

Antiretroviral Crushable/Liquid Formulation Chart

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Agent	How Supplied	Crushable Status
Products listed in bold are available through JMH formulary		
<i>Nucleoside Reverse Transcriptase Inhibitors (NRTIs)</i>		
Abacavir (ABC) (Ziagen®)	Solution, oral: Ziagen®: 20 mg/mL Tablet, oral: Ziagen®: 300 mg Abacavir sulfate: 300 mg	Tablets may be crushed and added to a small amount of semi-solid food or liquid to be consumed immediately. ¹
Didanosine (ddI) (Videx®)	Capsule, delayed release, enteric coated beadlets, oral: Videx® EC: 125 mg, 200 mg, 250 mg, 400 mg Didanosine: 125 mg, 200 mg, 250 mg, 400 mg Powder for solution, oral: Videx®: 2 g/bottle , 4g/bottle	Capsules are enteric-coated and cannot be opened, chewed, dissolved or crushed. ^{1,9}
Emtricitabine (FTC) (Emtriva®)	Capsule, oral: Emtriva®: 200 mg Solution, oral: Emtriva®: 10 mg/mL	No data is available on opening capsules. ¹
Lamivudine (3TC) (Epivir®)	Solution, oral: Epivir®: 10 mg/mL Tablet, oral: Epivir-HBV®: 100 mg Epivir®: 150 mg	Tablets may be crushed and added to a small amount of semi-solid food or liquid to be consumed immediately. ¹
Stavudine (d4T) (Zerit®)	Capsule, oral: Zerit: 15 mg, 20 mg, 30 mg, 40 mg Generic: 15 mg, 20 mg, 30 mg, 40 mg Solution reconstituted, oral: Zerit: 1 mg/mL Generic: 1 mg/mL	Capsule may be opened and beads mixed with 5mL water; beads are not to be chewed or crushed during swallowing. ²

Tenofovir disoproxil fumarate (TDF) (Viread®)		Tablet may be crushed and disintegrated in water, grape juice, or orange juice; pharmacokinetic and stability data unavailable. ¹
Zidovudine (ZDV, AZT) (Retrovir®)	<p>Injection, solution: Retrovir®: 10 mg/mL</p> <p>Syrup, oral: Retrovir®: 50 mg/5 mL</p> <p>Tablet, oral: Retrovir®: 300 mg</p> <p>Capsules, oral: Retrovir®: 100 mg Zidovudine®: 100 mg</p>	Tablets may be crushed or capsules opened and added to a small amount of semi-solid food or liquid to be consumed immediately. ³
<i>Combination Nucleoside Reverse Transcriptase Inhibitors</i>		
3TC/ABC (Epzicom®)	Tablets, oral: Epzicom®: 600-300 mg	<p>The combination product is film-coated and has not been evaluated for safety or efficacy after crushing.⁴</p> <p>The individual components (abacavir and lamivudine) are available as tablets which may be crushed and added to a small amount of semi-solid food or liquid to be consumed immediately.</p>
3TC/ABC/ADV (Trizivir®)	Tablet, oral: Trizivir®: 300-150-300 mg Abacavir-Lamivudine-Zidovudine: 300-150-300 mg	<p>No data available on crushing or splitting tablet; disruption not recommended by manufacturer.¹</p> <p>The individual components (abacavir, lamivudine, and zidovudine) are available as tablets which may be crushed and added to a small amount of semi-solid food or liquid to be consumed immediately.</p>
FTC/TDF (Truvada®)	Tablet, oral: Truvada®: 200-300 mg	Tablets may be crushed and disintegrated in water, grape juice, or orange juice; pharmacokinetic and stability data unavailable. ¹
3TC/AZT (Combivir®)	Tablet, oral: Combivir®: 150-300 mg Lamivudine-Zidovudine: 150-300 mg	Tablets may be crushed and added to a small amount of semi-solid food or liquid to be consumed immediately. ¹

