

# 2023 Training on updates to ART and Prevention of Vertical Transmission Guidelines

## 2023 ART Clinical Guidelines for the Management of HIV in Adults, Pregnancy and Breastfeeding, Adolescents, Children, Infants and Neonates

April 2023

Republic of South Africa National Department of Health



health

Department:  
Health  
REPUBLIC OF SOUTH AFRICA



World Health  
Organization



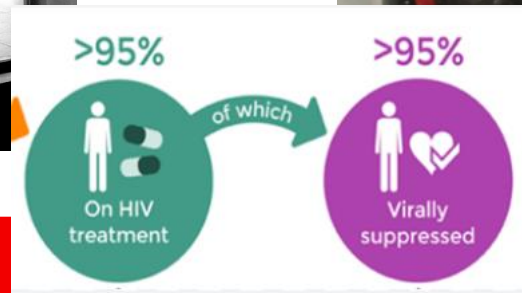
# Objectives Session 1

## High-level overview of changes to ART Clinical Guidelines

- Background and Rationale for changes
- Changes for the Stable client
- Changes to TB screening guidelines
- Changes relating to the unstable client
- Changes to the management of Cryptococcal Meningitis
- Changes related to Paediatric ART
- Changes to the Vertical Transmission Prevention guidelines

**Background and rationale**

# South African HIV program big challenges....



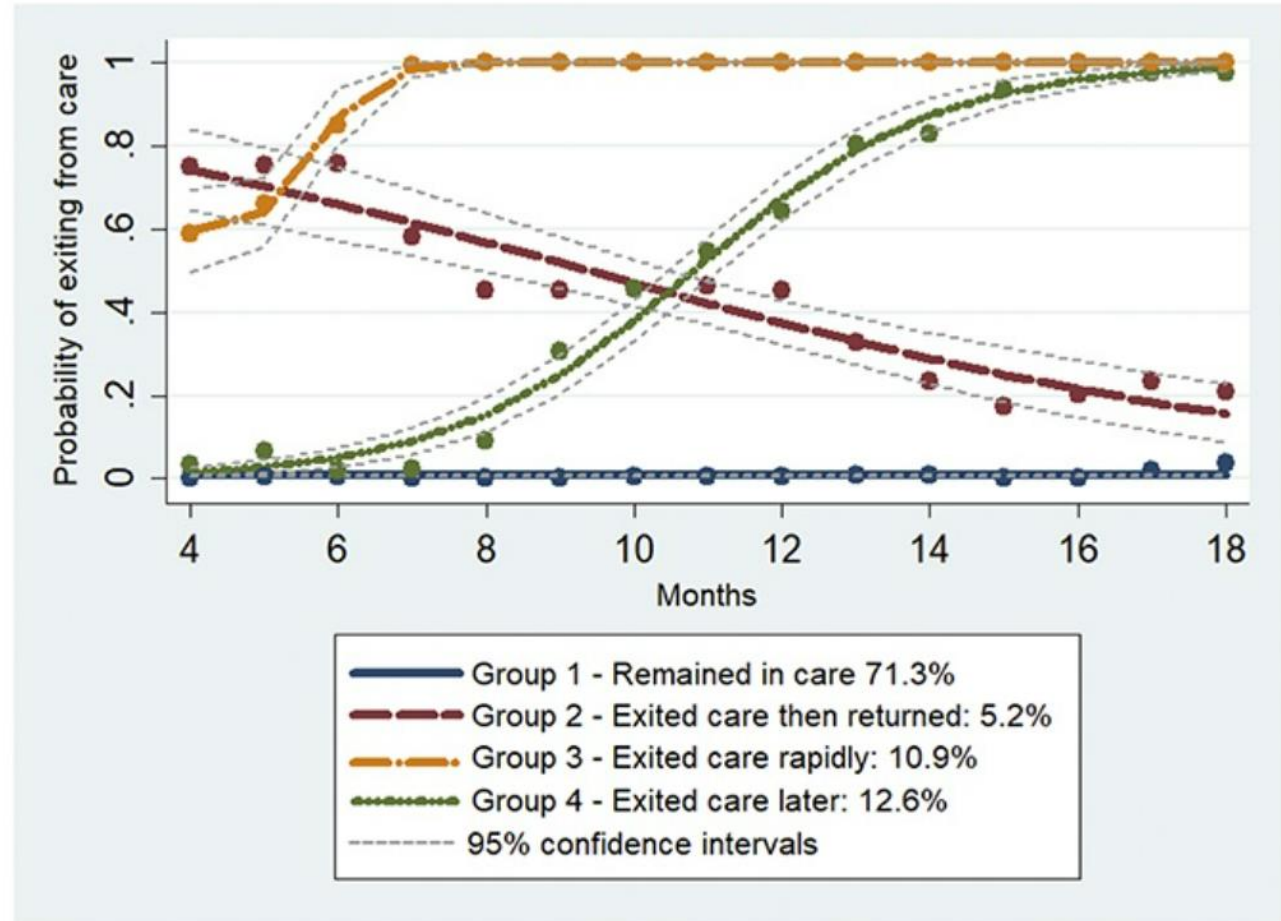
**Sub-optimal retention**  
especially in the first 12 year  
on ART  
(including for returning clients)

**Sub-optimal VL suppression**  
( $<50$  copies/ml)

**Massive health system burden**  
high number of people living  
with HIV and people at risk of  
acquiring HIV requiring  
ongoing HIV treatment and  
prevention services

**Disengagement  
approx. 15% by 6  
months on ART**

**+ further 9% by 12  
months on ART**



Care trajectories in trial clinics over 18 months of clinical follow-up among patients eligible for ART initiation at the first visit (ANRS 12249 TasP trial, n = 777).

Gosset, Andréa MSc<sup>a,b</sup>; Protopopescu, Camelia PhD<sup>a</sup>; Larmarange, Joseph PhD<sup>c,d</sup>; Orne-Gliemann, Joanna PhD<sup>e,f</sup>; McGrath, Nuala PhD<sup>g,h</sup>; Pillay, Deenan PhD<sup>c,i</sup>; Dabis, François PhD<sup>e,f</sup>; Iwuji, Collins MRCP<sup>j,c,h</sup>; Boyer, Sylvie PhD<sup>a</sup>. Retention in Care Trajectories of HIV-Positive Individuals Participating in a Universal Test-and-Treat Program in Rural South Africa (ANRS 12249 TasP Trial). *JAIDS Journal of Acquired Immune Deficiency Syndromes* 80(4):p 375-385, April 1, 2019.

