

# ARV DRUG DOSING CHART FOR CHILDREN ≥ 28 DAYS (2025)

Compiled by National HIV & TB Health Care Worker Hotline and the Child and Adolescent Committee of SA HIV Clinicians Society in collaboration with the Department of Health

Target dose	Abacavir + Lamivudine (ABC + 3TC)	Abacavir (ABC)	Lamivudine (3TC)	Zidovudine (AZT)	Dolutegravir (DTG)	Abacavir + Lamivudine + Dolutegravir (ALD)	Dolutegravir (DTG) or Abacavir/Lamivudine/ Dolutegravir (ALD) when on Rifampicin	Lopinavir/ritonavir (LPV/r)	Lopinavir/ritonavir when on rifampicin (and for 2 weeks after stopping rifampicin)	#Atazanavir (ATV) + Ritonavir (RTV)	Target dose
As for individual medicines <b>ONCE daily</b>	8 mg/kg/dose <b>TWICE daily</b> OR if ≥ 10kg: 16 mg/kg/dose <b>ONCE daily</b>	4 mg/kg/dose <b>TWICE daily</b> OR if ≥ 10kg: 8 mg/kg/dose <b>ONCE daily</b>	180-240 mg/m <sup>2</sup> /dose <b>TWICE daily</b>	By weight band <b>ONCE daily</b>	By weight band <b>ONCE daily</b>	By weight band <b>TWICE DAILY</b>	300/75 mg/m <sup>2</sup> /dose LPV/r <b>TWICE daily</b>	LPV/r std dose + super-boosting with ritonavir (RTV) powder <b>TWICE daily</b> (≥0.75xLPV dose bd) OR Double-dose LPV/r tabs ONLY if able to swallow whole LPV/r tabs <b>TWICE daily</b>	By weight band <b>ONCE daily</b>	Target dose	
IF PATIENT IS ON RIFAMPICIN TB TREATMENT, ADD ADDITIONAL DTG UP TO TWO WEEKS AFTER STOPPING RIFAMPICIN. SEE NEXT COLUMN											
Available formulations	Dispersible tablet FDC: ABC/3TC 120/60 mg Tablets FDC: ABC/3TC 600/300 mg ABC/3TC/DTG (ALD) 600/300/50 mg	Sol. 20 mg/ml Tabs 60 mg (scored, dispersible), 300 mg (not scored)	Sol. 10 mg/ml Tabs 150 mg (scored)	Sol. 10 mg/ml, Tabs 100 mg; 300 mg FDC: AZT/3TC 300/150 mg	Dispersible tabs (DT) 10 mg, Film coated (FC) tabs 50 mg, FDC: TLD 300/300/50 mg OR ALD 600/300/50 mg <b>DT AND FC TABLETS ARE NOT BIOEQUIVALENT</b>	Dispersible tablets (DT) FDC: pALD 60/30/5 mg ALD 600/300/50 mg	Dispersible tabs (DT) 10 mg, Film coated (FC) tabs 50 mg, FDC: TLD 300/300/50 mg OR ALD DT 60/30/5 OR ALD 600/300/50 mg <b>DT AND FC TABLETS ARE NOT BIOEQUIVALENT</b>	Sol. 80/20 mg/ml Adult tabs 200/50 mg, Paed tabs 100/25 mg <b>TABLETS MUST BE SWALLOWED WHOLE</b>	Oral powder 100 mg/packet Adult tabs 200/50 mg, Paed tabs 100/25 mg	FDC: ATV/RTV 300/100 mg <b>ATV/r FDC TABLETS MUST BE SWALLOWED WHOLE</b>	Available formulations
Wt. (kg)	See ARV Drug Dosing Chart for Children < 28 Days for infants who are still < 2kg or < 37 weeks corrected gestational age at 4 weeks of age										Wt. (kg)
2 - 2.9	-	-	-	-	½ x 10 mg DT od	1 x pALD DT (60/30/5 mg) od	½ x 10 mg DT bd OR [pALD DT (60/30/5) 1 tabs od + ½ x 10 mg DTG DT approx. 12 hours later]	-	-	-	2 - 2.9
