## National Department of Health, South Africa







## Paediatric Dolutegravir 10mg Dispersible, Scored Tablets Training Slides

Information for healthcare workers

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## The Goal of Antiretroviral Therapy (ART)

#### **Achieve and Maintain**

Viral suppression

- Decrease opportunistic infections and other HIV-related conditions
- Minimise the development of treatment resistance
- Decrease the morbidity and mortality from HIV/AIDS
- Improve quality and length of life

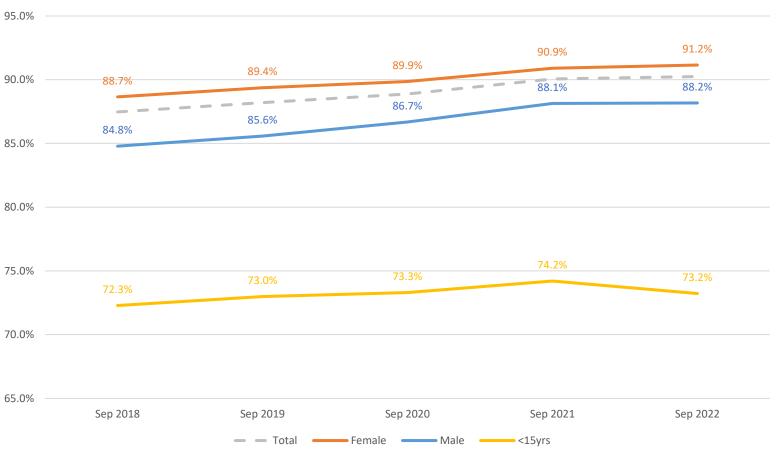
### Minimise Treatment side-effects and toxicity





## The Goal of Antiretroviral Therapy (ART)





Source: NICD





ABC + 3TC + DTG is a preferred regimen for a 3 year old child with weight of 15Kg

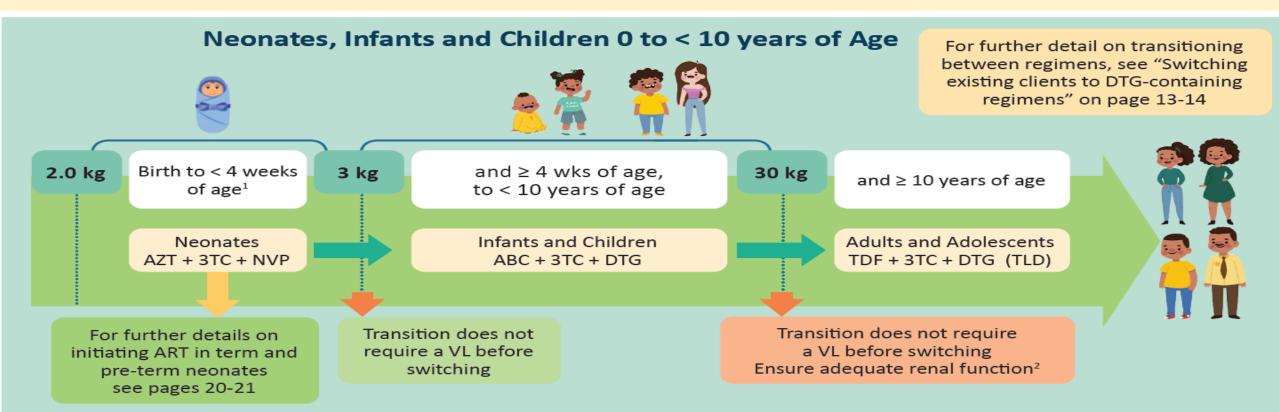
- a) True
- b) False
- C) Not Sure





## NDoH recommended 1st line regimens for Neonates, Infants and Children

All children should be to be switched to optimal formulations to enhance adherence, clinical efficacy, administration, palatability and to reduce side effects.





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## Changes to the 1<sup>st</sup> ART regimens

Changes in the 2023 ART guidance for CLHIV

Age & Weight	Current Regimen	New Regimen
Birth to 4 weeks and up to 2.9kg	AZT + 3TC + NVP	AZT + 3TC + NVP
Over 4 weeks and 3 kg to 19.9kg	ABC + 3TC + LPV/r	ABC + 3TC + DTG
20 to 29.9kg	ABC + 3TC + DTG	ABC + 3TC + DTG
30 to 34.9kg	ABC + 3TC + DTG	TDF + 3TC + DTG
Over 35kg	TDF + 3TC + DTG	TDF + 3TC + DTG



DTG should be part of the preferred first line ART regimen for all adults, adolescents, children and infants living with HIV, including women of child-bearing potential but excluding neonates.





