



TScan Therapeutics Announces Pioneering Publication in Scientific Journal *Cell* Describing New Methods to Identify Targets for T Cell Receptor Immunotherapy

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-The TScan Platform enables discovery of novel TCR Immunotherapies for cancer and infectious diseases

-TScan is a genome-wide, high-throughput method to uncover the physiologic targets of T cells, a central component of the immune system

Boston, MA August 12, 2019 TScan Therapeutics today announced the publication in the scientific journal *Cell* describing the invention of a breakthrough technology that enables the rapid and unbiased discovery of the physiologic targets of any T cell. This work is the foundation for development efforts at TScan Therapeutics to discover new TCR immunotherapies for cancer and infectious disease. The work described in the *Cell* article is based on research and discoveries by scientific founders of TScan, Stephen Elledge, PhD of Harvard Medical School and Tomasz Kula, PhD. TScan Therapeutics has an exclusive world-wide license to use the technology to discover and develop novel therapies based on T cell receptors (TCRs).

"Although cytotoxic T cells are the primary cells in the human immune system that are responsible for detecting and eliminating cancer cells, there has been no thorough and systematic way to determine what peptide antigens those T cells are recognizing until now," commented Dr. Elledge. "The TScan technology provides a method to better understand the natural T cell response to cancer and how we might use that information to design safer and more effective T cell therapies."

Dr. Tomasz Kula, a recent graduate from the Elledge Laboratory at Harvard Medical School, worked with Dr. Elledge and his team to develop the TScan technology. In the *Cell* paper, researchers from the Elledge Laboratory describe how the technology can be used in the areas of cancer and infectious disease to discover new targets for TCR therapy. The authors also demonstrate how tumor-derived TCRs can be fully characterized to reveal both their primary targets and any potential off-targets that may affect their safety profile as therapeutics.

"The TScan technology has advantages over previous approaches to TCR target identification because it relies on natural processes in both the T cells and their target cells to capture physiologically relevant and functional interactions," commented Dr. Kula. "I am excited to now apply this technology to the discovery of new targets for cancer therapy."

"I am thrilled that Tomasz has elected to join the TScan team," commented Gavin MacBeath, PhD, CSO of TScan Therapeutics. "Tomasz and I share the same vision for TCR therapeutics. His ingenuity and insight will be invaluable as we further develop the TScan technology platform and use it to discover and develop life-changing therapies for patients."

The paper, *T-Scan: [A Genome-wide Method for the Systematic Discovery of T Cell Epitopes](#)*, was published online in the Journal *Cell* by Tomasz Kula, Mohammad H. Dezfulian, Charlotte I. Wang, Kai W. Wucherpfennig, Herbert Kim Lyerly, Stephen J. Elledge.

Having recently graduated from the Elledge lab, Dr. Kula has joined TScan Therapeutics. Both Stephen Elledge, Professor of Genetics at Harvard Medical School and Kai Wucherpfennig, Professor of Cancer Immunology and Virology at Dana-Farber Cancer Institute and co-author on the *Cell* paper, are actively engaged with TScan Therapeutics as members of the Scientific Advisory Board.

About TScan Therapeutics

TScan designs therapies that reprogram a patient's own T cells to recognize and fight their cancer using naturally occurring TCRs that recognize shared cancer targets. The TScan discovery process relies on the genome-wide, high-throughput target identification screen described in this *Cell* paper, designed to rapidly identify the natural targets of TCRs. TScan is developing a portfolio of TCR therapies for patients suffering from both liquid and solid tumors. TScan is funded by a group of leading life science investors including Bessemer Venture Partners, Google Ventures, founding investor Longwood Fund, Novartis Venture Fund, and Novartis Institutes of Biomedical Research (NIBR).

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