<i>Nonnucleoside Reverse Transcriptase Inhibitors</i>		
Efavirenz (EFV) (Sustiva®)	Tablet, oral: Sustiva®: 600 mg Capsules, oral: Sustiva: 50 mg, 200 mg	Tablet should not be broken or crushed. Capsule contents may be sprinkled onto a small amount of soft food (e.g., applesauce, grape jelly, yogurt) for pediatric or adult patients who cannot swallow capsules. Administer within 30 minutes of mixing. Patient should not consume any additional food or administer additional formula for 2 hours after administration. ^{1,8}
Etravirine (ETF) (Intelligence®)	Tablet, oral: Intelligence®: 100 mg, 200 mg Intelligence®: 25mg	Tablets may be dispersed in water (≥1 teaspoonful [enough to cover tablets]); stir well (until milky), add additional water (or may add milk or orange juice), and drink immediately. Rinse glass several times (with water, milk or orange juice) and swallow entire contents to ensure administration of dose. Do not use grapefruit juice, carbonated beverages or warm (>40°C) water. ^{1,8,9}
Nevirapine (NVP) (Viramune®)	Suspension, oral: Viramune®: 50 mg/5 mL Nevirapine: 50mg/5mL Tablet, oral: Viramune®: 200 mg Nevirapine: 200 mg Tablet, 24-hour, oral: Viramune XR®: 100 mg, 400 mg Nevirapine ER: 100 mg, 400 mg	No data available on crushing or chewing immediate-release tablets. Extended-release tablets must be swallowed whole and not crushed, chewed, or divided. ^{1,9}
Rilpivirine (RPV) (Endurant®)	Tablet, Oral: Edurant: 25 mg	Manufacturer recommends tablets be swallowed whole; as tablets are not extended-release formulations, they may be crushed or chewed if necessary. ⁵
<i>Protease Inhibitors</i>		
Atazanavir (ATV) (Reyataz®)	Capsule, oral: Reyataz®: 150 mg, 200 mg Reyataz®: 300 mg	Manufacturer recommends capsules not be opened; analysis of single-dose pharmacokinetics of intact vs. opened 200 mg capsules indicated altered pharmacokinetics with capsule opening; no data available for 300mg capsule. ^{1,9}
Atazanavir/cobicistat (ATV/c) (Evotaz®)	Tablet, Oral: Evotaz: 300-150 mg	Manufacturer recommends tablets be swallowed whole. No data is available on crushing or splitting tablets. If it is necessary to administer via feeding tube, Atazanavir component has pH-dependent solubility, so it is recommended to be administered through a route that does not bypass the stomach. ⁶

Darunavir (DRV) (Prezista®)	<p>Tablet, oral: Prezista®: 600 mg, 800 mg Prezista®: 75mg, 150 mg</p> <p>Suspension, oral: Prezista®: 100 mg/mL</p>	Manufacturer recommends tablets be swallowed whole; as tablets are not extended-release formulations, they may be crushed or chewed if necessary. ¹
Darunavir/cobicistat (DRV/c) (Prezcobix®)	<p>Tablet, Oral: Prezcobix®: 800-150 mg</p>	Manufacturer recommends tablets be swallowed whole; as tablets are not extended-release formulations, they may be crushed or chewed if necessary. ⁷
Fosamprenavir (FPV) (Lexiva®)	<p>Tablet, oral: Lexiva®: 700 mg</p> <p>Suspension, oral: Lexiva®: 50 mg/mL</p>	No data available on crushing or splitting tablet. ¹
Indinavir (IDV) (Crixivan®)	<p>Capsule, oral: Crixivan®: 200 mg, 400 mg</p>	A 10 mg/mL oral solution may be prepared using capsules. See Lexicomp for details. ^{1,8}
Lopinavir/ritonavir (LPV/r) (Kaletra®)	<p>Solution, oral: Kaletra®: 400-100 mg/5 ml</p> <p>Tablet, oral: Kaletra®: 100-25 mg, 200-50 mg</p>	Tablet should be swallowed whole and not crushed, broken, or chewed. ^{1,8,9}
Nelfinavir (NFV) (Viracept®)	<p>Tablet, oral: Viracept®: 250 mg Viracept®: 625 mg</p>	If unable to swallow tablets, may dissolve tablets in a small amount of water or food; mix well and consume immediately. Rinse glass with water to ensure receiving full dose. Avoid mixing with acidic foods or juices as combination may result in a bitter taste. ^{1,8}
Ritonavir (RTV) (Norvir®)	<p>Tablet, oral: Norvir®: 100 mg</p> <p>Solution, oral: Norvir®: 80 mg/mL</p> <p>Capsule, oral: Norvir®: 100 mg</p>	Tablets should be swallowed whole; do not chew, break, or crush. ^{1,9}
Saquinavir (SQV) (Invirase®)	<p>Tablet, oral: Invirase®: 500 mg</p> <p>Capsule, oral: Invirase®: 200 mg</p>	Patients unable to swallow capsules may open capsules and mix contents with 15 mL of syrup (or sorbitol if diabetic or glucose intolerant) or with 3 teaspoons of jam. Mixture should be stirred for 30 to 60 seconds and then administered entirely. Suspension should be at room temperature prior to administration. ^{1,8}

