Molecular Partners Reports Corporate Highlights From Q4 2023 and Key Financials for Full Year 2023

March 14, 2024

Research & Development Highlights

- Presented encouraging initial data from first four dosing cohorts of ongoing Phase 1/2a trial of MP0533 for patients with relapsed/refractory AML and AML/MDS at the ASH Annual Meeting, reporting an acceptable safety profile and initial anti-tumor activity
- Introduced the Switch-DARPin concept and platform at PEGS Europe. In January 2024, introduced the first multispecific Switch-DARPin program, targeting cKIT x CD16a x CD47, as a next-generation conditioning regimen for hematopoietic stem cell transplantation
- Presented positive preclinical data supporting the Radio-DARPin Therapy (RDT) platform and expansion of the RDT pipeline at multiple leading scientific conferences
- In January 2024, announced a strategic collaboration agreement with Orano Med to co-develop ^{212}Pb-based RDTs for multiple oncology targets, including DLL3
- In January 2024, presented preclinical RDT data from the DLL3 program showing enhanced tumor uptake and reduced kidney absorption
- Presented updated positive data from the Phase 1 trial of MP0317 for patients with advanced solid tumors at the SITC Annual Meeting, demonstrating CD40 activation in the tumor microenvironment while maintaining a favorable safety profile

Leadership & Governance:

- Dr. Philippe Legenne, M.D., MBA, MHS, assumed responsibilities as acting Chief Medical Officer in August 2023

Financial:

- Ongoing strong financial position with CHF 186.9 million in cash and short-term deposits as of December 31, 2023, expected to support operations well into 2026

2024 Outlook:

- Full year 2024 operating expense guidance of CHF 70-80 million.
- Data from the Phase 1/2a trial of MP0533, including safety and efficacy, to be presented in H1 2024; expansion of enrollment to higher dose cohorts planned in H2 2024.
- Initial preclinical data from first Switch-DARPin program cKIT x CD16a x CD47 expected in H1 2024; preclinical proof-of-concept studies expected in H2 2024, which should provide strong translational efficacy data.
- Lead RDT candidate (DLL3) to be advanced into IND-enabling studies in H1 2024, and nomination of additional targets and lead candidates for the RDT pipeline. Initiation of clinical studies and first-in-human data are expected in 2025.
- The full dataset from the MP0317 Phase 1 dose-escalation trial expected in H1 2024.

ZURICH-SCHLIEREN, Switzerland and CONCORD, Mass., March 14, 2024 (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, today announced its corporate highlights and audited financial results for the full year 2023.

“2023 was a year of successful innovation and execution on our strategy, focusing on novel mechanisms that we believe only DARPin therapies can deliver. The encouraging new clinical and preclinical data across our portfolio illustrate the versatility and differentiated promise of DARPin therapies and our long-term leadership in this field,” said Patrick Amstutz, Ph.D. Molecular Partners’ Chief Executive Officer. “In 2024, we look forward to presenting further clinical data from our lead oncology program MP0533, and translating our significant progress across the Radio-DARPin Therapy and Switch-DARPin platforms into initiation of IND-enabling studies.”

Research & Development

MP0533
In December 2023, the Company presented positive initial data from the first four dosing cohorts of its ongoing Phase 1/2a trial of MP0533 at the 65th American Society of Hematology (ASH) Annual Meeting and Exposition. Results from the first 11 patients treated with MP0533 indicated an acceptable safety profile as of the data cut-off across all four dosing regimens (DRs), with no dose-limiting toxicities observed. Two responders were observed at the time of presentation, including a patient achieving a complete response (CR) in DR 4 and another patient with morphological leukemia-free state (MLFS) in DR 3. These responses are particularly notable for having occurred at dose levels below those predicted as therapeutically active.

MP0533 is a novel tetra-specific T cell-engaging DARPin, which simultaneously targets the antigens CD33, CD123, and CD70 on AML cells as well as the immune activator CD3 on T cells. AML cells display higher co-expression at least two of these target antigens as compared with healthy cells. MP0533 binds with increasing avidity as the number of its target antigens present increases, dramatically favoring binding to AML cells over healthy cells. This unique avidity-driven 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.

The Phase 1/2a study is on track with dosing in DR 6 currently ongoing. The Company expects to present data from further cohorts receiving MP0533 in H1 2024. Based on current safety and tolerability data from the ongoing study, and based on discussion with treating investigators and key opinion leaders, a protocol amendment is being filed to expand enrollment to additional higher dose cohorts of MP0533 beyond the initially planned highest cohort (DR 7). The goal of the additional higher doses will be to explore the full potential efficacy of MP0533. The Company expects to enroll patients in the added higher cohorts seamlessly in H2 2024.

