First Gene Therapy for Cancer Recommended for Approval

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Since 2010, multiple experiments have attempted to boost the immune system in leukemia patients. The treatment, developed at the University of Pennsylvania, involves removing millions of T-cells from the patient, genetically altering them to recognize the cancer cells and then putting them back into the patient.

One study, performed by Novartis, has an 82.5% remission rate. In their their study of 63 patients, 52 of them went into remission. The treatment however does have side effects, and some of them can be severe. The first child to be given the engineered cells had this done when she was 6 years old, came out of it cancer free and has been healthy since 2012. The panel recommended approval of the treatment for patients (aged 3 to 25) with B-cell acute lymphoblastic leukemia (ALL).1

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1 "Novartis CAR-T cell therapy CTL019 unanimously (10-0) recommended for approval by FDA advisory committee to treat pediatric, young adult r/r B-cell ALL." Novartis (2017). [NOVARTIS]

Source
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