## Critical consideration for this update:

1. Reducing disengagement in the first 6-12 months on treatment (including after re-engagement)



**Continue?** **Disengage?**

# A critical consideration for this update:

## 2. Improving long-term viral load suppression (VLS)

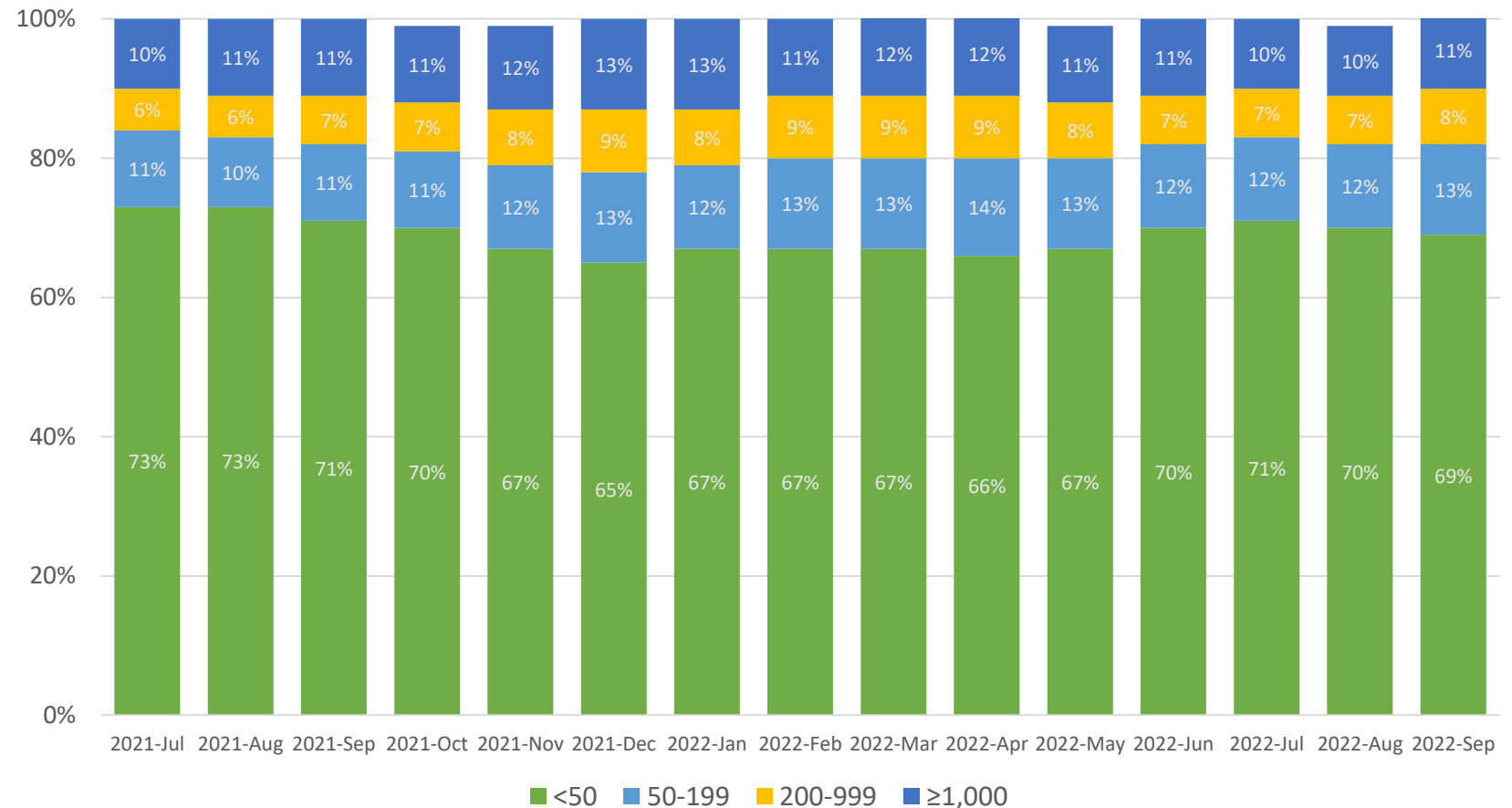


10-13% > 1000 c/ml

low level viraemia:  
16-23% 50-1000 c/ml  
yellow & light blue

Only 68-70% of VLs are < 50 c/ml

NHLS viral load data, July 2021-Sept 2022



# Aims of ART Clinical Guideline predominantly on 2nd & 3rd 95 Targets



- **Aim 1: Implement optimized regimens**
- **Treat as many people with DTG containing regimens as possible**
- **Aim 2: Create an enabling environment to support engagement in care and adherence**
- **Prioritize patient-centred service delivery**
  - Empower clients with the knowledge and skills they need
  - Identify adherence challenges earlier
  - Reduce unnecessary visits and increase convenience (clinical or ART refill)
  - Integrate service delivery including alignment of visits



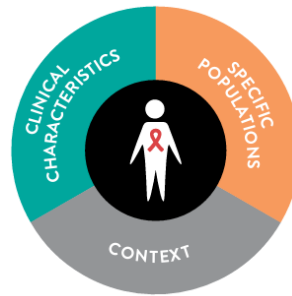
# Guideline Approach

Aim 1: Implement optimized ART regimens



**Clinical updates**

Aim 2: Create an enabling environment to support engagement in care and adherence



**Patient-centred service delivery updates**



**Note: Differentiated models of care (DMOC) fully integrated into the ART clinical guidelines. DMOC SOPs form part of ART guidelines.**

**Previously called  
“adherence  
guideline SOPs”**

# Integration of clinical and service delivery components



Toolkit

Who decides which tool is used where??



## Tools for Clinical Management

TLD

Monitoring on ART

Preventing and managing STIs, NCDs and OIs with TPT and CPT

## Tools for Differentiated Care (DMOC SOPs)

New patient

SOP 1 FTIC

Stable patient

SOP 5 RPCs  
SOP 6 Switch in RPCs

Non-stable patient

SOP 2 EAC | SOP 7 Trace  
SOP 8 Re-engagement

SOP 3 Disclosure

SOP 4 MMD

## Tools for the Provision of Integrated Care

Visit schedules to align EPI visits with paediatric ART, maternal ART, maternal contraception, maternal PrEP, TB treatment and ART

# Part 1: Implementing optimized regimens

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## Definition

An Optimised ART Regimen means we provide PLHIV with the best-available ART in the most efficient and cost-effective manner possible

### An optimized regimen using DTG:

- simplifies regimens with reduced pill burden and dosing frequency
- enhances tolerability
- reduces toxicity
- reduces potential drug-drug interactions
- maintains viral suppression without jeopardizing future treatment options through the development of drug resistance

**Background evidence that informed  
decisions in the GL revision**

# Benefits of Dolutegravir

EClinicalMedicine 28 (2020) 100573



ELSEVIER

Contents lists available at ScienceDirect

EClinicalMedicine

journal homepage: <https://www.journals.elsevier.com/eclinicalmedicine>



Research Paper

Comparative efficacy, tolerability and safety of dolutegravir and efavirenz 400mg among antiretroviral therapies for first-line HIV treatment: A systematic literature review and network meta-analysis

Steve Kanters<sup>a,\*</sup>, Marco Vitoria<sup>b</sup>, Michael Zoratti<sup>c</sup>, Meg Doherty<sup>b</sup>, Martina Penazzato<sup>b</sup>, Ajay Rangaraj<sup>b</sup>, Nathan Ford<sup>b</sup>, Kristian Thorlund<sup>c</sup>, Prof. Aslam H. Anis<sup>a,d</sup>, Mohammad Ehsanul Karim<sup>a,d</sup>, Lynne Mofenson<sup>e</sup>, Rebecca Zash<sup>f,g</sup>, Alexandra Calmy<sup>h</sup>, Tamara Kredon<sup>i</sup>, Nick Bansback<sup>a,d</sup>

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<sup>c</sup> Departments of Health Research Methods, Evidence and Impact, McMaster University, Hamilton, Canada

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<sup>h</sup> HIV/AIDS Unit, Division of Infectious Diseases, Geneva University Hospital, Geneva, Switzerland