## Introducing Paediatric Dolutegravir (pDTG) 10mg dispersible, scored tablets:

A <u>new and optimal</u> product that is <u>more effective</u>, <u>more palatable and easier to administer</u>

#### WHAT IS pDTG?

- Since 2019, Dolutegravir (DTG) has been the preferred first-line (1L) regimen for adults, adolescents, and children living with HIV ≥20 kg.
- Following registration with the South African Health Products Regulatory Authority (SAHPRA), Paediatric Dolutegravir (pDTG) 10mg dispersible, scored tablets are now recommended by the National Department of Health as part of the standard first-line antiretroviral regimen for children (≥ 4 weeks to <10 years of age) in the weight band 3 20kg, in combination with 2 NRTIs, ABC (abacavir) and 3TC (lamivudine)
- pDTG is an INSTI (integrase strand transfer inhibitor) that prevents HIV replication by inhibiting catalytic activity for HIV-1 integrase, an HIV encoded enzyme that is required for viral replication.

pDTG is the preferred first line antiretroviral over lopinavir/ritonavir (LPV/r) formulations for paediatric patients who weigh 3 - 20kg

**NOTE:** Paediatric Dolutegravir 10mg dispersible, scored tablets can be prescribed by a doctor or a professional nurse.





### Which of the following are advantages of Dispensable pDTG?

- a) High genetic barrier to resistance
- b) Better taste
- C) Less tolerable
- d) DTG is taken once daily
- e) Superior clinical efficacy





## Advantages of pDTG dispersible, scored tablets

Paediatric dolutegravir 10mg dispersible, scored tablets (pDTG) is a new generic formulation of DTG that allows antiretroviral treatment (ART) for children living with HIV (CLHIV) who are at least 4 weeks of age and weigh 3 to 20kg.



#### **Clinically Superior:**

- Demonstrated superior clinical efficacy
- DTG's high genetic barrier to resistance
- ✓ Increasing NNRTI resistance necessitates transition away from EFV- and NVPbased regimens

#### **Bolsters Adherence:**

- ✓ DTG is taken once daily
- ✓ Better side effect profile
- ✓ DTG dispersible tablet is easily dissolved in water, juice, milk, breast milk, yoghurt and porridge and allows easier administration as a solution or can be swallowed whole.
- DTG dispersible tablet has a strawberry taste and is more palatable.





## **Paediatric ARV Product Optimisation:**

All children should be switched to optimal formulations to enhance adherence, clinical efficacy, administration, palatability and to reduce side effects.

PRODUCT	
Abacavir 20mg/ml oral solution	
Abacavir 60mg dispersible/crushable tablet	
Lamivudine 10mg/ml oral solution	
Abacavir 600mg and Lamivudine 300mg tablet	
Lopinavir 40mg, Ritonavir 10mg capsule	
Lopinavir 80mg, Ritonavir 20mg/ml oral solution	
Lopinavir 100mg and Ritonavir 25mg film coated	
Lopinavir 200mg, Ritonavir 50mg film coated tablet	
Lopinavir 200mg, Ritonavir 50mg film coated tablet	

Initiate the process of switching

OPTIMAL PRODUCT	ELIGIBILITY
Abacavir 120mg, Lamivudine 60mg dispersible tablet	Weight 3 -24.9kg
Abacavir 120mg, Lamivudine 60mg dispersible tablet	Weight 3 -24.9kg
Abacavir 120mg, Lamivudine 60mg dispersible tablet	Weight 3 -24.9kg
Abacavir 600mg, Lamivudine 300mg, Dolutegravir 50mg tablet	If on Dolutegravir 50mg tablet
Dolutegravir 10mg dispersible tablet	Weight 3 -19.9kg
Dolutegravir 10mg dispersible tablet	Weight 3 -19.9kg
Dolutegravir 10mg dispersible tablet	Weight 3 -19.9kg
Dolutegravir 10mg dispersible tablet	Weight 14-19.9kg
Dolutegravir 50mg tablet	Weight >=20kg

All Children above the age of 10 years and over 30kgs should be switched if eligible to TLD: Tenofovir 300mg, Lamivudine 300mg, Dolutegravir 50mg tablet





## Switching Existing Clients to DTG-containing Regimens: Non VL-dependent regimen switches

Regimens where the VL result will not influence nor delay the decision to switch to a DTG-containing regimen.

