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MEDIA UPDATE

Novartis signs initial agreement with Carisma Therapeutics for the manufacturing of HER 2 targeted CAR-M cell therapy

- Initial agreement covers reservation of state-of-the-art cell and gene facility in Morris Plains, U.S.
- HER 2 targeted CAR-M cell therapy is tested in initial trials for the treatment of solid tumors
- Follows last year's agreements to provide manufacturing capacity for third parties including BioNTech's Covid vaccine

Basel, March 10, 2022 — Novartis has signed an initial agreement with Carisma Therapeutics, a biopharmaceutical pioneer in engineered macrophage-based therapeutics, to manufacture the HER 2 targeted CAR-M cell therapy, which is tested in initial trials for the treatment of solid tumors.

Under the terms of the initial agreement, the Carisma Therapeutics manufacturing process will be transferred to the Novartis Cell Therapy Site in Morris Plains, U.S, starting in the coming days. Clinical manufacturing is planned to begin in 2023.

"The Global Biotech Cooperations unit of Novartis is fully committed to collaborate with Carisma Therapeutics to bring their CAR-M cell therapy to patients by offering its proven state-of-the art cell and gene production capabilities," said Anton Gerdenitsch, Head of the Contract Manufacturing Organization at Novartis Technical Operations. "As one of the world's largest producers of medicines, Novartis can mobilize its manufacturing capacity in an efficient way on multiple fronts."

This new agreement follows contract manufacturing agreements signed last year such as the agreements with BioNTech, for the filling of the Covid vaccine at the Novartis Technical Operations' sites in Stein, Switzerland, and in Ljubljana, Slovenia.

Novartis continues to offer its world-class capabilities to other companies to take over manufacturing activities including a variety of technologies such as mRNA production and others. Further specifics will be disclosed when agreements are concluded.

Carisma (www.carismatx.com) is a biopharmaceutical company dedicated to developing a differentiated and proprietary cell therapy platform focused on engineered macrophages, cells

that play a crucial role in both the innate and adaptive immune response. The first applications of the platform, developed in collaboration with the University of Pennsylvania, are autologous chimeric antigen receptor (CAR)-macrophages for the treatment of solid tumors. Carisma is headquartered in Philadelphia, PA.

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Novartis is reimagining medicine to improve and extend people's lives. As a leading global medicines company, we use innovative science and digital technologies to create transformative treatments in areas of great medical need. In our quest to find new medicines, we consistently rank among the world's top companies investing in research and development. Novartis products reach nearly 800 million people globally and we are finding innovative ways to expand access to our latest treatments. About 110,000 people of more than 140 nationalities work at Novartis around the world. Find out more at https://www.novartis.com.

About GBTC

Global Biotech Cooperations (GBTC) is a contract manufacturing organization powered by the resources and capabilities of Novartis. Our purpose is to help customers manufacture lifechanging biotechnological products with our state-of-the-art production facilities. We're a team of highly-skilled experts working in innovative, cGMP-compliant sites around the world – building on decades of pharmaceutical and biotechnological manufacturing experience. Find out more at Global Biotech Cooperations | Novartis Novartis is on Twitter. Sign up to follow @Novartis at https://twitter.com/novartisnews For Novartis multimedia content, please visit https://www.novartis.com/news/media-library For questions about the site or required registration, please contact media.relations@novartis.com

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