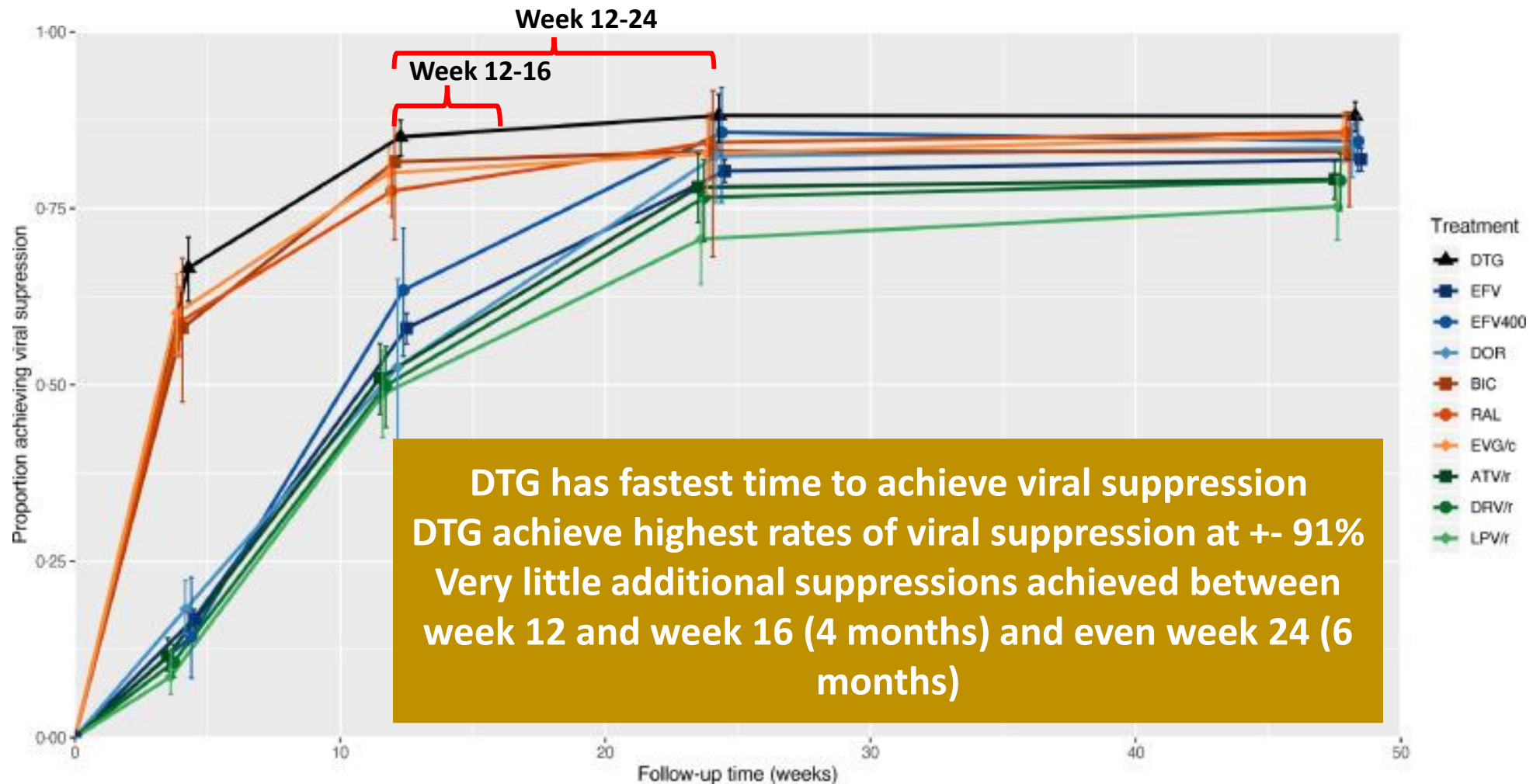
<sup>i</sup> South African Medical Research Council, Cape Town, South Africa

- DTG had **improved odds of viral suppression**
- DTG was **protective of drug-resistance**
- DTG led to **fewer discontinuations** due to better tolerance and low side effect profile
- Evidence supported dolutegravir use among TB-HIV co-infected persons and **pregnant women.**

Systematic review of 156 publications  
To inform and update WHO guidelines

No additional risk of NTDs!!

# Treatment comparison with respect to viral suppression over time relative to treatment initiation



# Recycling of TDF in second-line regimens

- Nucleosides And Darunavir/Dolutegravir In Africa (NADIA)
- This trial evaluated **options for second-line antiretroviral therapy** in patients failing on a non-nucleoside reverse transcriptase inhibitor (NNRTI) and tenofovir (TDF)-based first-line regimen. The trial aimed to answer the following:
  1. Is a **DTG**-containing regimen as effective as a darunavir-containing (**DRV/r**) regimen in 2nd-line?
  2. Is continuing **TDF and 3TC** in your second-line regimen as effective as using **AZT and 3TC**.

## **NADIA trial conclusions:**

**DTG in combination with NRTIs was as effective as DRV/r**  
including in those with extensive NRTI resistance in whom no NRTIs were predicted to have activity.

**TDF was superior to AZT as second-line therapy.**



# Implications of NADIA

- TDF may safely be reused in 2nd-line therapy following 1st-line failure with TDF-containing regimens.
- TDF to replace AZT for patients on second-line ART. Benefits of TDF:
  - Better viral suppression than AZT
  - Better tolerated than AZT
  - Less intense initial monitoring
  - Fewer tablets per day
  - Once daily (vs twice-daily)
  - Available as a fixed-dose combination (TLD)
  - It is cheaper
  - Greater harmonisation with first line TDF-based regimens would likely improve 2nd-line drug stock challenges.

# A paradigm shift

In the new ART era of dolutegravir, TLD used as a

First-line regimen

Second-line regimen

Part of  
Third-line regimens

→ need to rethink our terminology related to “1st and 2nd-line”

**TLD 1**

Clients on a DTG-containing regimen, who **have never failed** a previous regimen  
(old “1st line” terminology)

**TLD 2**

Clients on a DTG-containing regimen, who **have failed** a previous regimen  
(old “2nd line” terminology)

# Implications of NADIA: “Simple switches from TEE to TLD

- Simple switch i.e. non-VL dependent
- Why were switches VL –dependent in the 2019 ART GL?
  - It differentiated between a switch to TLD and a switch to AZT, 3TC and DTG (i.e., “second-line”)
- In the 2023 ART GL, whether
  - they stay on DTG as “first line” i.e., TLD1,
  - Or if they require “second-line” i.e. TLD2,
- → the regimen is still the same, i.e. TLD!!

We do not need a VL to distinguish between which regimen they will get!

# TLD will be used as:

A  
First-line  
regimen

A  
Second-line  
regimen

Part of  
Third-line  
regimens



If TLD is the most optimised regimen we have, and it can be used in 1<sup>st</sup>, 2<sup>nd</sup>, and third-line regimens, that means that:

All new clients should be initiated on TLD, or...

Clients already on ART should have been switched to TLD, or...

...be IN THE PROCESS of switching to TLD

# But what about people “failing” TLD with an elevated VL?

- There have been very few 1st line DTG Failures due to resistance (only 1 described in literature!!)
  - 99,99% of elevated VLs on DTG are due to adherence issues!!
- The best chance they have of good adherence and a suppressed VL is on a TLD because:
  - TLD is one tablet once a day
  - TLD is very well tolerated with few side-effects
  - Low toxicity
  - DTG has the fastest time to achieve viral suppression (see next slide)
  - DTG achieves the highest rates of viral suppression at +- 91%

# A paradigm shift

Historically we've been taught:  
“never leave a client on a failing regimen”

- **In the era of EFV → it meant a change in regimen to LPV/r**
  - low genetic barrier to resistance
  - Accumulation of other mutations that results in cross resistance to drugs other than EFV
- **In the era of DTG → it means fix adherence and stay on DTG**
  - High genetic barrier to resistance
  - Very low possibility of resistance
  - More efficacious than any other regimen
  - Best chance good adherence better tolerated than any alternatives

# Under which circumstance should someone change from DTG to an alternative PI-based regimen?

- Only if DTG is proven to be in-active
- This requires a resistance test

# Does that mean everyone failing DTG should get a resistance test?

- **No!!**
- **Only clients failing second-line TLD and meeting the following criteria for “confirmed virological failure”**
  - On a DTG-based regimen for more than 2 years
  - Two or more consecutive VLs  $\geq 1000$  c/mL, taken two or more years after starting DTG regimen
  - Adherent on their regimen
- **All Resistance tests will need to be authorised**

