This dosing card contains information on pediatric ARV drugs commonly used in resource-limited settings for which there are pediatric formulations or sufficient information and evidence to provide guidance on prescribing and dosing. The weight based tables were compiled by estimation of the body surface area, and decisions about dosing are based on the manufacturer’s information, ARV drug formulation, data from clinical trials and expert pediatric pharmacology consultation. Optimal dosing is given for single ARV drugs and where possible combination fixed dose combinations.

**ABACAVIR (Ziagen®, ABC)**

**Formulations**
- Oral solution: 20 mg/ml; Tablet: 300 mg

**Dosing**
- Target dose: <16 years or <37.5 kg: 8 mg/kg/dose twice daily
- Maximum dose: >16 years or ≥37.5 kg: 300 mg/dose twice daily
- Note: One-daily dosing is not yet approved for children.

**General comments**
- Parents must be warned about potential hypersensitivity reaction. ABC should be stopped permanently if hypersensitivity reaction occurs.
- No food restrictions.
- Tablets: Can be crushed and contents mixed with small amount of water or food and immediately ingested. Store at room temperature of 20°C to 25°C; may be refrigerated.

**DIDANOSINE (Videx®, DDI)**

**Formulations**
- Pediatric powder for oral solution: 10 mg/ml when reconstituted with water (in many countries must be made up with additional antacid)
- Chewable tablets: 25 mg, 50 mg, 100 mg, 150 mg, 200 mg
- Enteric-coated beadlets in capsules (EC): 125 mg, 200 mg, 250 mg, 400 mg (designed for once-daily dosing)

**Dosing**
- Target dose: <3 months: 50 mg/m²/dose twice daily
- Target dose: ≥ 3 months to <13 years: 90 - 120 mg/m²/dose twice daily
- Maximum dose: ≥13 years or ≥60 kg: 200 mg/dose twice daily or 400 mg once daily.
- Once-daily dosing for chewable tablets is authorized in United Kingdom for children >6 years.

**General comments**
- DDI is degraded rapidly unless given as an enteric formulation or combined with buffering agents or antacids. It is recommended to administer did 30 minutes before or two hours after meals.
- Oral suspension: Difficult to use and should be avoided. Must be kept refrigerated; stable for 30 days; must be well shaken.
- Tablets: At least two tablets of appropriate strength must be used at any one time for adequate buffering (e.g. if the child’s dose is 50 mg, administer two 25 mg tablets instead of one 50 mg tablet). Tablets should be chewed, crushed or dispersed in water before they are taken; should not be swallowed whole.
- Enteric-coated beadlets in capsules: Can be opened and sprinkled on a small amount of food.

**LAMIVUDINE (Epivir®, 3TC)**

**Formulations**
- Oral solution: 10 mg/ml; Tablet: 150 mg

**Dosing**
- Target dose: 4 mg/kg/dose twice daily to a maximum of 150 mg/dose twice daily
- Dose at <30 days: 2 mg/kg/dose twice daily

**STAVUDINE (Zerit®, d4T)**

**Formulations**
- Oral solution: 1 mg/ml; Capsules: 15 mg, 20 mg, 30 mg, 40 mg

**Dosing**
- Target dose: 1 mg/kg
- Dose at <30 kg: 1 mg/kg/dose twice daily
- Dose at 30 to 60 kg: 30 mg/dose twice daily
- Maximum dose at >60 kg: 40 mg/dose twice daily

**General comments**
- Well tolerated. Do not use d4T with ZDV due to antagonistic effect.
- Oral solution: Palatable and well tolerated but requires refrigeration after reconstitution. Powder for oral solution should be protected from excessive moisture and stored in tightly closed containers at 25°C (permitted range: 15°C to 30°C). After constitution, needs refrigeration and storage in original container; discard any unused portion after 30 days. Must be well shaken before use.
- Capsules: Can be opened and mixed with small amount of food or water (stable in solution for 24 hours if kept refrigerated).

