Molecular Partners and Novartis COVID-19 Antiviral Candidate, Ensovibep, Maintains Binding and Neutralization of New Viral Variants in vitro

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- **New study shows that Molecular Partners' tri-specific antiviral DARPin® candidates, ensovibep (MP0420) and the Company's preclinical candidate, MP0423, remain therapeutically active against the known mutations of SARS-CoV-2 including those present in the United Kingdom (UK) and South Africa (SA) variants**
- **Phase 2/3 clinical studies of ensovibep planned to initiate in Q2 2021**

Zurich-Schlieren, Switzerland, February 04, 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 results from a study conducted at Spiez Laboratory. The study assessed leading SARS-CoV-2 anti-infective molecules, including the collaboration's candidates ensovibep and MP0423, against new viral variants of SARS-CoV-2, including the variants first identified in the United Kingdom (UK) and South Africa (SA). These variants are associated with faster transmissibility and an ability to evade the immunity induced by some currently available vaccines and monoclonal antibodies. The study design and results were published on the research preprint service bioRxiv here.

The study showed that ensovibep maintained very high potency and activity on all tested viral variants and mutants. MP0423 maintained activity against all tested viral variants and mutants, but demonstrated a slight loss of potency against the UK variant, while remaining in the therapeutic range. These data indicate that ensovibep and MP0423 are potentially a better approach than monoclonal antibody approaches, many of which have previously reported significant potency loss.

"At Molecular Partners, we built our antiviral candidates to deal with the issue of viral escape, through targeting multiple sites on the virus at once with a single molecule. As designed, this approach is providing broad efficacy against SARS-CoV-2, even in the presence of emerging mutations, unlike approaches that only target single viral sites," said Patrick Amstutz, Ph.D., CEO of Molecular Partners. "These new data are highly encouraging as we look to initiate our global COVID-19 phase 2/3 registrational study in early Q2 2021 to establish our candidates' emerging profile as potent antiviral agents with the possibility for early therapeutic intervention. Additional trials are under discussion to broaden the application space further, in other therapeutic settings. We and Novartis are committed to quickly bring our candidates to patients in need across the globe."

In the study, based on a pseudovirion model, two new SARS-CoV-2 variants first identified in the United Kingdom (UK) (lineage B.1.1.7., del69-70, del145, N501Y, A570D, D614G, P681H, T716I, S982A, D1118H) and South Africa (SA) (early evolved variant of lineage B.1.351.; D80A, D215G, E484K, N501Y, A701V), were analyzed for infectivity in the presence of different inhibitors. The Company's two distinct multi-specific DARPin® candidates, ensovibep and MP0423, were shown to protect well against these variants, as well as against multiple individual point mutations previously described. Further analyses in context of the full Brazilian P.1 lineage are ongoing. Of note, key spike mutations from the newly emerged variants identified in UK and SA, as well as from the variant detected in Brazil (lineage P.1), E484K, 69/70-deletion and N501Y, were tested individually and in the context of the full variants as described above, and were inhibited by the two DARPin® candidates. These results are highly encouraging as the Company continues the clinical development of these candidates. Full data can be found in the bioRxiv publication linked above.

Ensovibep is presently in its ongoing phase 1 study which is expected to provide data in the first quarter of 2021.

About Molecular Partners' anti-COVID-19 program

Molecular Partners two antiviral DARPin® candidates, MP0420 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 half-life extending DARPin® domain that binds to human serum albumin (HSA) to support long-acting 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.

Following strong preclinical data supporting the anti-COVID-19 program candidates, in October 2020 the Company 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® program. Per the terms of the agreement, Molecular Partners will conduct Phase 1 clinical trials for MP0420 (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 these 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 MP0420, 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. www.molecularpartners.com; 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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