3 - 5.9	½ x 120/60 mg tab od	3 ml bd OR 1 x 60 mg tab bd	3 ml bd	6 ml bd	½ x 10 mg DT od	1 x pALD DT (60/30/5 mg) od	* 1 ml bd	LPV/r std dose (see purple column) + oral RTV powder 100 mg (1 packet) bd	Do not use double-dose LPV/r tabs	No preparation available	3 - 5.9
6 - 9.9	1½ x 120/60 mg tabs od	4 ml bd OR 1½ x 60 mg tab bd	4 ml bd	9 ml bd	1½ x 10 mg DT od	3 x pALD DT (60/30/5 mg) od	* 1.5 ml bd	LPV/r std dose (see purple column) + oral RTV powder 100 mg (1 packet) bd	Do not use double-dose LPV/r tabs	No preparation available	6 - 9.9
10 - 13.9	2 x 120/60 mg tabs od	<b>Once daily dosing &gt; 10 kg</b> 4 x 60 mg tabs od OR 12 ml od	<b>Once daily dosing &gt; 10 kg</b> 12 ml od	12 ml bd OR 1 x 100 mg tabs bd	2 x 10 mg DT od	4 x pALD DT (60/30/5 mg) od	2 x 10 mg DT bd OR [pALD DT (60/30/5) 4 tabs od + 2 x 10 mg DTG DT approx. 12 hours later]	2 ml bd OR [2 x 100/25 mg paed tabs am + 1 x 100/25 mg paed tab pm]	3 x 100/25 mg paed tabs bd	No preparation available	10 - 13.9
14 - 19.9	2½ x 120/60 mg tabs od	5 x 60 mg tabs od OR 1 x 300 mg tab od	1 x 150 mg tab od	2 x 100 mg tabs am + 1 x 100 mg tab pm OR 15 ml bd	2½ x 10 mg DT od	5 x pALD DT (60/30/5 mg) od	2½ x 10 mg DT bd OR [pALD DT (60/30/5) 5 tabs od + 2½ x 10 mg DTG DT approx. 12 hours later]	2.5 ml bd OR 2 x 100/25 mg paed tabs bd OR 1 x 200/50 mg adult tab bd	LPV/r std dose (see purple column) + oral RTV powder 200 mg (2 packets) bd	4 x 100/25 mg paed tabs bd OR 2 x 200/50 mg adult tabs bd	14 - 19.9
20 - 24.9	3 x 120/60 mg tabs od	1 x 300 mg tab + 1 x 60 mg tab od OR 6 x 60 mg tabs od	2 x 150 mg tabs od	2 x 100 mg tabs bd OR 20 ml bd	3 x 10 mg DT od OR 1 x 50 mg FC tab od	6 x pALD DT (60/30/5 mg) od	3 x 10 mg DT bd OR 1 x 50 mg FC tab bd OR [pALD DT (60/30/5) 6 tabs od + 3 x 10 mg DTG DT 12 hours later] OR [pALD DT (60/30/5) 6 tabs od + 1 x 50 mg DTG FC approx. 12 hours later]	3 ml bd OR 2 x 100/25 mg paed tabs bd OR 1 x 200/50 mg adult tab bd	LPV/r std dose (see purple column) + oral RTV powder 300 mg (3 packets) bd	6 x 100/25 mg paed tabs bd OR 3 x 200/50 mg adult tabs bd	20 - 24.9
25 - 29.9	1 x 600/300 mg tab od	2 x 300 mg tabs od	2 x 150 mg tabs od	1 x 300 mg tab bd OR 1 x AZT/3TC 300/150 mg tab bd	1 x 50 mg FC tab od OR ALD (600/300/50 mg) od	ALD (600/300/50 mg) x 1 tab od	1 x 50 mg FC tab bd OR [ALD (600/300/50 mg) 1 tab od + 50 mg DTG FC tab approx. 12 hours later]	3.5 ml bd OR 3 x 100/25 mg paed tabs bd OR [1 x 200/50 mg adult tab bd + 1 x 100/25 mg paed tab bd] <sup>§</sup>	LPV/r std dose (see purple column) + oral RTV powder 300 mg (3 packets) bd	1 x ATV/RTV 300/100 mg FDC od	25 - 29.9
30 - 34.9	OR ALD (600/300/50 mg) 1 tab od				1 x 50 mg FC tab od OR FDC: TLD, if eligible, 1 tab od OR ALD (600/300/50 mg) 1 tab od		1 x 50 mg FC tab bd OR [ALD (600/300/50 mg) x 1 tab od + 50 mg DTG FC tab approx. 12 hours later]	5 ml bd OR 4 x 100/25 mg paed tabs bd OR 2 x 200/50 mg adult tabs bd			30 - 34.9
≥35											≥35

