

December 18, 2020 Company Name: AnGes Inc. Presentative: Ei Yamada, President & CEO

# Initiation of the First-in-Human Clinical Trial of a Potential Vascular Normalization COVID-19 Treatment

## First subjects have been dosed in Phase 1 study of AV-001, a novel first-in-class therapeutic

## Should the Phase 1 results show AV-001 is safe and well-tolerated, AnGes and Vasomune will initiate a Phase 2 proof-of-concept study to assess efficacy in patients with moderate-to-severe COVID-19 disease

**December 18, 2020** – AnGes and Vasomune Therapeutics, a clinical-stage biopharmaceutical company, announced today the first subjects have been dosed in a Phase 1 study of AV-001 in healthy subjects. AV-001 is a first-in-class therapeutic that targets the Tie2 tyrosine kinase receptor, a key regulatory protein in the vasculature responsible for maintaining normal vascular function. Should the benefit demonstrated in animal studies translate to the clinic, AV-001 has the potential to improve survival and shorten the duration of hospitalization for patients hospitalized with COVID-19.

"Emerging evidence suggests serious SARS-CoV-2 infection impairs vascular function in the lungs and throughout the body, which explaains why patients with pre-existing vascular dysfunction (elderly, hypertension, diabetes and obesity) are at higher risk. Our therapeutic strategy focuses on normalizing the vasculature, which we believe could improve patient survival and shorten recovery time which, in turn, would reduce the strain on health care resources, including medical personnel, ICU beds and ventilators." said Douglas Hamilton, President and CEO of Vasomune.

The Phase 1 randomized, double-blind, placebo-controlled single and multiple ascending dose trial of AV-001 is currently enrolling healthy subjects. This study is a first-in-human design to assess the safety, tolerability and pharmacokinetics of daily administration of single and multiple doses of AV-001. Vasomune Therapeutics, Inc. plans to seek Emergency Use Authorization (EUA) from the US Food and Drug Administration (FDA) pending successful clinical trials for the treatment of patients with moderate-to-severe COVID-19 disease.

#### About AV-001

Originally discovered and designed at Sunnybrook Hospital in Toronto, AV-001 is being developed by Vasomune Therapeutics, Inc. under a co-development agreement with AnGes, Inc. [TYO: 4563]. AV-001 is a novel investigational medicine that targets the Tie2 receptor, a transmembrane protein target most highly expressed on the surface of endothelial cells in the vasculature. AV-001 activates the Tie2-Angiopoietin pathway and restores normal vascular function and endothelial stability. Vascular dysfunction contributes to the underlying disease pathophysiology in patients with COVID-19 and acute respiratory distress syndrome (ARDS),

especially in patients with pre-existing vascular comorbidities, such as hypertension, diabetes and obesity. Emerging evidence suggests SARS-CoV-2 infects pulmonary endothelial cells and causes microvascular leaks, contributing to the initiation and propagation of respiratory distress and ARDS in COVID-19 patients by altering blood vessel barrier integrity, promoting a coagulated state and inducing vascular inflammation (endotheliitis). In preclinical studies involving a lethal RNA virus infection animal model of influenza/ARDS, AV-001 has been shown to stabilize the vasculature by enhancing endothelial cell stability, restoring normal barrier defense and blocking vascular leak. Importantly, AV-001 monotherapy significantly improved survival and lung function compared to untreated controls and showed the benefit of enhanced recovery in combination with antiviral therapy. AV-001 is being developed for the treatment of moderate to-severe COVID-19 and ARDS.

## About Vasomune Therapeutics, Inc.

Vasomune Therapeutics, Inc. is a private clinical-stage biopharmaceutical company developing the next generation of medicines to harness the body's ability to defend against illness. Originally founded in 2014, Vasomune discovers and develops drugs using a novel therapeutic approach focused on vascular normalization strategies. Vascular dysfunction is associated with the pathology of several disease states, including COVID-19, influenza-associated ARDS, acute lung injury, acute kidney injury, hemorrhagic shock, sepsis and stroke. Vasomune's corporate headquarters and laboratory is located in Toronto, Canada with US offices in San Mateo, CA. For more information about the company and its product candidates, please visit www.vasomune.com

#### About AnGes, Inc.

AnGes, Inc., a biopharmaceutical company founded in December 1999 focuses on the development of gene-based medicines. In March 2019, AnGes obtained conditional and timelimited approval for its lead product, Collategene<sup>®</sup> (Hepatocyte Growth Factor, HGF, plasmid gene therapy), for the treatment of Lower Limb Ischemic Ulcers. In September 2019, AnGes commenced the commercialization in Japan of Collategene<sup>®</sup>. Collategene<sup>®</sup> is the world's first marketed drug using Plasmid DNA. AnGes is currently focusing on the development of DNA vaccines for COVID-19 and Hypertension, Tie2 tyrosine kinase receptor agonist for COVID-19 treatment, and NF-κB decoy oligonucleotide for Chronic Discogenic Lumbar Back Pain. Furthermore, AnGes acquired EmendoBio to expand its capabilities in Genome Editing Technologies in December 2020. For more information, visit www.anges.co.jp/en/.

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