**ZIDOVUDINE (Retrovir®, ZDV, AZT)**

**Formulations**
- Syrup: 10 mg/ml; Capsules: 100 mg and 250 mg sizes; Tablet: 300 mg

**Dosing**
- Target dose for infants >6 weeks old: 180-240 mg/m² per dose given twice daily (total daily dose of 360-480 mg/m²)
- Maximum dose: 300 mg/dose twice daily

**General comments**
- For children with suspected nervous system involvement, a dose of 240 mg/m² per dose given twice daily may be beneficial. Do not use d4T with ZDV due to antagonistic effect. No food restrictions. Use with caution in children with anaemia due to potential for bone marrow suppression.
- **Syrup:** Stable at room temperature but light-sensitive; store in glass jar.
- **Capsules:** May be opened and dispersed in water or on to a small amount of food and immediately ingested. Store at 15°C to 25°C.

**EFAVIRENZ (Stocrin®, Sustiva®, EFV)**

**Formulations**
- Syrup: 30 mg/ml. Note: syrup has lower bioavailability and ratio of 1.3 syrup to solid formulation is suggested to achieve an equivalent dose.
- Capsules: 50 mg, 100 mg, 200 mg; Tablets: 600 mg

**Dosing**
- Target dose for children >3 years: 19.5 mg/kg/day (syrup) or 15 mg/kg/day (capsule/tablet)
- Weight >40 kg: 600 mg once daily

**Towards Universal Access (http://www.who.int.hiv)"
**General comments**

EFV is not approved for children <3 years. Store at 25°C (permitted range: 15°C to 30°C). EFV can be given with food but if taken with food, especially high-fat meals, absorption is increased by an average of 50%. Best given at bedtime to reduce CNS side-effects, especially during first two weeks.

**Capsules:** May be opened and added to small amount of food or liquid; they have a very peppery taste but can be mixed with sweet foods to disguise taste.

**NEVIRAPINE (Viramune®, NVP)**

**Formulations**

Oral suspension: 10 mg/mL; Tablet: 200 mg

**Dosing**

Target dose for maintenance: 160-200 mg/m²/dose to a maximum dose of 200 mg taken twice daily

Special considerations on dosing:

- **a)** Induction dose: once daily for first 14 days; it is generally half the daily maintenance dose given once daily except where the maintenance dose is divided unequally between a.m. and p.m.
- **b)** Maintenance dose: 160 - 200 mg/m² given twice daily adjusted for more aggressive dosing in younger ages.
- **c)** For children 14-24.9 kg; the suggested dose is 1 tablet a.m. and 0.5 tablet p.m. If a mild rash occurs during the first 14 days of induction dosing, continue once daily dosing and only escalate dose once the rash has subsided and the dose is well tolerated. If a severe rash occurs (especially if accompanied by fever, blistering or mucosal ulcerations), discontinue drug.

**General comments**

Parents must be warned about a potential severe, life-threatening rash from nevirapine if rifampicin is coadministered. Can be given without disguise taste. They have a very peppery taste but can be mixed with sweet foods to disguise taste.

**STAVUDINE (d4T) + LAMIVUDINE (3TC)**

**Formulations**

Oral solution: 80 mg/mL; Capsule: 100 mg

**Dosing**

(d4T from NovoR® package insert)

Rarely used as sole PI except for TB co-treatment in children <3 years.

- **Target dose:** >1 month: 350-400 mg/m²/dose twice daily. Maximum dose 600 mg twice daily (when used as single PI therapy).
- **Special considerations on dosing:** Initiate therapy at 250 mg/m²dose twice daily and increase as tolerated to full dose over 5 days. Usually used at lower doses as a pharmacokinetic enhancer with other PIs.

**General comments**

Should be taken with food. Techniques to increase tolerance in children: mix oral solution with milk, dull taste buds with ice chips, coat mouth with peanut butter, follow dose with strong-tasting food such as cheese or gum. There are many drug-drug interactions because it is a potent inhibitor of cytochrome P450.