→ more on this later



## First-Line ART Regimens in Adults, Adolescents, Pregnant Women, Children, Infants, and Neonates



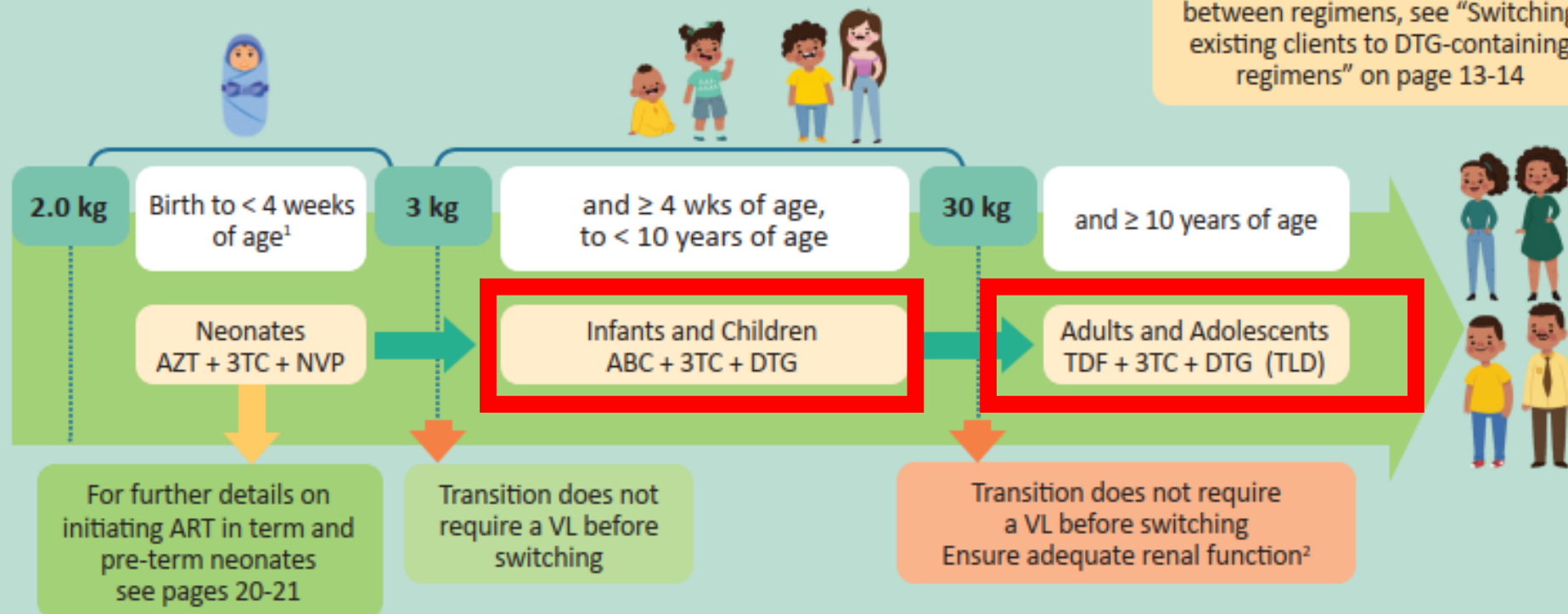
All Adult and Adolescent Females and Males  
≥ 30 kg and ≥ 10 years of Age



TDF + 3TC + DTG (TLD)

### Neonates, Infants and Children 0 to < 10 years of Age

For further detail on transitioning between regimens, see “Switching existing clients to DTG-containing regimens” on page 13-14



<sup>1</sup> For neonates with severe anaemia, obtain advice from an expert or through one of the helplines provided on page 18

<sup>2</sup> Before switching to TDF, ensure adequate renal function by checking eGFR/creatinine as outlined in table on page 7

# Summary

ART Regimens	All adult and adolescent clients > 30 kg and > 10 years of age, including pregnant and breastfeeding women	<ul style="list-style-type: none"> <li>The preferred first-line ART regimen is <b>tenofovir disoproxil fumarate-lamivudine-dolutegravir (TLD)</b> for those adult and adolescent clients initiating ART.</li> <li>TDF weight-related eligibility criteria decreased from <b>35 kg to 30 kg</b></li> <li>All clients already on ART and not on dolutegravir (DTG), whether on first-line or second-line regimens, should be evaluated for a switch to a dolutegravir-containing regimen.</li> </ul>
		<ul style="list-style-type: none"> <li>TDF may safely be reused in 2nd-line therapy following 1st-line failure with TDF-containing regimens. TLD will therefore be used as both first (TLD 1) and second (TLD 2) line regimens and in certain cases, 3rd line regimens as well</li> <li>Simplified <b>switching from TEE to TLD not dependant on VL</b></li> </ul>
	New formulations	<ul style="list-style-type: none"> <li><b>DTG 10 mg dispersible tablets</b> for children from <math>\geq 3\text{kg}</math> and <math>\geq 4</math> weeks of age</li> <li>DTG-containing fixed-dose combination: Abacavir (ABC) 600 mg + lamivudine (3TC) 300 mg + DTG 50 mg (ALD FDC). ALD FDC can be prescribed for clients <math>\geq 25</math> kg</li> </ul>
	Children $\geq 3$ kg and $\geq 4$ weeks of age until 29,9 kg or 9 years of age	<ul style="list-style-type: none"> <li>The preferred first-line ART regimen is <b>abacavir-lamivudine-dolutegravir (ALD)</b>.</li> <li>All paediatric clients already on ART and not on dolutegravir (DTG), whether on first-line or second-line regimens, should be evaluated for a switch to a dolutegravir-containing regimen.</li> </ul>
	Other antiretrovirals	<ul style="list-style-type: none"> <li><b>Abacavir</b> is the preferred alternative agent if TDF cannot be used</li> <li>Zidovudine (AZT) no longer part of any standard ART regimen. AZT will be reserved only for cases with <b>both</b> renal failure <b>and</b> ABC hypersensitivity</li> <li><b>Atazanavir/r</b> replaces lopinavir/r as the preferred protease inhibitor except when on TB treatment</li> </ul>

# Who is eligible for a “simple”/non-VL dependent switch to TLD?

## Switching Existing Clients to DTG-containing Regimens (Adults, adolescents or children)

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
Switching regardless of VL result	TEE	<p><b>Switch all to a DTG-containing regimen, regardless of VL result</b></p> <p>Review VL in last 12 months. If VL in last 12 months was not suppressed, continue to switch same day, but do ABCDE assessment and provide enhanced 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</p>	<p><b>TLD</b> provided no renal dysfunction and age <math>\geq</math> 10 yrs and weight <math>\geq</math> 30 kg</p> <p>If client does not qualify for TDF <b>ABC<sup>1</sup>/3TC/DTG</b></p> <p>If client does not qualify for TDF and has ABC hypersensitivity <b>AZT/3TC/DTG</b></p>
	ABC/3TC/EFV (or NVP*)		
	AZT/3TC/EFV (or NVP*)		
	AZT/3TC/DTG		
	Any LPV/r or ATV/r regimen for less than 2 years		

# VL dependent 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
- If they are failing a PI regimen, this WILL influence regimen selection, because if they have already failed a PI, they have no “backup” regimen if they fail DTG
- They may require a resistance test to determine if they indeed have PI resistance
- If resistance is confirmed, they will require an individualised regimen (to be determined in consultation with an expert)

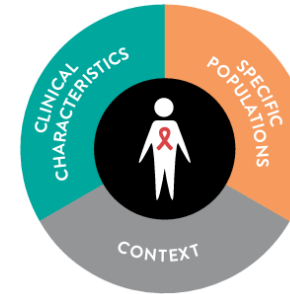
## Switching Existing Clients to DTG-containing Regimens

(Adults, adolescents or children who have never used a DTG-containing regimen in the past)

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	<b>Switch all to a DTG-containing regimen</b> If VL in last 12 months was $\geq 50$ c/mL, continue to switch same day, but do ABCDE assessment, provide EAC if needed, and repeat the VL after 3 months as per <i>"The VL non-suppression algorithm" on page 19</i>	<b>TLD</b> provided no renal dysfunction and age $\geq 10$ yrs and weight $\geq 30$ kg  If clients does not qualify for TDF <b>ABC<sup>1</sup>/3TC/DTG</b>
<sup>2</sup> Two or more VLs $\geq 1000$ c/mL taken two or more years after starting PI regimen	Adult or adolescent on any LPV/r or ATV/r regimen and adherence less than 80% <sup>3</sup>	<b>Switch all to a DTG-containing regimen</b> <b>Do not do a resistance test</b> These clients are unlikely to have PI resistance mutations. Rather switch to a more tolerable once daily FDC regimen which is likely to support adherence. Manage as per <i>"The VL non-suppression algorithm" on page 19</i>	<b>TLD</b> provided no renal dysfunction and age $\geq 10$ yrs and weight $\geq 30$ kg  If clients does not qualify for TDF <b>ABC<sup>1</sup>/3TC/DTG</b>
	Adult or adolescent on any LPV/r or ATV/r regimen and adherence more than 80% <sup>3</sup>	Clients who meet the definition of confirmed virological failure and have confirmed adherence more than 80% may need a resistance test. <b>These clients do not qualify for a same-day switch.</b> Discuss with an HIV expert <sup>4</sup> to authorise and interpret a resistance test.  Provide individualised regimen as recommended by HIV expert. Repeat VL 3 months after the regimen change to confirm re-suppression, as per the <i>"Management of Confirmed Virological Failure on TLD" on page 21</i>	
	Child < 10 years, or weight < 30 kg on any LPV/r or ATV/r regimen	These clients do not yet qualify for TLD and may require a resistance test. Refer to algorithm <i>"Switching children on PI-containing regimens to DTG-containing regimens" on page 16</i>	



