

# Vanderbilt University Hospital Antiretroviral Therapy

## Crush Guidance

**Table 1: Combination Antiretrovirals**

Trade Name	Drug Components	Ability to be crushed/dissolved	Guidance for crushing/dissolving
<b>Atripla</b>	Efavirenz 600 mg Emtricitabine 200 mg Tenofovir disoproxil fumarate 300 mg	No	<ul style="list-style-type: none"> <li>Consult ID as combination product cannot be crushed</li> <li>Individual components are not on formulary</li> </ul>
<b>Biktarvy</b>	Bictegravir 50 mg Emtricitabine 200 mg Tenofovir alafenamide 25 mg	No	<ul style="list-style-type: none"> <li>Recommend switching to dolutegravir + emtricitabine/tenofovir alafenamide</li> <li>Data on crushing/dissolving is mixed and there have been cases of crushing biktarvy that have led to increased viral loads<sup>1</sup></li> </ul>
<b>Combivir</b>	Lamivudine 150 mg Zidovudine 300 mg	Yes	<ul style="list-style-type: none"> <li>Crush and add to small amount of liquid or semi-solid food and administer immediately.<sup>2</sup></li> </ul>
<b>Descovy</b>	Emtricitabine 200 mg Tenofovir alafenamide 25 mg	Yes	<ul style="list-style-type: none"> <li>Crush as both agents are soluble in water.<sup>3</sup></li> </ul>
<b>Epzicom</b>	Abacavir 600 mg Lamivudine 300 mg	Yes	<ul style="list-style-type: none"> <li>Crush and add to a small amount of liquid or semi-solid food and consume immediately.<sup>4</sup></li> </ul>
<b>Genvoya</b>	Elvitegravir 150 mg Cobicistat 150 mg Emtricitabine 200 mg, Tenofovir alafenamide 10 mg	Yes	<ul style="list-style-type: none"> <li>Dissolve/crush in 30-120 mL of water and administer with food or enteral nutrition.<sup>5</sup></li> </ul>
<b>Kaletra</b>	Lopinavir 200 mg, Ritonavir 50 mg	Yes	<ul style="list-style-type: none"> <li>Data to support crushing and administering with enteral tube feedings</li> <li>Solution is commercially available but non-formulary<sup>6</sup></li> </ul>
<b>Prezcobix</b>	Darunavir 800 mg, Cobicistat 150 mg	Yes	<ul style="list-style-type: none"> <li>Crush and administer with food or enteral nutrition<sup>7</sup></li> </ul>
<b>Stribild</b>	Elvitegravir 150 mg, Cobicistat 150 mg, Emtricitabine 200 mg,	Yes	<ul style="list-style-type: none"> <li>Crush and administer with food or enteral nutrition.<sup>8</sup></li> </ul>

	Tenofovir disoproxil fumarate 300 mg		
<b>Triumeq</b>	Abacavir 600 mg, Lamivudine 300 mg, Dolutegravir 50 mg	Yes	<ul style="list-style-type: none"> <li>Crush and administer with a small amount of semisolid food or liquid and consume immediately.<sup>9,10</sup></li> </ul>
<b>Truvada</b>	Emtricitabine 200 mg, Tenofovir disoproxil fumarate 300 mg	Yes	<ul style="list-style-type: none"> <li>Crush and stir into water, grape juice or orange juice.<sup>11</sup></li> </ul>

**Table 2: Single Drug Components**

Trade Name	Drug Components	Ability to be crushed	Guidance for Crushing
<b>Edurant</b>	Rilpivirine 25 mg	No	<ul style="list-style-type: none"> <li>Decreased levels have been seen when drug monitoring is performed</li> <li>Rilpivirine is also insoluble in water over wide pH range<sup>12,13</sup></li> </ul>
<b>Emtriva</b>	Emtricitabine 200 mg	Yes, solution also available	<ul style="list-style-type: none"> <li>Can open and mix capsules with water, although oral solution is available</li> <li>If solution is used, capsule and solution formulation is not a 1:1 conversion<sup>14</sup></li> <li><b>240 mg oral solution = 200 mg capsule</b></li> </ul>
<b>Epivir</b>	Lamivudine 100 mg, 150 mg	Yes, solution also available	<ul style="list-style-type: none"> <li>Tablets can be crushed or split.<sup>14</sup></li> </ul>
<b>Intelence</b>	Etravirine 100 mg	Yes	<ul style="list-style-type: none"> <li>Place in 5 mL of cold water and stir until liquid is dispersed and administer immediately.<sup>15</sup></li> </ul>
<b>Isentress</b>	Raltegravir 400 mg	Yes	<ul style="list-style-type: none"> <li>Crush, mix with 60 mL of warm water and can administer enterally.<sup>16</sup></li> </ul>
<b>Norvir</b>	Ritonavir 100 mg	No	<ul style="list-style-type: none"> <li>Consult ID and consider submitting NF request for oral powder or switching to cobicistat</li> <li>Oral powder can be administered via a feeding tube or orally when mixed with water</li> <li>Crushing ritonavir tablets is not recommended and leads to decreased bioavailability<sup>17,18</sup></li> </ul>

<b>Pifeltro</b>	Doravirine 100 mg	No	<ul style="list-style-type: none"> <li>• May crush and mix with 60 mL of warm water and administer immediately.<sup>19</sup></li> </ul>
<b>Prezista</b>	Darunavir 600 mg, 800 mg	Yes	<ul style="list-style-type: none"> <li>• May crush or dissolve, although oral suspension is also available on formulary.<sup>20</sup></li> </ul>
<b>Reyataz</b>	Atazanavir 150 mg, 200 mg	Yes	<ul style="list-style-type: none"> <li>• May open and mix with applesauce for immediate administration following a light meal</li> <li>• Better absorbed in an acidic environment.<sup>21</sup></li> </ul>
<b>Tivicay</b>	Dolutegravir 50 mg	Yes	<ul style="list-style-type: none"> <li>• May crush and add to small amount of semi-solid food or liquid and consume immediately.<sup>22</sup></li> </ul>
<b>Vemlidy</b>	Tenofovir alafenamide 25 mg	Yes	<ul style="list-style-type: none"> <li>• May crush and disintegrate in water.<sup>23</sup></li> </ul>
<b>Viramune</b>	Nevirapine 200 mg	Yes	<ul style="list-style-type: none"> <li>• Immediate release tablets may be crushed in water and administered</li> <li>• Oral suspension is also on formulary</li> <li>• Do not crush XR tablets<sup>24</sup></li> <li>• Do not crush XR tablets<sup>24</sup></li> </ul>
<b>Viread</b>	Tenofovir disoproxil fumarate 300 mg	Yes	<ul style="list-style-type: none"> <li>• May crush and dissolve in 100 mL or grape juice and consume immediately.<sup>14</sup></li> </ul>
<b>Ziagen</b>	Abacavir 300 mg	Yes	<ul style="list-style-type: none"> <li>• May crush and add to a small amount of liquid or semisolid food and consume immediately.<sup>25</sup></li> </ul>

**\*For medications that contain an integrase strain inhibitor, consider holding enteral feedings 2-3 hours before and after unless comments state to give with enteral feedings**

## References

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