

Drug formulary listing decision – HIV Post-Exposure Prophylaxis (HIV PEP)

Indication(s)

Clinical management of occupational exposure to HIV

Formulary status

The Drug Advisory Committee (DAC) recommended antiretroviral medications emtricitabine/tenofovir, lamivudine/zidovudine, lopinavir/ritonavir, darunavir/cobicistat, ritonavir, darunavir, raltegravir and dolutegravir, included in HIV Post-Exposure Prophylaxis (PEP) regimens, be listed on the initial formulary.

The WSIB accepts the DAC recommendation for listing.

Recommendation highlights

- ♦ An exposure that might place a worker at risk for HIV infection (occupational exposure to HIV) is defined as percutaneous injury (needlestick or cut with a sharp object) or contact of mucous membrane or non-intact skin with blood, tissue, or other body fluids that are potentially infectious.
- ♦ The purpose of PEP is to prevent HIV seroconversion. The systemic infection does not occur immediately after the exposure, leaving a brief window of opportunity during which PEP intervention might modify or prevent viral replication.
- ♦ PEP is up to 80% effective when initiated as soon as possible and should be reevaluated within 72 hours after exposure, especially if additional information about source virus becomes available.
- ♦ Recommended duration of PEP treatment is 4 weeks.
- ♦ Guidelines recommend combination of 3 or more antiretroviral medications with favourable side effect profile and convenient dosing schedule to facilitate adherence and completion of the regimen. There are

no human prospective randomized trials to establish the optimal number of HIV medications for PEP and no data showing superiority of any single regimen to prevent HIV infection.

- ♦ The DAC reviewed recommendations from St. Michael's Pocket P.E.P Reference – Clinical Management of Non-Occupational and Occupational Exposure to Blood-borne Pathogens (Jan 2016) and Blood-borne Diseases Surveillance Protocol for Ontario Hospitals (Mar 2015). The identified treatment regimens have similar cost.
- ♦ Given the above and the need for quick access to antiretrovirals to prevent delay of PEP initiation, the DAC has recommended all medications currently recognized per the above noted guidelines/protocols be listed on the initial formulary.

Antiretrovirals recommended in HIV PEP:

Emtricitabine 200 mg/ Tenofovir disoproxil fumarate 300 mg (Truvada® and generics)

Lamivudine 150 mg/Zidovudine 300 mg (Combivir® and generics)

Lopinavir 200 mg/Ritonavir 50mg (Kaletra®)

Darunavir 800 mg/ Cobicistat 150 mg (Prezcobix®)

Ritonavir 100 mg (Norvir®)

Darunavir ethanolate 800 mg (Prezista 800 mg®)

Raltegravir potassium 400 mg (Isentress 400 mg®)

Dolutegravir 50 mg (Tivicay 50 mg®)

Lamivudine 150 mg, 300 mg (3TC® and generics)

Atazanavir 300 mg (Reyataz 300 mg and generics)

Efavirenz 600 mg (Sustiva 600 mg and generics)