SOUTH AFRICAN ART CLINICAL GUIDELINES 2023

(Infants and children < 10 years and/or < 30kg)

October 2023, Version 4

ART ELIGIBILITY AND DETERMINING THE TIMEFRAME FOR ART INITIATION

WHO IS ELIGIBLE?

All people living with HIV (PLHIV), regardless of age, CD4 cell count and clinical stage. ART should be initiated within 7 days unless there is a reason to defer (see below). Infants and children under five years, and those with advanced HIV disease should be prioritised for rapid initiation. Same day initiation is encouraged if the child is clinically well

REASONS TO DEFER STARTING ART	WHEN TO INITIATE ART*
TB symptoms (cough, fever, night sweats,	No TB: Same day or within 7 days
failure to thrive)	Confirmed DS-TB at non-neurological site:CD4 < 50 cells/µL: within 2 weeks of starting TB treatment
Signs and symptoms of meningitis (headache, confusion, fever, neck stiffness or coma)	Investigate for meningitis before starting ART TBM (DS or DR): 4 - 8 weeks after starting TB treatment CM: 4 - 6 weeks after starting antifungal treatment
Other acute illnesses e.g. <i>Pneumocystis jirovecii</i> pneumonia or bacterial pneumonia	Defer ART for 1 - 2 weeks after commencing treatment for the infection
Clinical symptoms or signs of liver disease	Do ALT and bilirubin. Investigate and manage possible causes
SOCIA	AL CONSIDERATIONS

The following points are important to maximise adherence:

• One named, responsible primary caregiver able to administer ART to the child

• Disclosure to another adult living in the same house able to supervise the child's ART when primary caregiver is unavailable *Clients already on ART should NOT have their treatment interrupted upon diagnosis of the above conditions

BASELINE CLINICAL EVALUATION

TEST AND PURPOSE	INTERPRETATION/ACTION
Recognise the client with respiratory, neurological or abdominal danger signs	Identify danger signs as classified in the IMCI Chart booklet. Refer urgently
Nutritional assessment To monitor growth, developmental stage and deter- mine correct dosing of ART	Use the growth chart to plot the weight, height and head circumference (if < 2 years). Measure MUAC to identify moderate and severe malnutrition
Screen for symptoms of meningitis To diagnose and treat clients with cryptococcal and other forms of meningitis and reduce associated morbidity and mortality	Identify symptoms of headache, confusion or visual disturbances. Other symptoms may include fever, neck stiffness or coma. Do/refer the client for a lumbar puncture. Defer ART if meningitis is confirmed
Screen for TB To identify TB/HIV co-infection and eligibility for tuberculosis preventive therapy (TPT)	Suspect TB in clients with the following symptoms: coughing, night sweats, fever, failure to thrive. If present, confirm or exclude TB. Ask about TB contacts
WHO clinical staging To determine immune status, priority of initiating ART and need for cotrimoxazole preventive therapy (CPT)	See eligibility for CPT under CD4 cell count/% section in baseline laboratory evaluation below
Screen for active depression in older children and epilepsy in all ages To exclude drug-drug and drug-disease interactions	Identify the child with epilepsy and be aware of and monitor for potential drug-drug interactions and drug- disease interactions
Neurodevelopmental screen To identify neurocognitive or developmental delays	Screening tool is available in Road To Health Booklet (RTHB)

BASELINE LABORATORY EVALUATION

TEST AND PURPOSE	INTERPRETATION/ACTION
Confirm HIV test result To confirm HIV status for those without documented HIV status	Ensure that the national testing algorithm has been followed. Infants < 1 month: HIV drug resistance test for infant if mother is failing treatment on TLD2 or a PI-based regimen
Haemoglobin (Hb) To identify anaemia and eligibility for AZT	Can use AZT if Hb ≥ 8 g/dL. Children with anaemia: < 5 years: Treat with iron supplementation and deworm child ≥ 5 years: Do FBC and manage according to Primary Health Care EML
CD4 cell count/% To determine eligibility for cotrimoxazole preventive therapy (CPT)	 Eligibility for CPT: All HIV-positive infants < 1 year irrespective of CD4 % or clinical stage HIV-positive child 1 - 5 years with WHO stage 2, 3 or 4, or CD4 % ≤ 25 % HIV-positive child under 5 years of age with PJP infection: start CPT after PJP treatment is completed HIV-positive child > 5 years with WHO stage 2, 3 or 4, or CD4 ≤ 200
GeneXpert (MTB/Rif Ultra) To diagnose TB	Only for those with a positive TB symptom screen

If patient comes from a different facility provide patient with treatment on the day of presentation. Referral letters are helpful, however a patient shouldn't be required to leave the facility without treatment to first obtain a referral/transfer letter

