

Cure for cancer? Two patients leukemia free a decade after breakthrough gene therapy

Penn researchers in 2010 treated their first chronic lymphocytic leukemia patients with [CAR-T therapy](#), which uses the body's own immune system to fight cancer. In a paper [published \[February 2\] in the journal Nature](#), researchers report that their first two patients were still cancer-free 10 years after their treatment. What's more, the cells were still present, protecting against future lymphoma invaders.

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The therapy's effectiveness and longevity are "beyond our wildest expectations," one of the doctors told reporters Tuesday.

"Doctors don't use words like *cure* lightly or, frankly, very often," said David L. Porter, the director of Cell Therapy and Transplantation at Penn. "When we started this, I don't think we were expecting this would develop into such a powerful curative therapy."

Chimeric Antigen Receptor (CAR) T therapy genetically modifies the body's T-cells — the white blood cells that play a lead role in the body's immune response to foreign particles — to attack cancer.

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Researchers said they hope their findings about the effectiveness of CAR-T treatment among leukemia patients will spur more research into how the therapy can be used to treat other types of cancer.

[This is an excerpt. Read the original post here.](#)