

## Appendix A, Table 2. Antiretroviral Fixed-Dose Combination Tablets and Co-packaged Formulations: Minimum Body Weights and Considerations for Use in Children and Adolescents

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### ***General Considerations When Using Fixed-Dose Combination Products***

Please see the individual drug sections under [Appendix A. Pediatric Antiretroviral Drug Information](#) for the recommended dosing of individual fixed-dose combination (FDC) products.

FDC tablets and individual ARV drugs also can be looked up by drug name (brand name and generic) at [DailyMed](#). Size is listed under the Ingredients and Appearance section.

For images of most of the FDC tablets listed in this table, see the [Antiretroviral Medications](#) section of the National HIV Curriculum. In addition, a resource from the United Kingdom illustrates the relative sizes of FDC tablets and individual ARV drugs (see the [ARV Chart](#) at [HIV i-BASE](#)). Although most of the drugs listed in the chart are the same as those in the United States, there are several differences: some formulations available in the United States are not included; a few of the brand names are not the same as those listed in Appendix A, Table 2; and the chart includes a formulation that is not available in the United States.

#### **Integrase Strand Transfer Inhibitors**

- Bictegravir (BIC) and dolutegravir (DTG), second-generation **integrase strand transfer inhibitors** (INSTIs), have a higher barrier to resistance than the first-generation INSTIs, elvitegravir (EVG) and raltegravir (RAL).
- For children weighing  $\geq 6$  kg **and aged  $\geq 3$  months**, DTG is available in once-daily FDC formulations of abacavir (ABC)/ DTG/lamivudine (3TC). If ABC/DTG/3TC is not an option, then single-entity DTG can be used in combination with other FDC tablets. Refer to [Dolutegravir](#) for dosing information.
  - ABC/DTG/3TC is available in two different formulations, with the appropriate formulation depending on weight. For children weighing  $\geq 6$  kg to  $<25$  kg **and aged  $\geq 3$  months**, ABC/DTG/3TC is available in a dispersible tablet, once-daily regimen (Triumeq PD); the number of tablets per dose depends on the child's weight. For children and adolescents weighing  $\geq 25$  kg, ABC/DTG/3TC is available as a once-daily single-tablet regimen (Triumeq).
  - Whether considering DTG in FDC or single-entity form, **the film-coated tablets and dispersible tablets are not bioequivalent and, thus, are not interchangeable on a milligram-per-milligram basis**.

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- For children weighing  $\geq 14$  kg, BIC is available as the single-tablet, once-daily regimen BIC/emtricitabine (FTC)/tenofovir alafenamide (TAF) (Biktarvy). There are two dosage strengths for pediatric use: one for use in children weighing  $\geq 14$  to  $< 25$  kg and another for children and adolescents weighing  $\geq 25$  kg and adults. Refer to [Bictegravir](#) for dosing information.
- For children weighing  $\geq 25$  kg, EVG is available as the single-tablet, once-daily regimen EVG/cobicistat (c)/FTC/TAF (Genvoya). EVG/c/FTC/TAF (Genvoya) has more drug–drug interactions than ABC/DTG/3TC (Triumeq or Triumeq PD) or BIC/FTC/TAF (Biktarvy). Refer to [Elvitegravir](#) for dosing information.
- The two-drug, co-packaged regimen of long-acting injectable cabotegravir (CAB) and rilpivirine (RPV) (Cabenuva) is approved by the U.S. Food and Drug Administration (FDA) for use in children and adolescents aged  $\geq 12$  years and weighing  $\geq 35$  kg. CAB and RPV are administered by intramuscular injection on a monthly or every-2-months schedule after an optional oral dose lead-in. See [Cabotegravir](#) and [Rilpivirine](#) for instructions about dosing and administration.

**Nucleoside/Nucleotide Reverse Transcriptase Inhibitors**

- ABC or TAF in combination with 3TC or FTC are favored over zidovudine (ZDV)/3TC because of the lower risk of nucleoside/nucleotide reverse transcriptase inhibitor (NRTI)–associated mitochondrial toxicity.
- Tenofovir disoproxil fumarate (TDF) is more potent than ABC at high viral loads ( $> 100,000$  copies/mL) when used in regimens that do not contain an INSTI.
- TAF is favored over TDF because of the lower risk of TDF-associated bone and renal toxicity. TDF is not recommended for children with sexual maturity ratings (SMRs) of 1 to 3 because of TDF-associated bone toxicity.
- For children weighing  $\geq 14$  kg who can swallow pills, FTC/TAF (Descovy) offers a once-daily alternative to twice-daily ZDV plus 3TC or ABC plus 3TC.
- For children weighing  $\geq 14$  kg and  $\leq 35$  kg, FTC/TAF (Descovy) can be used in combination with an INSTI or non-nucleoside reverse transcriptase inhibitor (NNRTI), but not with a protease inhibitor; this restriction does not apply to regimens containing ZDV or ABC.