								_									
ART REGIMENS IN NEW CLIENTS										MONITORING WHILE ON ART							
3 kg to < 30	kg, <u>and</u> ≥4 weeks	to < 10 years ^{##}		А	NBC + 3TC + DTG (dosing as per p	aed dosing chart)		VIRAL LOAD CLINICAL ASSESSMENT								
	irth to < 4 weeks o eight ≥ 2.0 kg and ≥		ational and at	hirth) A	ZT + 3TC + NVP (s	ee dosing belo	w)		WHEN: DC [€] /mont			DCs	WHEN: every visit				
	:igiit ≥ 2.0 kg and 2	-		birth)				_	For < 5 year olds 12 (DC 13) and the	done at	week 14 (DC	: 4) <i>,</i> month	 Height, weight, head circumference (< 2 years) and 				
		Zidovudi	. ,		udine (3TC)	Nevirapii							neurodevelopm according to we		nber to adjust ART dosage		
	lable formulation ight (kg) at birth	10 m Dose in mL	g/mL Dose in mg	1 Dose in	0 mg/mL mL Dose in mg	10 mg Dose in mL	g/mL Dose in mg			er a VL≥ emerge	250 is a me encv!	dical	 Ask about side- TB & other opportunity 	effects	fection screen		
	≥ 2 - < 3	1 mL BD	10 mg BD	0.5 mL l	*	1.5 mL BD	15 mg BD			ciller			WHO staging				
	≥3-<4	1.5 mL BD	15 mg BD	0.8 mL l	BD 8 mg BD	2 mL BD	20 mg BD		RESPONSE T	TO VL O	N DTG REG	IMEN		CD4 (COUNT		
	≥ 4 - < 5	2 mL BD	20 mg BD	1 mL B	D 10 mg BD	3 mL BD	30 mg BD		• VL < 50: Continue				WHEN: after 10 D	Cs [€] on ART ((aligned with VL)		
Posing is based on the birth weight of the child. It is not necessary to change the dose before 28 days of age if, for example, the weight ecreases in the first week or two of life; Consult with a clinician experienced in paediatric ARV prescribing or the HIV hotline (0800 212 506), for neonates with birth weight < 2.0 kg or gestational age < 35 weeks, as well as infants \geq 28 days of age but weight < 3 kg										 • VL ≥ 50: Do thorough assessment of the cause of an elevated VL. Consider adherence problems, intercurrent infections, incorrect ART dose, drug • Repeat 6 monthly: if CD4 ≤ 200 OR VL ≥ 1000 cells/μL • Repeat if: any clinical indication arises (i.e. new WHO stage 3 or 4) OR a client missed a scheduled visit by > 90 							
ee protocol in t om NVP to DTC	he ART Clinical Guide	ines for baseline t	esting and follow	v up for neor	nates < 4 weeks of ag	e; ^{##} No VL needeo	d when transitioning		interactions and r 2 years). Impleme Repeat VL after 3	ent inter	ventions, inc	luding EAC.	days INTERPRETATION	I: Stop cotri	imoxazole once		
	SWITCHING	EXISTING	CLIENTS 1	ro dtg	-CONTAININ	IG REGIMI	ENS		CD4 monitoring				• HIV-positive inf	ants < 12 m	onstitution has occurred: nonths: should remain on CPT		
		NON VL-DI	EPENDENT	REGIM	IEN SWITCHE	S			RESPONSE TO RE	_		EGIVIEN			ars: If CD4 percentage ≥ 25% ears old if meets ≥ 5 years		
	CURREN	T REGIMEN):		 VL < 50: Continue VL ≥ 50: Re-asses 	s and res	solve adhere	nce issues	category)		s: If CD4 count ≥ 200 cells/μL		
-	ATV/r regimen f	or < 2 years			A	BC [*] + 3TC + D [*]	TG		urgently and	d see bel	low				\sim		
	(EFV or NVP)				If child is ≥ 30 kg	and ≥ 10 years: sw	itch client to TLD if			F	RESPONSE	O REPEAT	L ON DTG REGIN	IEN, IF VL:	> 50		
	(EFV or NVP)					No additional VL n to Adult ART 2023	eeded before switch. poster		DTG regimen < 2				DTG regime	_			
ZT + 3TC +									•Intensify efforts to	-			Ū		Adherence still suboptimal		
	on PI-based regin swit				SWITCHES sed a DTG-cont in the last 12 m	aining regime onths	n in the past:		resolve adherenci issues	ce .	taken ≥ 2 ye	ears after sta ′L ≥ 1000 and	D with 2 or more V rting DTG regimen d either CD4 < 200 o	OR at least	(adharance < 90%) or		
VL (c/mL) vithin the la 12 months)		CRITERIA	A FOR SWIT	сн	REGIMEN II	CHANGE IS	S INDICATED		 Repeat VL at next scheduled routine 	e VL	Clients who have failed	Clients	nistic infection who have never fa Is ART regimen:	iled a	 Intensify adherence (ABCDE) 		
VL < 1000	LPV/r or ATV/r based regimen > 2 years	assessment) but < CDE EAC if	Repe	NBC [*] + 3TC + DT	onths				previous AF regimen: Discuss with HIV expert t	T Intensi • Repervention of the tension of ten	y adherence (ABCD at VL at next sched ne VL Resistance to a first	uled	 Repeat VL at next scheduled routine 		
		If already on I	LPV/r tablets: TG regimen		•		switch client to TL ult ART 2023 post				authorise au interpret RT Do VL 3	nd Di . ex	G-containing regin tremely rare. Subop herence remains the	nen is timal			
