Innovative CAR-T cancer treatments offer cures-and sometimes high risks

[T]here's a reason CAR-T is reserved for [cancer] patients that fail to improve under front-line treatments: it comes with horrid side effects and can itself be fatal. We are slowly finding exciting treatments for formerly deadly diseases, but the pathway remains riddled with landmines.

CAR-T is not a drug; it's a genetically modified cell therapy.

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One of the ways T cells unleash havoc is by spraying out pro-inflammatory molecules, called cytokines, that recruit other immune cells to join the fray. If the CAR-T cells are too potent, or if there are too many of them, the patient is swamped in cytokines, resulting in a severe inflammatory condition called cytokine release syndrome (CRS). In the successful Novartis trial, <u>nearly half</u> of the patients experienced this side effect, though they all recovered. Most CRS sufferers experience a high fever that recedes in the two weeks following treatment. But in the worst cases of CRS, which get dubbed cytokine storm, that fever can lead to a fatal swelling of the brain.

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The excitement around CAR-T may not yet be at its crescendo. As of this writing, <u>nearly 400</u> CAR-T clinical trials are registered with the FDA, <u>some even targeting brain tumors</u>. But CAR-T is not some miracle cure. CRS is a potentially deadly side effect that many patients will suffer.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: <u>CAR-T could revolutionize cancer treatment</u>. It can also be fatal