UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of January 2024

Commission File Number: **001-40488**

Molecular Partners AG
(Translation of registrant's name into English)

Wagistrasse 14
8952 Zurich-Schlieren
Switzerland
(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.
Form 20-F [X] Form 40-F [ ]

On January 5, 2024, the Registrant issued a press release, a copy of which is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

(c) Exhibit 99.1. Press release dated January 5, 2024

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Molecular Partners AG
(Registrant)

Date: January 5, 2024

/s/ PATRICK AMSTUTZ
Patrick Amstutz
Chief Executive Officer

EXHIBIT 99.1

Molecular Partners and Orano Med Announce Co-Development Agreement for Radio-DARPin Therapies

- *Collaboration leverages lead-based (^{212}Pb) alpha emitter expertise and supply of Orano Med with Molecular Partners' leadership in DARPins for tumor-targeted delivery of radioactive payloads*
- *Co-Development agreement covers multiple oncology targets, including DLL3*
- *Companies anticipate first-in-human studies in 2025*

ZURICH-SCHLIEREN, Switzerland and CONCORD, Mass., and PARIS, Jan. 05, 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, and Orano Med, a pioneer in targeted alpha therapy, have announced a collaboration to develop novel Radio-DARPin therapeutics (RDTs) that use Orano Med's ^{212}Pb radioisotope as a payload to selectively kill cancer cells. Both companies will leverage their unique capabilities to enable rapid clinical development and agree to share costs for preclinical and clinical development for multiple oncology targets, the first of which is DLL3.

The partnership is based upon strong preclinical data supporting a highly differentiated profile for ^{212}Pb-based RDTs. Besides strong binding to target proteins and selective delivery of radioactive payloads, these data have also indicated the ability of RDTs to minimize kidney damage often associated with protein-based radioligand therapies while maintaining high tumor uptake. This agreement represents the first co-development deal for Molecular Partners and Orano Med. Both companies are developing additional radioligand therapy candidates in partnership with other companies, with Molecular Partners having announced its first collaboration with Novartis in December 2021.

"Orano Med provides extensive expertise and a secure supply of a powerful, highly focused source of radiation for precision cancer treatment, expanding our RDT portfolio in new directions," said Patrick Amstutz, Ph.D., CEO of Molecular Partners. "While we have been able to demonstrate the potent and highly selective targeting of tumor cells by DARPins, it is imperative that we align ourselves with our partners who have the scientific, technical and logistical expertise to develop, manufacture and supply radiotherapeutics. Having worked with the Orano Med team for many months, we are excited and confident in their expertise and capabilities, as well as by their ambition to co-develop molecules in the clinic. We look forward to working jointly to bring these RDT programs into the clinics as rapidly as possible."

"We are extremely excited to start this collaboration with Molecular Partners and to unlock the full potential of their DARPin platform in the field of radioligand therapies. We have been impressed by the versatility of the DARPin platform and by their in-house expertise in optimizing DARPins for applications in targeted alpha therapies. This collaboration enables us to meet the 3 key success factors in this field: leveraging a safe, convenient, and potent radioactive payload, achieving effective vectorization, and mastering the intricacies of the supply chain. This collaboration will further diversify our targeting approach, which combines the unique properties of ^{212}Pb and Orano Med's unparalleled global manufacturing supply chain. It will expedite the development of ^{212}Pb-based radiotherapies to bring new breakthrough solutions for patients living with cancer", said Julien Dodet, CEO of Orano Med.

Under the terms of the co-development agreement, Molecular Partner's previously disclosed RDT target DLL3 (delta-like ligand 3) will be included in the partnership with Orano Med. Expression of DLL3 is low in healthy tissue but significantly increased in certain tumor types, such as small-cell lung cancer, providing an opportunity for selective tumor-targeting. DLL3 will be exclusively developed by Molecular Partners and Orano Med as a RDT target. Molecular Partners will maintain the option to explore DLL3 for targeted therapy outside of the radiotherapy space.

Both companies commit to sharing the cost of preclinical and clinical development with additional commitments to supply of their respective materials. Additional agreements are being put in place for future development and commercialization of any potential programs that proceed into the clinical stage of development.

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 other currently available protein therapeutics. DARPin therapeutics have been clinically validated in thousands of patients in multiple indications, including through to registration via the development of abicipar, a DARPin drug candidate for ophthalmological indications. 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.

About Molecular Partners AG
Molecular Partners AG is a clinical-stage biotech company developing DARPin (designed ankyrin repeat protein) 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 oncology and virology and has compounds in various stages of clinical and preclinical development across multiple therapeutic areas. www.molecularpartners.com. Find us on LinkedIn and X: @MolecularPrtnrs.

About Orano Med SAS
Orano Med is a clinical-stage biotechnology company which develops a new generation of targeted therapies against cancer using the unique properties of lead-212 (^{212}Pb), a rare alpha-emitting radioisotope and one of the more potent therapeutic payloads against cancer cells known as Targeted Alpha-Emitter Therapy (TAT). The company develops several treatments using ^{212}Pb combined with various targeting agents. Orano Med has ^{212}Pb manufacturing facilities, laboratories, and R&D centers in France and in the US and is currently investing to further expand its GMP-manufacturing capacities for ^{212}Pb radiolabeled pharmaceuticals in North America and Europe. For more information, please visit: www.oranomed.com.

About Targeted Alpha Therapy
Targeted alpha therapy (TAT) relies on a simple concept: combining the ability of biological molecules to target cancer cells with the short-range cell-killing capabilities of alpha-emitting radioisotopes. Alpha decay consists of the emission of a helium nucleus (alpha particle) together with very high linear energy transfer and a range emission of only few cell layers, resulting in irreparable double strand DNA breaks in cells adjacent only to area of alpha emission. This approach results in an increased cytotoxic potential toward cancer cells while limiting toxicity to nearby healthy cells. As a result, alpha emitters are considered as the most powerful payloads to be found for targeted therapies.

For further details, please contact:
Molecular Partners
Seth Lewis, SVP Investor Relations & Strategy
Concord, Massachusetts, U.S.
seth.lewis@molecularpartners.com
Tel: +1 781 420 2361

Laura Jeanbart, PhD, Head of Portfolio Management & Communications
Zurich-Schlieren, Switzerland
laura.jeanbart@molecularpartners.com
Tel: +41 44 575 19 35

Orano Med
Sophie Letournel
Strategy, governance, and communication director
sophie.letournel@orano.group
Tel: +33 6 38 44 34 11

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 antiviral or other programs, and Molecular Partners' expected business and financial outlook, including expenses and cash utilization for 2023 and its expectation of its current cash runway. These statements may be identified by words such as "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 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; 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, 2022, filed with Securities and Exchange Commission (SEC) on March 9, 2023 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.