

**'She has big things ahead of her.' CAR-T cell therapy gives Florida teen hope**

NATS	(Bat hits softball)
<b>Brooke Michael Patient</b>	"I started playing softball when I was five. Being a catcher, you have to be strong."
	Brooke Michael knows more than the average teenager about being strong.  In November 2020, then 17 years old and a high school senior, she called her mom in pain after softball practice.
<b>Stephanie Michael Brooke's Mother</b>	"She had been sick about five weeks prior, but we thought she had a shoulder injury."
	Brooke was also struggling to breathe.  Stephanie took her daughter to a pediatric hospital, where physicians found fluid around her heart and a tumor compressing her airway.
	"They had told us she had anywhere between hours and days to live."
	Brooke's diagnosis: primary B-cell lymphoma, a cancer of the immune system that tends to affect young people.
	"Cancer — when you get that diagnosis, especially with your child — it's hard. And it's hard to stay positive, but you have to,"
	After six cycles of chemotherapy and proton radiation therapy...
	"My cancer wasn't really responding."
	Soon after, Brooke and her family turned to the Mayo Clinic Cancer Center.  Physicians believed Brooke was a good candidate for chimeric antigen receptor-T cell therapy, also known as CAR-T cell therapy.

	The personalized treatment collects a patient's T cells, which normally help fight off infections, and genetically engineers them to target lymphoma.
<b>Madiha Iqbal, M.B.B.S., M.D. Hematology/Oncology Mayo Clinic</b>	"CAR-T represents a real game changer and essentially represents the future of lymphoma treatments."
	Dr. Madiha Iqbal is a Mayo Clinic hematologist and oncologist and member of Brooke's care team.
	"When I first heard about CAR T, I was a little bit nervous but pretty excited to hear they were pretty optimistic, and they had seen good outcomes."
	In November 2021, almost a year to the day of her diagnosis, Brooke's modified cells were infused back into her body.
	"We assess response to CAR-T cell therapy at 30 days after the cell infusion. Brooke had a remarkable response; her disease had almost completely gone."
	Brooke's body maintained that response through her 100-day checkup.
	"Scientists and physicians are becoming more comfortable calling these patients as cured."
	For Brooke, that means being back on the diamond: catching on the same college team as her twin sister Brittany.
	"It was really exciting, definitely getting back on the softball field and starting with Brittany because that's what we always dreamed of."
	She says time spent in the hospital also helped reaffirm her career dreams.
	"I've always wanted to be a nurse since I was young, but going through this really made me feel like I wanted to help people."
	A dream Stephanie sees coming true.

	<p>"I hate that she's on this journey, but I feel like she has big things ahead of her in her life. Because of this, she'll be able to help people with this."</p>
	<p>Though Brooke will have ongoing checkups, her family's focus is on the future.</p>
	<p>"She feels great. You'd never know she had cancer."</p>
	<p>"I don't really think about the past at all anymore because I'm really in a normal life now. I gotta life to live."</p>
	<p>For the Mayo Clinic News Network, I'm Alex Osiadacz.</p>