WHO optimal antiretroviral dosing guidance

Recommendations for dosing medicines for HIV prevention and treatment in paediatric populations

World Health Organization

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WHO optimal antiretroviral dosing guidance: Recommendations for dosing medicines for HIV prevention and treatment in paediatric populations

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Page 02, lines 08–09

Delete: ["At age two weeks, ABC/3TC dosing should be increased to give 30 mg/15 mg once daily (Table 2).")]

Insert: ["At age two weeks, ABC/3TC dosing should be increased to give 30 mg/15 mg once daily (Table 3)"]

Page 06, Table 1, row 10 column 07

Delete: [blank]

Insert: [1]

Page 06 Table 1, row 11 column 07

Delete: [Blank]

Insert: [1]

Page 06 Table 2, row 07 column 03

Delete: [1]

Insert: [0.5]

Page 06 Table 2, row 07 column 04

Delete: [1]

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Page 08 Table 04, row 03 column 04

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Insert: [1.2mL]

Page 08 Table 04, row 04 column 04

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Insert: [2mL]

Page 08 Table 04, footnote "b"

Delete: ["NVP dosing in this table is for treatment; see **Table 6** for NVP dosing when used for prophylaxis."]

Insert: ["NVP dosing in this table is for treatment; see **Table 5** for NVP dosing when used for prophylaxis."]

Page 08, Table 05

Replace [Table 5]

Corrected version:

Table 5. Simplified age-and weight-based ARV drug dosing for prolonged postnatal prophylaxis in infants ≥ 4 weeks* and weighing 3 – 20 kg

Drug	Formulation	Number of tablets or amount in mL							
		4-6 weeks		6 weeks to 6 months		6 to 9 months		9 to 24 months	
NVP	50 mg scored dispersible tablets	0.5		0.5		0.5		1	
NVP	10 mg/mL liquid	1.5*		2		3		4	
Drug[a]	**Formulation**	3 to <6 kg		6 to <10 kg		10 to <15 kg		15 to <20 kg	
3TC[b]	10 mg/mL liquid	1.5	1.5	4	4	6	6	-	
3TC	150 mg tablet	-		-		-		1	
DTG	10 mg scored dispersible tablets	0.5		1.5		2		2.5	

[a]AZT can be administered at 1.5 mL twice daily from age 4 to 6 weeks, but should not be used a single drug for prolonged postnatal prophylaxis thereafter.
[b]3TC should be administered twice daily (as in Table) but can be given daily as 3 mL (3 to <6 kg), 8 mL (6 to <10 kg), and 12 mL (10 to <15 kg).
*Refer to Table 3 and 4 for enhanced infant prophylaxis from 0 - 4 weeks, 1.5mL daily NVP can be given from 0-4 weeks as prophylaxis.

Page 12, Table 09, Column 03 row 03

Delete: [1]

Insert: [0.5]

Page 12, Table 09, Column 04 row 03

Delete: [1]

Insert: [0.5]

Page 12, Table 09, Column 03 row 04

Delete: [3mL]

Insert: [1.5mL]

Page 12, Table 09, Column 03 row 07

Delete: [3mL]

Insert: [1.5mL]

Page 12, Table 09, Column 04 row 07

Delete: [3mL]

Insert: [1.5mL]

Page 12, Table 09, Row 14

Delete: entire row - [“RTV Powder 100mg/packet”]

Insert: [blank]

Page 12, Table 09, footnote, generic

Delete: [“If RTV powder 100 mg/packet is used, it should be given once daily, since the total daily RTV dose is 100 mg, except when higher doses are required for superboosting for children receiving rifampicin-containing TB treatment (see Table 7).”]

Insert: [blank]

These corrections have been incorporated into the electronic file.

Contents

Acknowledgements

WHO gratefully acknowledges the contributions of many individuals and organizations to update this paediatric HIV dosing publication. It is a revision of the paediatric dosing annex released in 2018 as part of a WHO guidelines update. Those that contributed to developing the previous version are duly acknowledged in the relevant publication. The individuals acknowledged below relate to this publication only.

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Nandita Sugandhi (former staff member of the Department of Global HIV, Hepatitis and STI programmes) coordinated the overall process, Ivy Kasirye (Department for HIV, Tuberculosis, Hepatitis and STIs), Martina Penazzato (Science for Health, Science Division), Lisa Frigati, Avinash Kanchar and Ajay Rangaraj (Department for HIV, Tuberculosis, Hepatitis and STIs) supported the development of the publication, under the leadership of Meg Doherty (Director, Science for Health, Science Division) and Tereza Kasaeva (Director, Department of HIV, Tuberculosis, Hepatitis and STIs).

