HIV Pre-Exposure Prophylaxis (PrEP)

(modified August 2024)

Use this checklist to identify high-risk patients and safely prescribe and monitor HIV PrEP therapy.

Goal	Suggested Approach
Identify potential candidates	☐ Talk about HIV PrEP with ALL sexually active adults and adolescents.[3] ☐ Be aware of high-risk activities, realizing that not all patients will openly share this information. These high-risk activities may include:[3,23] o having unprotected sex with multiple partners, especially men who have sex with men. o having a sexual partner that is HIV positive. o recent IV drug use, especially if sharing needles (within the last six months). o recent STIs, such as chlamydia, syphilis, and gonorrhea (e.g., within the last three to six months). o commercial sex work.
Screen potential candidates	☐ Look for signs and symptoms of acute HIV infection (e.g., fever, night sweats).[1,14] ☐ Document a **negative HIV test**.[1,14] o If suspicion is high for an acute HIV infection, repeat the HIV test in about a month to **confirm a negative result** before prescribing PrEP.[1] o Emtricitabine 200 mg/tenofovir disoproxil fumarate 300 mg (*Truvada*) and cabotegravir (*Apretude*) use in HIV-positive patients are both linked to developing drug-resistant HIV.[1,8,9,27,29] It is not yet known if there is a link to drug-resistant HIV with emtricitabine 200 mg/tenofovir alafenamide 25 mg (*Descovy*) use in HIV-positive patients.[16] ☐ Determine **pregnancy and breastfeeding status** and discuss risks and benefits. ☐ Screen for STIs and hepatitis.[1] (Note there are not data available for use of cabotegravir for PrEP in patients coinfected with hepatitis B or C.[27,29])
Be familiar with possible HIV **PrEP regimens**	☐ Approved PrEP options for adults and adolescents ≥35 kg include: o ***Truvada*** (200 mg/300 mg) PO once daily.[3,5,8,9] (In Canada, *Truvada* is only approved for use as PrEP in adults.) o ***Descovy*** (200 mg/25 mg) PO once daily (select patient groups, see row "Consider high-risk behaviors").[3,16,19] o **Cabotegravir** (*Apretude*) 600 mg given as a gluteal intramuscular (IM) injection (first two doses separated by four weeks, then continued every eight weeks [injected by a healthcare professional]).[3] (Note there is an optional four-week oral lead-in [*Vocabria*, *Apretude* (Canada); **see footnote a**] for patients worried about side effects of a long-acting injection].[3]) ☐ Usually consider an oral option as first-line PrEP (See considerations in the rows below).[3] ☐ Think of long-acting injectable cabotegravir PrEP for patients who:[3] o have difficulty taking oral PrEP options. o prefer getting a shot every two months over taking daily oral PrEP.

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Goal	Suggested Approach
	○ have severe kidney impairment (CrCl <30 mL/min) (see row "Consider kidney function").
Consider **high-risk behaviors**	☐ *Truvada* is a recommended PrEP option regardless of high-risk behaviors.[3] ☐ **Men or transgender women who have sex with men**: ○ *Descovy* PrEP is only recommended in this high-risk group, because this is how it was studied.[3] However, note there are less data in Black patients and transgender women, compared to white men who have sex with men.[15,20] ○ *Apretude* is more effective than *Truvada* in men, women, and transgender women who have sex with men.[4] Note there may be concerns for delayed HIV detection and the development of integrase strand-transfer inhibitor (INSTI) resistance in cases of *Apretude* PrEP failure.[4] ☐ **Receptive vaginal sex**: *Descovy* is NOT approved for PrEP in this group of high-risk patients.[17,18,24] ☐ **IV drug use**: *Truvada* is the preferred PrEP regimen for IV drug users, due to lack of data with *Descovy* and *Apretude*.[3]
Consider **kidney function**	☐ Ensure CrCl is:[2,3,5,8,9,17,18] ○ ≥60 mL/min (*Truvada* for PrEP) ○ ≥30 mL/min (*Descovy*) ☐ *Apretude* can be considered in patients with severely impaired kidney function (i.e., CrCl <30 mL/min).[3,27]
Consider **pregnancy and breastfeeding** status	☐ Experts recommend use of *Truvada* as PrEP in patients at high risk of HIV who are pregnant or breastfeeding, as benefits outweigh risks.[13,24] ○ Data do not show an increase in birth defects or adverse pregnancy outcomes for pregnant patients using *Truvada* for treatment of HIV [Evidence Level B-2].[1,7,24] ☐ Human data are lacking to evaluate the safety of *Descovy* or *Apretude* in patients who are pregnant or breastfeeding.[17,18,24] ○ Patients should not breastfeed if taking *Descovy* for HIV prevention or treatment.[8,9,17,18,24] ○ *Apretude* is not recommended for use during pregnancy or while breastfeeding.[24]
Consider drug-drug **interactions**	☐ Consider using the Liverpool HIV Drug Interactions website (https://www.hiv-druginteractions.org/checker) or HIV/HCV Drug Therapy Guide website (https://hivclinic.ca/app/#drugInt) to screen for drug-drug interactions. ☐ There is potential for increased kidney injury and other side effects (due to increased tenofovir disoproxil fumarate levels) when ***Truvada*** is used with certain hepatitis C meds (e.g., ledipasvir/sofosbuvir [*Harvoni*], velpatasvir-containing formulations [*Epclusa*, *Vosevi*]).[8,9] ☐ Several meds can decrease tenofovir alafenamide or cabotegravir levels and possibly reduce PrEP effectiveness. Examples of meds not recommended with ***Descovy*** or ***Apretude*** include carbamazepine, phenobarbital, phenytoin, St. John's wort, and rifampin.[2,17,18,27,29]