VL considerations	Current Regimen	Criteria for switch	Regimen if change indicated
	TEE		
	ABC/3TC/EFV (or NVP*)	Switch all to a DTG-containing regimen, regardless of VL result	TLD
	AZT/3TC/EFV (or NVP*)	Review VL in last 12 months.	provided no renal dysfunction and age ≥ 10 yrs and weight ≥ 30 kg
Switching	AZT/3TC/DTG	If VL in last 12 months was not suppressed,	If client does not qualify for TDF
regardless of VL result		continue to switch same day, but do ABCDE assessment and provide enhanced	ABC¹/3TC/DTG
	Any LPV/r or ATV/r regimen for less than 2 years	adherence counseling (EAC) if needed.  If VL was not done in last 12 months, do it at this visit, but do not wait for the result to switch	If client does not qualify for TDF and has ABC hypersensitivity  AZT/3TC/DTG



## Switching Existing Clients to DTG-containing Regimens: **VL-dependent regimen switches**

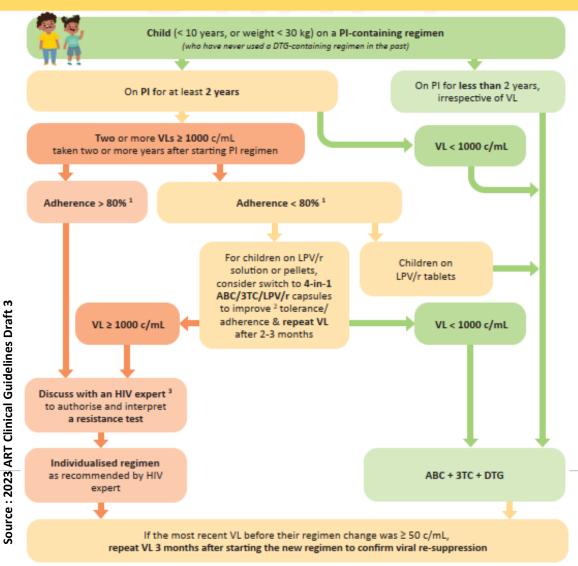
Relevant to all clients who have been on PI-based regimens for more than two years: their VL result in the last 12 months will influence the decision of how and when to switch to a DTG-containing regimen.

VL considerations	Current Regimen	Criteria for switch	Regimen if change indicated		
VL < 1000 c/mL  Any LPV/r or ATV/r regimen for more than 2 years		Switch all to a DTG-containing regimen  If VL in last 12 months was ≥ 50 c/mL,  continue to switch same day, but do ABCDE  assessment, provide EAC if needed, and  repeat the VL after 3 months as per "The VL  non-suppression algorithm" on page 19	TLD  provided no renal dysfunction and age ≥ 10 yrs and weight ≥ 30 kg  If clients does not qualify for TDF  ABC¹/3TC/DTG		
Two or more VLs ≥ 1000 c/mL taken two or more years after starting PI regimen	Child < 10 years, or weight < 30 kg on any LPV/r or ATV/r regimen	These clients do not yet qualify for TLD an Refer to algorithm "Switching children on containing regimens"	PI-containing regimens to DTG-		



# The NDoH recommends all children ≥4 weeks and ≥3 kg be transitioned to a DTG containing regimen

### All children should be initiated on a DTG based regimen



- 1. Although objective measures of poor adherence include pharmacy refills or attendance of scheduled clinic visits in the previous 6-12 months of <80%, adherence difficulties in young children are often linked to poor tolerability of unpalatable formulations, particularly LPV/r solution. It is important to ask the caregiver about how the child tolerates the medication e.g., does the child refuse to swallow the medicine or spit out or vomit the medicine, and whether the caregiver has been able to overcome this. Considering these limitations, objective measures of good adherence could include one of the following:
  - a) Pharmacy refills > 80% in the last 6-12 months (if this is known)
  - b) Attendance of > 80% of scheduled clinic visits in the last 6-12 months (if this is known)
  - c) Detection of current antiretroviral drug/s in the client's blood or urine, if available
- 2. If a switch to the 4-in1 capsules does not improve adherence, or is not available, continue to switch to ABC + 3TC + DTG as for non-adherent children on LPV/r tablets
- 3. The following would qualify as HIV experts: the HIV Helplines, a paediatric infectious disease specialist or the paediatric Third line ART committee