Abbreviations

3TC	lamivudine
ABC	abacavir
ARV	antiretroviral
AZT	zidovudine
DTG	dolutegravir
DRV	darunavir
DRV/r	ritonavir-boosted darunavir
EFV	efavirenz
FTC	emtricitabine
LPV	lopinavir
LPV/r	ritonavir-boosted lopinavir
NVP	nevirapine
pALD	paediatric fixed-dose combination of abacavir, lamivudine and dolutegravir
PAWG	Paediatric ARV Working Group
TAF	tenofovir alafenamide
TB	tuberculosis

Introduction and rationale

This update provides consolidated guidance on optimal antiretroviral (ARV) drug dosing for neonates, infants and children, reflecting on the latest clinical evidence and formulations. It aims to simplify prescribing by using harmonized weight band dosing while ensuring that drug exposure remains safe and effective across paediatric age groups. The recommendations draw on expert review and new pharmacokinetic data incorporated into this 2026 revision.

For ease of implementation, paediatric ARV drug dosing is expressed in weight bands rather than milligrams per kilogram (mg/kg) or per square metre/per square foot (m^2 or ft^2) of body surface area. When standardized weight-band dosing was developed, the expected body surface area of children from low- and middle-income countries in each weight band was considered.

When paediatric dosing based on WHO weight bands was not readily available from the manufacturer, WHO consulted an advisory group of paediatric clinical experts, the Paediatric Antiretroviral Working Group (PAWG) (1) to identify options for delivering safe and effective dosing for each weight band using available paediatric ARV formulations. The sources of information for this guidance are data from clinical trials and studies of children living with HIV.

Methods

Paediatric ARV drug dosing recommendations were developed through structured review of pharmacokinetic, safety and efficacy data from clinical trials, cohort studies and modelling analyses involving neonates, infants and children. When manufacturer dosing was incomplete or unavailable, WHO convened the PAWG *(1)* to assess evidence and provide expert consensus on ARV drug dosing across standardized weight bands.

For the 2026 update, harmonized weight bands and revised neonatal dosing were informed by new pharmacokinetic data, simulation studies and clinical trial results, especially for dolutegravir (DTG) and abacavir + lamivudine (ABC/3TC). The recommendations were evaluated for feasibility using existing paediatric formulations and cross-checked against products approved by WHO listed authorities *(2)*. All guidance was finalized through iterative expert review, with attention to programme implementation and the needs of special populations, including preterm neonates and children receiving tuberculosis (TB) co-treatment.

Important updates to the paediatric HIV dosing tables

Harmonized weight bands, variability and dose boundaries

This publication introduces the use of harmonized dosing weight bands to streamline dosing for children while minimizing change in drug exposure. For ARV drugs, this change affects two weight bands that have now been updated using the weight bands of 10–14.99 kg and 15–19.99 kg *(3)*.

In some instances, the dose for a specific component in an ARV drug regimen for a particular weight band may be above or below the target dose recommended. WHO recommends that a fixed-dose combination be no more than 25% above the maximum target dose established in registrational trials and no more than 5% below the minimum target dose for efficacy for each drug component of the fixed-dose combination *(4)*.

These dosing tables have been updated to include the most recent information available for neonatal dosing. Clinical trials involving full-term neonates (≥37 weeks of gestation) weighing 2 kg or more now demonstrate that a DTG dose of 5 mg every other day (every 48 hours) in the first two weeks of life is safe and maintains appropriate drug levels. At two weeks of age, DTG dosing can be increased to 5 mg once daily (Table 3) *(5, 6)*.

For a three-drug ARV drug regimen in the first month of life, the dosing schedule for paediatric ABC/3TC dispersible tablets (120 mg/60 mg) can be harmonized with dosing for DTG *(7)*. Dosing for the first two weeks of life is 30 mg/15 mg (one quarter of a 120 mg/60 mg tablet) every other day (every 48 hours). At age two weeks, ABC/3TC dosing should be increased to give 30 mg/15 mg once daily (Table 3). DTG and ABC/3TC dosing by body weight should continue as recommended for infants ≥4 weeks and ≥3 kg weight (Table 1), noting that the doses of ABC and 3TC double from 30 mg/15 mg to 60 mg/30 mg, once daily, for infants at four weeks and older and weighing 3–5.99 kg.

Table 1 highlights the ARV drugs that are recommended for initiating and sequencing treatment for infants and children. In particular, the table now includes dosing of paediatric ABC/3TC/DTG (pALD, 60 mg/30 mg/5 mg) from ≥4 weeks of age and ≥3 kg onwards. A pharmacokinetic modelling and simulation study of children older than 4 weeks of age found doses of ABC 60 mg and 3TC 30 mg per day for children weighing 3–5.99 kg provides acceptable levels to maintain the safety and efficacy of both drugs *(8)*. In 2025, newly available clinical and pharmacokinetic data were incorporated into the existing pharmacokinetic model confirming that, for infants aged 4 weeks and weighing 3–5.99 kg, one tablet of ABC/3TC/DTG (60 mg/30 mg/5 mg) daily achieves therapeutic systemic exposure *(9)*.

