, the relative ratios of which have

significant effects on cell and tissue targeting and potency. In order to uncover new LNP formulations optimized for use in IO, the Company will carry out studies in collaboration with Dr. Kenneth Harder's lab at UBC. These studies will employ a cutting edge multiomic barcode based high-dimensional single cell LNP formulation screen developed in Dr. Harder's laboratory to identify LNPs with myeloid cell targeting and regulatory potential. The Company's investment in this new technology is based on the belief that LNP small molecule and nucleic acid therapies represent one of the most promising new developments in the IO space. The Company is currently exploring the most effective way to proceed with this discovery program and intends to start in the first 3 months of 2024.

"We are very excited about the progress we have made to date on our research and development programs as this is evidence of our capacity to advance our research in a timely and cost-effective manner. The coming few months will bring preclinical data from several studies which we intend to use to support the further development of our drug candidates with the goal of advancing one or more of these candidates into the clinic over the coming years." – Salim Dhanji, PhD, CEO.

More information on the history of the Company and our research programs can be found in our non-offering prospectus dated September 29, 2023 and in our other public filings which are available on SEDAR+ at www.sedarplus.ca.

ME Therapeutics Holdings Inc.

Myeloid Enhancement (ME) Therapeutics is an early stage Vancouver based biotechnology company involved in the discovery and development of novel immuno-oncology therapeutics targeting immune suppression in cancer. Our main focus is on overcoming the suppressive effects of an important class of immune cells called myeloid cells in order to enhance anti-cancer immunity. For more information, please visit www.metherapeutics.com and the Company's profile on SEDAR+ at www.sedarplus.ca

ON BEHALF OF THE BOARD

"Salim Dhanji"

Dr. Salim Dhanji
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Forward Looking Statements

This news release includes certain "forward-looking statements" under applicable Canadian securities legislation. Forward-looking statements consist of statements that are not purely historical, including any statements regarding beliefs, plans, expectations or intentions regarding the future. Such forward-looking statements in this news release include, but are not limited to, statements regarding the Company's research plans, the timing for completion of studies and the receipt of results, the intended outcomes of the research, the intended benefits and applications of

the Company's technology, and the Company's plans for development of its business. Such statements are subject to risks and uncertainties that may cause actual results, performance or developments to differ materially from those contained in the statements, including risks related to factors beyond the control of the Company, that the results of the testing are not favorable, that the research will not be completed within the expected timeline, G-CSF proves to be an unsuitable target to treat cancer, that the Company's myeloid targeted prodrug candidates prove ineffective during testing, that the Company may require additional funding to advance its research and develop its business, and that the Company's business may not develop as set out in this news release. No assurance can be given that any of the events anticipated by the forward-looking statements will occur or, if they do occur, what benefits the Company will obtain from them. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ from forward-looking statements. The Company disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.