Molecular Partners and Novartis Announce Inclusion of COVID-19 Antiviral Candidate, ensovibep, in NIH-Sponsored ACTIV-3 Trial

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- **ACTIV-3 trial planned to investigate safety and efficacy of ensovibep in adults hospitalized with a COVID-19 diagnosis; first patient dose expected in Q2 2021**
- **Ensovibep to be first non-antibody therapeutic assessed in ACTIV-3**
- **Clinical trial includes an interim analysis after 300 patients**
- **Separately, a global Phase 2-3 study in adults with mild to moderate symptoms is planned to be initiated in Q2 2021**
- **Initial Phase 1 data support safety, tolerability and 2-3 week half-life of ensovibep**

Zurich-Schlieren, Switzerland, March 15, 2021. Molecular Partners AG (SIX: MOLN), a clinical-stage biotech company that is developing a new class of custom-built protein drugs known as DARPin® therapeutics, and its collaborator Novartis, today announced that ensovibep (formerly MP0420) is expected to be included in a global phase 3 randomized, controlled clinical trial as part of the National Institutes of Health's (NIH) Accelerating COVID-19 Therapeutic Interventions and Vaccines (ACTIV) program. The trial, ACTIV-3, is designed to evaluate the safety and efficacy of various therapies for the treatment of adults hospitalized with a COVID-19 diagnosis. Ensovibep is a DARPin® therapeutic candidate designed to bind to the receptor-binding domain (RBD) of the SARS-CoV-2 spike protein at three distinct locations to prevent viral entry into cells, and may provide added protection against variant strains.

"The NIH's ACTIV-3 trial provides a major expansion of ensovibep's clinical program and data collection, and recognizes the clinical and preclinical evidence we have delivered to-date supporting this candidate as a differentiated approach to COVID-19 treatment," said Patrick Amstutz, Ph.D., chief executive officer of Molecular Partners. "Emerging variant strains and the challenges of vaccinating a global population create an ongoing need for effective antivirals to save lives. We will work closely with both our collaborator Novartis and the NIH to maximize support on this trial in parallel with the other clinical trials of ensovibep planned to initiate in the second quarter."

ACTIV-3 is one of multiple ongoing trials in the NIH's ACTIV program, a public-private partnership designed to speed development of the most promising treatments and vaccine candidates for COVID-19. In order to be selected for ACTIV-3, Molecular Partners provided the NIH with relevant data and in addition provided ensovibep for independent preclinical assessments by the NIH. Molecular Partners has recently submitted an Investigational New Drug (IND) application to the U.S. Food and Drug Administration (FDA) for ensovibep.

Ensovibep is currently being evaluated in a Phase 1, randomized, double-blind, placebo-controlled single ascending dose study to evaluate the safety, tolerability, and pharmacokinetics of intravenously administered ensovibep. Initial data from this study, run by Molecular Partners, indicate that ensovibep is well tolerated with a half-life in the range of 2-3 weeks.

In partnership with Novartis, Molecular Partners expects the initiation of additional clinical studies of ensovibep to initiate throughout the first half of 2021 with the goal of achieving clinical proof-of-concept and potential emergency use authorization within 2021. The intended clinical program includes a smaller Phase 2 trial specifically evaluating the ability of ensovibep to reduce infectivity, as well as a global Phase 2-3 study (EMPATHY), which will seek to enroll more than 2,000 patients in the ambulatory setting to evaluate the ability of ensovibep to prevent disease worsening, hospitalizations and death.

ACTIV-3 Clinical Trial Design

Once initiated, the ACTIV-3 trial arm evaluating ensovibep would initially enroll 300 participants who have been hospitalized with mild to moderate COVID-19 with fewer than 13 days of symptoms, who will receive either ensovibep or placebo. Participants will also receive standard of care for COVID-19, including the FDA-approved antiviral remdesivir. Five days after dosing, participants' clinical status will be assessed, based on need for supplemental oxygen, mechanical ventilation, or other supportive care. If the ensovibep treatment arm appears to have a positive benefit:risk profile, the trial will enroll an additional 700 participants. Trial participants will be followed for 90 days following enrollment to analyze their response to treatment. The primary efficacy endpoint is the time from randomization to participants' sustained recovery for 14 days after release from the hospital.

About Molecular Partners' anti-COVID-19 program

Molecular Partners' two antiviral DARPin® candidates, ensovibep and MP0423, are designed to target multiple different sites on the SARS-CoV-2 virus simultaneously for enhanced antiviral effects and potential use as both prophylactics and treatments. The benefits of this multi-specificity include cooperative binding, extremely high potencies and potential prevention of viral 'escape' via mutations. The candidates are formatted with a DARPin® domain that binds to human serum albumin (HSA) to support a longer half-life and hence longer activity. All DARPin® candidates are constructed to benefit from high-yield and low-cost microbial manufacturing. Molecular Partners is investigating whether the high thermal stability of DARPin® molecules can be used to overcome cold-chain requirements.

In March 2021, the Company announced positive initial data from its Phase 1 study of ensovibep in healthy volunteers, which showed that ensovibep was safe and well-tolerated with a half-life of 2-3 weeks. In October 2020, Molecular Partners entered into a collaboration with Novartis AG in the form

of an option and license agreement to develop, manufacture and commercialize Molecular Partners' anti-COVID-19 DARPin® candidates. Per the terms of the agreement, Molecular Partners will conduct Phase 1 clinical trials for ensovibep and perform all remaining preclinical work for MP0423; Novartis will conduct Phase 2 and Phase 3 clinical trials, with Molecular Partners as sponsor of those trials. Upon option exercise, Novartis would be responsible for all further development and commercialization activities. Molecular Partners is also collaborating with AGC Biologics, Baccinex, and Ivers-Lee Clinical Supply Management (IL-CSM) to support development of its anti-COVID-19 program, and has reached an agreement with the Swiss Government regarding rights to purchase up to 3.2 million doses of ensovibep, if it is approved in Switzerland.

About Molecular Partners AG

Molecular Partners AG is a clinical-stage biotech company developing DARPin® therapeutics, a new class of custom-built protein drugs designed to address challenges current modalities cannot. The Company has formed partnerships with leading pharmaceutical companies to advance DARPin® therapeutics in the areas of ophthalmology, oncology and infectious disease, and has compounds in various stages of clinical and preclinical development across multiple therapeutic areas.

For more information see www.molecularpartners.com and follow the Company on Twitter at @MolecularPrtnrs.

About Novartis

Novartis is reimagining medicine to improve and extend people's lives. As a leading global medicines company, we use innovative science and digital technologies to create transformative treatments in areas of great medical need. In our quest to find new medicines, we consistently rank among the world's top companies investing in research and development. Novartis products reach nearly 800 million people globally and we are finding innovative ways to expand access to our latest treatments. About 110,000 people of more than 140 nationalities work at Novartis around the world. Find out more at https://www.novartis.com.

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For further details, please contact:

Investors:
Seth Lewis
seth.lewis@molecularpartners.com
Tel: +1 781 420 2361

Media:
Shai Biran, Ph.D.
shai.biran@molecularpartners.com
Tel: +1 978 254 6286

Thomas Schneckenburger, European IR & Media
thomas.schneckenburger@molecularpartners.com
Tel: +41 79 407 9952

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