WHO confirms current dosing information for children for tenofovir alafenamide (TAF) in this dosing publication. Drawing on the United States Food and Drug Administration approval of an identical TAF dose for both unboosted regimens and regimens containing darunavir boosted with ritonavir (DRV/r), as well as evidence from additional paediatric clinical studies, WHO recommends administering the same TAF dose to all children weighing ≥14 kg, regardless of whether the regimen is boosted or unboosted *(10, 11)*. Studies to investigate dosing for children weighing less than 14 kg are ongoing.

Important considerations for preterm infants

The management of HIV prophylaxis and treatment for preterm neonates (<37 weeks gestational age) remains challenging due to the lack of appropriate pharmacokinetic data, safety and dosing information for most ARV drugs. In this population, pharmacokinetic data are mainly available for zidovudine (AZT) from approximately 24 weeks gestational age onwards *(12)*. Nevirapine (NVP) and 3TC are widely used among preterm infants for both prophylaxis and treatment. Data on treatment-related twice-daily dosing of NVP was evaluated in the IMPAACT P1115 clinical trial, which suggested no additional safety concerns when administering the higher NVP dosing to preterm infants between 34 and 37 weeks gestational age *(13)*. However, pharmacokinetic data to guide treatment and prophylactic dosing of NVP are very limited for preterm neonates born before 32 weeks gestational age. Pharmacokinetic modelling and simulation studies are underway to establish optimal NVP treatment dosing for preterm infants born at <34 weeks gestation. A country example of NVP prophylactic dosing for very preterm infants includes administering a 2 mg/kg dose once daily from birth, followed by a 4 mg/kg dose once daily from 2 to 6 weeks of age *(14)*. In addition, a recent pharmacokinetic modelling and simulation study has proposed 3TC dosing for preterm neonates from 24 weeks gestational age *(15)*, providing preliminary guidance for 3TC dosing in this population.

DTG is highly protein-bound and has the potential to displace bilirubin from albumin-binding sites at very high concentrations, therefore raising the concern that administering DTG in its current formulations to preterm infants with immature liver function may result in bilirubin-induced neurological dysfunction *(16)*. In addition, ritonavir-boosted lopinavir (LPV/r) oral liquid contains alcohol and propylene glycol *(17)* and should not be given to infants younger than two weeks or preterm infants until 42 weeks corrected gestational age. In exceptional circumstances, use of LPV/r liquid may be considered for preterm infants ≥34 weeks gestational age and ≥2 weeks of life, for which some reassuring safety data do exist *(18)*.

However, AZT remains a preferred option for neonatal prophylaxis for preterm infants since dosing for preterm infants is not yet authorized for DTG. Dosing information for AZT-containing formulations is included here since it is still widely in use; however, programmes still using AZT as infant prophylaxis may consider transitioning to safer alternatives.

Prophylaxis versus treatment considerations

Prophylaxis and treatment dosing for all ARV drugs are the same except for NVP. The dosing tables in this publication apply to either HIV treatment or prophylaxis, except for NVP dosing. Since dedicated trials of new ARV drugs to assess efficacy in preventing vertical transmission will be challenging, the PAWG endorses the principle that dosing demonstrated to be safe and effective for treatment is also acceptable for prevention.

The lower once-daily NVP prophylaxis dose was derived from an early HIV prevention trial *(19)* that aimed to maintain NVP concentrations 10 times above the in vitro antiviral half-maximal inhibitory concentration (IC50) and not from direct evidence of efficacy for this dosing strategy in preventing vertical transmission. Although no longer preferred for treatment for children, NVP remains the preferred ARV drug option for routine and extended infant prophylaxis (Table 5). NVP prophylaxis is usually administered as a liquid formulation, but 50-mg scored dispersible tablets are an alternative. When NVP formulations are unavailable or not tolerated, DTG or 3TC are now recommended as alternative single drugs for infant prophylaxis *(20)*.

In 2025 (20), AZT was removed as an option for postnatal prophylaxis and treatment because of its well described toxicity for blood and the blood-forming organs. DTG and 3TC are safer and more widely available alternatives.

ARV drug dosing in HIV-associated TB

Guidance on dose adjustment for children receiving regimens containing DTG or LPV/r during rifampicin-based treatment has been incorporated in the dosing tables (Table 7). Direct pharmacokinetic data support twice-daily dosing for children weighing ≥3 kg and at least 4 weeks of age *(21, 22)*. Twice-daily DTG dosing should continue for two weeks after the final rifampicin dose. There are insufficient data to recommend once-daily DTG during rifampicin co-administration among children.

WHO recommends TB preventive treatment with weekly isoniazid plus rifapentine for three months for all ages, beginning with term infants to <3 months of age onwards, with weight band dosing available. For children younger than 2 years, dosing is derived from modelling and simulation studies evaluated by the TB Technical Advisory Group during the guidelines development process for TB preventive treatment recommendations. Specialist consultation should be sought for infants weighing <3 kg.

WHO also provides specific recommendations for infants born to mothers with TB disease. Importantly, malnutrition should be excluded among infants and young children before initiating TB preventive treatment, since active TB disease must first be ruled out *(23, 24)*.