## NDoH recommended daily dosing for ABC/3TC & DTG-based formulations

NDoH Recommended Daily Dosing									
Formulation	3 – 5.9 kg	- 5.9 kg 6 - 9.9 kg 10 - 13.9 kg 14 - 1		14 – 19.9 kg	20 – 24.9 kg	25 – 29.9 kg	≥ 30 kg		
ABC/3TC 120/60mg dispersible, scored tablet <sup>1</sup>	1	1.5	2	2.5	3	[transition to ABC/3TC 600/300mg] <sup>3</sup>	_		
DTG 10mg dispersible, scored tablet <sup>1 &amp; 2</sup>	0.5	1.5	2	2.5	[transition to DTG 50mg]³	_	_		
ABC/3TC 600/300 mg tablet <sup>4</sup>	_	_	_	_	_	1	_		
DTG 50 mg tablet <sup>2 &amp; 5</sup>	_	_	_	_	1	1	1		
ABC/3TC/DTG 600/300/50 mg tablet	-	-	-	-	-	1	1		
TDF/3TC/DTG 300/300/50 mg tablet	_	_	_	_	_	_	1		

- 1. Can be dissolved in the same solution
- 2. Twice daily with concomitant use of rifampicin
- 3. If able to swallow whole tablets
- 4. Transition to ABC/3TC/DTG if eligible

5. Transition to ABC/3TC/DTG or TDF/3TC/DTG if eligible





## Demonstration on the use of pDTG dispersible, scored tablets



pDTG is a scored, dispersible tablet (DT). Dispersible formulation allows **pDTG to be easily administered to children by dispersing and drinking the medicine in a small amount of water**, rather than having to swallow multiple pills, pellets, or granule formulations.

#### **Administration Instructions**



Caregivers should be guided to add the appropriate dose for weight of pDTG to clean water, stir until the tablet(s) dissolves, and administer to the child.

- The child should drink all of the water straight away or within no more than 30 mins.
- If dispersing between 0.5 or 1.5 DTG 10 mg tablets, 5 mL (1 teaspoon) of clean water should be used. When dispersing 2 or more tablets, 10 mL (2 teaspoons) of water should be used.
- If any medicine remains in the cup, add a small amount of additional water to the cup, swirl, and give to the child. Repeat as necessary.



Co-administration with ABC/3TC 120/60 mg DT: pDTG can be dispersed and administered in the same solution of clean water as ABC/3TC 120/60 mg DT. When dispersing both products together, use 10-20 mL (2-4 teaspoons) of clean water and ensure both medicines are properly dissolved before administering. If not dissolved (i.e., lumping occurs), stir and slowly add water until all DTs are dissolved.

Other liquids/foods (e.g., juice, milk, breast milk, yoghurt, porridge): If a child is unable to use water, other age-appropriate liquids or foods may be used. Follow the above volume recommendations to ensure the child takes the full dose. If mixing with foods, the tablets can be crushed to aid in dissolution.



The dispersible tablets can be swallowed whole; however, the tablets should not be chewed.









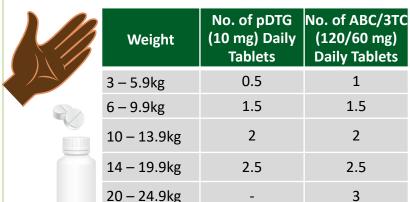


# How to administer pDTG in combination with ABC/3TC dispersible, scored tablets with water or other liquids

- pDTG & ABC/3TC dispersible, scored tablets can be dissolved and mixed in a small amount of water, breastmilk or other liquids prior to administration.
- pDTG & ABC/3TC dispersible, scored tablets can also be split/crushed before mixing them with water or other liquids.
- The tablets can be swallowed whole and HCWs and caregivers should, when appropriate, start teaching the child how to swallow whole tablets to enable an easier transition to non-dispersible formulations when the children reaches the appropriate weight band.

#### **STEP 1: DETERMINE THE DOSE**

Add the correct number of pDTG & ABC/3TC tablets to a clean, empty glass or cup based on the child's weight. (See Dosing Table)



**TIP:** If you are administering 0.5, 1.5 or 2.5 tablets, you can easily split the tablets down the middle on the solid line.

## STEP 2: PREPARE THE pDTG & ABC/3TC MIXTURE

Add 10 -20mL (2-4 teaspoons) of clean water into the glass or cup and stir until the tablets dissolve.



**TIP:** If the tablets do not dissolve completely (i.e., they lump together), stir and slowly add another 10ml (2 teaspoons) of extra water until the tablets fully dissolve.