\* Avoid LPV/r solution in any full-term infant <14 days of age and any premature infant <42 weeks post conceptual age (corrected gestational age) or obtain expert advice. § Children weighing 25-29.9 kg may also be dosed with LPV/r 200/50 mg adult tabs: 2 tabs am + 1 tab pm. # Atazanavir + ritonavir should not be used in children/adolescents on treatment with rifampicin, obtain expert advice.

od = once a day; nocte = at night; bd = twice a day; am = in the morning; pm = in the evening; std = standard; ALD = abacavir/lamivudine/dolutegravir; FDC = fixed dose combination; TLD = tenofovir/lamivudine/dolutegravir; pALD = paediatric ALD (60/30/5 mg)

Weight (kg)	3 - 5.9	6 - 13.9	14 - 24.9	≥ 25
<b>Cotrimoxazole Dose</b>	2.5 ml od	5 ml or ½ tab od	10 ml or 1 tab od	2 tabs od
<b>Multivitamin Dose</b>	2.5 ml od	2.5 ml od	5 ml od	10 ml od

**NEED HELP?**  
0800 212 506

# ARV DRUG DOSING CHART FOR CHILDREN < 28 DAYS (2025)

Compiled by Child and Adolescent Committee of SA HIV Clinicians Society in collaboration with the Department of Health



## INFANT ≥ 2.0 KG AND ≥ 37 WEEKS GESTATIONAL AGE AT BIRTH

**Preferred option:** Use the chart below if the pharmacy stocks ABC/3TC (120/60 mg) **double-scored** dispersible tablets and DTG 10 mg dispersible tablets.

	Abacavir + Lamivudine (ABC + 3TC)	Dolutegravir (DTG)
Available formulation	Dispersible tabs (DT) 120/60 mg (double-scored tablet) <sup>#</sup>	Dispersible tabs (DT) 10 mg
Birth - <2 weeks of age	¼ of double-scored tab <b>once every 2nd day (alternate days)</b>	½ tab <b>once every 2nd day (alternate days)</b>
2 weeks - <4 weeks of age	¼ of double-scored tab <b>once daily</b>	½ tab <b>once daily</b>

If ABC/3TC (120/60 mg) **double-scored** dispersible tablet is not available, use ABC solution (20 mg/mL) AND 3TC solution (10 mg/mL) AND dolutegravir 10 mg dispersible tablet, as per chart below:

	Abacavir (ABC)	Lamivudine (3TC)	Dolutegravir (DTG)
Available formulation	Solution (20 mg/mL)	Solution (10 mg/ml)	Dispersible tabs (DT) 10 mg
Birth - <2 weeks of age	1.5 mL <b>once every 2nd day (alternate days)</b>	1.5 mL <b>once every 2nd day (alternate days)</b>	½ tab <b>once every 2nd day (alternate days)</b>
2 weeks - <4 weeks of age	1.5 mL <b>once daily</b>	1.5 mL <b>once daily</b>	½ tab <b>once daily</b>