Two or mor consecutive VLs ≥ 1000	Adherence		solution or pel switch to 4-in	llets: i	f child is ≥ 30 kg a f eGFR > 80 mL/m	in. Refer to Ad	+ 3TC + DTG switch client to TL ult ART 2023 post n HIV expert or the	er			months after new regime implementer	r <i>probab</i> n <i>Most c</i>	le cause for non-su lients will re-suppre taining regimen if a	opression. ss on DTG			
aken ≥ 2 yea after startin PV/r or ATV regimen	B	ABC/3TC/	/LPV/r capsule /L in 2-3 montl	s ^{\$} . hs	hotline (0800 212 resistance test. F recommended by months t	a S				 if clie as a ART 	rent was incorrectly o client who has neve regimen; or vant drug interactio						
	Adherence				tline (0800 212 50	6) to authorise	and interpret a		€ DC = dispensing cycle, de	efined as th	e number of day		-		ard "monthly" quantity of tablets was		
nly 1 VL > 10	> 80 %	resistance			sed regimen as re nonths to confirm				DO THE FOLL	OWIN	G TESTS I		ENT IS ON TH	E DRUG [·]	THAT MAY CAUSE THE		
ter 2 years (LPV/r or AT\		issessment, EA			after 3 months. T ve categories	his result will រួ	group the client in		DRUG	TE	ST		UENCY	ACTIO	ON/INTERPRETATION		
regimen									AZT	FBC +	At n	nonths 1 and	3,	Hb≥8g/d	L: Continue AZT		
client has ABC ilable, continu	hypersensitivity: AZT e to switch to ABC + 3	TC + DTG as for no	on-adherent child	lren on LPV/	r tablets		erence, or is not			differe WCC	indi	eafter if clin cated		persistent alternative	IL or neutrophil count ly < 1000 cells/μL: Use e – consult with expert		
					NCE OBJECT	IVELY			PI-based regimen	Choles Triglyc	erides rang		oove acceptable g cholesterol and	side-effect	or PI-related metabolic ts. If fasting cholesterol and TG		
	to be > 80 %, pati acy refills > 80 % in			lowing crit	eria:				(LPV/r, ATV/r, DRV/r)	(TG)	TG				pove the acceptable range, poert advice		
 Attenda 	, ance of > 80 % of s	cheduled clinic	visits in the la						TB treatment or NVP or EFV	ALT			ns of hepatitis niting, jaundice)	If ALT is ab	onormal, refer to specialist or HIV hotline (0800 212 506)		
Detection of current antiretroviral drugs in the client's blood or urine calculate adherence percentage in the past 6 - 12 months: <u>Amount of scheduled visits actually attended by client/caregiver</u> X 100 X 100									NVP OF EFV	ALT		sh develops	inting, jaunuitej	If ALT is at	onormal, refer to specialist or		
calculate a	merence percenta	ge in the past 6 -	- 12 months: Ar	nount of sc	heduled visits		X 1	.00						phone the	e HIV hotline (0800 212 506)		
					H TUBERCU				health Department: Health REPUBLIC OF SOU		AND A TO HEALTH CARE MORE TO DO THE OBOO 212 506	And the second s	MEDICINES INFORMATION CENTRE	ment of HIN Adolescents, C	2023 ART Clinical Guidelines for the Manage- V in Adults, Pregnancy and Breastfeediing, Children, Infants and Neonates, South African nal Department of Health, April 2023		
	s ART and TB treatme add pyridoxine (vitar			e a large an	nount of medicatio	n. Intensify adhe	erence support.								alaria through the National Department of re solely the responsibility of the authors		
TG- based gimen					ting of DTG require stopped. See ART [picin-containing TB rt for Children 2022								ent of Health of South Africa se; ATV/r = atazanavir and ritonavir;		
FV-based reg			•		for DS-TB treatmen	5 5			AZT = zidovudine; CM = cryp DTG = dolutegravir; DRV/r =	ptococcal me = darunavir a	eningitis; CPT = co and ritonavir; EAC	rimoxazole preve = enhanced adher	ntive therapy; CrAg = cryptoc ence counselling; EFV = efavi	coccal antigen; D renz; eGFR = esti	R = drug-resistant; DS = drug-sensitive; imated glomerular filtration rate; EML =		
DV/r based	AND receiving	g a rifampicin -co	ntaining TB reg	imen: Addit	ional ritonavir shou	Id be added or t	the LPV/r dose		DTG = dolutegravir; DRV/r = darunavir and ritonavir; EAC = enhanced adherence counselling; EFV = efavirenz; eGFR = estimated glomerular filtration rate; EML = essential medicines list; FBC = full blood count; FTC = emtricitabine; HBV = hepatitis B virus; HBSAg = hepatitis B surface antigen; IMCI = Integrated management of childhood illnes; InSTI = Integrase strand transfer inhibitor; IPV/r = lopinavir and ritonavir; LP = lumbar puncture; MUAC = mid-upper arm circumference;								

