# Molecular Partners to present updated data from Phase 1/2a trial of MP0533 in AML at ASH Annual Meeting

November 3, 2025

ZURICH-SCHLIEREN, Switzerland and CONCORD, Mass., Nov. 03, 2025 (GLOBE NEWSWIRE) -- **Ad hoc announcement pursuant to Art. 53 LR** Molecular Partners AG (SIX: MOLN; NASDAQ: MOLN), a clinical-stage biotech company developing a new class of custom-built protein drugs known as DARPin therapeutics ("Molecular Partners" or the "Company"), today announced it will present updated data from a Phase 1/2a trial of MP0533, a novel, multispecific T cell engager for acute myeloid leukemia (AML) patients, in a poster at the 67th American Society of Hematology (ASH) Annual Meeting and Exposition, taking place December 6-9, 2025, in Orlando, Florida, and online.

The poster will outline latest results of this first-in-human, multicenter, open-label study evaluating MP0533 in relapsed/refractory AML and myelodysplastic syndrome (MDS)/AML patients (ClinicalTrials.gov: NCT05673057). MP0533 shows an acceptable safety profile across DR 1–9. Based on initial data, densified MP0533 dosing as used in DR 8 and 9 appears tolerable, and preliminary antitumor activity signs are encouraging. The study is currently dosing patients in DR 10.

MP0533 is a novel tetra-specific T cell-engaging DARPin, which simultaneously targets three tumor-associated antigens CD33, CD123 and CD70 on AML cells as well as the immune activator CD3 on T cells. AML cells commonly co-express at least two of the three target antigens, whereas most healthy cells only express one or none. MP0533 binds with increasing avidity as the number of its target antigens present increases, thereby preferentially binding to AML cells over healthy cells. This unique mode of action is designed to enable T cell-mediated killing of AML cells while preserving a therapeutic window that minimizes damage to healthy cells.

**Details of the presentation**

**Title:** Phase 1/2 study of MP0533, a tetra-specific T cell engager (CD33 x CD123 x CD70 x CD3), in patients with relapsed/refractory AML or MDS/AML: Initial results from optimized treatment regimen including densified MP0533 dosing and adapted premedication

**Session Name:** 616. Acute Myeloid Leukemias: Investigational Drug and Cellular Therapies: Poster II

**Session Date:** December 7, 2025

**Presentation Time & Location:** 6:00– 8:00 PM ET; OCCC, West Halls B3–B4

**Publication Number:** 3419

The full abstracts will be available on the ASH website from 9:00 am ET on Monday November 3, 2025.

**About DARPin Therapeutics**
DARPin (Designed Ankyrin Repeat Protein) therapeutics are a new class of custom-built protein drugs based on natural binding proteins that open new dimensions of multi-functionality and multi-target specificity in drug design. The flexible architecture, intrinsic potential for high affinity and specificity, small size and high stability of DARPins offer benefits to drug design over other currently available protein-based therapeutics. DARPin candidates can be radically simple, with a single DARPin unit acting as the delivery vector to a specific target; or multispecific, with the possibility of engaging more than five targets, and combining multiple and conditional functionalities in a unique DARPin drug candidate. The DARPin platform is designed to be a rapid and cost-effective drug discovery engine, producing drug candidates with optimized properties and high production yields. DARPin therapeutics have been clinically validated across several therapeutic areas and developed through to the registrational stage.

**About Molecular Partners AG**
Molecular Partners AG (SIX: MOLN, NASDAQ: MOLN) 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 2025 and its expectation of its current cash runway. These statements may be identified by words such as "aim", "anticipate", "expect", "guidance", "intend", "outlook", "plan", "potential", "will" 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 cause Molecular Partners' actual results to differ from its financial and business projections and guidance; and other risks and uncertainties set forth in Molecular Partners' Annual Report on Form 20-F for the year ended December 31, 2024 and other filings Molecular Partners makes with the SEC from time to time. These documents are available on the Investors page of Molecular Partners' website at www.molecularpartners.com. In addition, this press release contains information relating to interim data as of the relevant data cutoff date, results of which may differ from topline results that may be obtained in the future. 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.