



PrEP to Prevent HIV and Promote Sexual Health

May 2022

Table 2: Comparison of Benefits, Limitations, and Risks of Available PrEP Regimens		
All PrEP Regimens	Oral PrEP With TDF/FTC or TAF/FTC	Injectable PrEP With CAB LA
Benefits		
<ul style="list-style-type: none"> Highly effective when taken as directed May decrease anxiety regarding HIV acquisition Engages sexually active at-risk individuals in care who are then screened regularly for STIs 	<ul style="list-style-type: none"> 99% effective in reducing the risk of HIV acquisition when used as prescribed Single tablet taken daily Good safety profiles in people who do not have HIV Minimal adverse effects, most of which resolve in a brief period of time or can be managed TDF/FTC appears to be safe for use during attempts to conceive and during pregnancy Treats HBV infection 	<ul style="list-style-type: none"> Statistical superiority to TDF/FTC has been attributed to a lack of adherence to the oral regimen Indicated for all sexual exposures Administered once every 2 months Directly observed therapy Potential option when adherence to oral PrEP may be challenged by ongoing substance use or mental health concerns, neurocognitive disorders, difficulty swallowing pills, privacy concerns, or other challenges
Limitations		
<ul style="list-style-type: none"> Protection correlates with adherence to the dosing schedule No significant protection against STIs other than HIV [a] 	<ul style="list-style-type: none"> Requires close adherence to the daily administration schedule Requires planning and adherence when TDF/FTC is dosed on demand Requires additional monitoring in patients with chronic HBV infection Cost of TAF/FTC (no generic available) No data on TAF/FTC for individuals who inject drugs 	<ul style="list-style-type: none"> Requires deep IM injection Lack of data on use during pregnancy or breastfeeding No data for individuals who inject drugs Requires oral medications as bridging therapy when injections are missed Requires ≥6 in-person healthcare visits per year Does not treat HBV coinfection Not appropriate for individuals with injectable silicone or other fillers in the gluteal area Implementation logistics Cost (no generic available)
Risks		
<ul style="list-style-type: none"> Potential for delayed detection of HIV infection using standard HIV testing algorithms Continued use after undiagnosed HIV infection may result in development of drug-resistant virus 	<ul style="list-style-type: none"> Safety concerns for individuals with impaired kidney function Compared with TAF, TDF may be associated with reversible decreases in bone density 	<ul style="list-style-type: none"> Potential injection site reactions and other adverse events, including pyrexia Long tail phase once treatment is discontinued Potential for breakthrough infections despite on-time injections
<p>Abbreviations: CAB LA, long-acting injectable cabotegravir (brand name Apretude); HBV, hepatitis B virus; HSV, herpes simplex virus; IM, intramuscular; PrEP, pre-exposure prophylaxis; STI, sexually transmitted infection; TAF/FTC, tenofovir alafenamide/emtricitabine (brand name Descovy); TDF/FTC, tenofovir disoproxil fumarate/emtricitabine (brand name Truvada).</p> <p>Note:</p> <p>a. Some protection against HSV has been reported in heterosexual populations without HIV [Celum, et al. 2014].</p>		

Reference

Celum C, Morrow RA, Donnell D, et al. Daily oral tenofovir and emtricitabine-tenofovir preexposure prophylaxis reduces herpes simplex virus type 2 acquisition among heterosexual HIV-1-uninfected men and women: a subgroup analysis of a randomized trial. *Ann Intern Med* 2014;161(1):11-19. [PMID: 24979446] <https://pubmed.ncbi.nlm.nih.gov/24979446>