	ART RE	GIMENS		EW C	LIENTS						ĺ	MONITORI		N ART		
weeks	:o < 10 years ^{##}			ABC +	3TC + DTG (d	losing as per p	aed dosing chart)		V	/IRAL	LOAD)	CLI	NICAL A	SSESSME	
veeks of g and ≥	age 35 weeks gest	ational age at	birth)	AZT +	3TC + NVP (s	ee dosing belo	w)		WHEN: DC [€] /mont For < 5 year olds	done at	week 1	4 (DC 4), month	WHEN: every visit • Height, weight,		nference (< 2	
	Zidovudi	ne (AZT)	Lam	nivudir	ne (3TC)	Nevirapiı	ne (NVP)		12 (DC 13) and th	ien at 12	2 DC inte	ervals	neurodevelopment (remember to adjust according to weight)			
lation	10 m	<u>.</u>		10 mg		10 mg			Remembe			a medical	 Ask about side-effects 			
birth	Dose in mL 1 mL BD	Dose in mg 10 mg BD	Dose 0.5 m		Dose in mg 5 mg BD	Dose in mL 1.5 mL BD	Dose in mg 15 mg BD			emerg	ency!		 TB & other opp WHO staging 	ortunistic ir	fection screer	
	1.5 mL BD	15 mg BD	0.8 m		8 mg BD	2 mL BD	20 mg BD		RESPONSE 1	TO VL C	ON DTG	REGIMEN		CD4	COUNT	
	2 mL BD	20 mg BD	1 m	LBD	10 mg BD	3 mL BD	30 mg BD		• VL < 50: Continue	e vearly	monito	ring	WHEN: after 10 D			
or two of tht < 2.0								 VL ≥ 50: Do thoro an elevated VL. C intercurrent infect interactions and r 2 years). Implement Repeat VL after 3 	ough ass consider ctions, ir resistan ent inter	essmen adheren ncorrect ce (if on rvention	t of the cause of nce problems, ART dose, drug treatment for > is, including EAC.	•Repeat 6 mont •Repeat if: any of stage 3 or 4) OF days INTERPRETATION	hly: if CD4 ≤ linical indic t a client mi N: Stop cotr	200 OR VL ≥ : ation arises (i. ssed a schedu imoxazole one		
	EXISTING						INS		CD4 monitoring	FPFAT \		TG REGIMEN	ART-associated i • HIV-positive inf • HIV-positive ch	ants < 12 n	nonths: should	
	NON VL-DI	EPENDENT	r Regi	MEN	SWITCHE	S			• VL < 50: Continue	_	_		(If previous PJP	•		
	Image: NT REGIMEN SWITCH TO: n for < 2 years								 VL ≥ 50: Continue VL ≥ 50: Re-asses urgently and 	s and re	esolve ad		category) • HIV-positive ch	ild ≥ 5 year	s: If CD4 count	
(P)				If				ľ	,							
P)				If child is ≥ 30 kg and ≥ 10 years: switch client to TLD if eGFR > 80 mL/min. No additional VL needed before switch. Refer to Adult ART 2023 poster								NSE TO REPEAT	TVL ON DTG REGIMEN, IF VL > 50			
									DTG regimen < 2Intensify efforts t	-			DTG regime	n ≥ 2 year	Adherence	
d regim	VL-DEPE ens > two yea	NDENT R ars, who hav	EGIMI e neve	EN SM r used a	VITCHES a DTG-conta	aining regime	n in the past:		resolve adherence				D with 2 or more V rting DTG regimen		(adheren	
swit RENT MEN		A FOR SWIT					S INDICATED		 Repeat VL at next scheduled routing 			one VL≥ 1000 an opportu	d either CD4 < 200 on nistic infection who have never fa	persistent lo (2 or more of between • Intensify ad		
r or based en > 2 ars	1000: swit assessment	2 months ≥ 50 ch, but do AB0 and provide B needed) but < CDE EAC if		Repe d is ≥ 30 kg aı						have fa previo regime Discuss HIV ex author	ailed a us ART en: s with an pert to ise and breviou Intensi • Repe roution D	us ART regimen: fy adherence (ABCE eat VL at next sched ne VL <i>Resistance to a firs</i> TG-containing regin	DE) uled t-line nen is	 (ABCDE) Repeat VL a scheduled r 	
rence) %	If on LPV/r s consider ABC/3TC/	TG regimen solution or pe switch to 4-in 'LPV/r capsule 'L in 2-3 mont	-1 s ^{\$} .	if eGF If rep hotlin resis	d is \ge 30 kg an R > 80 mL/mi peat VL \ge 100 ne (0800 212 stance test. P mmended by	in. Refer to Ad 0: Discuss with 506) to author rovide individu HIV expert an	switch client to TL ult ART 2023 poste HIV expert or the rise and interpret alised regimen as d repeat VL after 3	ths tch client to TLD ART 2023 posterDiscuss with an HIV expert to authorise and interpret RT. Do VL 3Resistance to a first-line DTG-containing regimen is extremely rare. Suboptimal adherence remains the most probable cause for non-suppression. Most clients will re-suppress on DTG -containing regimen if adherentschTC + DTG tch client to TLD ART 2023 postermonths after new regimen implementedmonths after ocontaining regimen if adherentmonths after probable cause for non-suppression. Most clients will re-suppress on DTG -containing regimen if adherentV expert or the and interpret a sed regimen aso RT only: if client was incorrectly classified as a client who has never failed a								
	Discuss w	ith HIV expert	or the l	hotline (o confirm re-su 6) to authorise	and interpret a	-	€ Cardiana anina angla da	a fina da a d			vant drug interactio			
rence 0 %		test. Provide	individu	alised r	egimen as re		y HIV expert and		dispensed				nt would have treatment			
		•							DO THE FOLL		IG TES		ENT IS ON TH	E DRUG		
IBCDE 9	ssessment, EAG				r 3 months. I ategories	nis result will g	group the client in		DRUG	TE	ST	FREQ	UENCY	ACTI	ON/INTERP	
ity: AZT + ABC + 31	3TC + DTG; ^{\$} If a s C + DTG as for no	switch to the 4-ir on-adherent child	n-1 ABC/3 Iren on LF	TC/LPV/r PV/r table	r capsules does i ets	not improve adhe	erence, or is not		AZT	FBC + differe WCC		At months 1 and thereafter if clin indicated		Hb < 8 g/c persistent	IL: Continue A IL or neutroph Iy < 1000 cells	
нои	ν το ΜεΑ	SURE AD	HER	ENCE	OBJECT	IVELY			PI-based		sterol +	At month 3, if al		To monito	e – consult with or PI-related m	
%, patie 80 % in	ent must meet the last 6 - 12 r	one of the fol months	lowing o	criteria:					regimen (LPV/r, ATV/r, DRV/r)	(TG)	cerides	TG	g cholesterol and	are still al obtain ex	ts. If fasting ch oove the accep pert advice	
) % of scheduled clinic visits in the last 6 - 12 months nt antiretroviral drugs in the client's blood or urine									TB treatment or NVP or EFV	ALT			miting, jaundice)	ns of hepatitis If ALT is abnormal		
ercenta	ge in the past 6	- 12 months: Ar	mount of mount of	schedul schedul	ed visits actua ed visits	lly attended by	client/caregiverX 1	00	NVP	ALT		If rash develops			onormal, refer HIV hotline ((
treatme	DREN CO nt together will nin B6) to TB trea	have to tolerat					rence support.	Ī	health bepartment Health REPUBLIC OF SOU This publication was s Health of South Afric	uthafrica supported (under fund	ing provided by the Glob	MEDICINES INFORMATION CENTRE Pal Fund to Fight AIDS, Tub r Public Health Programme	ment of HI Adolescents, Natio erculosis and M	2023 ART Clinical Guid V in Adults, Pregnancy Children, Infants and N nal Department of Hea alaria through the I use solely the respo	
eceiving nent and	a rifampicin -co until two week	ntaining TB reg s after rifampic	in has be	en stopp	oed. See ART D	orug Dosing Chai	oicin-containing TB t for Children 2022			not necess	arily repre = Alanine tr	sent the official views of ransaminase; ART = antire	the Global Fund or the Na troviral therapy; AST = Aspa	tional Departm rtate transamina	ent of Health of Sou se; ATV/r = atazanav	
-	tments or chang a rifampicin -co						he LPV/r dose	_	DTG = dolutegravir; DRV/r = essential medicines list; FBC	= darunavir C = full bloo	and ritonav d count; FT(<pre>ir; EAC = enhanced adher C = emtricitabine; HBV = h</pre>	ence counselling; EFV = efav	irenz; eGFR = est patitis B surface a	imated glomerular fi ntigen; IMCI = Integ	