Programme and regulatory considerations

This publication containing the simplified dosing schedule will be regularly reviewed and updated as additional data and new formulations become available. ARV drug formulations available from several manufacturers may have varied dosage strengths of tablets, capsules as well as liquid formulations from the information provided in this publication. Several optimal dosage forms for children are currently in development but have not yet received approval by a regulatory agency designated as a WHO-listed authority *(2)*.

National programme managers should ensure that products planned for use have received regulatory approval and are of appropriate quality and stability. A list of paediatric ARV drugs approved by WHO-listed authorities is available as WHO-prequalified drugs *(25)* and those either approved or tentatively approved by the United States Food and Drug Administration. Policies on procurement and quality assurance are available from the Global Fund to Fight AIDS, Tuberculosis and Malaria *(26)*.

Notable gaps

The work of the WHO Global Accelerator for Paediatric Formulations Network (GAP-f) *(27)* and the PAWG highlights the urgent need for improved age-appropriate formulations for infants and children living with HIV. A key unresolved gap is the absence of co-formulated TAF/FTC, TAF/3TC and DRV/r in heat-stable fixed-dose combinations, which are essential for improving treatment sequencing in children.

Conclusions

WHO will continue to give priority to simplified prescribing, dispensing and dosing guidance and will work closely with partners to accelerate the development of the formulations needed to support safe, effective and sustainable ARV therapy for children.

Key principles for paediatric ARV dosing

General principles

- At each clinic visit, infants and children should be weighed and their doses adjusted based on changes in body weight.
- If children need to use adult formulations, care must be taken to avoid underdosing and overdosing.
- Dividing scored tablets is preferred to ensure accurate dosing, especially if adult dosage forms are used. Splitting unscored tablets should be avoided since the uniform distribution of active drug products cannot be assured in tablet fragments.
- Once-daily dosing is preferable for ARV therapy and prophylaxis. If once-daily dosing is not possible, twice-daily dosing should be considered for all drugs in the regimen to facilitate adherence.

Preferred formulations

- Using an age-appropriate fixed-dose combination is preferred for any regimen if such a formulation is available.
- Oral liquid or syrup formulations should be avoided if possible (except when there is no other option for neonatal prophylaxis and for preterm infants).
- Dispersible tablets, granules or films are the preferred solid oral dosage forms, since dispersible tablets and granules can be made into liquid at the point of use for infants and children who cannot take the solid form directly.

Oral dosage forms

- When fractions of dispersible tablets are used, tablets should be fractioned first before being dispersed in an appropriate liquid to ensure proper dosing.
- Dispersible tablets should be ideally dispersed in potable water or swallowed whole.
- Crushing, chewing or mixing with breast-milk, other foods or liquids can be considered if the entire tablet is ingested, although direct bioavailability studies of such approaches are lacking.
- If suitable dispersible fixed-dose combinations are not available and oral liquids must be used, children should be switched to a solid oral dosage form as soon as possible.

Product-specific considerations

ABC/3TC/DTG

- To allow for appropriate dosing in term neonates, programmes should continue to ensure adequate stocks of separate formulations of ABC/3TC (120 mg/60 mg) double-scored dispersible tablet and DTG 5 mg or 10 mg scored dispersible tablets.
- The triple formulation of pALD should not be used in neonates and may be used only once an infant has reached age 4 weeks and a body weight of 3 kg.
- DTG dispersible tablets are not bioequivalent to DTG film-coated tablets and 30 mg of a DTG dispersible tablet is equivalent to 50 mg of a DTG film-coated tablet (28).
- A novel DTG 5 mg and 10 mg oral-dispersible film has been developed and has tentative United States Food and Drug Administration approval (29). The bioavailability of this DTG oral film is comparable (5, 30) to the DTG dispersible tablet in term neonates.

LPV/r and ritonavir-boosted atazanavir (ATV/r)

- Some tablets such as LPV/r, RTV or ATV/r heat-stable tablets are made in a special embedded matrix and should not be cut, split, dissolved, chewed or crushed, since bioavailability is significantly reduced when they are not swallowed whole.
- Among children for whom an LPV/r-based regimen remains the appropriate treatment choice, LPV/r is available in a granule formulation for infants and young children.
- However, children weighing 10 kg or more should be transitioned to LPV/r heat-stable tablets as soon as they are able to swallow tablets whole to ease administration and improve palatability and to reduce pill burden.

Programme and regulatory considerations

- Country programmes should consider the national regulatory status and local availability status of specific dosage forms when developing national recommendations for treating children.

