

Studies Shed More Light on Weight Gain

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February 13, 2023 By [Liz Highleyman](#)

Switching from the newer tenofovir alafenamide (TAF) to the older tenofovir disoproxil fumarate (TDF) may help people with HIV lose weight, but doing so because of weight gain is not recommended, according to new guidelines.

In recent years, there's been growing concern about weight gain after starting or switching antiretrovirals. Some of the largest increases have been seen in people who start potent integrase inhibitors, such as dolutegravir, and TAF, especially when used together. In the ADVANCE trial in South Africa, which compared first-line regimens, people who started on dolutegravir, TAF and emtricitabine gained about 19 pounds over four years.

But integrase inhibitors and TAF may not be entirely to blame. TDF can lead to reduced cholesterol and triglyceride levels and either weight loss or absence of expected weight gain over time. TAF lacks this weight-suppressing effect, so people who switch from TDF to TAF may experience weight gain and rising blood fat levels.

Researchers analyzed weight and metabolic changes among a subset of ADVANCE participants who switched to dolutegravir, TDF and lamivudine when national treatment guidelines changed. People who switched from either dolutegravir, TAF and emtricitabine or efavirenz, TDF and emtricitabine to the new regimen saw declines in body weight, cholesterol and triglyceride levels and blood sugar. A related study in Finland found that people who switched from TAF to TDF while keeping their other antiretrovirals unchanged maintained a stable weight after two years, while those who stayed on TAF gained about 3 pounds.

Some people might benefit from switching—or switching back—from TAF to TDF, but this must be balanced against the risk of kidney impairment and bone loss due to TDF, side effects TAF doesn't share. Until there's more evidence, "switching regimens because of weight gain is not recommended," according to new guidelines from the International Antiviral Society-USA (see item above). "Instead, lifestyle modifications, like exercise and diet intervention, are recommended."

