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St. Jude, Tessa Therapeutics announce strategic collaboration

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The collaboration between St. Jude and Tessa aims to advance cellular immunotherapy treatments for childhood cancer.

St. Jude Children's Research Hospital (St. Jude), the U.S. hospital leading the way the world understands, treats and cures childhood cancer and other life-threatening diseases, together with Tessa Therapeutics (Tessa), a clinical stage biopharmaceutical company has announced the establishment of a strategic collaboration focusing on the development of novel cellular immunotherapies that could lead to new treatment options for children with brain cancer.

The goal of the partnership is to accelerate the preclinical development of CAR-expressing Virus-Specific T cells (VSTs) leading to clinical testing in the near future. Stephen Gottschalk, M.D., chair of the St. Jude Department of Bone Marrow Transplantation and Cellular Therapy, leads the St. Jude team of investigators, which also includes Giedre Krenciute, Ph.D., and Jean-Yves Metais, Ph.D.

"The strategic collaboration will advance our understanding of how CARs work in VSTs," Gottschalk said. "The gained knowledge will be critical for optimizing CAR VSTs targeting multiple tumor antigens expressed in pediatric high-grade gliomas."

For the collaboration's first project, the research teams of Gottschalk and John E. Connolly, Ph.D., Chief Scientific Officer of Tessa Therapeutics, will develop a new treatment for pediatric high-grade gliomas, an aggressive form of brain cancer in children, which currently has very few treatment options.

"We are excited to team up with St. Jude in the fight against childhood cancer," said Andrew Khoo, Tessa Therapeutics CEO and Co-Founder. "St. Jude, one of the leading pediatric cancer hospitals in the U.S., shares our vision of working toward a cure for cancer. We believe our joint effort will accelerate advances in cellular immunotherapy and lead us a step closer to achieving this vision. Together, we aim to bring new hope to children suffering from cancer in the U.S. and around the world."

Notably, the teams at Tessa and St. Jude will explore a new approach to cellular immunotherapy by targeting multiple tumor antigens with CARs using Tessa's VST platform. This novel multi-CAR VST approach carries the potential to improve survival

rates in children as well as reduce the chance of tumor escape, a phenomenon where cancer evolves to evade a successful treatment.

“If successful,” Gottschalk said, “multi-CAR VSTs could be adapted to other pediatric cancers that cannot be cured with conventional therapies.”

Connolly added, “High-grade glioma is a tumor where in some cases, we have seen a reduction in tumor volume following cell therapy treatment. However, after some time the tumor starts growing again. One reason could be that current therapies only target single tumor antigens. Over time, cancer cells may mutate and stop displaying the target antigen. Targeting multiple antigens should prevent the cancer from taking this escape strategy. The promise of the multi-CAR VST approach we are taking together with St. Jude is incredibly exciting.”

Cellular immunotherapy is a new cancer treatment that harnesses the patient’s immune system to fight the disease. It is widely considered one of the most promising advances toward a cure for cancer. T cells are removed from the patient’s blood and re-engineered to recognize the cancer cells. The T cells are then expanded to large numbers and infused back into the patient where the T cells seek out and destroy the cancer cells.