MOLECULAR partners

Building tomorrow's breakthroughs

DARPins® are a uniquely versatile and customizable protein therapeutic class with the potential to transform treatment for cancer and other serious diseases.

WE ARE PIONEERS

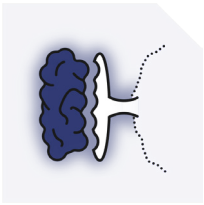
Molecular Partners (SIX:MOLN) is pioneering the class of DARPin® therapeutics, which we believe have the potential to overcome many limitations of current protein-based therapeutics and deliver entirely new ways of treating disease. DARPins have been validated through extensive clinical trials involving up to 2,000 patients across multiple programs and through the pivotal stage.

A NEW DRUG CLASS

DARPins are custom-built therapeutics based on natural proteins with the powerful advantages of tunable multi-functionality and specificity for multiple targets at once.

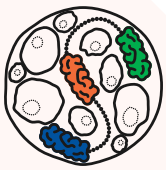
To tailor DARPins to medical need, we draw on a vast library of 'mono-DARPins' and screen for optimal binding to clinically validated molecular targets. We then assemble the best mono-DARPins into a chain through a highly standardized linking process. The result is a custom-built multi-functional 'multi-DARPin'. We can rapidly generate thousands of different multi-DARPin product candidates to address a wide range of diseases.

KEY ADVANTAGES OF DARPins



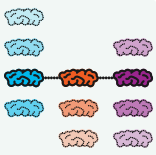
High affinity and specificity
High potency with lower risk of off-target effects

Multi-specificity
Can act on up to 6 distinct targets at once

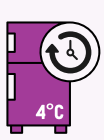


Small size (10 kDa)
Allows greater tissue penetration

Simple high-yield manufacturing
Highly validated bacterial fermentation simplifies production and scaling



Modular structure: 1 DARPin, 1 function
Rapid creation of multi-functional candidates



Long shelf-life and stability
Can be stored for years at 4°C, simplifying supply chain management

BUILDING A NEW APPROACH TO CANCER

The unique advantages of DARPins have the potential to address many current challenges of cancer treatment. DARPins in development have been designed to:

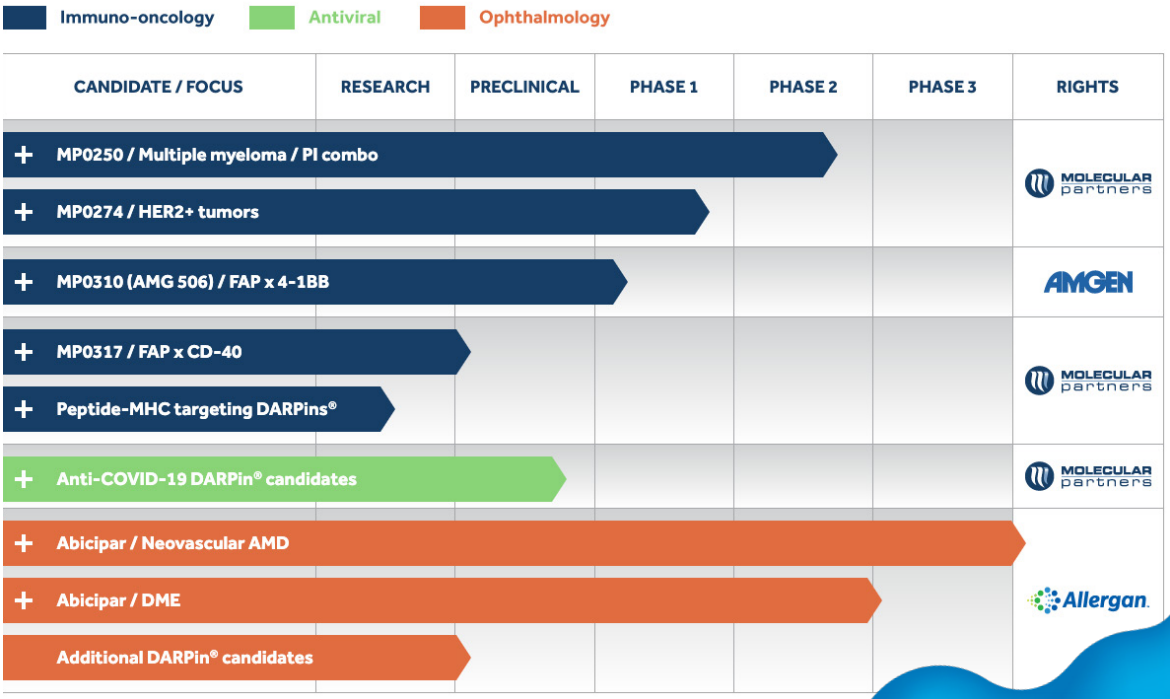
- Target multiple cancer escape pathways at once, improving efficacy and reducing resistance.
- Activate only within the target tumor, potentially eliminating off-target effects and widening the therapeutic window.
- Kill tumors without the need for a toxin by bringing together immune cells and cancer antigens.
- Bind to molecular targets found within dense tumor microenvironments that have been difficult to access by other drug modalities with large and flexible binding mechanisms, such as antibodies.

CASE STUDY: **MP0317**

This clinical immuno-oncology candidate leverages our local immune activation platform: it binds to both the tumor-associated protein FAP and the immune protein CD40, uniting them to induce tumor cell death. In preclinical studies MP0317 has induced CD40-mediated tumor killing without the off-target toxicity typically seen with systemic CD40 antibody administration.

OUR PORTFOLIO

While DARPins are a versatile drug class, our long-term portfolio strategy focuses on immuno-oncology with other opportunities guided by partnership strategy and urgent medical need.



A TEAM UNITED BY A VISION

Molecular Partners is led by an experienced team dedicated to incredible science and a focus on delivering transformational outcomes for patients. Our leadership includes DARPin technology inventors and experts in drug discovery, development and corporate development. Our trans-Atlantic Board of Directors provide expertise in the fields of oncology drug discovery, translational science, commercialization and capital strategy.

MOLECULAR partners

Wagistrasse 14
8952 Zurich-Schlieren
Switzerland
PHONE: +41 44 755 77 00
EMAIL: info@molecularpartners.com
www.molecularpartners.com