**Clinical  
updates**



**Patient-centred  
service delivery  
updates**

**The Stable Client in the 1<sup>st</sup> year of ART  
and onwards**

# First year on ART for the stable client

DC =

dispensing cycle whether 28 or 30 days

MMD =

multi-month dispensing

RPCS =

repeat prescription collection strategies (external pick-up points, facility pick-up points and adherence clubs)

Visit Schedule for Adults, Adolescents and Children 5 Years and Older on ART

DC/ Months* on ART	Routine monitoring tests	Overview of Management			
0		Baseline clinical and lab assessment as outlined on pages 4 to 6 ART initiation and session 1 of fast track initiation counselling			
1	Review test results	<ul style="list-style-type: none"> <li>Session 2 of fast track initiation counselling including planning for travel and VL education</li> <li>Clinical assessment and routine monitoring as outlined on page 17</li> <li>Integrated services for family planning and NCDs</li> <li>2 months ART dispensed (2MMD) - DMOC SOP 4</li> </ul>			
3	3-month* VL sCR and eGFR	<ul style="list-style-type: none"> <li>Clinical assessment including VL and any other routine monitoring bloods as outlined on page 17</li> <li>Integrated services for family planning and NCDs</li> </ul>			
4	Review test results	<ul style="list-style-type: none"> <li>Clinical assessment and review of VL and any other monitoring results</li> <li>Integrated services for family planning and NCDs</li> <li>Assess eligibility for Repeat Prescription Collection strategies (RPCs) (South Africa's differentiated models of care for stable patients)                             <ul style="list-style-type: none"> <li>VL &lt; 50 c/mL</li> <li>Clinically well</li> <li>No OIs, including TB</li> <li>Not pregnant</li> </ul> </li> </ul> <p style="text-align: center;"><b>Repeat Prescription Collection strategies (DMOC for stable patients)</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center;">                     Facility Pick-up Point (FAC-PUP) (DMOC SOP 5.1)                 </td> <td style="width: 33%; text-align: center;">                     Adherence Clubs (AC) Facility or community-based support groups (DMOC SOP 5.2)                 </td> <td style="width: 33%; text-align: center;">                     External Pick-up point (EX-PUP) (DMOC SOP 5.3)                 </td> </tr> </table> <ul style="list-style-type: none"> <li>Renew prescription for next 6 months, with first 3 month's supply issued today from the facility</li> <li>If not eligible for RPCs or refused RPCs: Assess eligibility for facility provided multi-month dispensing (MMD) – DMOC SOP 4</li> </ul>	Facility Pick-up Point (FAC-PUP) (DMOC SOP 5.1)	Adherence Clubs (AC) Facility or community-based support groups (DMOC SOP 5.2)	External Pick-up point (EX-PUP) (DMOC SOP 5.3)
Facility Pick-up Point (FAC-PUP) (DMOC SOP 5.1)	Adherence Clubs (AC) Facility or community-based support groups (DMOC SOP 5.2)	External Pick-up point (EX-PUP) (DMOC SOP 5.3)			
7		Collect medication from preferred RPCs			
10	10-month* VL sCR and eGFR CD4 count	<ul style="list-style-type: none"> <li>Clinical assessment including VL and any other monitoring bloods as per "Monitoring on ART" on page 17</li> <li>Integrated services for family planning and NCDs</li> <li>Check TPT eligibility</li> <li>Renew prescription for next 6 months</li> <li>Do not require clients to return to the facility in 1 month to review the VL results, unless other clinical indications exist that require review. Rather, recall to the facility only those clients with elevated VLs</li> </ul>			
11+		<ul style="list-style-type: none"> <li>12-monthly clinical assessment and family planning review as per "Monitoring on ART" on page 17</li> <li>12-monthly routine monitoring of VL, sCR and eGFR</li> <li>Check that chosen RPCs option is still suitable</li> <li>Collect medication from preferred RPCs</li> </ul>			

## Non-stable clients

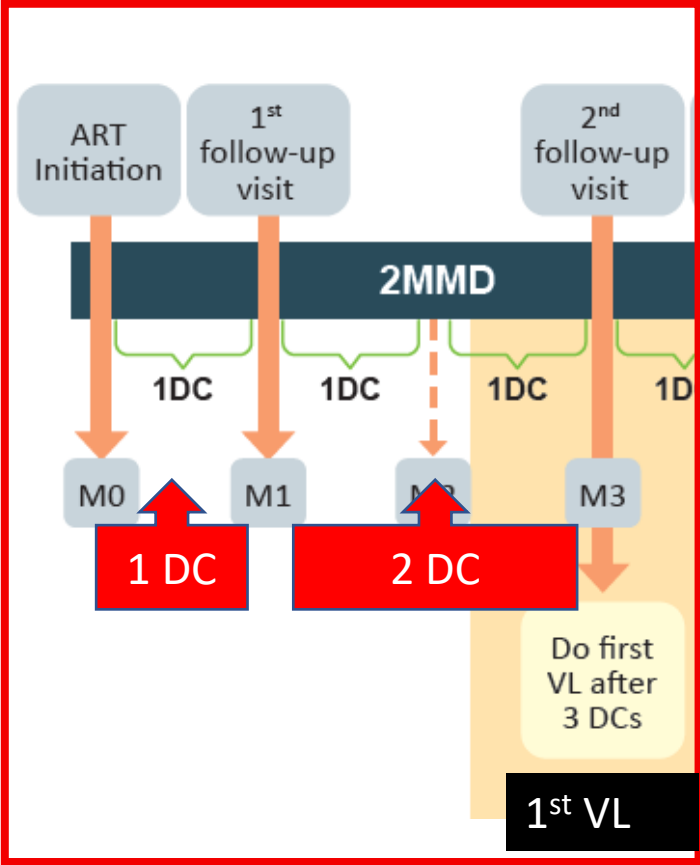
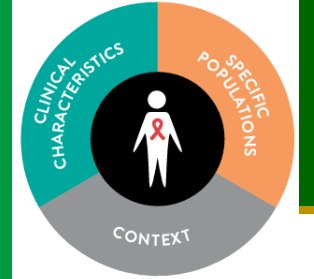
If at any stage the client becomes clinically non-stable and /or non-adherent i.e. a client who has:

- missed a scheduled appointment by more than 28 days (including in an RPCs) (see also re-engagement algorithm on page 12)
- a VL  $\geq$  50 c/ml
- possible signs or symptoms of clinical failure, e.g. if the client is acutely unwell, or develops a new OI such as TB

## A clinician should:

- if in an RPCs, return the client to regular care to ensure more frequent clinical follow-up until they are stable again.
- Provide appropriate clinical management
- if clinically well and struggling with visit frequency: provide multi-month dispensing (DMOC SOP 4)
- if experiencing side effects or the child cannot tolerate their medication: switch drugs/formulation
- if struggling to take ART as prescribed: enhanced adherence counselling (See Annexure 3)

