Molecular Partners Presents Positive Data From Completed Phase 1 Trial Of MP0317 (FAP X CD40 DARPin) Monotherapy In Patients With Advanced Solid Tumors At ASCO 2024

June 1, 2024

- Mechanism of action supported by observed MP0317 localization and immune cell activation in the tumor microenvironment
- Favorable and manageable safety profile observed at all tested dose levels
- Weekly and three-weekly dosing schedules established, supported by pharmacokinetics and pharmacodynamics
- Data support further clinical evaluation of MP0317 in combination settings

ZURICH-SCHLIEREN, Switzerland and CONCORD, Mass., June 01, 2024 (GLOBE NEWSWIRE) -- **Ad hoc announcement pursuant to Art. 53 LR** Molecular Partners AG (SIX: MOLN; NASDAQ: MOLN), a clinical-stage biotech company pioneering the design and development of a new class of custom-built protein drugs known as DARPin therapeutics, today announced it had presented the final data from its Phase 1 dose-escalation study of MP0317 at the American Society of Clinical Oncology (ASCO) Annual Meeting 2024, held in Chicago, IL, USA. MP0317 is a CD40 agonist designed to activate immune cells specifically within the tumor microenvironment (TME) by anchoring to fibroblast activation protein (FAP) which is expressed in high amounts around tumors. This tumor-localized approach has the potential to deliver greater efficacy with fewer side effects compared to systemic CD40-targeting therapies.

“The Phase 1 data for MP0317 demonstrate the ability of the FAP x CD40 DARPin to avoid the systemic toxicities of CD40 agonists while showcasing truly promising modulation of the tumor microenvironment,” said Philippe Legenne, MD, MBA, Molecular Partners’ acting Chief Medical Officer. “This further deepens the clinical evidence supporting DARPins’ ability to deliver multi-specific candidates with enhanced capabilities in oncology including localized activation of powerful immunostimulatory molecules. We will continue discussions with potential partners towards clinical evaluation of MP0317 in combination with complementary approaches.”

Mechanistic data & clinical response
The final analysis of this phase 1 dose-escalation study included 46 patients with advanced solid tumors and confirms earlier reported interim analysis findings. MP0317 treatment resulted in target occupancy in tumor biopsies with evidence of TME remodeling as characterized by increases in dendritic cells (DC), T follicular helper cells and plasma cells, as well as IFNγ downstream activation and DC maturation gene signature score increases. These findings were further supported by observed elevation of serum levels of CXCL10, a pro-inflammatory downstream effector of the IFNγ signaling.

In terms of clinical response, one patient achieved an unconfirmed partial response and stable disease was observed in 14 additional patients. The data support further clinical evaluation of MP0317 in combination with complementary anticancer therapies. Dose-response analyses of the final trial data propose MP0317 at dosages of 1.5mg/kg or above as providing an optimal benefit-risk profile, with adjustable dosing frequency to match a combination dosing scheme.

Safety & tolerability
MP0317 displayed a favorable and manageable safety profile across all nine planned dosing cohorts (0.03–10 mg/kg administered intravenously weekly (Q1W) or every 3 weeks (Q3W). The most frequently observed adverse reactions were fatigue and lower grade infusion-related reactions (grade 1–2). Dose-limiting toxicity was reported in one patient (transient asymptomatic grade 3 elevation of liver enzymes) at the highest planned dose of 10 mg/kg administered Q3W.

Details of the poster presenting the final results from the MP0317 Phase 1 study at the 2024 ASCO Annual Meeting can be found below. The poster will be made available on Molecular Partners' website after the presentation.

Title: Effect of MP0317, a FAP x CD40 DARPin, on safety profile and tumor-localized CD40 activation in a phase 1 study in patients with advanced solid tumors

Abstract number (poster board): 2573 (52)

Timing: 1 June 2024; 9:00 am – 12:00 pm PST

About Molecular Partners AG
Molecular Partners AG is a clinical-stage biotech company pioneering the design and development of DARPin therapeutics for medical challenges other drug modalities cannot readily address. The Company has programs in various stages of pre-clinical and clinical development, with oncology as its main focus. Molecular Partners leverages the advantages of DARPins to provide unique solutions to patients through its proprietary programs as well as through partnerships with leading pharmaceutical companies. Molecular Partners was founded in 2004 and has offices in both Zurich, Switzerland and Concord, MA, USA. For more information, visit www.molecularpartners.com and find us on LinkedIn and Twitter/X @MolecularPrtnrs.

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Cautionary Note Regarding Forward-Looking Statements

Any statements contained in this press release that do not describe historical facts may constitute forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995, as amended, including, without limitation: implied and express statements regarding the clinical development of Molecular Partners' current or future product candidates; expectations regarding timing for reporting data from ongoing clinical trials or the initiation of future clinical trials; the potential therapeutic and clinical benefits of Molecular Partners' product candidates and its RDT and Switch-DARPin platforms; the selection and development of future programs; Molecular Partners' collaboration with Orano Med including the benefits and results that may be achieved through the collaboration; and Molecular Partners' expected business and financial outlook, including anticipated expenses and cash utilization for 2024 and its expectation of its current cash runway. These statements may be identified by words such as "anticipate", "believe", "expect", "guidance", "intend", "may", "plan", "potential", "will", "would" and similar expressions, and are based on Molecular Partners' current beliefs and expectations. These statements involve risks and uncertainties that could cause actual results to differ materially from those reflected in such statements. Some of the key factors that could cause actual results to differ from Molecular Partners' expectations include its plans to develop and potentially commercialize its product candidates; Molecular Partners' reliance on third party partners and collaborators over which it may not always have full control; Molecular Partners' ongoing and planned clinical trials and preclinical studies for its product candidates, including the timing of such trials and studies; the risk that the results of preclinical studies and clinical trials may not be predictive of future results in connection with future clinical trials; the timing of and Molecular Partners' ability to obtain and maintain regulatory approvals for its product candidates; the extent of clinical trials potentially required for Molecular Partners' product candidates; the clinical utility and ability to achieve market acceptance of Molecular Partners' product candidates; the potential that Molecular Partners' product candidates may exhibit serious adverse, undesirable or unacceptable side effects; the impact of any health pandemic, macroeconomic factors and other global events on Molecular Partners' preclinical studies, clinical trials or operations, or the operations of third parties on which it relies; Molecular Partners' plans and development of any new indications for its product candidates; Molecular Partners' commercialization, marketing and manufacturing capabilities and strategy; Molecular Partners' intellectual property position; Molecular Partners' ability to identify and in-license additional product candidates; unanticipated factors in addition to the foregoing that may impact Molecular Partners' financial and business projections and guidance; and other risks and uncertainties that are described in the Risk Factors section of Molecular Partners' Annual Report on Form 20-F for the fiscal year ended December 31, 2023, filed with Securities and Exchange Commission (SEC) on March 14, 2024 and other filings Molecular Partners makes with the SEC. These documents are available on the Investors page of Molecular Partners' website at www.molecularpartners.com. Any forward-looking statements speak only as of the date of this press release and are based on information available to Molecular Partners as of the date of this release, and Molecular Partners assumes no obligation to, and does not intend to, update any forward-looking statements, whether as a result of new information, future events or otherwise.