Switch-DARPin Platform

In 2023, the Company introduced the Switch-DARPin platform and presented data evidencing its mechanism-of-action. The Switch-DARPin platform represents a further evolution of the Company's capabilities to deliver multispecific candidates to address different disease needs. The Switch-DARPin platform provides a logic-gated "on/off" function (the "Switch") to multispecific DARPin candidates leading to activation only in the presence of defined antigens. The objective is conditional activation of a targeted immune response.

In January 2024, the first program from the Switch-DARPin platform was introduced at the 42nd Annual J.P. Morgan Healthcare Conference, namely a cKIT x CD16a x CD47 multispecific Switch-DARPin candidate designed as next-generation targeted conditioning regimen for hematopoietic stem cell transplantation (HSCT) in AML and other diseases benefiting from HSCT such as genetic diseases. The cKIT x CD16a x CD47 Switch-DARPin program is designed to induce exhaustive killing of stem cells to increase long-term disease control post HSCT for AML patients, including those with a poor cytogenetic risk profile, and those currently not eligible for standard high-intensity conditioning. Our intent is to extend the access to potentially curative HSCT for more patients with AML and beyond.

The target-by-target rationale for this program's design is:

- cKIT is critical for stem cell maintenance and renewal and thus expressed on both hematopoietic and leukemic stem cells.
- The CD16a DARPin engages NK cells and macrophages to selectively kill cKIT-positive cells.
- The Switch-DARPin will block the CD47 "don't eat me" signal only when the molecule binds on cKIT-positive cells, leveraging the power of CD47 inhibition without its associated toxicity to healthy cells.

The Company expects to present initial pre-clinical data from the first Switch-DARPin program cKIT x CD16a x CD47 in H1 2024 and to run preclinical proof-of-concept studies in H2 2024, which should provide strong translational efficacy data.

Radio-DARPin Therapy (RDT) Platform

In September 2023, Molecular Partners presented preclinical data from its RDT platform at the 36th Annual Meeting of the European Association of Nuclear Medicine (EANM) demonstrating a substantially increased tumor uptake of RDT candidates through an adjustment of systemic half-life, achieved by binding to the human serum albumin protein. These results expand on preclinical data that were previously reported at the American Association for Cancer Research (AACR) Annual Meeting and Society of Nuclear Medicine and Molecular Imaging (SNMMI) Annual Meeting in 2023 and highlight that surface engineering of the DARPin backbone into a "Stealth" DARPin can lead to marked reduction of RDT candidate reabsorption by kidneys, addressing a key challenge for protein-based radionuclide delivery vectors. At the 42nd Annual J.P. Morgan Healthcare Conference in January 2024, Molecular Partners presented data showing the reduction of kidney absorption through novel engineered Stealth DARPins as well as enhanced tumor uptake via half-life engineering for several targets. Achieving improved tumor uptake and reduced kidney reabsorption has enabled the expansion of the RDT pipeline and strategy for the RDT portfolio.

Furthermore, in January 2024, Molecular Partners and Orano Med entered a strategic collaboration to co-develop ^{212}Pb-based RDTs for patients with solid tumors. The deal combines the power of DARPins, as a highly differentiated modality for tumor-targeted delivery of radioisotopes, with Orano Med's leading capabilities in Targeted Alpha Therapy and supply to further advance the RDT platform and expand Molecular Partners' RDT portfolio.

The tumor-associated protein Delta-like ligand 3 (DLL3) was selected as the target of the Company's lead RDT program to be advanced into IND-enabling studies in H1 2024. Expression of DLL3 is low in healthy tissue but significantly increased in certain tumor types, providing an opportunity for selective targeting through the high affinity and specificity offered by DARPins. The initiation of clinical studies and first-in-human data are expected in 2025 through co-development with Orano Med. Molecular Partners also expects to nominate additional targets and RDT candidates in 2024.

In addition to the above updates, Molecular Partners continued to progress its RDT portfolio of projects in partnership with Novartis.

MP0317

In November 2023, the Company presented additional positive dose-escalation data from its Phase 1 study of MP0317 in patients with advanced solid tumors at the 38th Annual Meeting of the Society for Immunotherapy of Cancer (SITC). These data from 46 patients corroborated earlier reported findings of MP0317-induced CD40 activation and related remodeling of the tumor microenvironment (TME). At the time of the presentation, MP0317 monotherapy continued to display a favorable safety profile across all dosing cohorts up to the highest planned dose.

MP0317 enables tumor-localized immune activation through simultaneously targeting the immunostimulatory protein CD40 and fibroblast activation protein (FAP). FAP is expressed in high amounts around tumors. Through this proposed mechanism of action, MP0317 is designed to activate immune cells specifically within the tumor microenvironment, potentially delivering greater efficacy with fewer side effects compared to systemic CD40-targeting therapies.

The Company expects to report the full dataset from the Phase 1 study dose-escalation in H1 2024.

Corporate Governance & Leadership Highlights

Dr. Philippe Legenne, M.D., MBA, MHS, assumed responsibilities as acting Chief Medical Officer in August 2023.

