



Quick Reference HIV Guidelines for Community Pharmacists

HIV is a virus that uses the human immune system (specifically CD4 cells) to replicate. This weakens immune function and can lead to opportunistic infections. A prescribed combination of antiretroviral medications can slow disease progression and prolong survival by decreasing viral replication.

As a community pharmacist involved in HIV care, it is important that you review the following:

1. Treatment usually involves **three or more** antiretroviral medications. There are various classes of antiretrovirals (see: www.cfenet.ubc.ca for more information)
 - a. **nucleoside/ nucleotide reverse transcriptase inhibitors** (NRTIs): e.g. lamivudine (3TC), tenofovir, abacavir
 - b. **protease inhibitors** (PIs): e.g. atazanavir, darunavir, and ritonavir
 - c. **non-nucleoside reverse transcriptase inhibitors** (NNRTIs) e.g. nevirapine, efavirenz, rilpivirine
 - d. **integrase inhibitors**: bicitgravir, dolutegravir, elvitegravir, raltegravir
 - e. **fusion inhibitor**: enfuvirtide (Fuzeon) injection
 - f. **entry inhibitor**: maraviroc
2. **Adherence** is a critical factor for HIV treatment success. Missing doses, taking partial regimens, not adhering to food requirements may lead to treatment failure, resistance, and compromise future treatment options.
 - a. **All or Nothing Rule** – the prescribed antiretroviral regimen must be given in its entirety to ensure the virus is being treated adequately. Even if only ONE of the medications is missing, then none of the other meds should be given. Seek advice if the patient is refusing part, or the entire regimen.
 - b. **Timing** – Patients should take their ARVs at the same time each day for consistent drug levels and to establish a routine. Late doses should be taken as soon as remembered on the same day. Doses should not be doubled to catch up.
3. **Resistance** – The HIV virus can change into a different form, which is not easily controlled by the current regimen. Resistance can arise from poor adherence, or contracting a resistant virus from a new source. Developing resistance to one medication may result in cross-resistance to other medications the patient has never taken before but might need in the future. The doctor can order testing to confirm viral resistance to specific medications.
4. **Side Effects** – Poorly managed side effects may lead to treatment non-adherence. The pharmacist can give advice on how to manage side effects. Do not suggest stopping HIV medications in response to side effects. Always ask the patient to consult with the doctor or HIV pharmacist before stopping medications. Call the outpatient clinical pharmacist at St. Paul's Hospital.
5. **Drug Interactions** - Prescription and non-prescription medications, herbal products, and street drugs can interact with HIV medications. Consult the outpatient pharmacy at St. Paul's Hospital or reliable HIV drug interaction resources to ensure drug interactions with antiretrovirals are managed appropriately.
6. **Monitoring** – routine lab work is required to ensure antiretrovirals are effective and safe. The HIV viral load should be monitored monthly until it is "undetectable" or <40 copies/mL. This indicates the treatment is effective. Once undetectable, monitoring should be done every 3-6 months depending on the stability of the patient. Monitoring includes HIV viral load, and safety parameters including kidney and liver function (see www.cfenet.ubc.ca for more information).

Consult with one of our HIV pharmacists for antiretroviral advice or resources.

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For urgent questions after hours: 1-888-511-6222