Adoptive T-Cell Therapy

What is Adoptive T-Cell therapy?

Adoptive T-cell therapy is a type of immunotherapy that attempts to boost the natural ability of the patient’s T-cells (killer cells) to fight cancer. T-cells are taken from the tumor, then those that are most active against the tumor are grown in large batches in the lab, engineered to be more resilient and then given back to the patient to help the immune system fight the cancer. The process of growing your T cells in the lab can take 2 to 8 weeks, and during this time, patients may have treatments such as chemotherapy and radiation therapy. After these treatments, the T-cells that were grown in the lab are given back to the patient. This treatment gives the patient’s immune system a better chance to fight the cancer cells and is intended to keep the patient in remission longer.

The idea behind this approach is that the TILs have already shown the ability to target tumor cells, but there may not be enough of them in the tumor microenvironment to kill the tumor or to overcome the immune suppressive signals that the tumor is releasing. Introducing massive amounts of activated TILs can help to overcome these barriers.

How Successful is Adoptive T-Cell Therapy?

Adoptive T-Cell Therapy holds a lot of promise. In a summary of TIL therapy clinical trials, TIL therapy was found to induce complete and durable regression of metastatic melanoma. Tumor reduction of 50% or more was observed in about half of patients. Some patients experienced complete responses with no detectable tumor remaining years after treatment. In one clinical trial, among the 93 patients treated with TILs, 19 patients had complete remissions that lasted greater than 3 years.

Clinical trials using TILs to treat other tumor types,

including lung, ovarian, bladder, and breast, are ongoing and promising.

Who is a good candidate?

Clinical trials for a number of tumor types are ongoing in the USA and across the world. Click here to search a complete list.

Adoptive T-Cell therapy requires live cancer cells (tissue or fluid) be preserved at the time of surgery or biopsy and under specific sterile conditions. Live tumor preservation is not routinely done by your hospital. Banking tumor tissue or fluid is an ideal way to test your candidacy for experimental treatments.

Request more information about Adoptive T-Cell Therapy or schedule a free consultation with one of our advisors.

A call with a patient advisor from StoreMyTumor is the quickest way to get answers to your questions. This is a free conversation, and there is no obligation to utilize StoreMyTumor.

Schedule a Call Back

Our Services

Tumor Preservation

(Step 1)

Preserve your cancer cells/tissue (in multiple formats) for advanced testing and study, either immediately or at a later time.

Advanced Testing

Personalized Chemo / Drug Therapy

Test and prioritize which chemo or drug combination your tumor is most likely to respond to before treatment begins.

Targeted Therapy (Genomic Testing)

Identify approved and experimental drugs that target specific biomarkers present in your tumor.

Immune Therapy

Personalized Vaccines

Activate and train your immune system to recognize and fight your cancer from within and in parallel.

Adoptive T-Cell Therapy

Boost and strengthen the natural ability of your T-cells (killer cells) to attack and destroy cancer cells.