



The Elite Meet

Some positive people don't need meds. Are their genetic mysteries about to crack HIV's code?

September 1, 2007 By Laura Whitehorn

Bruce Walker, MD, wants HIV-positive immune systems to exert a little self-control. "The immune system is able to contain other viruses," says Walker, widely known for his groundbreaking work on the subject. He is investigating how it can do that for HIV.

The answer may lie within the genes of those positive people who manage HIV without taking meds—some for more than 25 years so far. These folks fall into two groups—either viremic (viral load consistently under 2,000 for at least one no-med year) or elite controllers (viral load consistently below 50 without meds). Walker and his team are looking for more members of both groups to fill out his HIV elite controllers study.

In June, Walker, director of Boston's Partners AIDS Research Center, said, "We began genotyping the DNA of the first 600 controllers," including 300 viremic and 300 elite, plus 900 progressors, or positive people who do need meds.

Comparing these genetic profiles may reveal, for example, why some people's immune systems seek out certain HIV surface proteins. "For each person we will get 650,000 pieces of data," Walker says. Initial results from the first round were expected in August. Paul de Bakker, PhD, statistical geneticist on the study, adds that the small pool (fewer than 1,000 people) "limits our statistical ability to find the [relevant] variants." More participants (you could qualify if you've been off meds for at least a year now) would produce more significant results. Walker estimates that some 25% of all positive people may fit the trial criteria.

To join the study, you don't have to travel—just your blood sample does. Your doc sends it off with a bit of your treatment history. Your participation may help unlock the secrets of HIV treatment—and potential vaccines. Call 617.726.5536; or e-mail elitecontrollerstudy@partners.org.