#### STEP 3: GIVE THE MIXTURE TO THE CHILD

Give the medicine to the child to drink. Make sure they drink all the medicine right away or within a maximum of 30 minutes.



**OPTION 1:** The child can drink the mixture directly from the glass.

OR

**OPTION 2:** Feed the mixture to the child using a spoon.



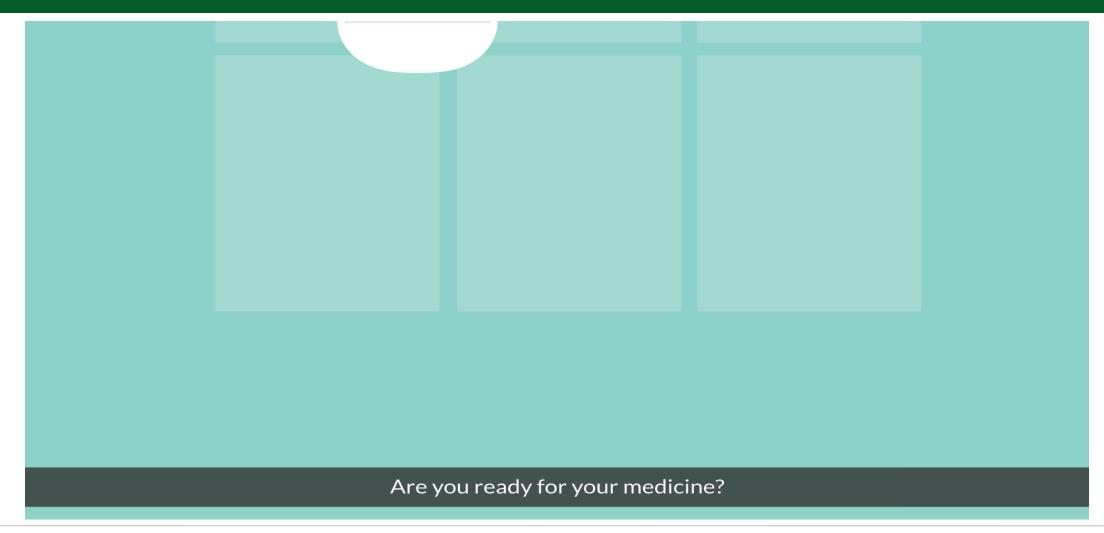
**TIP:** If any medicine remains in the glass, add a little more water to the glass and give it to the child. Repeat until no medicine remains in the glass.



Note: Addition information on the ABC/3TC (120/60 mg) dispersible, scored tablets can be found on the NDoH Knowledge Hub eLibrary A demo video on the use of the product can be found here



# Demo video on how to administer pDTG in combination with ABC/3TC dispersible, scored tablets with water or other liquids





# There are some considerations for pDTG when used to treat CHLIV with TB, as well as other drug-drug interactions

#### **Administration Instructions**



- DTG interacts with the TB medicine rifampicin (RIF). Children receiving TB treatment containing RIF should have their standard daily dose according to weight given both in the morning and in the evening for the duration of the TB treatment.
- Continue the dosing pDTG twice daily for two weeks after the completion of the RIF containing TB treatment and then go back to dosing once daily after the two weeks.

#### **Additional Drug-Drug Interactions**



• Iron, aluminium, magnesium, and calcium-containing medicines bind with and reduce absorption of DTG. If co-administered, DTG should be taken with food to enhance DTG absorption or taken at alternate times (6 hours apart).



Drugs that are metabolic inducers may decrease the plasma concentrations of DTG. This includes some anticonvulsants such
as phenobarbital. Co-administration with these anticonvulsants is not recommended with DTG. Consult expert opinion for
further guidance on this.



For more information on drug interactions, please see the latest national guidelines.





# Dosing differences between the DTG 50 mg film-coated tablets and DTG 10 mg dispersible tablets



#### **DTG 50 mg Film-Coated Tablets**

- Administration: The 50 mg tablet is a small, film coated tablet (FCT) that should be swallowed whole
- While 50 mg is the adult dose, it can also be used for children who weigh 20kg or more



#### **DTG 10 mg Dispersible Tablets**

 Administration: The DTG 10 mg scored, dispersible tablet (DT) can be swallowed whole, but is meant to be dissolved in water

#### Dosing Differences Between 50 mg DTG FCT and 10 mg DTG DT

- DTG dispersible tablets are much **better absorbed** than DTG film coated tablets. As a result, when switching between products, **the product dosing is not** 1:1 (i.e. 5 x 10 mg DT is *not* equivalent to 1 x 50 mg FCT). In the event there is a need to transition between the two formulations:
- DTG dose of 50 mg FCT is approximately equal to 30 mg of DT (i.e. 3 x 10 mg DTs).











