Avstera Therapeutics Announces FDA Clearance of IND Application for AVS100, a Novel Highly Selective HDAC6 Inhibitor Targeting Solid Tumors

- *AVS100 is a novel, orally bioavailable selective HDAC6i targeting locally advanced or metastatic solid tumors, including in combination with pembrolizumab.*
- *Avstera intends to initiate the Phase Ia/b clinical trial in the first half of 2024.*

Avstera Therapeutics Corp, an oncology-focused biotech dedicated to addressing the large disease burden and significant unmet need of cancer patients, today announced the U.S. FDA clearance of its Investigational New Drug application (IND) for AVS100, a novel highly selective oral HDAC6 inhibitor intended to treat locally advanced or metastatic solid tumors in a Phase I clinical study.

“The FDA clearance of our IND for AVS100 marks an amazing step for our company towards the fulfillment of our mission. We are excited to advance this promising new therapy into the clinic to address the disease burden for the benefit of patients, and our transition to a viable clinical stage biotech. AVS100 has demonstrated significant preclinical efficacy, remarkable safety, and durability in numerous in-vivo studies.” said Karthik Musunuri, CEO & Co-Founder, Director of Avstera Therapeutics.

AVS100 is a highly selective, orally bioavailable, isoxazole-3-hydroxamate based HDAC6 inhibitor. AVS100 demonstrated unique ability in its class preclinically in suppressing the polarization of macrophages toward pro-tumoral phenotypic pathways. This immunomodulatory function is both pivotal and of keen interest as tumor associated macrophages can constitute up to 50% or more of solid tumor cell mass. AVS100 is AMES negative and demonstrated a strong safety profile in animals, including GLP toxicology studies in dogs and rats with no major adverse events.

“FDA clearance of our IND for AVS100 represents a significant milestone for Avstera’s mission in providing state of the art oncological agents to tackle solid tumors. I am proud of our team’s efficiency as drug developers in advancing to FIH trials in a just over a year since our seed round.” said Ajay Raju, Co-Founder & Director of Avstera Therapeutics.

“New findings demonstrating a critical role of tumor-associated macrophages in resistance to immunotherapy suggest that targeting this cell population could both effectively reverse and/or avoid resistance to existing ICB. Therefore, an emerging interest is in developing new immunotherapies targeting this immune population, including selective HDAC6 inhibitors, which have been proven effective modulators of immunosuppressive macrophages. Undoubtedly, the IND approval of AVS100 selective HDAC6 inhibitor will open new opportunities to potentially enhance response rates for patients.” said Alejandro Villagra, PhD, Georgetown University Associate Professor and Co-Inventor of AVS100 who also serves on Avstera’s Scientific Advisory Board (SAB).

More About the Phase I Clinical Study

The Phase Ia/b clinical trial for AVS100 is targeting locally advanced or metastatic solid tumors. This trial is an open label, dose-escalation and confirmation study to characterize the safety, tolerability, pharmacokinetics, and MTD of AVS100 when administered as a monotherapy and in combination with pembrolizumab. The primary endpoints are to evaluate the incidence of adverse events including DLTs in monotherapy and in combination, while secondarily assessing the PK, Objective Response Rate (ORR)

using RECIST v1.1, and Progression Free Survival (PFS). Avstera will also assess multiple exploratory biomarkers, including conducting multi-omics analyses on patient samples.

Avstera intends to initiate the Phase Ia/b clinical trial in the first half of 2024. The principal investigator of the study is Apostolia M Tsimberidou, MD, PhD, FASCO, FAAAS, Professor of Medicine at MD Anderson Cancer Center, Houston, TX.

Cautionary Statements Regarding Forward-Looking Statements:

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based on Avstera's current beliefs, expectations and assumptions regarding the future of Avstera's business, future plans and strategies, clinical results and other future conditions. New risks and uncertainties may emerge from time to time, and it is not possible to predict all risks and uncertainties. No representations or warranties (expressed or implied) are made about the accuracy of any such forward-looking statements.

Such forward-looking statements are subject to a number of material risks and uncertainties including, but not limited to: the adequacy of Avstera's capital to support its future operations and its ability to successfully initiate and complete clinical trials; the difficulty in predicting the time and cost of development of Avstera's product candidates; Avstera's plans to research, develop and commercialize its current and future product candidates, including, but not limited to, AVS100; the timing of the availability of data from Avstera's clinical trials; the timing of any planned investigational new drug application or new drug application; the risk of cessation or delay of any ongoing or planned clinical trials of Avstera or its collaborators; the clinical utility, potential benefits and market acceptance of Avstera's product candidates; Avstera's commercialization, marketing and manufacturing capabilities and strategy; developments and projections relating to Avstera's competitors and its industry; the impact of government laws and regulations; the timing and outcome of Avstera's planned interactions with regulatory authorities; Avstera's ability to protect its intellectual property position; and Avstera's estimates regarding future revenue, expenses, capital requirements and need for additional financing. Any forward-looking statement speaks only as of the date on which it was made. Except as required by law, Avstera undertakes no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.