

Defanged HIV a positive for gene therapy

The scientific community witnessed an unexpected medical breakthrough last year, when a child with acute lymphoblastic leukemia (ALL) was treated with the help of HIV. Emily Whitehead, who was 7 at the time, underwent an experimental treatment in which millions of T cells were extracted from her body and re-engineered to target cancer cells. Researchers delivered new genes to the T cells through a disabled HIV strain that specifically targeted CD19 proteins on the surface of most B cells, immune cells that turn malignant in leukemia. Since the treatment, Emily has been in full remission and has gone back to school. She is now living a healthy and happy life.

Read the full, original story here: [Opinion: How HIV Became Positive](#)