



The Next Wave of Cell & Gene Therapies With the Capacity to Cure

What is CAR-T?

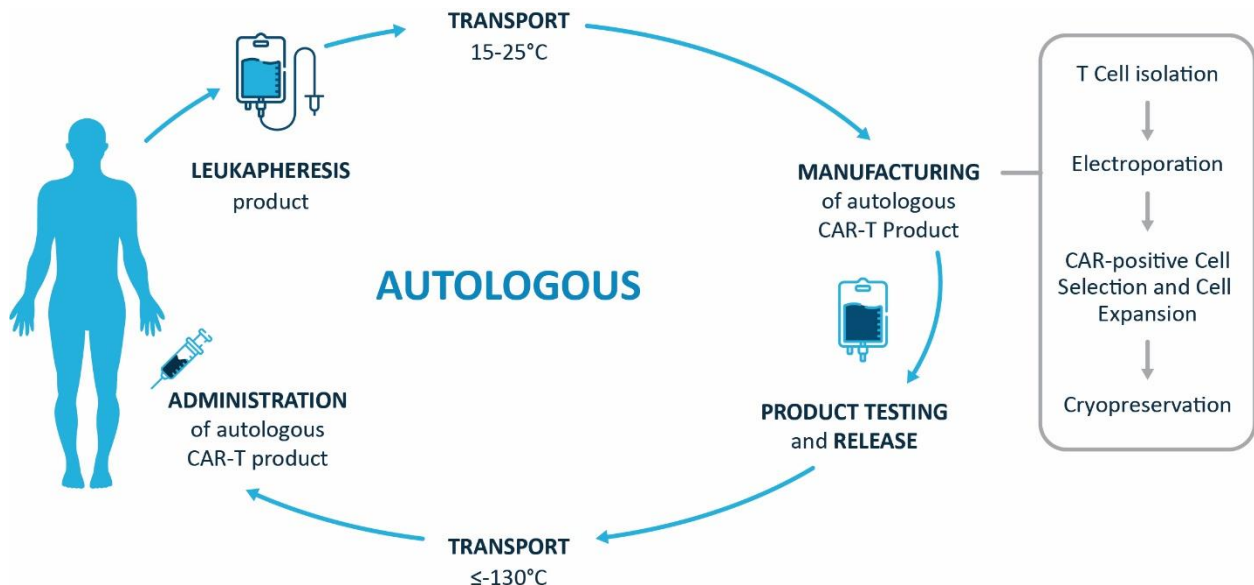
CAR-T therapy – which stands for chimeric antigen receptor T cell therapy – is a form of cell therapy that uses immune cells to attack cancer. The advent of CAR-T therapies has revolutionized treatment of some blood-based cancers by demonstrating profound initial response rates and, in some cases, the ability to cure. CAR-T therapy is approved to treat certain blood cancers and is being studied in the treatment of many other types of cancer, including prostate cancer.

How is Poseida’s CAR-T approach different?

At Poseida Therapeutics, we are developing the next wave of cell and gene therapies with the capacity to cure. Our proprietary gene engineering technologies are used to create potential therapies predominantly composed of a specific T cell subset, stem cell memory, or T_{SCM}, which we believe can address the limitations of other CAR-T therapies, including duration of response, the ability to treat solid tumors, and safety concerns. This is possible because Poseida does not rely on viral vectors to manufacture therapies. Instead, we use our novel non-viral gene engineering technologies that create high T_{SCM} products and have multiple other attributes that result in a potentially safer treatment with equivalent or better outcomes.

How are CAR-T therapies made?

Today, CAR-T therapies are customized to each patient by removing a specific set of T cells from the patient’s blood, modifying the cells in a lab to intensify the immune system’s response to cancer, and re-injecting the cells into the patient. These are known as *autologous* therapies.



Poseida is also developing *allogeneic* therapies, which are created using the cells of a universal donor and produced in large quantities, so it is available for on-demand use. Poseida plans to develop allogeneic versions of all of our hematological and solid tumor product candidates.

What is PSMA?

At Poseida, we are developing therapies to revolutionize the treatment of cancer – including a CAR-T therapy for prostate cancer. P-PSMA-101 is a solid tumor autologous CAR-T product candidate to treat patients with metastatic castrate-resistant prostate cancer (mCRPC). It is a potential CAR-T immunotherapy designed to supercharge a patient’s own T cells to safely and effectively eliminate tumor cells carrying prostate-specific membrane antigen (PSMA), which is expressed on the majority of prostate cancer cells.

In August 2021, Poseida announced [preliminary data from our Phase 1 trial of P-PSMA-101](#), which provides further evidence of the effectiveness of our CAR-T platform for solid tumor cancers. To date, other CAR-T therapeutics have not had much success outside of hematologic malignancies. The deep and durable responses in our trial demonstrate that CAR-T products have the potential to work well against solid tumors, even at low doses, when using the appropriate technology platform.

To learn about the P-PSMA-101-001 study, visit [ClinicalTrials.gov](https://clinicaltrials.gov) using identifier: NCT04249947. To learn more about Poseida’s approach to CAR-T therapies, visit [the Poseida website](#).