

## Versant Ventures Launches Matterhorn Biosciences

***--Based on recent discovery of MR1-restricted T cells and their potential applications in cancer--***

***--Foundational know-how establishes leadership in the field--***

***--Launched out of Versant's Ridgeline Discovery Engine--***

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BASEL, Switzerland--(BUSINESS WIRE)--Versant Ventures today announced the debut of Matterhorn Biosciences AG, a biotechnology company developing T cell receptor therapies based on the recent discovery of MR1T cells that recognize and kill a wide range of tumors of various tissue origins. Versant has made a \$30 million commitment to the new company, which was founded by pioneers in the MR1 field at the University of Basel. It is the most recent company to be launched out of Versant's Ridgeline Discovery Engine based in Basel, Switzerland.

While existing T cell receptor (TCR) therapies only recognize peptides in certain cancer patients, MR1T cells universally recognize and target cancer-specific metabolites presented by the MR1 molecule expressed on malignant cells. This is due to broad expression of MR1 over a range of tumor types and its conservation across all patients. The foundational know-how in Matterhorn includes a 2017 patent that describes the role of these MR1-restricted T cells in cancer immunotherapy.

"Targeting MR1 is a fundamentally new approach to cancer cell therapy. By recognizing the distorted metabolism within cancer cells, these T cell therapies can attack a wide range of liquid and solid tumors without affecting healthy tissue," said Alex Mayweg, Ph.D., managing director at Versant and Matterhorn board member.

### **Pan-cancer-targeting universal T cell therapies**

T cell therapies have transformed the cancer landscape due to their effective killing of cancer cells and their continued persistence within the patient's body. Current cell therapies such as CAR-Ts have shown dramatic survival improvements in liquid cancers but have been limited in solid tumors due to the lack of cancer-specific targets against which to direct the T cells.

TCR therapies overcome some of these limitations by targeting cancer-specific peptides presented on the cell surface by human leukocyte antigen (HLA) molecules. However, HLAs are highly polymorphic and current TCR therapies need to be matched to the patient's HLA, significantly limiting the eligible patient population.

MR1 (MHC class I-related molecule 1) is monomorphic and is therefore the same in all patients. Since MR1 binds small metabolite antigens that are highly specific to cancer cells and are shared across liquid and solid tumors, it creates the opportunity for pan-cancer-targeting, off-the-shelf T cell therapies.

### **Matterhorn leadership and operating plans**

The company's scientific founders include:

- Gennaro De Libero, M.D., Professor of Immunology at the Department of Biomedicine at the University of Basel, Switzerland. His group focuses on adaptive and innate T cells specific for non-peptidic antigens. He is a worldwide leader in the field of MR1T cells. During his career he held appointments at the Basel Institute for Immunology and at the Singapore Agency for Science, Technology and Research (A\*STAR).
- Lucia Mori, Ph.D., Chief Scientific Officer of Matterhorn and a faculty member in the Department of Biomedicine and University Hospital of Basel since 1994. Over the past 34 years her work has focused on antigen recognition of TCRs and non-classical T cell immunity, with appointments at A\*STAR in Singapore and F. Hoffmann-La Roche in Basel, Switzerland.

The Matterhorn founders pioneered work in the MR1 field over the past decade. They first proposed the role of MR1 in cancer immunosurveillance in 2016 and subsequently described the utility of MR1T cells as cancer therapies. The mechanism and specific metabolite antigens that give MR1T cells their broad anti-tumor activity spectrum have now been elucidated. These insights provided a practical starting point for drug discovery in the field.

“It is gratifying to see the work that started 15 years ago now being translated into new therapies,” said Dr. De Libero. “I look forward to working closely with the Matterhorn team to bring these treatments to patients.”

During Matterhorn’s formative phase, the team at the University of Basel will continue to work alongside scientists at Versant’s Ridgeline Discovery Engine to build a platform of MR1-binding metabolites and develop a broad portfolio of TCR therapies. Based on progress to date, Matterhorn expects to start IND-enabling work on its first development candidates during 2020. Phase 1 studies should commence by late 2021.

#### **About Matterhorn Biosciences**

Matterhorn is a biotechnology company focusing on the discovery of cellular therapies targeting the MR1 molecule. MR1 presents cancer-specific metabolites on the surface of cancer cells that are recognized and killed by T cells bearing a MR1-specific T cell receptor. Matterhorn was launched by Versant Ventures and emerged from a collaboration between founding scientists at the University of Basel and the firm’s Ridgeline Discovery Engine in Basel Switzerland.

#### **About Versant Ventures**

Versant Ventures is a leading healthcare venture capital firm committed to helping exceptional entrepreneurs build the next generation of great companies. The firm’s emphasis is on biotechnology companies that are discovering and developing novel therapeutics. With \$3.2 billion under management and offices in the U.S., Canada and Europe, Versant has built a team with deep investment, operating and R&D expertise that enables a hands-on approach to company building. Since the firm’s founding in 1999, more than 75 Versant companies have achieved successful acquisitions or IPOs. Versant is currently investing out of its seventh fund, Versant Venture Capital VII, a \$600 million global biotech fund closed in December 2018. In parallel the firm co-invests out of its Canadian strategic fund Versant Voyageurs I and its later-stage biotech opportunity fund Versant Vantage I. For more information, please visit [www.versantventures.com](http://www.versantventures.com).

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