

New Tenofovir Tied to Weight Gain

A recent study sheds light on weight gain after switching to new form of tenofovir.

February 15, 2021 By [Benjamin Ryan](#)

People who switch to the new form of tenofovir (tenofovir alafenamide, or TAF) from the older one (tenofovir disoproxil fumarate, or TDF) gain significantly more weight than those who switch to TAF from abacavir.

Researchers analyzed data from about 975 adults who had suppressed HIV on an integrase inhibitor regimen, switched at least one nucleoside/nucleotide reverse transcriptase inhibitor and maintained viral suppression a year later. Roughly a third were of normal weight, a third were overweight and 30% had obesity at baseline. Within this group, 85% switched from TDF to TAF, while 15% switched from abacavir to TAF.

One year after the switch, people in the TDF-to-TAF group gained an average of about 3 pounds, compared with less than half a pound in the abacavir-to-TAF group. In the TDF-to-TAF group, 40% experienced a gain of at least 3% of their body weight, 26% gained at least 5% and 10% gained at least 10%. In the abacavir-to-TAF group, the corresponding proportions were 27%, 22% and 6%. People in the abacavir-to-TAF group were also more likely to lose weight.

Factors significantly associated with at least a 3% weight gain included switching from TDF rather than abacavir, female sex, being underweight or normal weight (as opposed to being overweight or having obesity) before the switch and having a pre-switch CD4 count under 200.

TDF is known to have a protective effect against weight gain and blood lipid abnormalities, while TAF lacks this property. Thus, people switching from TDF would lose this protective effect, while those switching from abacavir never would have benefited from it.

“These data suggest that differences in weight gain between TAF and TDF are likely driven by removal of TDF-associated weight suppression,” the researchers concluded.