# ART initiation to 1<sup>st</sup> Viral load

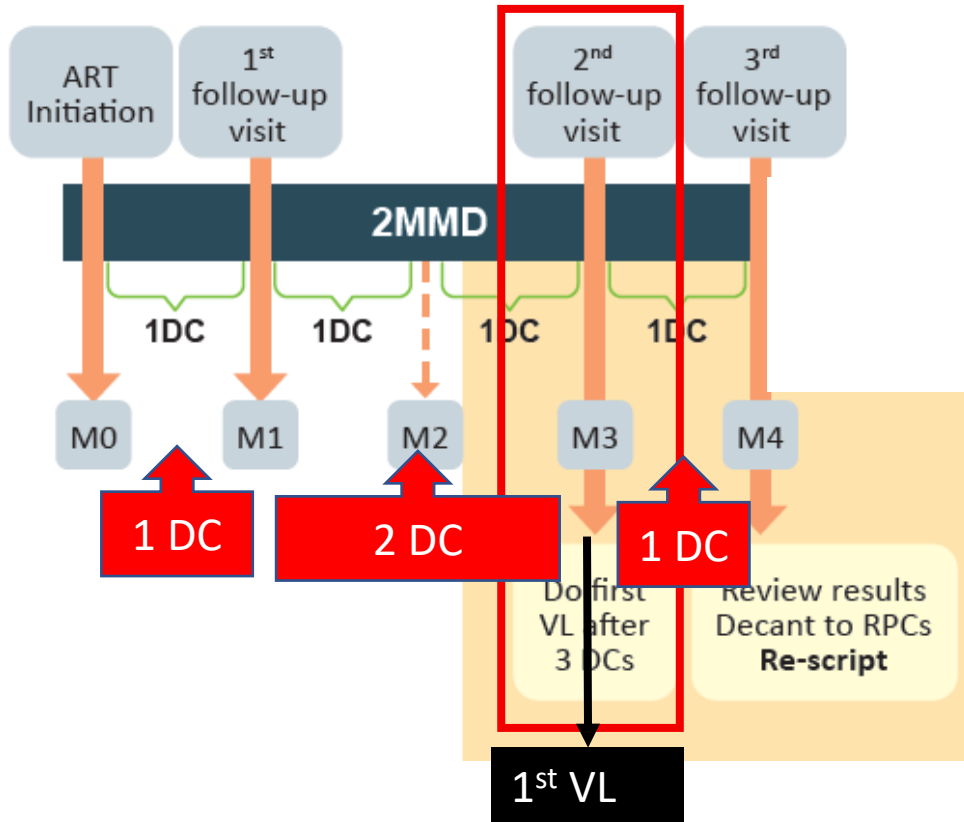


DC/ Months* on ART	Routine monitoring tests	Overview of Management
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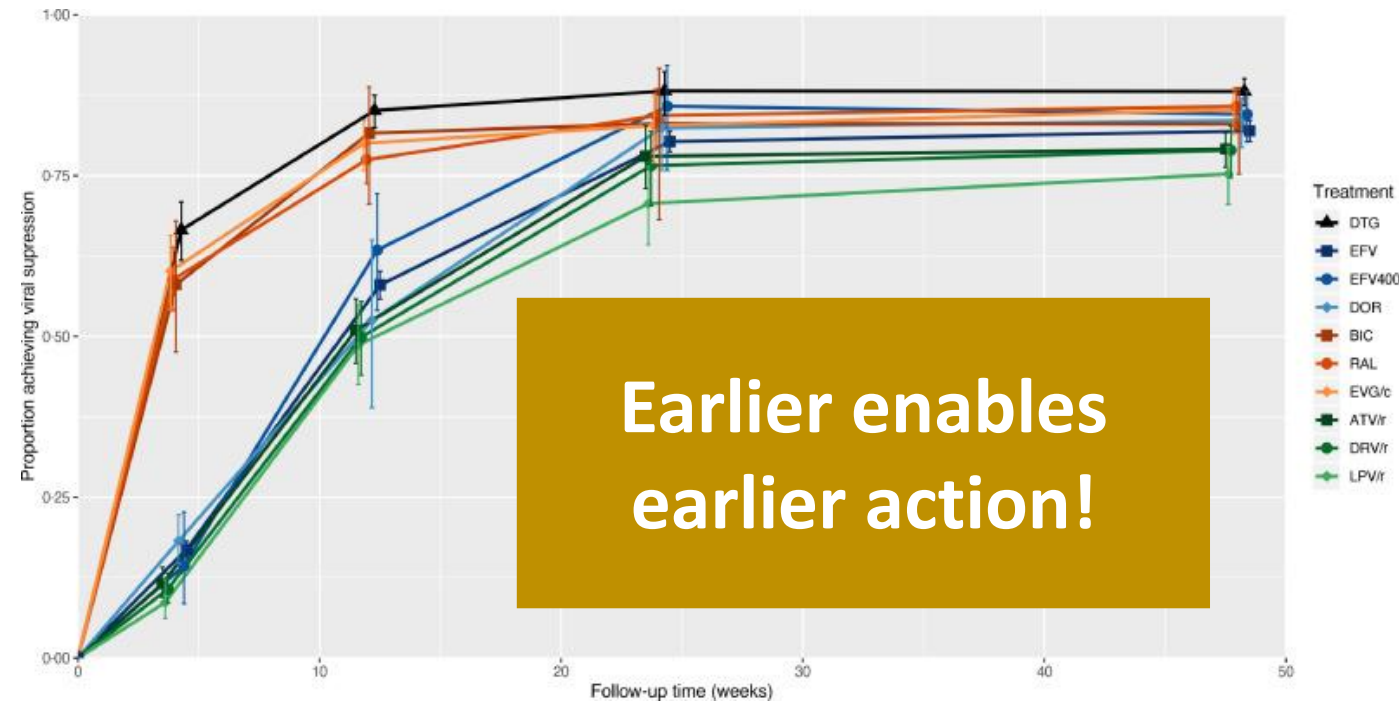


# 1<sup>st</sup> viral load

DC/ Months* on ART	Routine monitoring tests	Overview of Management
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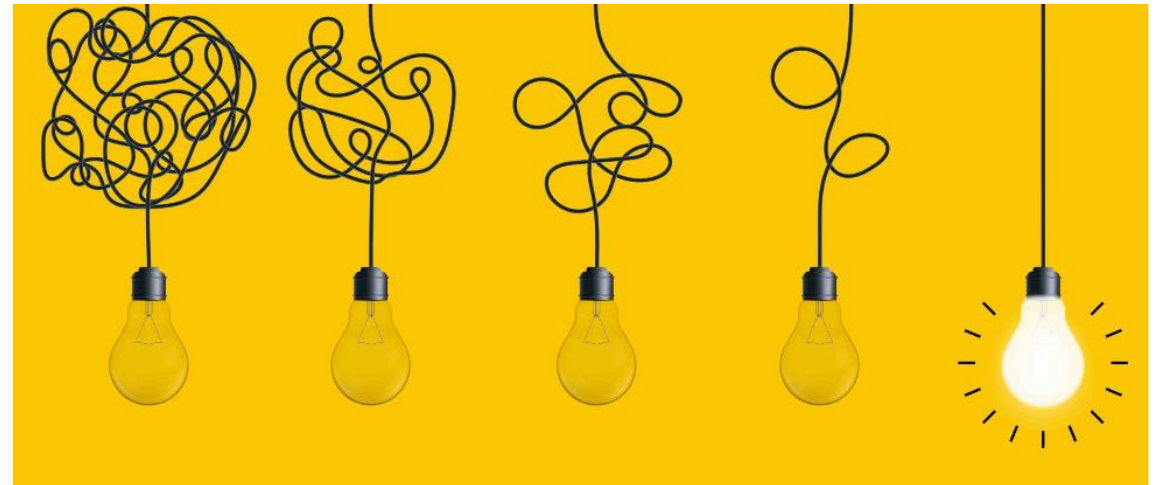
- After 3 consecutive DCs (M3 visit) – takes 1<sup>st</sup> viral load



# 1st viral load

- **Aligning viral load timing**
  - **Start ART**: First VL after 3 continuous dispensing cycles (3 DCs)
  - **Elevated VL**: Repeat VL after 3 more DCs
  - **Re-engagement**: VL 3 DCs after re-engagement (if >90 days late)

**Simpler = easier to  
train, implement  
and monitor**



# VL review to next clinical review

4	Review test results	<ul style="list-style-type: none"> <li>Clinical assessment and review of VL and any other monitoring results</li> <li>Integrated services for family planning and NCDs</li> <li>Assess eligibility for Repeat Prescription Collection strategies (RPCs) (South Africa's differentiated models of care for stable patients)               <ul style="list-style-type: none"> <li>VL &lt; 50 c/mL</li> <li>Clinically well</li> <li>No OIs, including TB</li> <li>Not pregnant</li> </ul> </li> </ul>			
		<p align="center"><b>Repeat Prescription Collection strategies (DMOC for stable patients)</b></p>			
		<p align="center">Facility Pick-up Point (FAC-PUP) (DMOC SOP 5.1)</p>	<p align="center">Adherence Clubs (AC) Facility or community-based support groups (DMOC SOP 5.2)</p>	<p align="center">External Pick-up point (EX-PUP) (DMOC SOP 5.3)</p>	
		<ul style="list-style-type: none"> <li>Renew prescription for next 6 months, with first 3 month's supply issued today from the facility</li> <li>If not eligible for RPCs or refused RPCs: Assess eligibility for facility provided multi-month dispensing (MMD) – DMOC SOP 4</li> </ul>			
7		<ul style="list-style-type: none"> <li>Collect medication from preferred RPCs</li> </ul>			

# 1st viral load REVIEW

VIRAL LOAD SUPPRESSED +  
CLINICALLY WELL  
= STABLE

4		<ul style="list-style-type: none"> <li>Clinical assessment and review of VL and any other monitoring results</li> <li>Integrated services for family planning and NCDs</li> <li>Assess eligibility for Repeat Prescription Collection strategies (RPCs) (South Africa's differentiated models of care for stable patients)               <ul style="list-style-type: none"> <li>VL &lt; 50 c/mL</li> <li>Clinically well</li> <li>No OIs, including TB</li> <li>Not pregnant</li> </ul> </li> </ul>		
	Review test results	Repeat Prescription Collection strategies (DMOC for stable patients)		
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- Client is adherent to ART
- Important to start making longer-term adherence easier and more convenient
- No benefit for the client to require frequent clinical reviews, ART collections or rescripts
  - Time to differentiate care.....

