

Appendix 5 – Antiretrovirals in HIV PEP Kits

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Prior to prescribing antiretrovirals (ARV), please refer to the following pages for information on side effects, drug interactions, renal dosing, pediatric dosing, etc.

NOTE: Dosing of ARVs for prophylaxis is the same as treatment of HIV positive individuals.

Adults/Children more than 40 kg:

1. **Kaletra®** (lopinavir 200mg/ritonavir 50mg) **TWO** Tablets po **TWICE** Daily (i.e. 400mg lopinavir/100mg ritonavir)

PLUS

2. **Combivir®** (zidovudine 300mg/lamivudine 150mg) **ONE** Tablet po **TWICE** Daily
If HIV PEP is continuing for 4 weeks and the client has renal dysfunction, adjust dosing as soon as possible as per the Compendium of Pharmaceuticals and Specialties:
 - **If creatinine clearance (CrCl) less than 50mL/min**, dose adjustment of lamivudine required
 - **If CrCl less than 15mL/min**, dose adjustment of zidovudine and lamivudine required

Children and Individuals 40 kg and less (discussion with a Pediatric ID Specialist is required):

Use the medications provided in HIV PEP kit for the first 24 - 48 hours (*a pill cutter should be used*) until oral solutions of ARVs can be obtained if necessary. Details of oral suspension dosing provided on page 3.

1. **Kaletra®** (lopinavir 200mg/ritonavir 50mg per tablet) – Adapted from BC Centre for Excellence in HIV/AIDS, 2009 *Therapeutic Guidelines*.

Weight	# of Kaletra® 200mg/50mg Tablets from HIV PEP Kit
7 kg to less than 11 kg	½ tablet TWICE Daily
11 kg to less than 17 kg	¾ tablet TWICE Daily
17 kg to less than 22 kg	1 tablet TWICE Daily
22 kg to less than 27 kg	1¼ tablet TWICE Daily
27 kg to less than 32 kg	1½ tablet TWICE Daily
32 kg to less than 40 kg	1¾ tablets TWICE Daily
40 kg or greater	2 tablets TWICE Daily (adult dose)

PLUS

2. **Combivir®** (zidovudine 300mg/lamivudine 150mg per tablet)

Age/Weight	# of Combivir® tablets from HIV PEP Kit
7 kg to 8.9 kg	¼ tablet TWICE Daily
9 kg to 14.9 kg	¼ tablet qam & ½ tablet qpm
15 kg to 17.9 kg	½ tablet TWICE Daily
18 kg to 21.9 kg	½ tablet qam & ¾ tablet qpm
22 kg to 24.9 kg	¾ tablet TWICE Daily
25 kg to 29.9 kg	¾ tablet qam & 1 tablet qpm
30 kg or more	1 tablet TWICE Daily (adult dose)

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Additional medication information for review **PRIOR** to prescribing

Antiretroviral Agent	Dose	Possible Side Effects	Additional Information (Significant drug interactions, side effects, etc.)
Kaletra® (lopinavir/ritonavir, LPV/RTV) Supplied as: Tablets - lopinavir 200mg/ritonavir 50mg OR - lopinavir 100mg/ritonavir 25mg Oral Solution - lopinavir 80mg/ritonavir 20mg per mL - Contains 42.4% alcohol	Adults/Children more than 40 kg: lopinavir 400mg/ritonavir 100mg po TWICE Daily (i.e. <u>Two</u> 200mg/50mg tablets TWICE Daily) Oral Solution for individuals less than 40 kg: <u>7 kg to 14.9kg:</u> 12mg/kg lopinavir/3mg/kg ritonavir po TWICE Daily <u>15 kg to less than 40kg:</u> 10mg/kg lopinavir/2.5mg/kg ritonavir po TWICE Daily	* Diarrhea, nausea * Perioral tingling * Headache * Rash * ↑cholesterol & triglycerides * Hyperglycemia (long-term use)	* Film coated Tablets & Oral Solution should be taken with food. * Refrigeration not required as prophylaxis is less than 1 month ++ Drug Interactions due to potent CYP3A4 inhibition Avoid: (Not all inclusive. Consult pharmacist and/or ID Specialist) * Fentanyl – Respiratory depression * Fluticasone (i.e. Advair®, Flovent®) – Cushing’s syndrome * Simvastatin, lovastatin – severe rhabdomyolysis, myopathy * Rifampin – ↓ lopinavir-treatment failure * Midazolam, triazolam - respiratory depression * Pimozide – cardiac toxicity, Torsades, MI * Ergot derivatives – ergotism * St. John’s wort – ↓ lopinavir-treatment failure * Voriconazole, etc, etc. Caution: (Not all inclusive) * Amiodarone – hypotension, etc. * Anticonvulsants (Phenytoin, phenobarbital, carbamazepine, valproic acid) * Oral contraceptives – ↓ effect OCPs * Statins - ↑ myopathy
PLUS			
Combivir® Supplied as: Tablets - zidovudine 300mg/lamivudine 150mg	Adult/Children more than 30 kg: 1 tablet po TWICE Daily CrCl less than 50mL/min , adjust lamivudine component	See Retrovir® & 3TC® later in this table	See Retrovir® & 3TC® later in this table

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Dosing of Individual Components of Combivir®:

Antiretroviral Agent	Dose	Possible Side Effects	Additional Information
<p>Zidovudine (ZDV, AZT) – Retrovir®</p> <p>Supplied as: Capsules 100 mg</p> <p>Oral Solution 10mg/mL (240mL)</p>	<p>Adults/Children 30 kg or more: 300mg po TWICE Daily</p> <p>Oral Solution for individuals less than 30 kg: <u>4kg to less than 9kg:</u> 12mg/kg TWICE Daily</p> <p><u>9kg to less than 30kg:</u> 9mg/kg TWICE Daily</p> <p>CrCl less than 15mL/min, dosage adjustment required</p>	<p>* Nausea, headaches, malaise, anorexia, anemia, neutropenia, myopathy</p> <p>* <u>Rare:</u> hepatotoxicity, lactic acidosis</p>	<p>* May take with or without food</p> <p>* Caution when used with other bone marrow suppressing drugs</p>
PLUS			
<p>Lamivudine – 3TC®</p> <p>Supplied as: Tablets 150 mg OR 300 mg</p> <p>Oral Solution 10mg/mL (240mL)</p>	<p>Adults/Children 40 kg or more: 150mg po TWICE Daily OR 300mg po ONCE Daily</p> <p>Oral Solution for individuals less than 40 kg: 4 mg/kg TWICE Daily (Maximum 150 mg/dose)</p> <p>CrCl less than 50mL/min, dosage adjustment required</p>	<p>* Well tolerated</p> <p>* Headache, nausea, diarrhea, abdominal pain and insomnia</p> <p>* <u>Rare:</u> rash, pancreatitis, lactic acidosis</p>	<p>* May take with or without food</p>

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References

- British Columbia Centre for Excellence in HIV/AIDS. (2009). *Therapeutic guidelines: Accidental exposure*. Retrieved May, 2013 from <http://www.cfenet.ubc.ca/our-work/initiatives/therapeutic-guidelines/accidental-exposure-therapeutic-guidelines>.
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- U.S. Department of Health and Human Services Panel on Antiretroviral Therapy and Medical Management of HIV-Infected Children. (2011) *Guidelines for the use of antiretroviral agents in pediatric HIV infection*. Retrieved May, 2013 from <http://aidsinfo.nih.gov/contentfiles/lvguidelines/pediatricguidelines.pdf>.