**Non-Nucleoside Reverse Transcriptase Inhibitors**

- The FDC tablet doravirine (DOR)/3TC/TDF is approved by the FDA for children and adolescents weighing  $\geq 35$  kg who are antiretroviral (ARV) naive or virologically suppressed on a stable ARV regimen (see the [Doravirine](#) section).
- RPV has low potency at high viral loads ( $> 100,000$  copies/mL) and requires a high-fat meal for optimal absorption, so efavirenz (EFV) or an INSTI are favored over RPV.

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***Fixed-Dose Combinations Available for Children and Adolescents***

| FDC by Class<br>Brand name and generic <sup>a</sup><br>products, when available | FDC Components                        | Minimum Body Weight or Weight Range (kg) or Age <sup>b</sup>      | Pill Size (mm × mm)<br>or Largest Dimension (mm) <sup>c</sup> | Food Requirements              |
|---|---------------------------------------|---|---|--------------------------------|
| <b>NRTI</b>   |                                       |   |   |                                |
| Cimduo  | 3TC 300 mg/TDF 300 mg                 | 35 kg   | 19  | Take with or without food.     |
| Combivir and Generic 3TC/ZDV  | 3TC 150 mg/ZDV 300 mg (scored tablet) | 30 kg   | 18 × 7  | Take with or without food.     |
| Descovy   | FTC 120 mg/TAF 15 mg                  | With an INSTI or NNRTI<br>• 14 to < 25 kg                         | N/A   | Take with or without food.     |
|   | FTC 200 mg/TAF 25 mg                  | With an INSTI or NNRTI<br>With a Boosted PI<br>• 25 kg<br>• 35 kg | 12.5 × 6.4  | Take with or without food.     |
| Epzicom and Generic ABC/3TC   | ABC 600 mg/3TC 300 mg                 | 25 kg   | 21 × 9  | Take with or without food.     |
| Temixys   | 3TC 300 mg/TDF 300 mg                 | 35 kg   | N/A   | Take with or without food.     |
| Truvada   | FTC 100 mg/TDF 150 mg                 | 17 to < 22 kg   | 14  | Take with or without food.     |
|   | FTC 133 mg/TDF 200 mg                 | 22 to < 28 kg   | 16  | Take with or without food.     |
|   | FTC 167 mg/TDF 250 mg                 | 28 to < 35 kg   | 18  | Take with or without food.     |
|   | FTC 200 mg/TDF 300 mg                 | 35 kg   | 19 × 8.5  | Take with or without food.     |
| <b>NRTI/NNRTI</b>   |                                       |   |   |                                |
| Atripla   | EFV 600 mg/FTC 200 mg/TDF 300 mg      | 40 kg   | 20  | Take on an empty stomach.      |
| Complera  | FTC 200 mg/RPV 25 mg/TDF 300 mg       | 35 kg and aged ≥ 12 years   | 19  | Take with a meal. <sup>d</sup> |

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|---|---|--|---|--|
| Delstrigo   | DOR 100 mg/3TC 300 mg/TDF 300 mg  | 35 kg  | 19  | Take with or without food.   |
| Odefsey   | FTC 200 mg/RPV 25 mg/TAF 25 mg  | 35 kg and aged ≥12 years                                     | 15  | Take with a meal. <sup>d</sup>   |
| Symfi   | EFV 600 mg/3TC 300 mg/TDF 300 mg (scored tablet)                                  | 40 kg  | 23  | Take on an empty stomach.  |
| Symfi Lo  | EFV 400 mg/3TC 300 mg/TDF 300 mg  | 35 kg <sup>e</sup>   | 21  | Take on an empty stomach.  |
| <b>NRTI/INSTI</b>   |   |  |   |  |
| Biktarvy  | BIC 30 mg/FTC 120 mg/TAF 15 mg  | 14 to <25 kg   | N/A   | Take with or without food.   |
|   | BIC 50 mg/FTC 200 mg/TAF 25 mg  | 25 kg  | 15 × 8  | Take with or without food.   |
| Dovato  | DTG 50 mg/3TC 300 mg  | 25 kg  | 19  | Take with or without food.   |
| Triumeq   | ABC 600 mg/DTG 50 mg/3TC 300 mg   | 25 kg  | 22 × 11   | Take with or without food.   |
| Triumeq PD  | ABC 60 mg/DTG 5 mg/3TC 30 mg  | 6 to <25 kg and aged ≥3 months <sup>g</sup>                  | N/A (dispersible)   | Take with or without food.   |
| <b>NNRTI/INSTI</b>  |   |  |   |  |
| Cabenuva <sup>h</sup>   | Cabenuva 400 mg/600 mg kit contains CAB 400 mg/2 mL vial and RPV 600 mg/2 mL vial | 35 kg and aged ≥12 years                                     | N/A   | See <a href="#">Cabotegravir</a> for instructions about dosing and administration. |
|   | Cabenuva 600 mg/900 mg kit contains CAB 600 mg/3 mL vial and RPV 900 mg/3 mL vial | 35 kg and aged ≥12 years                                     | N/A   | See <a href="#">Cabotegravir</a> for instructions about dosing and administration. |
| Juluca  | DTG 50 mg/RPV 25 mg   | Adults <sup>f</sup>  | 14  | Take with a meal. <sup>d</sup>   |
| <b>NRTI/INSTI/COBI</b>  |   |  |   |  |
| Genvoya   | EVG 150 mg/COBI 150 mg/FTC 200 mg/TAF 10 mg                                       | 25 kg  | 19 × 8.5  | Take with food.  |
| Stribild  | EVG 150 mg/COBI 150 mg/FTC 200 mg/TDF 300 mg                                      | 35 kg and SMR of 4 or 5 <sup>i</sup>                         | 20  | Take with food.  |