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Goal	Suggested Approach
	☐ There is an increased risk of side effects with *Truvada* (including kidney injury), *Descovy*, or interacting drug, when *Descovy* or *Truvada* are used with drugs that are eliminated by active tubular secretion (e.g., acyclovir, aminoglycosides, high-dose or multiple nonsteroidal anti-inflammatory drugs [NSAIDs]).[8,9,17,18,22]
Consider **cost**	☐ Without insurance, PrEP costs:[11] o *Truvada*: US ~ $1,840 (brand) or ~ $80 (generic); Canada ~ $915 (brand) or ~ $475 (generic) for one month. o *Descovy*: ~ $2,040 (US); ~ $845 (Canada) for one month. o *Apretude*: ~$3,700 (US); ~$1,850 (Canada) per dose. ☐ See the last row "Help patients afford PrEP."
Determine if **on-demand oral PrEP** is an option	☐ Non-daily PrEP or on-demand PrEP may also be referred to as "event-driven" or "intermittent" PrEP.[3] ☐ **On-demand *Truvada*** may be considered for men who have sex with men.[5,12] (No data for on-demand *Descovy*.) ☐ On-demand *Truvada* (200 mg/300 mg) can be complicated. Use "2-1-1" to help patients with on-demand dosing:[3,5,12,26] o 2: take two tablets two to 24 hours prior to sexual exposure (closer to 24 hours is preferred). o 1: take one tablet 24 hours after the first dose. o 1: take one tablet 48 hours after the first dose. ☐ If the interval between the last dose of a 2-1-1 regimen and the next sexual encounter is:[3] o <7 days: take one tablet daily until 48 hours after the last sexual encounter. o ≥7 days: use the 2-1-1 regimen as described above.
Monitor patients receiving **oral** PrEP	☐ Patients receiving **oral PrEP** should be seen **at least every 90 days**. Recommended monitoring includes: o Every three months:[3] ☐ check HIV status ☐ screen for bacterial STI (men and transgender women who have sex with men [all patients per Canadian guidelines][5]) ☐ assess medication adherence and drug-drug interactions (See the row above "Consider drug-drug interactions") ☐ provide access to clean needles and drug treatment services (patients who inject IV drugs) ☐ check pregnancy status (patients with potential to become pregnant)[24] o Every six months:[3] ☐ assess kidney function (patients ≥50 years old or with a CrCl <90 mL/min when PrEP was started [no specific recommendations in Canadian guidelines][5]) ☐ screen for bacterial STI (all sexually active patients [every three months per Canadian guidelines]) o Every 12 months:[3] ☐ assess kidney function (all patients [no specific recommendations in Canadian guidelines][5]) ☐ screen for chlamydia (heterosexually active men and women [not specifically addressed in Canadian guidelines][5])

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Goal	Suggested Approach
Continued… Monitoring oral PrEP, continued	☐ monitor weight, triglycerides, and cholesterol for patients taking *Descovy* PrEP (US) ☐ Bone density monitoring is **NOT necessary for patients taking PrEP**. o *Truvada* use has NOT been linked to increased fractures, despite increased osteopenia and complaints of bone pain.[1] o *Descovy* may be associated with improved bone mineral density biomarkers (as seen on DXA scans), compared to *Truvada*.[15,16] ☐ Monitor liver function tests if patients become HIV positive and are coinfected with hepatitis B. o Stopping *Descovy* or *Truvada* in patients **coinfected with hepatitis B and HIV** can lead to acute hepatitis B exacerbations.[8,9,17,18]
Monitor patients receiving **injectable cabotegravir** for PrEP	☐ One month after the first injection:[3] o check HIV status ☐ Every two months (starting with the third injection [four months into therapy]):[3] o check HIV status o provide access to clean needles and drug treatment services for people who inject IV drugs ☐ Every four months (starting with the third injection [four months into therapy]):[3] o Screen for bacterial STIs (men and transgender women who have sex with men) ☐ Every six months (starting with the fifth injection [eight months into therapy]):[3] o Screen for bacterial STIs (men and transgender women who have sex with men) ☐ Every 12 months (starting one year after the first injection):[3] o evaluate patient's desire to continue cabotegravir for PrEP o screen for chlamydia (heterosexually active men and women) ☐ When stopping injectable cabotegravir, continue to check HIV status every three months for 12 months AND:[3] o discuss HIV prevention plans. o educate patients about the injectable cabotegravir's "tail" effect (i.e., slowly declining cabotegravir levels) and the risk of developing drug-resistant HIV if the patient becomes infected with HIV during this time period. o start oral PrEP (if appropriate) eight weeks after the last cabotegravir injection.
Counsel patients	☐ Tell patients who are initiating **oral** PrEP or restarting after doses have been held (e.g., hospital admission) how long it takes for drug levels to build up for maximal protection (i.e., ~7 days [rectal tissue], ~20 days [blood and vaginal tissue]).[1,21,24] ☐ Stress adherence. Missed doses are linked to reduced effectiveness.[1] o Oral *Descovy* or *Truvada* significantly reduces the risk of HIV [Evidence Level A-1].[1,12,16] For example, one case of HIV can be prevented by treating about 56 men with *Truvada* or *Descovy* [Evidence Level B-1].[10] o There is a 14-day window for administering injectable cabotegravir injections (i.e., injections can be given up to seven days BEFORE or AFTER the due date).[3,27,29]