## INFANT < 2.0 KG OR < 37 WEEKS GESTATIONAL AGE AT BIRTH

Gestational age at birth	Chronological age	Zidovudine (AZT)	Lamivudine (3TC)	Nevirapine (NVP)
		Solution (10 mg/ml)	Solution (10 mg/ml)	Solution (10 mg/ml)
<30 weeks	Birth - < 4 weeks	2 mg/kg/dose twice daily	2 mg/kg/dose twice daily	2 mg/kg/dose twice daily
	≥ 4 weeks - < 8 weeks	3 mg/kg/dose twice daily	2 mg/kg/dose twice daily	4 mg/kg/dose twice daily
	≥ 8 weeks - < 10 weeks	12 mg/kg/dose twice daily	4 mg/kg/dose twice daily	6 mg/kg/dose twice daily
≥ 30 - < 35 weeks	Birth - < 2 weeks	2 mg/kg/dose twice daily	2 mg/kg/dose twice daily	2 mg/kg/dose twice daily
	≥ 2 - < 4 weeks	3 mg/kg/dose twice daily	2 mg/kg/dose twice daily	4 mg/kg/dose twice daily
	≥ 4 - < 6 weeks	3 mg/kg/dose twice daily	4 mg/kg/dose twice daily	6 mg/kg/dose twice daily
	≥ 6 - < 8 weeks	12 mg/kg/dose twice daily	4 mg/kg/dose twice daily	6 mg/kg/dose twice daily
≥ 35 - < 37 weeks	Birth—< 1 week	4 mg/kg/dose twice daily	2 mg/kg/dose twice daily	4 mg/kg/dose twice daily
	≥ 1 - < 4 weeks	4 mg/kg/dose twice daily	2 mg/kg/dose twice daily	6 mg/kg/dose twice daily

### CLINICAL EVALUATION FOR NEWBORNS:

#### Baseline assessment:

- Clinical review
- Bloods: confirmatory HIV PCR (or HIV VL), CD4 count, FBC
- Consider HIV drug resistance test if mother failing treatment on TLD2 or a protease inhibitor regimen
- Counsel parent / caregiver
- Ensure the mother is on ART, and advise that breastfeeding is recommended for all infants living with HIV

#### Review after 1 week then 1-2 weekly

- Clinical review and counselling
- Check baseline blood results
- Review PCR result: if indeterminate / negative confirmatory HIV PCR test result - refer to the ART guideline or discuss with an expert

#### Review when 4 weeks of age

- Clinical review and counselling
- For babies with **birth weight <2.0 kg or <37 weeks** gestation at birth:
  - If < 2 kg or < 37 weeks corrected gestational age<sup>d</sup> — continue AZT + 3TC + NVP
  - If ≥ 2 kg and ≥ 37 weeks corrected gestational age<sup>d</sup> —switch to ABC + 3TC + DTG (dose according to ARV dosing chart for children ≥ 28 days)
- For babies with **birth weight ≥ 2.0 kg and ≥ 37 weeks** gestation at birth:
  - - Continue ABC + 3TC + DTG - dosing as per ARV dosing chart for children ≥ 28 days
  - Continue monitoring as per **ART guidelines**

<sup>d</sup>Corrected gestational age = gestational age at birth plus postnatal age (in weeks)

## NEED HELP?

Contact the TOLL-FREE National HIV & TB Health Care Worker Hotline at

0800 212 506 / 021 406 6782

Alternatively “whatsapp” or send an SMS or “Please Call Me” to 071 840 1572

# PRACTICAL ADVICE ON ADMINISTRATION OF ARV DRUGS 2025

Caregivers administering ARV medication should be shown how to correctly prepare and give the prescribed dose, and provided with an appropriate syringe to make administration easier.