3 x 10 mg paediatric DTG DT

Note: The pDTG tablets replaces Lopinavir/ritonavir and children should be switched to the DTG 50mg formulation after 20kg, unless there are challenges swallowing whole tablets.





## Abacavir/3TC 120/60 tablets

- Scored and Dispersible
- Can be used from 3kg till 25kg
- At 25kg can use ABC/3TC 600/300 tabs
- Will virtually replace all other paediatric 3TC and ABC formulations
- Can be swallowed chewed crushed or dissolved in water
- Is given once daily
- 2 Generics are registered in SA
- Is available in the private sector and is on the new DOH tender
- Is cost effective

## ABC/3TC/DTG 600/300/50mg

- FDC of all 3 paediatric ARVs
- Large tablet
- Can be crushed/cut
- Can be used from 25kg
- 1 tablet nocte
- Is on new tender in DOH

## Abacavir/lamivudine/lopinavir/ritonavir 4 in 1

- 30/15/40/10mg powder
- Taste masked with strawberry flavour
- Actually tastes quite nice!
- Can be sprinkled on breast milk, formula, or other age-appropriate foods.
- In DOH will be used for patients not tolerating LPV/r solution or failing DTG regimens
- Will be available both in private and in the DOH



#### **ANTIRETROVIRAL DRUG DOSING CHART FOR CHILDREN 2022**



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

TARRA DA	THE OBEIO OF COOT											ANS SO	
	Abacavir + Lamivudine (ABC + 3TC)	Abacavir (ABC)	Lamivudine (3TC)	Zidovudine (AZT)	Dolutegravir (DTG)	Dolutegravir when on Rifampicin	Lopinavir/ritonavir (LPV/r)	Abacavir + Lamivudine + Lopinavir/ ritonavir	Lopinavir/rito rifampicin (an after stoppin	d for 2 weeks	# Atazanavir (ATV) + Ritonavir (RTV)	Efavirenz (EFV)	
Target dose	As for individual medicines ONCE daily	8 mg/kg/dose TWICE daily OR If ≥ 10kg: 16 mg/kg/dose ONCE daily	4 mg/kg/dose TWICE daily OR If ≥ 10kg: 8 mg/kg/dose ONCE daily	180-240 mg/m2/dose TWICE daily	By weight band ONCE daily	By weight band TWICE DAILY	300/75 mg/m2/dose LPV/r TWICE daily	By weight band TWICE daily	LPV/r std dose + super-boosting with ritonavir (RTV) powder TWICE daily (≥0.75xLPV dose bd)	able to swallow whole LPV/r tabs	By weight band ONCE daily	By weight band ONCE daily	Target dose
Available formula-tions	Dispersible tablet FDC: ABC/3TC 120/60 mg Tablets FDC: ABC/3TC 600/300 mg ABC/3TC/DTG 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, 300 mg (not scored), FDC: AZT/3TC 300/150 mg	Dispersible tabs (DT) 10 mg, Film coated (FC) tabs 50 mg, FDC: TLD 300/300/50 mg OR ABC/3TC/DTG 600/300/50 mg DT AND FC TABLETS ARE NOT BIOEQUIVALENT	Dispersible tabs (DT) 10 mg, Film coated (FC) tabs 50 mg, FDC: TLD 300/300/50 mg OR ABC/3TC/DTG 600/300/50 mg DT AND FCTABLETS ARE NOT BIOEQUIVALENT	Sol. 80/20 mg/ml Adult tabs 200/50 mg, Paed tabs 100/25 mg TABLETS MUST BE SWALLOWED WHOLE Pellets 40/10 mg per capsule ONLY FOR USE IF NOT TOLERATING LPV/r SOLUTION. CAPSULES ARE NOT RECOMMENDED < 6 MONTHS OF AGE	Caps 30/15/40/10 mg IF PATIENT IS ON RIFAMPICIN TB TREATMENT, ADD RTV POWDER (next column)	Oral powder 100 mg/packet	Adult tabs 200/50 mg, Paed tabs 100/25 mg	ATV caps 150, 200 mg; RTV tabs 100 mg; FDC: ATV/RTV 300/100 mg RTV TABLETS AND ATV/r FDC TABLETS MUST BE SWALLOWED WHOLE	Caps/tabs 50, 200, 600 mg; FDC: TEE 300/200/600 mg; TABLETS MUST BE SWALLOWED WHOLE	Available formula- tions