**STAVUDINE (d4T) + LAMIVUDINE (3TC) + NEVIRAPINE (NVP)**

**Formulations**

Tablet: 40 mg d4T-based tablet twice daily

**Dosing**

- **Target dose:** stavudine: 1 mg/kg/dose twice daily; lamivudine: 4 mg/kg/dose twice daily; nevirapine: 160-200 mg/m²/dose twice daily

**Maximum dose:** One 40 mg d4T-based tablet twice daily

**General comments**

Contains a fixed dose of NVP, therefore cannot be used for nevirapine induction as nevirapine dose escalation required (see NVP dosing recommendations). See comments under individual drug components.

**Tables:** Preferably, should not be split unless scored.

**ZIDOVUDINE (ZDV) + LAMIVUDINE (3TC) (Combivir®)**

**Formulation**

Tablet: ZDV (300 mg) plus 3TC (150 mg)

**Dosing**

- **Target dose:**
  - Zidovudine: 180 - 240 mg/m²/dose twice daily
  - Lamivudine: 4 mg/kg/dose twice daily

**Maximum dose:** 1 tablet/dose twice daily

**General comments**

See comments under individual drug components.

**Tables:** No food restrictions. Can be crushed and contents mixed with a small amount of water or food and immediately taken. Store between 2°C and 30°C.

**ZIDOVUDINE (ZDV) + LAMIVUDINE (3TC) + ABACAVIR (ABC)(Trizivir®)**

**Formulation**

Tablet: ZDV (300 mg) plus 3TC (150 mg) plus ABC (300 mg)

**Dosing**

- **Target dose:**
  - Zidovudine: 180-240 mg/m²/dose twice daily
  - Lamivudine: 4 mg/kg/dose twice daily
  - Abacavir: 8 mg/kg/dose twice daily

**Maximum dose:** 1 tablet/dose twice daily

**General comments**

See comments under individual drug components. Parents must be warned about potential hypersensitivity reaction. ABC should be stopped permanently if hypersensitivity reaction occurs.

**Tables:** Should not be split.

**TRIMETHOPRIM/SULFAMETHOXAZOLE**

(Cotrimoxazole, Septrin®, Bactrim®, TMP/SMZ)