Paediatric dosing tables

Table 1. Simplified dosing of solid formulations for once-daily dosing for infants and children ≥4 weeks[a] and weighing 3–35 kg

		Once-daily dosing						
Drug	**Strength of paediatric tablet, pellets or granules**	**Number of paediatric tablets/capsules/ pellets/sachets by weight band**					**Strength of adult tablet**	**Number of adult tablets by weight band**
		3 to <6 kg	**6 to <10 kg**	**10 to <15 kg**	**15 to <20 kg**	**20 to <25 kg**		**25 to <35 kg**
ABC/3TC/DTG (pALD)	Tablet (dispersible) 60 mg/30 mg/ 5 mg	1	3	4	5	6	-	-
ABC/3TC[b]	Tablet (dispersible) 120 mg/60 mg	0.5	1.5	2	2.5	3	600 mg/300 mg	1
DRV/r	Tablet 400 mg/50 mg	-	-	-	-	-	400 mg/50 mg	2
DTG/3TC	Tablet 300 mg/50 mg	-	-	-	-	1	300 mg/50 mg	1
TAF/FTC[c]	Tablet 15 mg/120 mg	-	-	-	1	1	25 mg/200 mg	1
	Tablet 25 mg/200 mg	-	-	-	-	-		
TAF/3TC/DTG	Tablet 25 mg/ 300 mg/50 mg	-	-	-	-	1	25 mg/300 mg/50 mg	1
TAF/FTC/ DTG[d]	Tablet 25 mg/200 mg/50 mg	-	-	-	-	1	25 mg/200 mg/50 mg	1
TDF/3TC/ DTG (TLD)	Tablet 300 mg/ 300 mg/50 mg	-	-	-	-	-	300 mg/300 mg/ 50 mg	1 (≥30 kg)
DRV[e]	Tablet 150 mg	-	-	-	4	4	600 mg	1
	Tablet 600 mg	-	-	-	1	1		
DTG[f]	Tablet (dispersible) 5 mg	1	3	4	5	6	50 mg	1
	Scored tablet (dispersible) 10 mg	0.5	1.5	2	2.5	3		
	Tablet (film coated) 50 mg	-	-	-	-	1		
RTV[g]	Tablet 50 mg	-	-	-	2	2	100 mg	1

a For infants younger than four weeks old, see Tables 3 and 4 for more appropriate dosing. Doses for infants younger than 4 weeks are reduced because of their decreased ability to excrete and metabolize medications. For infants who are at least four weeks old but weigh less than 3 kg, the immaturity of renal and hepatic pathways of elimination is less of a concern: most experts would therefore apply the 3–5.99 kg dosing regimen in this table for such infants, although uncertainty still exists about the appropriate dosing of ARV drugs for preterm and low-birthweight infants.

b This dose of ABC/3TC was designed to harmonize with the recommended dose for the solid pALD formulation. A double-scored tablet of ABC/3TC 120 mg/60 mg should be used to administer a quarter of a tablet when used in the 3–5.99 kg weight band.

c This dose of TAF/FTC 15 mg/120 mg may be used from 14 kg onwards.

d The United States Food and Drug Administration tentatively approved a fixed-dose combination containing TAF/FTC/DTG (TAF 25 mg, FTC 200 mg, DTG 50 mg) that can be used once daily for children and adolescents living with HIV weighing ≥25 kg *(30–32)*.

e DRV should not be used for children younger than 3 years. DRV in combination with RTV may be used once daily when there is no DRV resistance, present or suspected, and otherwise twice-daily dosing is required. Although the approved dosing for children weighing 30–34.99 kg is 675 mg, preliminary adult data suggest that lower DRV doses are effective; the 600-mg dose has therefore been extended to the 25–34.99 kg weight band. DRV should be administered with RTV 50 mg (using the 25-mg or 50-mg solid formulation) for children weighing 15–29.99 kg. RTV 100-mg tablets can be used as a booster if lower-strength RTV tablets are not available based on limited experience indicating good acceptability and tolerability.

f The United States Food and Drug Administration has approved DTG 5-mg dispersible tablets *(33)* and 10-mg scored dispersible tablets (34) for treatment-naive or treatment-experienced integrase strand transfer inhibitor–naive children aged ≥4 weeks and weighing ≥3 kg, based on data from the IMPAACT 1093 trial and ODYSSEY. The United States Food and Drug Administration and European Medicines Agency approved simplified dosing of the DTG 50-mg film-coated tablets for all children weighing ≥20 kg. DTG dispersible tablets and DTG film-coated tablets are not bioequivalent: 30 mg of DTG dispersible tablet corresponds to 50 mg of DTG film-coated tablets. DTG 50-mg film-coated tablets are preferred for children who have reached 20 kg (unless they cannot swallow tablets). For adolescents living with HIV weighing more than 30 kg, a fixed-dose formulation of TDF/3TC/DTG 300 mg/300 mg/50 mg can be used and is preferable.

g RTV should only be used as a boosting agent in combination with ATV or DRV or to superboost LPV/r when given with concomitant rifampicin for TB (see Table 7).

Table 2: Simplified dosing of solid formulations for twice-daily dosing for infants and children ≥ 4 weeks[a] and weighing 3–35 kg.

