PrEP to Prevent HIV and Promote Sexual Health





All PrEP Regimens	Oral PrEP With TDF/FTC or TAF/FTC	Injectable PrEP With CAB LA	Injectable PrEP With SC LEN
Benefits			
 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 	 99% effective in reducing the risk of HIV acquisition when used as prescribed TDF/FTC: Indicated for all sexual and injection exposures TAF/FTC: Use for all sexual exposures (with shared decision-making for receptive vaginal sex) Single tablet taken daily, and for TDF/FTC can also be taken before and after sex Good safety profiles in people without HIV Minimal adverse effects, most of which are manageable or resolve quickly Appear to be safe for use during attempts to conceive and during pregnancy Treats HBV infection 	 Statistical superiority to TDF/FTC has been attributed to a lack of adherence to the oral regimen Indicated for all sexual exposures Administered intramuscularly once every 2 months Directly observed therapy Advantageous 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 	 Statistical superiority to TDF/FTC and TAF/FTC has been attributed to a lack of adherence to the oral regimen Indicated for all sexual exposures Administered subcutaneously once every 6 months Directly observed therapy Advantageous 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
Limitations			
 Protection correlates with adherence to the dosing schedule No significant protection against STIs other than HIV (some protection against HSV reported in heterosexual populations without HIV [Celum, et al. 2014]) 	Requires daily adherence Requires planning and adherence when TDF/FTC is dosed on-demand Requires additional monitoring in patients with chronic HBV Cost of TAF/FTC (no generic available) No data on TAF/FTC for individuals who inject drugs	 Requires deep intramuscular injection 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 Potential absorption issue for individuals with injectable silicone or 	 Increased risk of long-term impactful medication interactions Data pending for individuals who inject drugs Requires oral medications as bridging therapy when injections are missed Does not treat HBV coinfection Implementation logistics Cost (no generic available)



Table 2: Benefits, Limitations, and Risks of Available PrEP Regimens				
All PrEP Regimens	Oral PrEP With TDF/FTC or TAF/FTC	Injectable PrEP With CAB LA	Injectable PrEP With SC LEN	
		other fillers in the gluteal area; discuss risks and consider ultrasound for assessment and alternative PrEP options		
		Implementation logistics		
		Cost (no generic available)		
Risks				
Continued use after undiagnosed HIV infection may result in development of drug-resistant virus	 Safety concerns for individuals with impaired kidney function Compared with TAF, TDF may be associated with reversible decreases in bone density in adults and irreversible bone density loss in individuals aged ≤19 years 	 Potential injection site reactions and other adverse events, including pyrexia Potential for delayed detection of HIV infection using standard HIV testing algorithms Long tail phase once treatment is discontinued Rare breakthrough infections despite on-time injections Breakthrough infection may eliminate first-line ART options 	 Injection site reactions are common (nodules, pain, and erythema at injection site) Long tail phase once treatment is discontinued Rare breakthrough infections despite on-time injections 	

Abbreviations: ART, antiretroviral therapy; CAB LA, long-acting injectable cabotegravir (Apretude); HBV, hepatitis B virus; HSV, herpes simplex virus; SC LEN, subcutaneous lenacapavir (Yeztugo) PrEP, pre-exposure prophylaxis; STI, sexually transmitted infection; TAF/FTC, tenofovir alafenamide/emtricitabine (Descovy); TDF/FTC, tenofovir disoproxil fumarate/emtricitabine (Truvada).

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

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