



Molecular Partners Initiates Anti-COVID-19 Therapeutic Program Leveraging Multi-Target Binding of DARPin® Proteins to Neutralize SARS-CoV-2 Virus

April 20, 2020

- **First trispecific anti-COVID-19 therapeutic program: targets three parts of the viral “spike” protein with one drug candidate for broad inhibition of infection and mitigation of future drug resistance**
- **Initial testing performed in collaboration with the Swiss Federal Office for Civil Protection confirmed deep neutralization potential; candidate testing underway on live virus**
- **DARPin® technology expected to allow production of GMP material in Q3 2020**

Zurich-Schlieren, Switzerland, April 20, 2020. Molecular Partners AG (SIX: MOLN), a clinical-stage biotech company that is developing a new class of custom-built protein therapeutics known as DARPin® therapeutics, has identified multiple potent monospecific DARPin® proteins which neutralize samples of the SARS-CoV-2 virus. The company has engineered these proteins into trispecific antiviral candidates that target three parts of the viral “spike” protein, which is essential for viral entry into human cells. Multispecific inhibition represents a differentiated approach to treating COVID-19, offering potentially greater therapeutic efficacy and reduced potential for the development of viral drug resistance.

“In this period of unprecedented global need, we believe it is imperative that we investigate the potential of our DARPin® platform against COVID-19. Among the many efforts underway, a DARPin® therapeutic that can neutralize multiple sites of the viral spike protein in a single drug could be an important tool in our fight against the virus,” said Patrick Amstutz, Ph.D., Chief Executive Officer of Molecular Partners. “I am truly encouraged by the spirit of collaboration across academia and industry in response to this challenging time. We have progressed to hit candidate selection in a month, and expect to further leverage the rapid, high-yield nature of DARPin® protein manufacturing to chart a rapid path to human trials.”

Research performed by Molecular Partners in collaboration with virologists at the Spiez Laboratory, a division of the Swiss Federal Office for Civil Protection, has characterized hundreds of monospecific and multispecific DARPin® proteins with strong binding and neutralizing qualities against multiple epitopes on the SARS-CoV-2 spike protein that are crucial for infection. Preliminary data indicate that multispecific DARPin® molecules show synergistic antiviral activity, exceeding the activity of their constituent parts. A multispecific DARPin® lead candidate will be chosen based on its capability to perform three distinct mechanisms of action ([illustrative graphic](#)): blocking binding of the human ACE2 receptor, the virus’s primary docking mechanism to host cells; blocking binding of a specific protease essential for spike protein activation; and “handcuffing” the spike protein, preventing the conformational change it undergoes prior to injection of viral RNA into the human cell. The final candidate is also expected to have its half-life enhanced with a DARPin® domain that binds to human serum albumin (HSA) to support long-acting activity.

The construction of multispecific candidates from monospecific proteins is the foundation of Molecular Partners’ drug discovery engine, and has yielded multiple clinical candidates in other indications.

Molecular Partners is proceeding with expedited preclinical testing to select a lead candidate. The company has verified available manufacturing capacity and is targeting readiness of Good Manufacturing Practice-compliant drug product in Q3 2020.

Financial Calendar

April 29, 2020	Annual General Meeting
May 7, 2020	Interim Management Statement Q1 2020
August 26, 2020	Publication of Half-year Results 2020 (unaudited)
October 29, 2020	Interim Management Statement Q3 2020

<http://investors.molecularpartners.com/financial-calendar-and-events/>

About DARPin® therapeutics

DARPin® therapeutics are a new class of custom-built protein therapeutics based on natural binding proteins that open a new dimension of multi-functionality and multi-target specificity in drug design. A single DARPin® candidate can engage more than five targets, and its flexible architecture

and small size offer benefits over conventional monoclonal antibodies or other currently available protein therapeutics. DARPin® therapeutics have been clinically validated through to registration via the development of abicipar, Molecular Partners' most advanced DARPin® drug candidate. The DARPin® platform is a fast and cost-effective drug discovery engine, producing drug candidates with optimized properties for development and very high production yields. DARPin® is a registered trademark owned by Molecular Partners AG.

About Molecular Partners AG

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

For more information regarding Molecular Partners AG, go to: www.molecularpartners.com.

For further details, please contact:

Seth Lewis, SVP IR, Comms, & Strategy
seth.lewis@molecularpartners.com
Tel: +1 781 420 2361

Lisa Raffensperger, International Media
lisa@tenbridgecommunications.com
Tel: +1 617 903 8783

Thomas Schneckeburger, IR & Media
thomas.schneckeburger@molecularpartners.com
Tel: +41 79 40799522

Disclaimer

This communication does not constitute an offer or invitation to subscribe for or purchase any securities of Molecular Partners AG. This publication may contain certain forward-looking statements and assessments or intentions concerning the company and its business. Such statements involve certain risks, uncertainties and other factors which could cause the actual results, financial condition, performance or achievements of the company to be materially different from those expressed or implied by such statements. Readers should therefore not place reliance on these statements, particularly not in connection with any contract or investment decision. The company disclaims any obligation to update these forward-looking statements, assessments or intentions.