A Complex Cure Trial

Participants will first receive a therapeutic vaccine to enhance CD8 T cells' ability to kill virus-infected cells.

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Experts think achieving a functional cure for HIV will require a combination approach, as is true for antiretroviral treatment. In the trial Tom Perrault has joined, participants will first receive a therapeutic vaccine that contains DNA instructions for making HIV proteins, followed by a booster, to enhance CD8 T cells' ability to kill virus-infected cells. Next, they will get a TLR9 agonist to coax HIV out of hiding and promote natural killer cell activity. They will also receive broadly neutralizing antibodies that can inactivate diverse strains of HIV. Finally, they will undergo a carefully monitored analytic treatment interruption to see whether HIV remains suppressed after they stop antiretrovirals. The study aims to enroll 20 people living with HIV, 15 of whom—including Perrault—started treatment at an early stage. According to Rowena Johnston, PhD, amfAR's vice president and director of research, this is "by far the most complex cure trial that anyone has undertaken to date."
