

CAR T-cell Clinical Trial Milestone Achieved in 2024

In a landmark achievement for neuroendocrine cancer research, the first-ever CAR T-cell immunotherapy trial for NETs, which targets CDH17, is now underway, thanks to nearly a decade of foundational support from NETRF. This innovative therapy emerged from NETRF-funded preclinical research led by Dr. Xianxin Hua at the University of Pennsylvania, supported initially by a 2014 NETRF grant and further propelled by a 2018 Petersen Accelerator Award.

The therapy, CHM 2101, is now in a Phase 1/2 clinical trial led by Chimeric Therapeutics in partnership with leading institutions including the University of Pennsylvania, and Emory Winship Cancer Institute, led by NETRF Board of Scientific Advisors members Drs. Jennifer Eads and Daniel Halperin, respectively.

Dr. Eads emphasized the critical role of NETRF in bringing this trial to life:

"Without the funding from the Neuroendocrine Tumor Research Foundation, I don't think we would have been able to come as far as we have... We're incredibly excited to offer this option to our patients in the hopes of identifying potentially a new treatment option."

This milestone trial evaluates the safety and preliminary efficacy of CDH17-targeted CAR T cells, a third-generation therapy designed to eliminate cancer cells while sparing healthy tissue. As of this report, seven patients have been enrolled, four have received doses, and five successful CAR T manufacturing runs have been completed. A patient with rapidly progressing NETs has demonstrated stable disease at 60 days, showing early promise for this therapeutic approach.

NETRF's early, high-risk investment enabled the discovery and development of CDH17 as a viable CAR T target. This trial highlights NETRF's broader impact, funding the basic and translational science that drives the entire neuroendocrine cancer research ecosystem forward.