Tipranavir (TPV) (Aptivus®)	Capsule, Oral: Aptivus®: 250 mg Solution, Oral: Aptivus®: 100 mg/mL	Capsules should be swallowed whole; do not open. ⁹
Cobicistat (Tybost®)	Tablet, Oral: Tybost®: 150 mg	Manufacturer recommends tablets be swallowed whole. Tablets are insoluble in water. No data is available on crushing or splitting tablets. ¹⁰
<i>Integrase and Entry Inhibitors</i>		
Dolutegravir (DTG) (Tivicay®)	Tablet, Oral: Tivicay®: 50 mg	Tablets may be crushed and added to a small amount of semi-solid food or liquid to be consumed immediately. ¹
Elvitegravir (EVG) (Vitekta®)	Tablet, Oral: Vitekta®: 85 mg, 150 mg	Manufacturer recommends tablets be swallowed whole. No data available on crushing or splitting. ¹
Maraviroc (MVC) (Selzentry®)	Tablet, Oral: Selzentry®: 150 mg, 300 mg	Manufacturer recommends tablets be swallowed whole. No data available on crushing or splitting. ¹
Raltegravir (RAL) (Isentress®)	Tablet, oral: Isentress®: 400 mg Tablet Chewable, Oral: Isentress®: 100 mg Isentress®: 25 mg Pack, oral: Isentress®: 100mg	The film-coated tablet has not been evaluated for safety or efficacy after crushing. ¹¹ Film-coated tablet, chewable tablet, and oral suspension not bioequivalent.
<i>Fixed-Dose Combination Products</i>		
EVG/cobi/FTC/TDF (Stribild®)	Tablet, oral: Stribild®: 150-150-200-300 mg	Components available separately; no data available on crushing, breaking, or chewing. ¹
DTG/3TC/ABC (Triumeq®)	Tablets, oral: Triumeq®: 600-50-300 mg	Tablets may be crushed and added to a small amount of semi-solid food or liquid to be consumed immediately. ¹
EFV/FTC/TDF (Atripla®)	Tablets, oral: Atripla®: 600-200-300 mg	Components available separately; pharmacokinetic analysis of intact tablet vs. crushed tablet in solution found crushing was associated with altered pharmacokinetics. ^{1,9}
RPV/FTC/TDF (Complera®)	Tablets, oral: Complera®: 200-25-300 mg	Components available separately; no data available on crushing, breaking, or chewing. ¹
EVG/cobi/FTC/TAF (Genvoya®)	Tablets, oral: Genvoya®: 150-150-200-10 mg	Manufacturer recommends tablets be swallowed whole. No data is available on crushing or splitting tablets. ¹²

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