**Dosing Recommendations for Cotrimoxazole Prophylaxis for Infants and Children**

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Suspension 40 mg TMP/200 mg SMZ per 5ml</th>
<th>Single-strength tablet 80 mg TMP/400 mg SMZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;6 months</td>
<td>2.5 ml daily</td>
<td>1/4 tablet daily</td>
</tr>
<tr>
<td>6 months-5 years</td>
<td>5 ml daily</td>
<td>1/2 tablet daily</td>
</tr>
<tr>
<td>5-14 years</td>
<td>10 ml daily</td>
<td>1 tablet daily</td>
</tr>
<tr>
<td>&gt;14 years</td>
<td>–</td>
<td>2 single-strength or 1 double-strength tablet daily</td>
</tr>
<tr>
<td>Weight range (kg)</td>
<td>Abacavir (Ziagen®, ABC)</td>
<td>Didanosine (Videx®, DDI)</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>5 - 5.9</td>
<td>8 mg/kg/dose TWICE daily</td>
<td>90-120 mg/m²/dose TWICE daily</td>
</tr>
<tr>
<td>6 - 6.9</td>
<td>8 mg/kg/dose TWICE daily</td>
<td>90-120 mg/m²/dose TWICE daily</td>
</tr>
<tr>
<td>7 - 7.9</td>
<td>8 mg/kg/dose TWICE daily</td>
<td>90-120 mg/m²/dose TWICE daily</td>
</tr>
<tr>
<td>8 - 8.9</td>
<td>8 mg/kg/dose TWICE daily</td>
<td>90-120 mg/m²/dose TWICE daily</td>
</tr>
<tr>
<td>9 - 9.9</td>
<td>8 mg/kg/dose TWICE daily</td>
<td>90-120 mg/m²/dose TWICE daily</td>
</tr>
<tr>
<td>10 - 10.9</td>
<td>8 mg/kg/dose TWICE daily</td>
<td>90-120 mg/m²/dose TWICE daily</td>
</tr>
<tr>
<td>11 - 11.9</td>
<td>8 mg/kg/dose TWICE daily</td>
<td>90-120 mg/m²/dose TWICE daily</td>
</tr>
<tr>
<td>12 - 13.9</td>
<td>8 mg/kg/dose TWICE daily</td>
<td>90-120 mg/m²/dose TWICE daily</td>
</tr>
<tr>
<td>14 - 16.9</td>
<td>8 mg/kg/dose TWICE daily</td>
<td>90-120 mg/m²/dose TWICE daily</td>
</tr>
<tr>
<td>17 - 19.9</td>
<td>8 mg/kg/dose TWICE daily</td>
<td>90-120 mg/m²/dose TWICE daily</td>
</tr>
<tr>
<td>20 - 24.9</td>
<td>8 mg/kg/dose TWICE daily</td>
<td>90-120 mg/m²/dose TWICE daily</td>
</tr>
<tr>
<td>25 - 29.9</td>
<td>8 mg/kg/dose TWICE daily</td>
<td>90-120 mg/m²/dose TWICE daily</td>
</tr>
<tr>
<td>30 - 34.9</td>
<td>8 mg/kg/dose TWICE daily</td>
<td>90-120 mg/m²/dose TWICE daily</td>
</tr>
<tr>
<td>35 - 39.9</td>
<td>8 mg/kg/dose TWICE daily</td>
<td>90-120 mg/m²/dose TWICE daily</td>
</tr>
<tr>
<td>Weight range (kg)</td>
<td>Lopinavir/ritonavir (Kaletra®, LPV/r)</td>
<td>Nelfinavir (Viracept®, NFV)</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>10-16 mg/kg/dose</td>
<td>TWICE daily</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weight range (kg)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-16 mg/kg/dose</td>
<td></td>
</tr>
<tr>
<td>5 - 5.9</td>
<td>1 ml</td>
<td>2 tabs</td>
</tr>
<tr>
<td>6 - 6.9</td>
<td>1.5 ml</td>
<td>2 tabs</td>
</tr>
<tr>
<td>7 - 7.9</td>
<td>1.5 ml</td>
<td>3 tabs in am</td>
</tr>
<tr>
<td>7 - 7.9</td>
<td>1.5 ml</td>
<td>3 tabs in pm</td>
</tr>
<tr>
<td>8 - 8.9</td>
<td>2 ml</td>
<td>3 tabs</td>
</tr>
<tr>
<td>9 - 9.9</td>
<td>2 ml</td>
<td>3 tabs</td>
</tr>
<tr>
<td>10 - 10.9</td>
<td>2 ml</td>
<td>3 tabs</td>
</tr>
<tr>
<td>11 - 11.9</td>
<td>2 ml</td>
<td>3 tabs</td>
</tr>
<tr>
<td>12 - 13.9</td>
<td>2 ml</td>
<td>2 caps in am</td>
</tr>
<tr>
<td>14 - 16.9</td>
<td>2 ml</td>
<td>2 caps in am</td>
</tr>
<tr>
<td>17 - 19.9</td>
<td>2.5 ml</td>
<td>2 caps in am</td>
</tr>
<tr>
<td>20 - 24.9</td>
<td>3 ml</td>
<td>2 caps in pm</td>
</tr>
<tr>
<td>25 - 25.9</td>
<td>3.5 ml</td>
<td>2 caps in pm</td>
</tr>
<tr>
<td>30 - 34.9</td>
<td>4 ml</td>
<td>3 caps in am</td>
</tr>
<tr>
<td>35 - 39.9</td>
<td>5 ml</td>
<td>3 caps in am</td>
</tr>
</tbody>
</table>