ARV Drug	Formulations (as used in dosing chart)	Can tablets/capsules be split/crushed/opened if unable to swallow?	Comment
<b>Abacavir (ABC)</b>	Oral solution: 20 mg/ml Tablets: 60 mg, 300 mg FDC tablets: ABC/3TC 120/60 mg; ABC/3TC 600/300 mg; ALD 600/300/50 mg FDC dispersible tablet: pALD DT 60/30/5 mg	Tablets: <b>YES</b>  FDC 120/60 mg and FDC ABC/3TC/DTG 60/30/5 mg tablets are dispersible tablets.	Hypersensitivity reaction (fever, rash, GIT & respiratory symptoms) may occur during first 6 weeks of therapy, very uncommon in black African patients. Symptoms typically worsen in the hours immediately after the dose and after each subsequent dose. Caregivers or patients should discuss symptoms early with the clinician rather than stopping therapy. Stop ABC permanently if hypersensitivity reaction has occurred.
<b>Lamivudine (3TC)</b>	Oral solution: 10 mg/ml Tablets: 150 mg; FDC tablets: ABC/3TC 120/60 mg; ABC/3TC 600/300 mg, TLD 300/300/50 mg ALD 600/300/50 mg FDC dispersible tablet: pALD DT 60/30/5 mg		Well tolerated, adverse-effects uncommon. Pure red cell aplasia causing anaemia can occur but is very rare.
<b>Zidovudine (AZT)</b>	Oral solution: 10 mg/ml Tablets: 100 mg; 300 mg Capsules: 100 mg FDC tablet: AZT/3TC 300/150 mg	Tablets & FDC: <b>YES</b> Capsules: Can be opened and added to a small amount of soft food/liquid and ingest immediately.	Avoid or use with caution in neonates or children with anaemia (Hb <8 g/dl) due to potential to cause bone marrow suppression.
<b>Tenofovir (TDF)</b>	FDC tablets: TDF/FTC 300/200 mg, TLD 300/300/50 mg	Tablet and FDC tablets: <b>YES</b>	TDF may be prescribed for adolescents ≥ 10 years of age AND ≥ 30 kg body weight after ensuring adequate renal function by checking eGFR/creatinine using the appropriate formula (refer to HIV guidelines). TDF is usually prescribed as part of an FDC tablet: TDF/FTC, TDF/FTC/EFV or TDF/3TC/DTG. To assess for TDF-induced nephrotoxicity, do creatinine and eGFR at 3 and 10 dispensing cycles, and thereafter annually.
<b>Lopinavir/ritonavir (LPV/r)</b>	Oral solution: 80/20 mg/ml Tablets: 200/50 mg, 100/25 mg	Tablets: <b>NO</b> <b>Must be swallowed whole and not divided, crushed or chewed.</b>	Oral solution should be refrigerated/stored at room temperature (if <25°C) for up to 6 weeks. Preferably administer oral solution with food as increases absorption. Strategies to improve tolerance and palatability of oral solution: coat mouth with peanut butter, dull taste buds with ice, follow dose with sweet foods. Many drug-drug interactions.#
<b>Ritonavir (RTV)</b>	Oral powder: 100 mg/packet		Each 100 mg packet of RTV powder should be mixed with a small amount of water or soft food and immediately ingested. Many drug-drug interactions.#
<b>Atazanavir (ATV)</b>	FDC tablets: ATV/RTV 300/100 mg	FDC tablets: <b>NO</b> <b>Must be swallowed whole and not divided, crushed or chewed.</b>	ATV is used in combination with RTV. May cause unconjugated hyperbilirubinaemia resulting in jaundice but this does not indicate hepatic toxicity and not a reason to discontinue the drug unless it is worrying the patient. Consider drug-drug interactions.#
<b>Dolutegravir (DTG)</b>	Dispersible tablet (DT): 10 mg Film coated (FC) tablets: 50 mg FDC dispersible tablet: pALD DT 60/30/5 mg FDC tablets: TLD 300/300/50 mg FDC tablets: ALD 600/300/50 mg	Dispersible tablets: <b>YES</b> Film coated tablets (including FDCs): <b>YES</b>	Iron supplements decrease DTG concentrations if taken together on an empty stomach. To prevent this, DTG and iron supplements can be taken at the same time if taken with food. May be helpful to administer as a morning dose rather than an evening dose if insomnia occurs with evening dosing. May raise creatinine levels by up to 15% without affecting renal function. Consider drug-drug interactions.# DTG DT and DTG FC tablets are not bioequivalent; 30 mg of DTG DT corresponds to 50 mg DTG FC tablets. DTG 50 mg FC tablets are preferred for children who have reached 20 kg (unless they cannot swallow tablets). pALD DT (60/30/5 mg) can only be dispersed in water, not milk or solid foods. Use approximately 15 mL of water when dispersing 3 tablets or less, and approximately 20 mL water when dispersing 4 tablets or more. Do not chew, crush or cut the tablets.

ALD = abacavir/lamivudine/dolutegravir; FDC = fixed dose combination; eGFR = estimated glomerular filtration rate; GIT = gastrointestinal tract; TLD = Tenofovir/Lamivudine/Dolutegravir; #EML-Antiretroviral interactions table (<http://www.mic.uct.ac.za>) OR [www.hiv-druginteractions.org/checker](http://www.hiv-druginteractions.org/checker) OR the Liverpool HIV iChart application for smart phones, or any of the helplines: **National HIV and TB Health Care Worker Hotline: 0800 212 506** or **HIV Expert Helpline: 082 352 6642**

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