Twice-daily dosing													
Drug	Strength of paediatric tablet, pellets or granules	Number of paediatric tablets/capsules/ pellets/sachets by weight band										Strength of adult tablet	Number of adult tablets by weight band
		3 to <6 kg		6 to <10 kg		10 to <15 kg		15 to <20 kg		20 to <25 kg			25 to <35 kg
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		AM PM
ABC/3TC[b]	Tablet (dispersible) 120 mg/60 mg	0.25	0.25	0.5	1	1	1	1	1.5	1.5	1.5	600 mg/300 mg	0.5 0.5
AZT/3TC	Tablet (dispersible) 60 mg/30 mg	1	1	1.5	1.5	2	2	2.5	2.5	3	3	300 mg/150 mg	1 1
DRV/r	Tablet 400 mg/50 mg	-	-	-	-	-	-	-	-	-	-	400 mg/50 mg	1 1
LPV/r[c]	Tablet 100 mg/25 mg	-	-	-	-	2	1	2	2	2	2	-	- -
	Granules 40 mg/ 10 mg/sachet	2	2	3	3	4	4	5	5	6	6		
ABC	Tablet (dispersible) 60 mg	0.5	0.5	1.5	1.5	2	2	2.5	2.5	3	3	300 mg	1 1
AZT	Tablet (dispersible) 60 mg	1	1	1.5	1.5	2	2	2.5	2.5	3	3	300 mg	1 1

a For infants younger than four weeks old, see Tables 3 and 4 for more appropriate dosing. Doses for infants younger than 4 weeks are reduced because of their decreased ability to excrete and metabolize medications. For infants who are at least four weeks old but weigh less than 3 kg, the immaturity of renal and hepatic pathways of elimination is less of a concern: most experts would therefore apply the 3–5.99 kg dosing regimen in this table for such infants, although uncertainty still exists about the appropriate dosing of ARV drugs for preterm and low-birthweight infants.

b This dose of ABC/3TC was designed to harmonize with the recommended dose for the solid pALD formulation. A double-scored tablet of ABC/3TC 120 mg/60 mg should be used to administer a quarter of a tablet when used in the 3–5.99 kg weight band.

c The LPV/r heat-stable tablet formulation must be swallowed whole and should not be split, chewed, dissolved or crushed. Adult 200 mg/50 mg tablets could be used for children weighing 14–25 kg (one tablet in the morning and one in the evening) and for children weighing 25–34.99 kg (two tablets in the morning and one in the evening). Since the supply is currently constrained, granules should be discouraged for children weighing more than 14 kg, who should receive LPV/r 100 mg/25 mg tablets or be transitioned to DRV/r instead.

Table 3. Simplified dosing of child-friendly ARV drug formulations for term neonates with birthweight ≥2 kg (dosed by age)

Drug	Strength of paediatric formulation	Dose (at age in weeks)[b]	
		0 to < 2 weeks[a]	2 to < 4 weeks
ABC/3TC	Double-scored tablet (dispersible) 120 mg/60 mg	¼ (every other day)	¼ (every day)
DTG	Tablet (dispersible) 5 mg	1 (every other day)	1 (every day)
	Tablet (dispersible) 10 mg	½ (every other day)	½ (every day)
	Oral film (dispersible) 5 mg	1 (every other day)	1 (every day)

a To help simplify neonatal dosing of other ARV drugs with DTG, ABC/3TC can also be administered every other day for the first two weeks of life at a dose of 30 mg/15 mg (quarter of a double-scored ABC/3TC 120 mg/60 mg dispersible tablet); once they have reached age two weeks, neonates can receive ABC/3TC 30 mg/15 mg once daily *(7)*. In the first two weeks of life, the dosing interval does not need to be exactly 48 hours, but an effort should be made to administer the dose at a consistent part of the day (such as in the mornings or in the evenings). There are two versions of ABC/3TC (120 mg/60 mg) dispersible tablets made by different manufacturers: one version is double-scored and the other only single-scored. It is critical that only the double-scored tablet be used when applying the neonatal dose of one quarter of a tablet.

b It is recommended that the caregiver be provided with support interventions, such as a dosing calendar, to facilitate appropriate dosing and dosing adjustments.

Table 4. Simplified dosing of ARV drug formulations for term neonates with birthweight ≥2 kg (dosed by body weight)

Drug	Strength of oral solution	2 to <3 kg		3 to <4 kg		4 to <5 kg	
Once-daily dosing							
ABC[a]	20 mg/mL	0.8 mL		1 mL		1.2 mL	
3TC[a]	10 mg/mL	1 mL		1.6 mL		2 mL	
Twice-daily dosing							
		AM	PM	AM	PM	AM	PM
ABC	20 mg/mL	0.4 mL	0.4 mL	0.5 mL	0.5 mL	0.6 mL	0.6 mL
AZT	10 mg/mL	1 mL	1 mL	1.5 mL	1.5 mL	2 mL	2 mL
3TC	10 mg/mL	0.5 mL	0.5 mL	0.8 mL	0.8 mL	1 mL	1 mL
NVP[b]	10 mg/mL	1.5 mL	1.5 mL	2 mL	2 mL	3 mL	3 mL
LPV/r[c]	Granules 40 mg/ 10 mg sachet	2	2	2	2	2	2

a Once-daily dosing for ABC and 3TC liquid formulations has been extrapolated from twice-daily dosing.

b NVP dosing in this table is for treatment; see Table 5 for NVP dosing when used for prophylaxis.

c Based on recent data, two LPV/r sachets twice a day can be considered for term neonates weighing ≥2 kg from birth *(35)*.