_																			
		ART RE	GIMENS	IN NE	EW C	LIENTS							N	IONITO	RING WHILE (ON ART			
≥ 3 kg to < 3	30 kg, <u>and</u> ≥ 4 week	s to < 10 years ^{##}			ABC +	- 3TC + DTG (a	dosing as per p	aed dosing ch	art)		V	IRAL L	.OAD		C		ASSESSME		
Neonates [#] - birth to < 4 weeks of age					AZT +	3TC + NVP (s	ee dosing belo	w)			VHEN: DC [€] /mon or < 5 year olds	th 3, 10 a	nd every	WHEN: every vi		mforonco (< 2)			
	Zidovudine (AZT) La					ne (3TC)	Nevirapi	ne (NVP)	1		2 (DC 13) and th				neurodevelop	oment (reme	mber to adjust		
Available formulation 10 mg/mL					10 mg/mL 10 mg/mL						Remembe	eraVL≥	50 is a	medical	according toAsk about sid				
\ \					se in mL Dose in mg Dose in mL Dose in mg							emerge	ncy!		• TB & other op	portunistic i	nfection screer		
				0.5 m 0.8 m		5 mg BD 8 mg BD	1.5 mL BD 2 mL BD	15 mg BD			DECDONICE			WHO staging	WHO staging				
	≥ 3 - < 4 ≥ 4 - < 5	2 mL BD	15 mg BD 20 mg BD	1 mL		10 mg BD	3 mL BD	20 mg BD 30 mg BD			RESPONSE		NDIGR	REGIIVIEN		CD4 COUNT			
decreases in for neonates	sed on the birth weight the first week or two o s with birth weight < 2. in the ART Clinical Guid	ght of the child. It is not necessary to change the dose before 28 days of age if, for example, the weight o of life; Consult with a clinician experienced in paediatric ARV prescribing or the HIV hotline (0800 212 2.0 kg or gestational age < 35 weeks, as well as infants ≥ 28 days of age but weight < 3 kg idelines for baseline testing and follow up for neonates < 4 weeks of age; ^{##} No VL needed when transition								•V ar in in 2	L < 50: Continue $L \ge 50$: Do thoro n elevated VL. Contercurrent infect interactions and in years). Implement	ough asse onsider a ctions, inc resistance ent interv	ssment Idherenc correct A e (if on ti ventions,	of the cause of ce problems, ART dose, dru reatment for , including EA	•Repeat if: and stage 3 or 4) days	nthly: if CD4 : / clinical indic DR a client m	≤ 200 OR VL ≥ : ation arises (i. issed a schedu		
	SWITCHING	EXISTING	CLIENTS "	to dt	G-CC	ONTAININ	IG REGIMI	ENS		CI	epeat VL after 3 D4 monitoring	_	_	_	ART-associated	l immune rec	onstitution ha		
		NON VL-D	EPENDENT		MEN	SWITCHE	S			RE	SPONSE TO RE	PEAT VI	ON DT	G REGIMEN		-	ars: If CD4 per ears old if mee		
	CURREN	IT REGIMEN):			′L < 50: Continue ′L ≥ 50: Re-asses				category)				
Any LPV/r	or ATV/r regimen	for < 2 years					BC [*] + 3TC + D	TC			urgently and				• HIV-positive	• HIV-positive child ≥ 5 years: If CD4 coun			
ABC + 3TC	+ (EFV or NVP)				lf		and ≥ 10 years: sw) if				ECDON				. 50		
AZT + 3TC	+ (EFV or NVP)				eGFI	R > 80 mL/min. I	No additional VL n to Adult ART 2023	eeded before sw	itch.			_	ESPON	SE TO REPEA	AT VL ON DTG REG	IIVIEN, IF VL	> 50		
AZT + 3TC	+ DTG								I		TG regimen < 2				DTG regin	nen ≥ 2 year	S		
	VL-DEPENDENT REGIMEN Clients on PI-based regimens > two years, who have never u switch to DTG is based on their VL with			EN SWITCHES er used a DTG-containing regimen in the past: vithin the last 12 months						ntensify efforts t esolve adherenc ssues	e .	taken ≥	ence > 80 %, 2 years after ne VL ≥ 1000	n OR at least	Adherence (adheren persistent lo (2 or more o				
VL (c/m (within the 12 mont		CRITERIA	A FOR SWIT	СН	R	EGIMEN IF	CHANGE I	S INDICATE	D		epeat VL at nex cheduled routin	e VL	Clients v have fai	who Clier		who have never failed a us ART regimen: (ABC			
VL < 100	LPV/r or ATV/r based regimen > 2 years	1000: swit assessment	G-containing ro 2 months ≥ 50 tch, but do AB0 and provide B needed) but < CDE	16 ab :1	Repe	ABC [*] + 3TC + D Pat VL after 3 m	onths					previou: regimen Discuss HIV expe	s ART Inte i: • Ro with an	ensify adherence (AB epeat VL at next sch outine VL	ify adherence (ABCDE) eat VL at next scheduled			
		If already on	LPV/r tablets: TG regimen	switch			nd ≥ 10 years: in. Refer to Ad						authoris interpre Do VL 3	t RT.	extremely rare. Sub	OTG-containing regimen is xtremely rare. Suboptimal dherence remains the most			
