

Liquid and Chewable Antiretroviral Drugs Table

The need for this chart was determined based on inquiries from other healthcare providers for HIV-infected adult patients unable to swallow antiretroviral tablets/capsules (specifically the pregnant population). This chart was compiled to provide information concerning bioavailability differences between capsule/tablet and liquid/chewable dosage forms of antiretrovirals in hopes of assisting providers with management of this patient population. This chart also lists storage and stability information for the liquid/chewable formulations. All information contained in this chart was provided by the drug manufacturer and is referenced accordingly. Any questions or concerns can be directed to Kerry Otero (kotero@csu.edu), Andres Chiu (achiu4@gmail.com), PharmD Candidates 2014 Chicago State College of Pharmacy; or Colleen O'Brien (cobrien1@nmh.org), PharmD, Clinical Pharmacist at Northwestern Memorial Hospital.

Liquid and Chewable Antiretroviral Drugs

Medication	Brand	Dosage Form/Usual Dose	Bioavailability	Storage	Stability
NRTI					
Abacavir ^{1,2}	Ziagen®	Oral solution (20mg/ml)/ 600 mg (30 ml) daily or 300 mg (15 ml) BID	Comparable	Refrigerator (36°-46° F) or at room temp (69°-77° F)	N/A
Emtricitabine ^{2,3}	Emtriva®	Oral solution (10mg/ml)/ 240 mg (24 ml) daily	18% less with oral solution vs oral capsule	Refrigerator (36°-46° F) or at room temp (69°-77° F)	3 months (Room temperature)
Lamivudine ^{2,4}	Epivir®	Oral solution (10mg/ml)/ 300 mg (30 ml) daily or 150 mg (15 ml) BID	Comparable	Room temp (68°-77° F)	N/A
Tenofovir ^{2,5}	Viread®	Oral powder (40mg/scoop)/ 300 mg (7.5 scoops) daily with 2-4 oz of soft food	(With 4oz of apple sauce) C _{max} : 26% lower with powder vs tablet AUC: Similar	Room temp (68°-77° F). Keep in the original container	N/A
Zidovudine ^{2,6}	Retrovir®	Oral syrup (50mg/ml)/ 300 mg (6 ml) BID or 200 mg (4 ml) TID	Comparable	Room temp (68°-77° F)	N/A
NNRTI					
Nevirapine ^{2,7}	Viramune®	Oral suspension (10mg/ml)/ 200 mg daily(20 ml) x 14 days then, 200 mg(20 ml) BID	Comparable bioavailability (up to 200mg)	Room temp (68°-77° F)	N/A
Integrase Inhibitor					
Raltegravir ^{2,8}	Isetress®	Chewable tablet 25 mg, 100 mg/ ^Weight based dosing^ ≥ 40 kg: 300 mg BID (max dose)	Chewable tablets and film coated tablet are NOT interchangeable. Higher bioavailability with chewable tablet.	Room temp (68°-77° F). Keep in the original container	N/A
Protease Inhibitors					
Darunavir ^{2,9}	Prezista®	Oral suspension (100mg/ml)/ ^Dosing based on txt-naïve or experienced^	Comparable	Room temp (68°-77° F). Keep in the original container	N/A
Fosamprenavir ^{2,10}	Lexiva®	Oral Suspension (50mg/ml)/ ^Dosing based on txt-naïve or experienced^	Comparable	Refrigerator (36°-46° F) or at room temp (69°-77° F)	N/A
Lopinavir/Ritonavir ^{2,11}	Kaletra®	Oral Solution (80mg-20mg/ml)/ 400mg-100mg (5 ml) BID	Higher with solution vs oral tablet (with food)	Refrigerator (36°-46° F) or at room temp (69°-77° F)	2 months (Room temperature)
Ritonavir ^{2,12}	Norvir®	Oral solution (80mg/ml)/ ^dosed as PI boosting agent^ ^dosing varies^	Comparable ^(no studies have been done)^	Room temp (68°-77° F). Protect from light and heat	N/A

1) Ziagen [package insert]. Research Triangle Park, NC: ViiV Healthcare, 2012. Accessed: August 7, 2013.

2) Clinical Pharmacology [database online]. Tampa, FL: Gold Standard, Inc., 2013. Updated July 2013.

3) Emtriva [package insert]. Foster City, CA: Gilead Sciences, Inc., 2012. Accessed August 7, 2013.

4) Epivir [package insert]. Research Triangle Park, NC: GlaxoSmithKline, 2011. Accessed August 7, 2013.

5) Viread [package insert]. Foster City, CA: Gilead Sciences, Inc., 2013. Accessed August 7, 2013.

6) zidovudine [package insert]. Dayton, OH: Aurobindo Pharma USA, Inc., 2012. Accessed August 7, 2013.

7) Viramune [package insert]. Ridgefield, CT: Boehringer Ingelheim Pharmaceuticals, Inc., 2012. Accessed August 7, 2013.

8) Isetress [package insert]. Whitehouse Station, NJ: Merck & Co., Inc., 2013. Accessed August 7, 2013.

9) Prezista [package insert]. Titusville, NJ: Janssen Products, LP, 2013. Accessed: August 7, 2013.

10) Lexiva [package insert]. Research Triangle Park, NC: ViiV Healthcare, 2013. Accessed: August 7, 2013.

11) Kaletra [package insert]. North Chicago, IL: AbbVie, Inc., 2013. Accessed August 7, 2013.

12) Norvir [package insert]. North Chicago, IL: AbbVie, Inc., 2013. Accessed August 7, 2013.