Table 5. Simplified age-and weight-based ARV drug dosing for prolonged postnatal prophylaxis in infants ≥ 4 weeks* and weighing 3 – 20 kg

Drug	Formulation	Number of tablets or amount in mL			
		4 to 6 weeks	6 weeks to 6 months	6 to 9 months	9 to 24 months
NVP	50 mg scored dispersible tablets	0.5	0.5	0.5	1
NVP	10 mg/mL liquid	1.5*	2	3	4
Drug[a]	**Formulation**	**3 to <6 kg**	**6 to <10 kg**	**10 to <15 kg**	**15 to <20 kg**
3TC[b]	10 mg/mL liquid	1.5 1.5	4 4	6 6	-
3TC	150 mg tablet	-	-	-	1
DTG	10 mg scored dispersible tablets	0.5	1.5	2	2.5

[a] AZT can be administered at 1.5 mL twice daily from age 4 to 6 weeks, but should not be used a single drug for prolonged postnatal prophylaxis thereafter.

[b] 3TC should be administered twice daily (as in Table) but can be given daily as 3 mL (3 to <6 kg), 8 mL (6 to <10 kg), and 12 mL (10 to <15 kg).

* Refer to Table 3 and 4 for enhanced infant prophylaxis from 0 - 4 weeks, 1.5mL daily NVP can be given from 0-4 weeks as prophylaxis.

Table 6. Simplified paediatric dosing for co-trimoxazole preventive therapy

Drug	Strength of paediatric tablet or oral liquid	Number of paediatric tablets or amount in mL by weight band once daily					Strength of adult tablet	Number of adult tablets by weight band
		3 to <6 kg	6 to <10 kg	10 to <15 kg	15 to <20 kg	20 to <25 kg		25 to <35 kg
Co-trimoxazole (sulfamethoxazole and trimethoprim)	Suspension 200 mg/40 mg per 5 mL	2.5 mL	5 mL	5 mL	10 mL	10 mL	-	-
	Tablets (dispersible) 100 mg/20 mg	1	2	2	4	4	-	-
	Tablets (scored) 400 mg/80 mg	-	0.5	0.5	1	1	400 mg/ 80 mg	2
	Tablets (scored) 800 mg/160 mg	-	-	-	0.5	0.5	800 mg/1 60 mg	1

Table 7. ARV drug dose adjustment for children receiving rifampicin-containing TB treatment[a]

Drug	Strength of paediatric tablets or oral liquid	Number of paediatric tablets or sachets by weight band TWICE DAILY										Strength of adult tablet	Number of adult tablets by weight band	
		3 to <6 kg		6 to <10 kg		10 to <15 kg		15 to <20 kg		20 to <25 kg			25 to <35 kg	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		AM	PM
DTG[b,c]	5 mg dispersible tablets	1	1	3	3	4	4	5	5	6	6	50 mg film-coated tablets	1	1
	10 mg scored dispersible tablets	0.5	0.5	1.5	1.5	2	2	2.5	2.5	3	3			
	50 mg film-coated tablets	-	-	-	-	-	-	-	-	1	1			
LPV/r (with additional RTV)	Granules 40 mg/ 10 mg sachet	2	2	3	3	4	4	5	5	6	6	-	-	-
	Tablet[d] 100 mg/ 25 mg	-	-	-	-	2	1	2	2	2	2	100 mg/25 mg	3	3
RTV[e]	Tablet 100 mg	-	-	-	-	1	1	1	2	1	2	100 mg	2	2
	Tablet 50 mg	-	-	-	-	2	2	3	3	3	3			

a The adjusted ARV drug dose must be continued until two weeks after rifampicin treatment ends since rifampicin's enzyme-inducing effect slowly fades away after discontinuing the drug.

b Twice-daily dosing of DTG when taken with rifampicin is recommended based on adult drug interaction data, supported by paediatric pharmacokinetic and safety data for children ≥14 kg (37, 38). PAWG highlights the need for ongoing confirmatory evidence for lower weight bands but endorses twice-daily dosing of DTG when taken with rifampicin for all children aged ≥4 weeks and weighing ≥3 kg.

c pALD should continue to be given once daily when taken with rifampicin and DTG dosing adjusted by providing an additional dose of DTG 12 hours after pALD is taken.

d The LPV/r heat-stable tablet formulation must be swallowed whole and should not be split, chewed, dissolved or crushed. An adult 200 mg/50 mg tablet may be used for children weighing 14–24.99 kg (one tablet in the morning and one in the evening) and for children weighing 25–34.99 kg (two tablets in the morning and one in the evening).

e Suggested RTV dose for superboosting to achieve the same dose as LPV in mg, in a ratio equal to or approaching 1:1. This dosing approach is supported by a study that explored this approach for young children receiving LPV/r *(39)*.