Two or m consecut VLs ≥ 10	ive Adherence		solution or pe switch to 4-in		If child is ≥ 30 kg a if eGFR > 80 mL/m		repeat VL < 1000: ABC [*] + 3TC + DTG \geq 30 kg and \geq 10 years: switch client to TLD 80 mL/min. Refer to Adult ART 2023 poster VL \geq 1000: Discuss with HIV expert or the						months new reg impleme	imen <i>Mos</i> ented -c	st clients will re-supp containing regimen i	ble cause for non-suppression. clients will re-suppress on DTG ntaining regimen if adherent only:			
taken ≥ 2 y after start LPV/r or A regime	rears ting TV/r	ABC/3TC/LPV/r capsules ^{\$} . Repeat VL in 2-3 months			If repeat VL ≥ 1000: Discuss with HIV expert or the hotline (0800 212 506) to authorise and interpret a resistance test. Provide individualised regimen as recommended by HIV expert and repeat VL after 3 months to confirm re-suppression									• if as A	client was incorrect	ent was incorrectly classified client who has never failed a regimen; or			
	Adherence						6) to authorise	€DC	= dispensing cycle, de	efined as the	number of	f days for which a	client would have treatme	nt if a single stand	l ard "monthly" qua				
Only 1 VL >	> 80 %	resistance					commended b re-suppression		nd		O THE FOLL	OWING	g test			HE DRUG	ΤΗΑΤ ΜΑΥ		
after 2 year a LPV/r or A	rs on Do ABCDE	assessment, EA		•			his result will	group the clier	nt in		DRUG	TES	т		OVERSE EVENT		ON/INTERP		
regime			One	or the a	DOVE C	ategories			ľ	AZ		FBC +		At months 1 a			dL: Continue A		
*If client has A available, cont	BC hypersensitivity: AZ inue to switch to ABC +	T + 3TC + DTG; ^{\$} If a s 3TC + DTG as for no	switch to the 4-ir on-adherent child	n-1 ABC/31 dren on LP	TC/LPV/ V/r table	r capsules does ets	not improve adhe	erence, or is not				differer WCC	į	thereafter if o indicated	·	persisten alternativ	dL or neutroph tly < 1000 cells re – consult wit		
	НО	W TO MEA	ASURE AD	DHERE	ENCE	OBJECT	IVELY				-based gimen	Cholest Triglyce			if above acceptable ting cholesterol and		or PI-related m ts. If fasting ch		
Phar	nce to be > 80 %, pai macy refills > 80 % i ndance of > 80 % of	n the last 6 - 12	months	-						(LI DF	PV/r, ATV/r, RV/r) 3 treatment or	(TG)		TG	otoms of hepatitis	are still a obtain ex	bove the accep pert advice bnormal, refer		
Dete	ction of current anti	retroviral drugs	in the client's	blood or	r urine				ſ	N١	VP or EFV			(e.g. nausea,	vomiting, jaundice)	phone th	e HIV hotline (
To calculate	adherence percent	age in the past 6	- 12 months: Ar	mount of mount of	schedu schedu	led visits actua led visits	ally attended by	client/caregiver	r X 100	N١	VP	ALT		If rash develo	ops		bnormal, refer e HIV hotline (
		LDREN CO					*			Í	health	(autor a TB HEALTH CARE 0800 212 5	00	MEDICINES INFORMAT CENTRE	ON ment of H Adolescents,	2023 ART Clinical Guid IV in Adults, Pregnancy Children, Infants and N onal Department of Hea		
	ing ART and TB treatn to add pyridoxine (vita			e a large a	amount	t of medication	n. Intensify adhe	erence support.			This publication was s	upported un			Global Fund to Fight AIDS, T re for Public Health Program				
DTG-based regimen	treatment a	ng a rifampicin -co nd until two week	s after rifampic	in has bee	en stop	ped. See ART D	Drug Dosing Cha	picin-containing rt for Children 2	g TB 2022	and do not necessarily represent the official views of the Global Fund or the National Department of Health							ent of Health of Sou use; ATV/r = atazanav DR = drug-resistant; D		
EFV-based r		djustments or changes in ART regimen needed for DS-TB treatment iving a rifampicin -containing TB regimen: Additional ritonavir should be added or the LPV/r dose								DTG esser	= dolutegravir; DRV/r ntial medicines list; FBC	= darunavir ar C = full blood o	nd ritonavir; count; FTC =	EAC = enhanced ad emtricitabine; HB	dherence counselling; EFV = e V = hepatitis B virus; HBsAg = pinavir and ritonavir; LP = lum	favirenz; eGFR = es hepatitis B surface	timated glomerular fi antigen; IMCI = Integ		

