Second-line Treatment Fails Twice as Often as First-line

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A person's first antiretroviral (ARV) drug regimen remains the best opportunity he or she has in terms of keeping viral load undetectable, suggests a study presented at the Ninth International Congress on Drug Therapy in HIV Infection in Glasgow. According to AIDSmap's review of the study, second-line regimens—notably those not containing a selection of all-new ARVs—are twice as likely to fail within a year, compared with first-line drug combinations.

Much has been written about the effectiveness of various ARV regimens in people starting therapy for the first time. But what happens to those who experience viral load rebounds on these drug combinations and need to switch to another regimen?

To explore this question, Colette Smith, MD, from Royal Free and University College Medical School in London, and her colleagues examined the medical records of 166 patients who experienced a rebound in viral load after having undetectable HIV levels for at least four months while on an initial drug regimen—a telltale sign of treatment failure—followed by a subsequent failure on a second-line regimen.

Fourteen percent of people needed to switch their first-line regimen within 12 months after starting it, Dr. Smith's group reported. By comparison, 29 percent of people needed to switch their second-line regimen within 12 months.

Twenty-seven percent of people saw their first-line regimen stop working after three years on treatment. Forty-four percent of people's second-line regimens stopped working after three years.

Smith's team also reported that the number of switched drugs was important. People who changed three or more first-line drugs were 10 times more likely to have their second-line regimen work well than people who only switched one drug. People who only switched two drugs were four times as likely to have second-line regimen success than those who switched only one drug.