Dr. Legenne joined Molecular Partners in early 2020. Over this time, he has led the clinical development strategy and execution across the Molecular Partners portfolio. Prior to joining Molecular Partners, Philippe held positions of increasing responsibility at JNJ, GSK, and Novartis, both in the United States and Europe. In his most recent role prior to Molecular Partners, Philippe led the EU medical organization for the oncology portfolio at Amgen. He received his medical degree from the Université de Lille (France), an MBA from ESSEC Business School (Paris) and a Master's degree in health economics from Université Paris Dauphine-PSL.

Update to Class Action Lawsuit

On February 29, 2024 a putative class action complaint against the Company, its directors, and certain of its executive officers was dismissed in the Company's favor, and the case has been ordered closed. The original case was filed on July 12, 2022 in the U.S. District Court for the Southern District of New York.

2023 Financial Highlights

In the financial year 2023, Molecular Partners recognized total revenues and other income of CHF 7.0 million (2022: CHF 189.6 million) and incurred total expenses of CHF 68.1 million (2022: CHF 73.0 million). This led to an operating loss of CHF 61.1 million for 2023 (2022: Operating profit of CHF 116.6 million). The net financial loss recorded in 2023 was CHF 0.9 million, compared to a net financial gain of CHF 1.2 million in 2022. This resulted in a 2023 net loss of CHF 62.0 million (2022: Net profit of CHF 117.8 million).

The net cash used in operating activities in 2023 was CHF 59.0 million (2022: Net cash from operating activities CHF 118.6 million). Including short-term time deposits, the cash and cash equivalents position decreased by CHF 62.2 million as compared to year-end 2022, to CHF 186.9 million as of December 31, 2023 (December 31, 2022: CHF 249.1 million). Total shareholders' equity stood at CHF 176.4 million as of December 31, 2023, a decrease of CHF 58.8 million (December 31, 2022: CHF 235.2 million).

The Company's cash position and short-term time deposits were CHF 186.9 million as per December 31, 2023, and continue to provide the Company with financial flexibility and a forecasted cash runway well into 2026.

The Company's balance sheet remained debt-free in 2023. As of December 31, 2023, the Company employed 167.5 FTE (full-time equivalents), down 4% year-on-year. About 83% of the employees are employed in R&D-related functions.

Key figures as of December 31, 2023

Key Financials (CHF million, except per share, FTE data)	FY 2023	FY 2022	Change
Total revenues and other income	**7.0**	**189.6**	**(182.6)**
R&D expenses	(48.7)	(50.7)	2.0
SG&A expenses	(19.4)	(22.3)	2.9
Operating result	**(68.1)**	**(73.0)**	**4.9**
Net finance result	(61.1)	116.6	(177.7)
Net result	**(0.9)**	**1.2**	**(2.1)**
Basic net result per share (in CHF)	(1.89)	3.63	(5.52)
Diluted net result per share (in CHF)	(1.89)	3.54	(5.43)
Net cash (used in) from operating activities	(59.0)	118.6	(177.6)
Cash & cash equivalents (incl. short-term time deposits)	**186.9**	**249.1**	**(62.2)**
Total shareholders' equity	176.4	235.2	(58.8)
Number of total FTE	**167.5**	**175.3**	**-7.8**

Financial outlook 2024
For the full year 2024, at constant exchange rates, the Company expects total operating expenses of CHF 70-80 million, of which around CHF 8 million will be non-cash effective costs for share-based payments, IFRS pension accounting and depreciation.

Documentation

This press release, the Company's Annual Report on Form 20-F for the year ended December 31, 2023 to be filed with the U.S. Securities and Exchange Commission (SEC), and the Company's annual report 2023 will be made available through www.molecularpartners.com under the investor section after 9.00 pm CET (4.00 pm EST) on March 14, 2024.

Full Year 2023 Conference Call & Audio Webcast

Molecular Partners will hold a conference call and audio webcast on March 15, 1.00 pm CET (8.00 am EST).
To register for the full year 2023 conference call, please dial the following numbers approximately 10 minutes before the start of the presentation:

Participant Dial In (Toll Free):	1-866-652-5200
Participant International Dial In:	1-412-317-6060
Switzerland Toll Free:	0800-246787

Participants in the conference call will have the opportunity to ask questions after the presentation.

Audio webcast

The full year 2023 results will be webcast live and will be made available on the Company's website under the investor section. The replay will be available for 90 days following the presentation.

Financial calendar

April 17, 2024	Annual General Meeting
May 16, 2024	Interim Management Statement Q1 2024
August 26, 2024	Half-year results 2024 (unaudited)
October 31, 2024	Interim Management Statement Q3 2024

The latest timing of the above events can always be viewed on the investor section of the website

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 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
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, the selection and development of future programs, 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 "guidance", "believe", "expect", "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 may cause Molecular Partners' actual results and outcomes to materially differ from its 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.