			ART RE	GIMENS	IN NE	W CLI	ENTS						MONITORI		N ART				
		and ≥ 4 weeks t	to < 10 years ^{##}					osing as per p	aed dosing chart)		VIRAL	LOAD)	CLI	INICAL ASSESSMENT				
		to < 4 weeks of t ≥ 2.0 kg and ≥		ational age at	birth)	AZT + 3T	C + NVP (se	ee dosing belo	w)	WHEN: DC [€] /m				WHEN: every visit	t				
	Zidovudine (AZT) Lamivudine (3TC) Nevirapine (NVP)										 For < 5 year olds done at week 14 (DC 4), month 12 (DC 13) and then at 12 DC intervals Height, weight, head circumference (< 2 year neurodevelopment (remember to adjust AR⁻ 								
	Availabl	e formulation	10 mg	. ,		10 mg/m	· /	10 mg		Remen	nber a VL	. ≥ 50 is a	medical	 according to we Ask about side- 	eight)				
							ose in mg	Dose in mL	Dose in mg		emer	rgency!		• TB & other opp	ortunistic infection screen				
		2 - < 3 3 - < 4	1 mL BD 1.5 mL BD	10 mg BD 15 mg BD	0.5 mL 0.8 mL		5 mg BD 8 mg BD	1.5 mL BD 2 mL BD	15 mg BD 20 mg BD	RESPONS	SE TO VI	ON DTG	REGIMEN	WHO staging					
≥ 4 - < 5 2 mL BD 20 mg BD 1 mL BD 10 mg BD 2 mL BD 30 mg BD										RESPONSE TO VL ON DTG REGIMEN CD4 COUNT • VL < 50: Continue yearly monitoring									
Dosing is based on the birth weight of the child. It is not necessary to change the dose before 28 days of age if, for example, the weight decreases in the first week or two of life; Consult with a clinician experienced in paediatric ARV prescribing or the HIV hotline (0800 212 506), for neonates with birth weight < 2.0 kg or gestational age < 35 weeks, as well as infants \geq 28 days of age but weight < 3 kg										 VL ≥ 50: Do thorough assessment of the cause of an elevated VL. Consider adherence problems, intercurrent infections, incorrect ART dose, drug Repeat 6 monthly: if CD4 ≤ 200 OR VL ≥ 1000 cells/[Repeat if: any clinical indication arises (i.e. new WH stage 3 or 4) OR a client missed a scheduled visit by 									
[#] See proto from NVP		RT Clinical Guideli	nes for baseline te	esting and follow	up for neo	onates < 4 v	weeks of age	; ^{##} No VL needed	I when transitioning	interactions and resistance (if on treatment for > 2 years). Implement interventions, including EAC. Repeat VL after 3 months. Also see section on INTERPRETATION: Stop cotrimoxazole once									
	S۱	NITCHING	EXISTING	CLIENTS	O DTO	G-CON	ITAININ	G REGIME	ENS	CD4 monitorir	<u> </u>			• HIV-positive inf	mmune reconstitution has occurred: fants < 12 months: should remain on CPT				
		l	NON VL-DE	EPENDENT	REGIN	VIEN SV	WITCHE	S		RESPONSE TO				-	ild $1 - 5$ years: If CD4 percentage $\ge 25\%$, stop at 5 years old if meets ≥ 5 years				
			REGIMEN				S	WITCH TO):		sess and r	resolve ad	dherence issues	category) • HIV-positive ch	ild ≥ 5 years: If CD4 count ≥ 200 cells/µL				
	-	V/r regimen fo	or < 2 years				AE	BC [*] + 3TC + D ⁻	TG	urgently	and see b	below							
	•	V or NVP) / or NVP)			_		80 mL/min. N	lo additional VL n	itch client to TLD if eeded before switch.			RESPOR	NSE TO REPEAT	VL ON DTG REGIN	/IEN, IF VL > 50				
	TC + DTG						Refer t	o Adult ART 2023	poster	DTG regimen	< 2 years	s		DTG regime	regimen ≥ 2 years				
Clie	ents on P	l-based regim swite		NDENT RI ars, who hav based on the				ining regime onths	n in the past:	 Intensify effor resolve adher issues 		taken	≥ 2 years after sta	AND with 2 or more VLs ≥ 1000 starting DTG regimen OR at least and either CD4 < 200 or an					
VL (C (within 12 mc	the last	CURRENT REGIMEN	CRITERIA	FOR SWIT	сн	REG	GIMEN IF	CHANGE IS	S INDICATED	 Repeat VL at r scheduled rou 		Clients have fa	opportu who Clients	nistic infection who have never fa Is ART regimen:	between 50 and 999)				
VL <	1000	LPV/r or ATV/r based regimen > 2 years	assessment		but < DE AC if	If child is	Repe	BC [*] + 3TC + DT at VL after 3 m ad > 10 years: :				previo regime Discuss HIV ex	us ART Intensit en: • Repe s with an pert to	fy adherence (ABCE eat VL at next sched ne VL Resistance to a first	DE) Iuled • Repeat VL at next scheduled routine				
			If already on L to DT	_PV/r tablets: IG regimen					ult ART 2023 poster			interpr Do VL	ret RT. ex 3 adv	ΓG-containing regin tremely rare. Subop herence remains the	otimal e most				
Two o conse VLs ≥ taken ≥ after s LPV/r o regi	cutive 1000 2 years carting r ATV/r	Adherence < 80 %	consider ABC/3TC/	solution or pe switch to 4-in LPV/r capsule L in 2-3 montl	lets: -1 s ^{\$} .	If child is if eGFR > If repeat hotline resistant recomm	s ≥ 30 kg ar > 80 mL/mi at VL ≥ 100 (0800 212 ince test. P mended by	n. Refer to Add 0: Discuss with 506) to author rovide individu	switch client to TLD ult ART 2023 poster n HIV expert or the rise and interpret a ualised regimen as d repeat VL after 3			month new re implen	egimen nented Do RT o • if clie as a ART	Ile cause for non-su lients will re-suppre- taining regimen if a only: ent was incorrectly client who has neve regimen; or vant drug interaction	classified er failed a				