Wt. (kg)				Consult wit	h a clinician experience	in paediatric ARV prescr	ibing for neonates (< 28 days of ag	e) and infants we	ghing < 3kg				Wt. (kg)
3 - 5.9	1 x 120/60 mg tab od	3 ml bd OR 1 x 60 mg tab bd	3 ml bd	6 ml bd	0.5 x 10 mg DT od	0.5 x 10 mg DT bd	* 1 ml bd <b>OR</b> 2 capsules bd	2 capsules bd	LPV/r std dose (see purple column) + oral RTV powder 100 mg (1 packet) bd	Do not use double-dose	Not recommended	Not	3 - 5.9
6 - 9.9	1.5 x 120/60 mg tabs od	4 ml bd <b>OR</b> 1.5 x 60 mg tab bd	4 ml bd	9 ml bd	1.5 x 10 mg DT od	1.5 x 10 mg DT bd	* 1.5 ml bd <b>OR</b> 3 capsules bd	3 capsules bd		LPV/r tabs		recom- mended	6 - 9.9
10 - 13.9	2 x 120/60 mg	Once daily dosing > 10 kg	Once daily dosing > 10 kg	12 ml bd OR 1 x 100 mg tabs bd  2 x 10 m	2 x 10 mg DT od	2 x 10 mg DT bd	2 ml bd <b>OR</b> 4 capsules bd <b>OR</b>	4 capsules bd	LPV/r std dose (see purple column) + oral RTV powder 200 mg (2 packets) bd	oral  r 4 x 100/25 mg	ATV 1 x 200 mg	1 x 200 mg cap/tab + 2 x 50 mg caps/tabs nocte	10 - 13.9
	tabs od	4 x 60 mg tabs od OR 12 ml od	12 ml od		2 x 10 mg 51 0a	2 x 10 mg 51 50	2 x 100/25 mg <b>paed tabs</b> am + 1 x 100/25 mg <b>paed tab</b> pm	4 capsules bu					
14 - 19.9	2.5 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	2.5 x 10 mg DT od	2.5 x 10 mg DT bd	2.5 ml bd <b>OR</b> 5 capsules bd <b>OR</b> 2 x 100/25 mg paed tabs bd <b>OR</b> 1 x 200/50 mg adult tab bd	5 capsules bd			cap od + RTV 1 x 100 mg tab or 100 mg oral powder (1 packet) od		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 100 mg tabs bd OR 20 ml bd	3 x 10 mg DT od OR 1 x 50 mg FC tab od	3 x 10 mg DT bd OR 1 x 50 mg FC tab bd	3 ml bd <b>OR</b> 6 capsules bd <b>OR</b> 2 x 100/25 mg <b>paed tabs</b> bd <b>OR</b> 1 x 200/50 mg <b>adult tab</b> bd	6 capsules bd					20 - 24.9
25 - 29.9	1 x 600/300 mg tab od	L x 600/300 mg	2 x 150 mg	1 x 300 mg	1 x 50 mg FC tab od OR FDC: ABC/3TC/DTG if eligible od	1 x 50 mg FC tab bd OR FDC: ABC/3TC/ DTG if eligible od + 50 mg DTG FC tab 12 hours later	3.5 ml bd <b>OR</b> 7 capsules bd <b>OR</b> 3 x 100/25 mg <b>paed tabs</b> bd <b>OR</b> 1 x 200/50 mg <b>adult tab</b> bd + 1 x 100/25 mg <b>paed tab</b> bd		LPV/r std dose (see purple	6 x 100/25 mg paed tabs bd OR 3 x 200/50 mg adult tabs bd	1 x ATV/RTV 300/100mg FDC od	2 x 200 mg caps/tabs nocte	25 - 29.9
30 - 39.9	OR ABC/3TC/DTG	2 x 300 mg tabs od	tabs od	tab bd OR 1 x AZT/3TC	1 x 50 mg FC tab od	1 x 50 mg FC tab bd OR FDC: TLD if eligible		Not recommended	column) + oral RTV	8 × 100/25	OR ATV 2 x 150 mg caps od +		30 - 39.9
(600/30	FDC (600/300/50 mg) if eligible od	tabsou		300/150 mg tab bd	OR FDC: TLD if eligible od OR FDC: ABC/3TC/DTG if eligible od	od + 50 mg DTG FC tab 12 hours later <b>OR</b> FDC: ABC/3TC/ DTG if eligible od + 50 mg DTG FC tab 12 hours later	5 ml bd <b>OR</b> 10 capsules bd <b>OR</b> 4x100/25 mg <b>paed tabs</b> bd <b>OR</b> 2x200/50 mg <b>adult tabs</b> bd	recommended	powder 300 mg (3 packets) bd	8 x 100/25 mg paed tabs bd OR 4 x 200/50 mg adult tabs bd	RTV 1 x 100 mg tab or 100 mg oral powder (1 packet) od	2 x 200 mg caps/tabs nocte OR FDC: TEE if eligible od	≥ 40