## Why focus on VLS and clinical stability only?

- Previous time on ART eligibility criteria matched VL timeline:
  - 2016: 1st and 2nd VL timeline (12 months)
  - 2019: 1st VL timeline (6 months)

As time on ART had no separate purpose, this has been removed.

# 1<sup>st</sup> viral load REVIEW:

Assess RPCs eligibility → *DMOC for stable patients*

DC/ Months* on ART	Routine monitoring tests	Overview of Management	
4	Review test results	<ul style="list-style-type: none"> <li>Clinical assessment and review of VL and any other monitoring results</li> <li>Integrated services for family planning and NCDs</li> <li>Assess eligibility for Repeat Prescription Collection strategies (RPCs) (South Africa's differentiated models of care for stable patients)                             <ul style="list-style-type: none"> <li>VL &lt; 50 c/mL</li> <li>Clinically well</li> <li>No OIs, including TB</li> <li>Not pregnant</li> </ul> </li> </ul>	
		<b>Repeat Prescription Collection strategies (DMOC for stable patients)</b>	
		<table border="1"> <tr> <td style="text-align: center;">                     Facility Pick-up Point (FAC-PUP) (DMOC SOP 5.1)                 </td> <td style="text-align: center;">                     Adherence Clubs (AC) Facility or community-based support groups (DMOC SOP 5.2)                 </td> <td style="text-align: center;">                     External Pick-up point (EX-PUP) (DMOC SOP 5.3)                 </td> </tr> </table>	Facility Pick-up Point (FAC-PUP) (DMOC SOP 5.1)
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If eligible, explain and offer all repeat prescription collection strategies (RPCs) available at your facility:

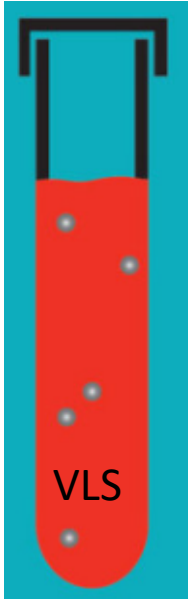
- External pick-up points
- Fast track facility pick-up point
  - One stop ART pick-up point – do not retrieve folder or see clinician
- Facility or community adherence club

# 1<sup>st</sup> viral load REVIEW: Scripting and ART supply for RPCs

DC/ Months* on ART	Routine monitoring tests	Overview of Management			
4	Review test results	<ul style="list-style-type: none"> <li>Clinical assessment and review of VL and any other monitoring results</li> <li>Integrated services for family planning and NCDs</li> <li>Assess eligibility for Repeat Prescription Collection strategies (RPCs) (South Africa's differentiated models of care for stable patients)               <ul style="list-style-type: none"> <li>VL &lt; 50 c/mL</li> <li>Clinically well</li> <li>No OIs, including TB</li> <li>Not pregnant</li> </ul> </li> </ul>			
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		<ul style="list-style-type: none"> <li>Renew prescription for next 6 months, with first 3 month's supply issued today from the facility</li> </ul>			

- If client chooses an RPCs option, script for 6 months with max 2 ART refills
- 1st supply provided by facility pharmacy
- 2<sup>nd</sup> supply to be collected at RPCs location

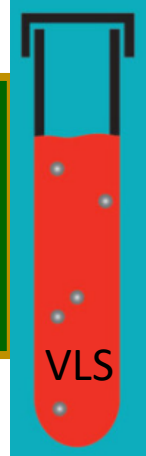
# 2nd VL and quality clinical review and thereafter...



DC/ Months* on ART	Routine monitoring tests	Overview of Management
10	10-month* VL sCR and eGFR CD4 count	<ul style="list-style-type: none"> <li>Clinical assessment including VL and any other monitoring bloods as per "Monitoring on ART" on page 17</li> <li>Integrated services for family planning and NCDs</li> <li>Check TPT eligibility</li> <li>Renew prescription for next 6 months</li> <li>Do not require clients to return to the facility in 1 month to review the VL results, unless other clinical indications exist that require review. Rather, recall to the facility only those clients with elevated VLs</li> </ul>
11+		<ul style="list-style-type: none"> <li>12-monthly clinical assessment and family planning review as per "Monitoring on ART" on page 17</li> <li>12-monthly routine monitoring of VL, sCR and eGFR</li> <li>Check that chosen RPCs option is still suitable</li> <li>Collect medication from preferred RPCs</li> </ul>

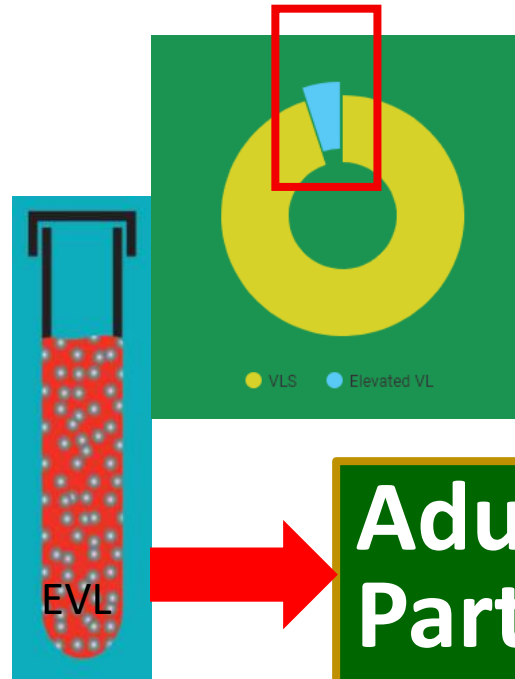
- 2nd VL after 10 DCs (after completion of 6-month script)
- Further VLs will be done every 12 DCs thereafter
- Quality clinical review – not just a rescript
  - Cost benefit for the client and the health system

# Rescripting and recall high VLs



DC/ Months* on ART	Routine monitoring tests	Overview of Management
10	10-month* VL sCR and eGFR CD4 count	<ul style="list-style-type: none"> <li>Clinical assessment including VL and any other monitoring bloods as per "Monitoring on ART" on page 17</li> <li>Integrated services for family planning and NCDs</li> <li>Check TPT eligibility</li> <li>Renew prescription for next 6 months</li> <li>Do not require clients to return to the facility in 1 month to review the VL results, unless other clinical indications exist that require review. Rather, recall to the facility only those clients with elevated VLs</li> </ul>
11+		<ul style="list-style-type: none"> <li>12-monthly clinical assessment and family planning review as per "Monitoring on ART" on page 17</li> <li>12-monthly routine monitoring of VL, sCR and eGFR</li> <li>Check that chosen RPCs option is still suitable</li> <li>Collect medication from preferred RPCs</li> </ul>

- Remember these clients are stable – last VL suppressed
- If in RPCs, immediately rescript based on previous VL.
- Do not require return for VL result review**
- Explain to client if they are not recalled its means their VL is suppressed. They will be recalled if elevated.