Table 8: Less frequently used solid and liquid formulations for once-daily dosing

Once-daily dosing								
Drug	**Strength of paediatric tablets, capsules, pellets, granules or liquid formulation**	**Number of paediatric tablets/capsules or amount in mL by weight band**					**Strength of adult tablet**	**Number of adult tablets by weight band**
		3 to <6 kg	6 to <10 kg	10 to <15 kg	15 to <20 kg	20 to <25 kg		25 to <35 kg
ABC/3TC	Tablet (dispersible) 60 mg/30 mg	1	3	4	5	6	600 mg/300 mg	1
ATV[a]	Capsule 100 mg	-	-	2	2	2	300 mg	1
	Capsule 200 mg	-	-	1	1	1		
DRV[b]	Tablet 150 mg	-	-	-	4	4	600 mg	1
	Tablet 600 mg	-	-	-	1	1		
EFV[c]	Tablet (scored) 200 mg	-	-	1	1.5	2	-	2
RTV	Tablet 25 mg	-	-	-	4	4	100 mg	1

[a] ATV is approved only for children three months and older. ATV single-strength capsules should be administered with RTV 100 mg for all weight bands of 10 kg and above. ATV powder formulation has limited availability in low- and middle-income countries but enables ATV to be administered to infants and children as young as three months. ATV 300 mg with RTV 100 mg for children weighing 25–29.99 kg is recommended based on the findings of the PRINCE-2 study (40).

[b] DRV 600 mg may be used starting from 14 kg using either four tablets of DRV 150 mg or one tablet of DRV 600 mg.

[c] EFV is not recommended for children younger than three years and weighing less than 10 kg.

Table 9: Less frequently used solid and liquid formulations for twice-daily dosing

Twice-daily dosing															
Drug	**Strength of paediatric tablets, capsules, pellets, granules or liquid formulation**	**Number of paediatric tablets/capsules or amount in mL by weight band**										**Strength of adult tablet**	**Number of adult tablets by weight band**		
		3 to <6 kg		**6 to <10 kg**		**10 to <15 kg**		**15 to <20 kg**		**20 to <25 kg**			**25 to <35 kg**		
		AM	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**		**AM**	**PM**	
ABC	Tablet (dispersible) 60 mg	0.5	0.5	1.5	1.5	2	2	2.5	2.5	3	3	300 mg	1	1	
	Liquid formulation 20 mg/mL	1.5 mL	1.5 mL	4 mL	4 mL	6 mL	6 mL	-	-	-	-	-	-	-	
AZT	Tablet (dispersible) 60 mg	1	1	1.5	1.5	2	2	2.5	2.5	3	3	300 mg	1	1	
	Liquid formulation 10 mg/mL	6 mL	6 mL	9 mL	9 mL	12 mL	12 mL	-	-	-	-	-	-	-	
3TC	Liquid formulation 10 mg/mL	1.5 mL	1.5 mL	4 mL	4 mL	6 mL	6 mL	-	-	-	-	-	-	-	
DRV	Tablet 75 mg	-	-	-	-	-	-	5	5	5	5	400 mg	1	1	
LPV/r[a]	Liquid formulation 80/20 mg/mL	1 mL	1 mL	1.5 mL	1.5 mL	2 mL	2 mL	2.5 mL	2.5 mL	3 mL	3 mL	-	-	-	
	Pellets 40/10 mg	2	2	3	3	4	4	5	5	6	6				
RAL	Chewable tablets 25 mg	1	1	2	2	3	3	4	4	6	6	400 mg	1	1	
	Chewable tablets 100 mg	-	-	-	-	-	-	1	1	1.5	1.5				
RTV	Tablet 25 mg	-	-	-	-	-	-	2	2	2	2	100 mg	1	1	

[a] LPV/r liquid requires a cold chain during transport and storage. Do not use LPV/r solution for infants younger than two weeks of age.

Table 10: Paediatric ARV formulations in development[a] for once- and twice-daily dosing

Drug	Strength of paediatric tablet	Number of tablets by weight band											
		3 to <6 kg		6 to <10 kg		10 to <15 kg		15 to <20 kg		20 to <25 kg		25 to <35 kg	
DTG/3TC[a]	Tablet (dispersible) 5 mg/30 mg	-		3		4		5		6		-	
TAF/FTC/ DTG[b]	Tablet 1.88 mg/15 mg/5 mg	1		3		4		5		-		-	
DRV/r	Tablet 120 mg/20 mg	-		-		4		5		5		5	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
DRV/r[c]	Tablet 120 mg/20 mg	-	-	-	-	2	2	3	3	3	3	4	4

a Research is ongoing to evaluate the use of DTG/3TC for treatment maintenance of children with suppressed viral loads aged ≥2 years *(41)*.

b TAF dosing for children ≤14 kg still requires clinical validation.

c DRV/r once- and twice-daily dosing for children at least three years old (weighing 10–34.99 kg) using the 120 mg/20 mg fixed-dose combination is based on modeling and simulation of available paediatric data *(42)*.

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