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Goal	Suggested Approach
Continued… Patient counseling, continued	▫ For planned injectable cabotegravir missed doses, patients can take oral cabotegravir 30 mg (*Vocabria* [US], *Apretude* [Canada]) once daily for up to two months to replace one missed dose of injectable cabotegravir (**see footnote a**).[27,29] ▫ For recommendations on unintentional missed doses, consult the product labeling for detailed instructions based on which injection is missed and how long it has been since the last injection.[27,29] ▫ Tell patients about possible side effects including diarrhea, nausea, abdominal pain, flatulence, headache, and weight loss. Reassure patients that side effects often go away in days to weeks.[1,2,6,16] ▫ Encourage acetaminophen if patients need something for pain. If possible, patients should avoid high dose or multiple NSAIDs, due to potential to reduce kidney function.[3,8,9,17,18] ▫ Encourage safe sex practices, including condoms. PrEP only protects against HIV, not other STIs.[1,3]
Help patients **afford PrEP**	▫ **In the US**, the Affordable Care Act requires plans and insurers to completely cover PrEP for patients at high risk of acquiring HIV including screening and laboratory testing, at least one medication, necessary monitoring, adherence counseling, and associated office visits.[25] o For **patients without insurance**, see if patients qualify for assistance: ▫ Ready, Set, PrEP (https://readysetprep.hiv.gov/). ▫ manufacturer: https://www.gileadadvancingaccess.com. ▫ Centers for Disease Control and Prevention (CDC): https://www.cdc.gov/hiv/prevention/prep.html#cdc_prevention_pre-paying-for-prep. ▫ See our chart, *Guide for Helping Patients Afford Their Medications*, for other possible resources. ▫ **In Canada**, for specific provincial and territorial coverage see: https://hivclinic.ca/wp-content/uploads/2019/07/ARV-Coverage_July-2019.pdf.

a. Oral cabotegravir (*Vocabria*, *Apretude* [Canada]) is FDA- and Health Canada-approved to **treat** HIV (in combination with rilpivirine). It is also approved for **short-term** PrEP as optional lead-in therapy prior to the first cabotegravir injection or as temporary coverage (up to two months) for patients receiving injectable cabotegravir if an injection is to be intentionally missed.[27-29]

Abbreviations: CrCl = creatinine clearance; HIV = human immunodeficiency virus; IV = intravenous; PrEP = pre-exposure prophylaxis; STI = sexually transmitted infection.

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In accordance with our goal of providing Evidence-Based information, we are citing the **LEVEL OF EVIDENCE** for the clinical recommendations we publish.

Level	Definition	Study Quality
A	Good-quality patient-oriented evidence.*	1. High-quality randomized controlled trial (RCT) 2. Systematic review (SR)/Meta-analysis of RCTs with consistent findings 3. All-or-none study
B	Inconsistent or limited-quality patient-oriented evidence.*	1. Lower-quality RCT 2. SR/Meta-analysis with low-quality clinical trials or of studies with inconsistent findings 3. Cohort study 4. Case control study
C	Consensus; usual practice; expert opinion; disease-oriented evidence (e.g., physiologic or surrogate endpoints); case series for studies of diagnosis, treatment, prevention, or screening.	

***Outcomes that matter to patients** (e.g., morbidity, mortality, symptom improvement, quality of life).

[Adapted from Ebell MH, Siwek J, Weiss BD, et al. Strength of Recommendation Taxonomy (SORT): a patient-centered approach to grading evidence in the medical literature. *Am Fam Physician* 2004;69:548-56. https://www.aafp.org/afp/2004/0201/p548.pdf.]

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