		Adherence							and interpret a y HIV expert and	€ DC = dispensing cycle, defined as the number of days for which a client would have treatment if a single standard "monthly" quantity dispensed									
Only 1 V		> 80 %		repeat V	'L after 3	months t	to confirm	re-suppressior	1	DO THE FOLLOWING TESTS IF THE CLIENT IS ON THE DRUG THAT MAY CAUSE THE ADVERSE EVENT									
after 2 y a LPV/r	or ATV/r	DO ABCDE as	ssessment, EAC			/L after 3 ove cate		nis result will g	group the client in	DRUG		EST	FREQ	UENCY	ACTION/INTERPRETATION				
regin *If client h available, o	I	ersensitivity: AZT + switch to ABC + 3T	3TC + DTG; ^s If a s C + DTG as for no	witch to the 4-in n-adherent child	-1 ABC/3T(ren on LPV	C/LPV/r caj //r tablets	psules does i	not improve adhe	erence, or is not	AZT	FBC - diffe WCC	rential	At months 1 and thereafter if clin indicated		Hb ≥ 8 g/dL: Continue AZT Hb < 8 g/dL or neutrophil count persistently < 1000 cells/µL: Use alternative – consult with expert				
		НОИ	V TO MEA	SURE AD	HERE	NCE C	DBJECT	IVELY		PI-based regimen	Trigly	esterol + ycerides	At month 3, if all range, do fasting	oove acceptable g cholesterol and	To monitor PI-related metabolic side-effects. If fasting cholesterol and T				
• P • A	narmacy r ttendance	be > 80 %, patie efills > 80 % in t e of > 80 % of sc	the last 6 - 12 n heduled clinic	nonths visits in the la	st 6 - 12 r	nonths				(LPV/r, ATV/r, DRV/r) TB treatment c	(TG)	,	TG If signs/symptor	ns of hepatitis	are still above the acceptable range, obtain expert advice If ALT is abnormal, refer to specialist or				
• D To calcul	etection c ate adher	of current antire rence percentag	etroviral drugs i ge in the past 6 -	12 months. Ar	nount of s	cheduled	visits actua visits	lly attended by o	client/caregiverX 100	NVP	NVP or EFV (e.g. nausea, vomiting, jaundice) phone the HIV hotline (08)								
Rememb DTG-bas regimen	Children taking ART and TB treatment together will have to tolerate a large amount of medication. Intensify adherence support. Remember to add pyridoxine (vitamin B6) to TB treatment DTG-based AND receiving a rifampicin-containing TB regimen: Boosting of DTG required while on rifampicin-containing TB									This publication v Health of South and 3TC = lamivudine; ABC AZT = zidovudine; CM :	of Southafrica vas supported Africa and the d do not nece = abacavir; AL cryptococcal	e NDoH Phar essarily repres T = Alanine tr meningitis; C	macovigilance Centre fo sent the official views of ansaminase; ART = antire PT = cotrimoxazole prevent	r Public Health Programme the Global Fund or the Na troviral therapy; AST = Aspan trive therapy; CrAg = crypto	Adolescents, Children, Infants and Neonates, South African National Department of Health, April 2023 erculosis and Malaria through the National Department es. Its contents are solely the responsibility of the author ational Department of Health of South Africa rtate transaminase; ATV/r = atazanavir and ritonavir; coccal antigen; DR = drug-resistant; DS = drug-sensitive;				
LPV/r-baregimen		AND receiving increased acco doses. Stop ad	ditional ritonavi	ntaining TB reg T Drug Dosing C r or increased L	men: Add hart for Cl PV/r dose	litional rito hildren 20 e 2 weeks a	onavir shou D22. TB treat after TB-tre	ld be added or t tment should be atment complet	e dosed at standard ted	essential medicines list childhood illness; InSTI NCD = non-communica Paed = paediatric; PI = test; TB = Tuberculosis	; FBC = full blo = Integrase str ble disease; N protease inhib TBM = Tubero	ood count; FT(trand transfer IRTI = nucleos bitor; OI = opp culosis menin	C = emtricitabine; HBV = h inhibitor; LPV/r = lopinav ide reverse transcriptase portunistic infection; PJP = gitis; TC = total cholestere	epatitis B virus; HBsAg = hep ir and ritonavir; LP = lumbar nhibitor; NNRTI = non-nuch <i>Pneumocystis jirovecii</i> pneu I; TDF = tenofovir; TLD = ter	<pre>bunselling; EFV = éfavirenz; eGFR = estimated glomerular filtration rate; EML = B virus; HBsAg = hepatitis B surface antigen; IMCI = Integrated management of itonavir; LP = lumbar puncture; MUAC = mid-upper arm circumference; r; NNRTI = non-nucleoside reverse transcriptase inhibitor; NVP = nevirapine; nocystis jirovecii pneumonia; RPC = repeat prescription collection; RT = resistance = tenofovir; TLD = tenofovir + lamivudine + dolutegravir; TEE = tenofovir +</pre>				
[*] This list is	not exhaust	tive. Download the	e free SA HIV/TB H	lotline app for a	complete i	nteraction	checker – sc	an QR code in the	e NEED HELP box	emtricitabine + efavire	12; IG = Trigly	cendes; IPT =	TB preventive therapy; V	L = viral load; WCC = white c	ten count				

NEED HELP?

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



0800 212 506 / 021 - 406 6782 Alternatively "WhatsApp" or send an SMS or "Please Call Me" to 071 840 1572 www.mic.uct.ac.za