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|---|--|---|---|----------------------------|
| <b>NRTI/PI/COBI</b>   |  |   |   |                            |
| Syntuz  | DRV 800 mg/COBI 150 mg/FTC 200 mg/TAF 10 mg  | 40 kg   | 22  | Take with food.            |
| <b>PI/COBI</b>  |  |   |   |                            |
| Evotaz  | ATV 300 mg/COBI 150 mg   | 35 kg   | 19  | Take with food.            |
| Prezcobix   | DRV 800 mg/COBI 150 mg   | 40 kg   | 23  | Take with food.            |
| <b>PI/RTV</b>   |  |   |   |                            |
| Kaletra   | LPV/r Oral Solution <ul style="list-style-type: none"> <li>• LPV 80 mg/mL and RTV 20 mg/mL</li> </ul> Tablets <ul style="list-style-type: none"> <li>• LPV 200 mg/RTV 50 mg</li> <li>• LPV 100 mg/RTV 25 mg</li> </ul> | Post-Menstrual Age of 42 Weeks and a Postnatal Age of <b>≥14 Days</b> <ul style="list-style-type: none"> <li>• No minimum weight</li> </ul> | 19  | Take with or without food. |

<sup>a</sup> The possibility of planned and unplanned pregnancy should be considered when selecting an antiretroviral therapy (ART) regimen for an adolescent. When discussing ART options with adolescents and their caregivers, it is important to consider childbearing potential and the benefits and risks of all ARV drugs and to provide the information and counseling needed to support informed decision-making (see [Table 7. Situation-Specific Recommendations for Use of Antiretroviral Drugs During Pregnancy and When Trying to Conceive](#) and [Appendix C: Antiretroviral Counseling Guide for Health Care Providers](#)).

<sup>b</sup> Minimum body weight and age are those recommended by the FDA, unless otherwise noted.

<sup>c</sup> Sizes or largest dimensions of generic drugs are not listed because they may vary by manufacturer; this information is available by looking up one of the drug components using [DailyMed](#).

<sup>d</sup> Patients must be able to take oral RPV with a meal of at least 500 calories on a regular schedule (a protein drink alone does not constitute a meal).

<sup>e</sup> Because of pharmacokinetic concerns, the Panel recommends caution when using Symfi Lo in children and adolescents who have SMRs of 1 to 3 and weigh  $\geq 40$  kg (see the [Efavirenz](#) section).

<sup>f</sup> The Panel does not currently recommend using DTG/RPV (Juluca) as a complete two-drug regimen in adolescents and children. These FDC tablets could be used as part of a three-drug regimen in children who meet the minimum body weight requirements for each component drug.

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<sup>g</sup> ABC/DTG/3TC is available in dispersible tablets (Triumeq PD) for children weighing  $\geq 6$  kg to  $<25$  kg and aged  $\geq 3$  months with the dosage and number of tablets based on weight. Refer to the [Dolutegravir](#) section for exact dosage and instructions for administration. Dispersible tablets (Triumeq PD) are not recommended for children and adolescents weighing  $\geq 25$  kg.

<sup>h</sup> Long-acting [injectable](#) CAB and RPV for intramuscular administration are available as a co-packaged product (Cabenuva); oral formulations of CAB and RPV for the optional initial lead-in dosing or bridging between injections  $>7$  days from the target injection window must be prescribed separately (see the [Cabotegravir](#) and [Rilpivirine](#) sections).

<sup>i</sup> Although Stribild is approved by the FDA for use in children and adolescents weighing  $\geq 35$  kg and age  $\geq 12$  years, the Panel does not recommend its use in children with SMRs of 1 to 3 given the availability of other INSTI-containing FDCs.

**Key:** 3TC = lamivudine; ABC = abacavir; ATV = atazanavir; BIC = bictegravir; CAB = cabotegravir; COBI = cobicistat; DOR = doravirine; DRV = darunavir; DTG = dolutegravir; EFV = efavirenz; EVG = elvitegravir; FDA = U.S. Food and Drug Administration; FDC = fixed-dose combination; FTC = emtricitabine; INSTI = integrase strand transfer inhibitor; kg = kilogram; LPV = lopinavir; LPV/r = lopinavir/ritonavir; mg = milligram; mL = milliliter; mm = millimeter; N/A = information not available or not applicable; NNRTI = non-nucleoside reverse transcriptase inhibitor; NRTI = nucleoside reverse transcriptase inhibitor; the Panel = Panel on Antiretroviral Therapy and Medical Management of Children Living With HIV; PI = protease inhibitor; RPV = rilpivirine; RTV = ritonavir; SMR = sexual maturity rating; TAF = tenofovir alafenamide; TDF = tenofovir disoproxil fumarate; ZDV = zidovudine