## While usually well tolerated, pDTG is associated with some infrequent side effects in children

#### **Side Effects**

- As with all ARVs, it is possible to have side effects when taking pDTG. However, in clinical studies, no participants permanently discontinued DTG due to adverse events from pDTG. Possible side effects include:
  - Insomnia
  - Fatigue
  - Headache
- Incidence of high blood sugar and possible weight gain following DTG has also been reported in ART experienced adults. Related symptoms such as polyuria, polydipsia should also be monitored routinely.



Discuss possible side effects with patients and care givers to enhance adherence.

Report any persistent Adverse Drug Reactions to SAHPRA on the SAHPRA MedSafety App.





A 2 year-old boy, Bongani, was started on Abacavir (ABC), Lamivudine (3TC) and Lopinavir/Ritonavir (LPV/r) 15 months ago. At the time, the child had a history of oral candidiasis and recurrent bacterial pneumonia.

Vitals: Temperature: 37°C, Pulse: 80, Respiratory Rate: 20, Weight 10.4 kg

6 month VL: 60,899 copies/mL

**12 month CD4/VL**: 14%, 35,679 copies/mL

The patient presents with a history of recurrent diarrhoea, and his grand mother complaints that giving him his medicines is challenging because he spews his medicines.

#### 1. What do you suspect is occurring?

- a) Virological treatment failure
- b) Poor adherence
- c) Opportunistic infection
- d) None of the above





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#### 2. Is there an indication for switching or stopping a regimen?

- a) Yes switch regimen, the viral load is too high.
- b) Yes switch, LPV/rt is a weak ARV drug.
- c) No need to switch or stop, high viral loads are acceptable in children.
- d) No need to with switch or stop, repeat viral load in 6 months time.





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#### 3. Is an HIV resistance test indicated?

- a) Yes
- b) No
- c) Not Sure





A 2 year-old boy, Bongani, was started on Abacavir (ABC), Lamivudine (3TC) and Lopinavir/Ritonavir (LPV/r) 15 months ago. At the time, the child had a history of oral candidiasis and recurrent bacterial pneumonia.

Vitals: Temperature: 37°C, Pulse: 80, Respiratory Rate: 20, Weight 10.4 kg

6 month VL: 60,899 copies/mL

**12 month CD4/VL**: 14%, 35,679 copies/mL

The patient presents with a history of recurrent diarrhoea, and his grand mother complaints that giving him his medicines is challenging because he spews his medicines.

#### 4. So, what's your plan (s)?

- a) Switch to ABC + 3TC + DTG and repeat VL in 3 months time
- b) Stop current regimen, and give: AZT + 3TC + EFV
- c) Enhanced Adherence Counselling
- d) Continue current ART regimen and repeat VL in 3 months





# For further assistance on how and when to use this formulation please contact the following:

#### **National HIV and TB Care Worker Hotline:**

- This helpline can be contacted by calling 0800 212 506 or 021 406 6782
- This helpline can be contacted via SMS / Please Call Me / WhatsApp on 071 840 157

#### Right To Care Paediatric, Adolescent and Adult HIV Helpline:

This helpline can be contacted via SMS / Please Call Me / WhatsApp/Missed Call on 082 352
 6642

#### **KZN Paediatric Hotline:**

This helpline can be contacted by calling 0800 006 603

Weight based dosing for all other paediatric formulations are available on <a href="KnowledgeHub">KnowledgeHub</a> in the 2019 ART Clinical Guidelines for the Management of HIV in Adults, Pregnancy, Adolescents, Children, Infants and Neonates, October 2019





### ABC + 3TC + DTG is a preferred regimen for a 3 year old child with weight of 15 Kg

- a) Trueb) False



## Q&A?

Thank you!

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