

IMMUNOTHERAPY

THE FACTS | CELL THERAPY

A therapeutic approach where cells are used to treat cancer. One popular form of cell therapy is the use of CAR T cells.

← CELL THERAPY

MECHANISM OF ACTION

An immunotherapy approach called adoptive cell transfer (ACT)

WHERE...



a patient's T cells



are modified in a laboratory



so they attack cancer cells

TILS
(tumor infiltrating lymphocytes: immune cells found in cancers)

CARs* (called **CAR T-cell therapy**)
the one that has advanced the furthest in clinical development

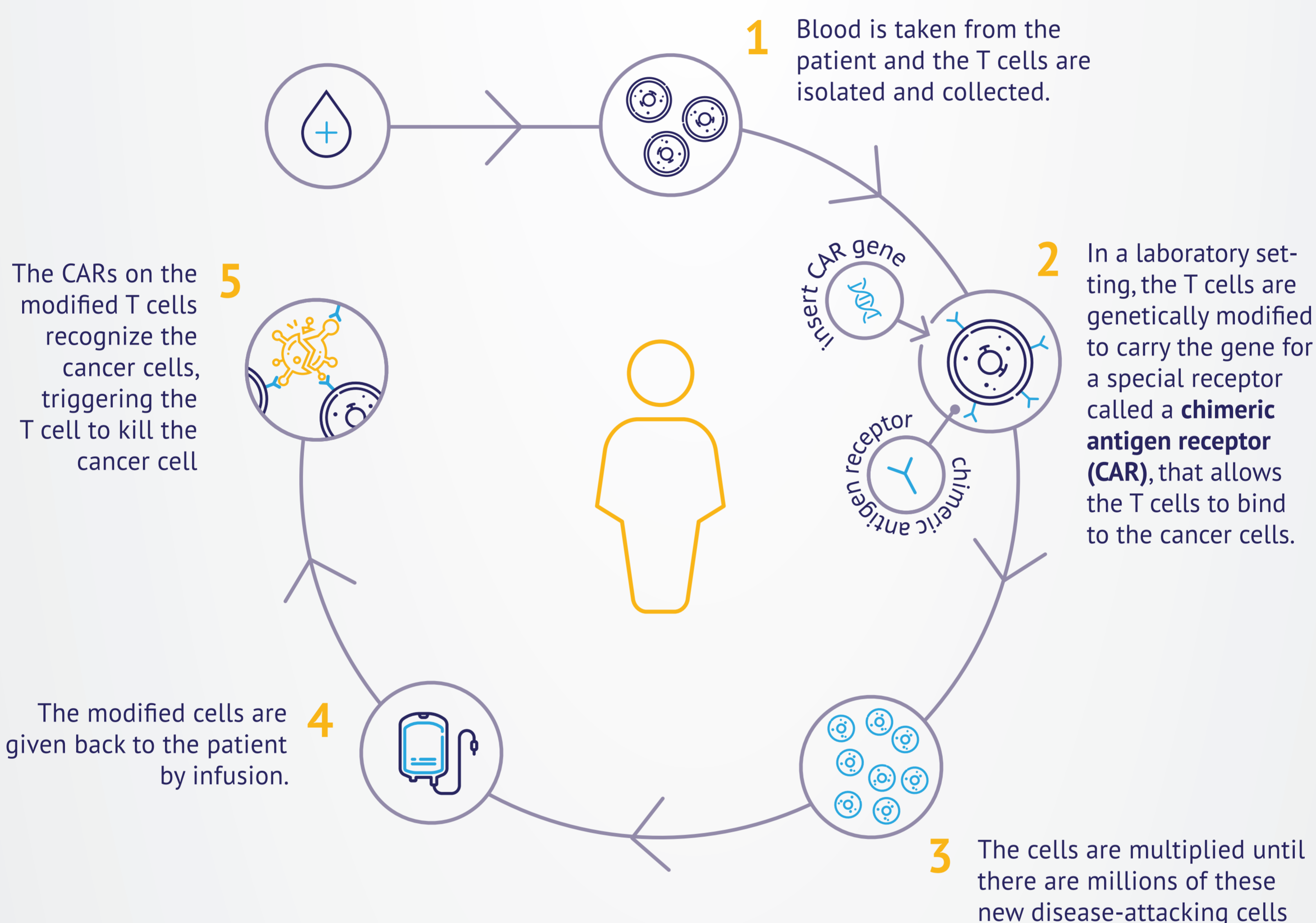
TYPES OF CELLS

CAR T → Chimeric Antigen Receptor T-cell. The engineering of a patient's T cells to treat their cancers.

HOW IT WORKS



CAR T-cell therapy is being studied in the treatment of some types of cancer.



PAST

Treatment up until just recently was restricted to small clinical trials, largely in patients with advanced blood cancers.



NOW

The treatments have captured the attention of researchers and the public with remarkable responses in some patients for whom all other treatments had stopped working.

HOW IS IT BEING USED

IN CANADA



To date, only **one** [1] CAR-T cell therapy has been approved by Health Canada.

INDICATIONS - WHAT CANCERS

Blood cancers

- Acute Lymphoblastic Leukemia (ALL) (paediatric only)
- Advanced Lymphomas (DLBCL)
- Chronic Lymphocytic Leukemia*
- Multiple Myeloma*

**While CAR-T cell therapy is available to blood cancers like ALL and DLBCL, it continues to broaden to other indications based on new clinical trials.*

COMMON SIDE EFFECTS

	HIGH FEVER		FATIGUE
	HYPOTENSION		RENAL TOXICITY
	PULMONARY EDEMA		CYTOKINE RELEASE SYNDROME
	BRAIN TOXICITY		LOW WHITE BLOOD CELL COUNT
	LOW RED BLOOD CELL COUNT		