

## LONGER TERM SAFETY OF F/TAF AND F/TDF FOR HIV PREP: DISCOVER TRIAL WEEK 96 RESULTS

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### Background

DISCOVER, a double-blind, randomized-controlled trial, compared F/TAF to F/TDF, demonstrating noninferior efficacy for HIV prevention, and improved bone mineral density (BMD) and renal biomarkers at week (W)48. We now report W96 safety outcomes.

### Methods

We evaluated renal and lipid parameters and weight changes in participants on F/TAF vs F/TDF. BMD was evaluated in younger participants (<25 years). We examined glomerular function, proteinuria, and renal biomarkers (PTI;β2M/Cr, RBP/Cr) in participants ≥50 years and those with moderate renal impairment (eGFR 60–<90 mL/min).

### Results

Among 5387 participants F/TAF (n=2694) users had significantly increased BMD, the magnitude of between-group differences increasing between W48 to W96. Participants <25 years had greater declines in BMD on F/TDF with a greater magnitude of difference between groups than those ≥25 years. Overall, F/TAF users had increases in eGFR and declines in UPCR and PTI biomarkers. Older F/TDF users had greater declines in eGFR and greater increases in UPCR and PTI markers compared to younger users. Similarly, those on F/TDF with eGFR 60–<90 mL/min had greater changes in PTI markers compared with those with eGFR ≥90 mL/min. F/TAF users had stable lipids through W96, whereas F/TDF users had decreases. Those on F/TDF had a smaller weight increase than those on F/TAF through W96.

### Conclusions

DISCOVER allows for the largest single-variable comparison of the tenofovir prodrugs without underlying HIV infection and in the absence of third antiretrovirals. Overall, those on F/TAF had increased BMD compared to declines in F/TDF users, with more pronounced differences in younger participants. Older participants on F/TDF and those

with impaired renal function had more adverse impact on renal biomarkers. Lipid and weight changes were consistent with the known lipid-lowering and weight suppressive effects of TDF. F/TAF is a safe, longer-term option for PrEP, with certain subgroups experiencing greater benefits in BMD and renal biomarkers.

**Disclosure**

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