LEUKEMIA & LYMPHOMA SOCIETY®

The CAR T-Cell Therapy Process

Below explains how the CAR T-cell therapy process works. For more detailed information about this process, visit **www.LLS.org/CART**.

1 THE PATIENT AND DOCTOR TALK

- A patient decides with his/her doctor that CAR T-cell therapy is the right treatment option.
- The patient then schedules a time in the hospital or treatment center for his/her T cells to be collected.

2 IN THE HOSPITAL/ TREATMENT CENTER

- Blood is taken from the patient.
- The white blood cells (which include T cells) are separated out and the rest of the blood is put back into the patient's bloodstream. This is called leukapheresis.
- The patient's T cells are sent to the lab/ manufacturing facility.

3 IN THE LAB/ MANUFACTURING FACILITY

- The patient's T cells are modified or genetically engineered (changed) to find and kill cancer cells.
- The engineered T cells are now called CAR T cells.
- The patient's CAR T cells are multiplied until there are millions of them. Then, they are frozen.
- The patient's CAR T cells are sent back to the hospital or treatment center where the patient is being treated.

4 IN THE HOSPITAL/ TREATMENT CENTER

- The patient receives a course of chemotherapy to reduce the number of normal T cells in the body to make space for the CAR T cells.
- The patient's CAR T cells are thawed and then put back into the patient's bloodstream.

5 IN THE PATIENT'S BODY

- The CAR T cells multiply in the patient's bloodstream.
- The CAR T cells find and kill the cancer cells.
- The CAR T cells may remain in the bloodstream to attack if cancer returns.

6 MONITORING THE PATIENT

- The patient's doctor will monitor the patient for side effects. The patient may need to stay in or return to the hospital for a period of time.
- The doctor will continue to follow up with the patient to understand the long-term results of the treatment.

LLS appreciates the review of this material by

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Please reach out to our Information Specialists for more information about this and other disease, treatment, and support concerns at **800.955.4572** or **www.LLS.org/InformationSpecialists**.