Recall clients with elevated VLs (<5% of clients with previously suppressed VL will now have an elevated VL)

**Adult HIV: Non-stable: See Part 3**



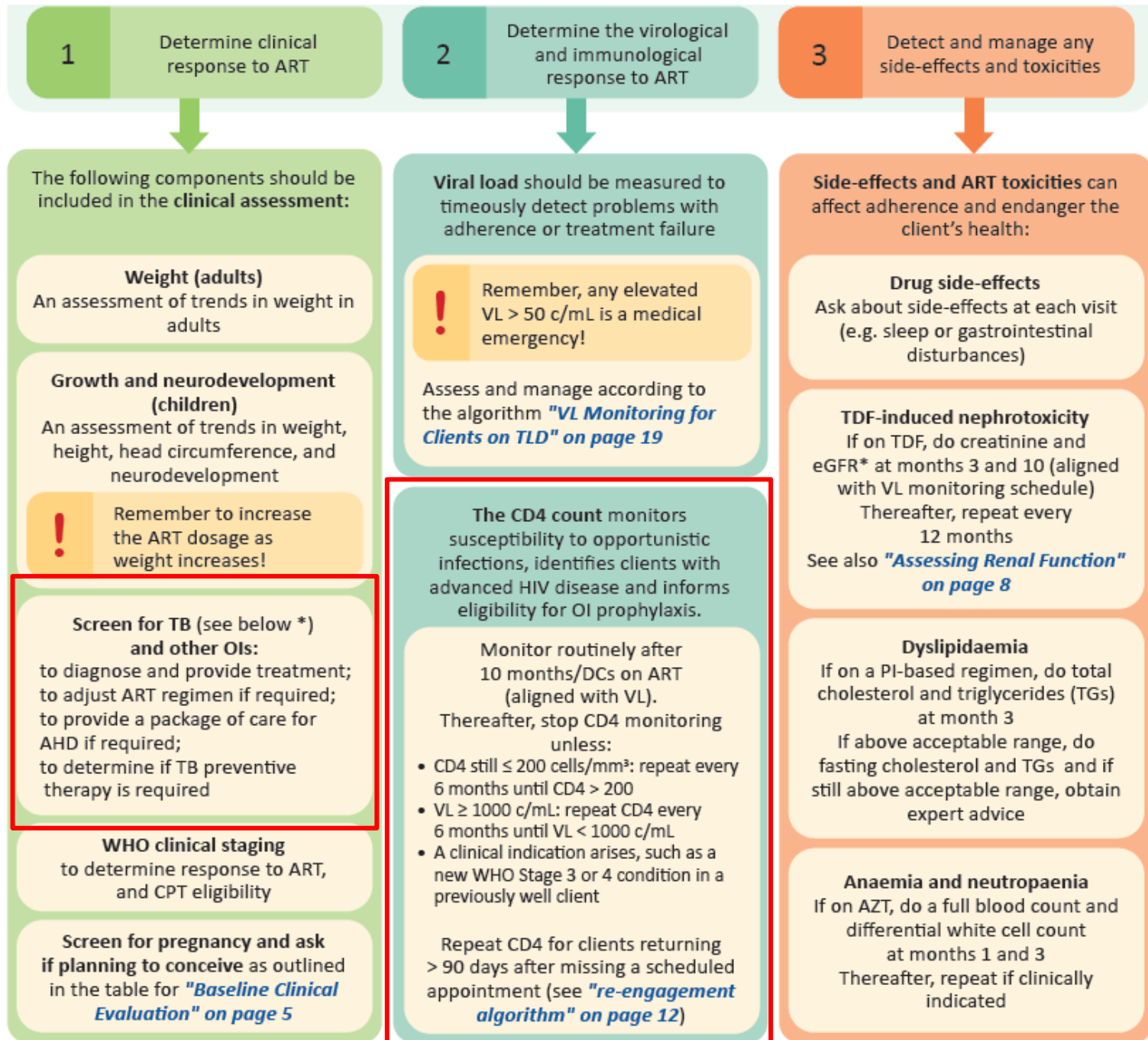
# Monitoring on ART

Creatinine and eGFR aligned to new VL monitoring schedule

New TB screening recommendations to be covered in separate sections

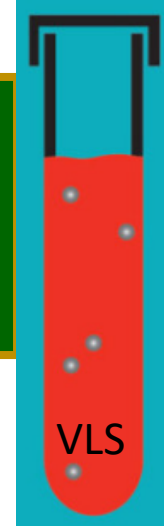
Note repeat CD4 every 6 months for children <5 yrs if less 25%

When monitoring on ART integrate monitoring for other chronic conditions (HPT, DM, and mental health)



# Switching stable clients on ART to TLD in RPCs

- All clients in RPCs must also be considered for switch to TLD at next clinical review (and rescript)
- Must remain in RPCs – not a reason to return to facility care (*unless their VL comes back elevated*).
- Provide TLD 6-month RPCs script immediately
- No additional clinical reviews required



DRUG SWITCHES FOR  
RPCS PATIENTS  
SOP 6



# Summary: ART Regimens

ART Regimens	<p>All adult and adolescent clients &gt; 30 kg and &gt; 10 years of age, including pregnant and breastfeeding women</p>	<ul style="list-style-type: none"> <li>The preferred first-line ART regimen is <b>tenofovir disoproxil fumarate-lamivudine-dolutegravir (TLD)</b> for those adult and adolescent clients initiating ART.</li> <li>TDF weight-related eligibility criteria decreased from <b>35 kg to 30 kg</b></li> <li>All clients already on ART and not on dolutegravir (DTG), whether on first-line or second-line regimens, should be evaluated for a switch to a dolutegravir-containing regimen.</li> </ul>
		<ul style="list-style-type: none"> <li>TDF may safely be reused in 2nd-line therapy following 1st-line failure with TDF-containing regimens. TLD will therefore be used as both first (TLD 1) and second (TLD 2) line regimens and in certain cases, 3rd line regimens as well</li> <li>Simplified <b>switching from TEE to TLD not dependant on VL</b></li> </ul>
	<p>New formulations</p>	<ul style="list-style-type: none"> <li><b>DTG 10 mg dispersible tablets</b> for children from <math>\geq 3\text{kg}</math> and <math>\geq 4</math> weeks of age</li> <li>DTG-containing fixed-dose combination: Abacavir (ABC) 600 mg + lamivudine (3TC) 300 mg + DTG 50 mg (ALD FDC). ALD FDC can be prescribed for clients <math>\geq 25</math> kg</li> </ul>
	<p>Children <math>\geq 3</math> kg and <math>\geq 4</math> weeks of age until 29,9 kg or 9 years of age</p>	<ul style="list-style-type: none"> <li>The preferred first-line ART regimen is <b>abacavir-lamivudine-dolutegravir (ALD)</b>.</li> <li>All paediatric clients already on ART and not on dolutegravir (DTG), whether on first-line or second-line regimens, should be evaluated for a switch to a dolutegravir-containing regimen.</li> </ul>
<p>Other antiretrovirals</p>	<ul style="list-style-type: none"> <li><b>Abacavir</b> is the preferred alternative agent if TDF cannot be used</li> <li>Zidovudine (AZT) no longer part of any standard ART regimen. AZT will be reserved only for cases with <b>both</b> renal failure <b>and</b> ABC hypersensitivity</li> <li><b>Atazanavir/r</b> replaces lopinavir/r as the preferred protease inhibitor except when on TB treatment</li> </ul>	

# Summary: Monitoring on ART

Monitoring on ART	VL monitoring	First VL after ART initiation to be done after 3 dispensing cycles
	Creatinine and eGFR	eGFR previously done at 'month' 6 moves to 'month' 3 (i.e. after 3 dispensing cycles) to align with the new VL monitoring schedule

# Summary

## Other updates

- 2 high quality counselling sessions at ART start and at follow-up a month later
- Reduces health facility visits in the first year on ART to support continued engagement in care, including visit schedule for first year on treatment.
- Removes time on ART from repeat prescription collection strategies (RPCs) eligibility criteria, enabling access as soon as first VL is suppressed.
- Reduces visits once enrolled in RPCs with a maximum of 2 visits per 6-month scripting cycle.
- Returns clients in RPCs with VL 50-1000 c/mL to clinician care for TLD switch and VL management
- Enables multi-month dispensing (MMD) by the facility between clinical visits including for people not eligible for RPCs - children from 6 months of age, post-natal women, people co-infected with TB, with elevated viral loads or re-engaging in care.
- Introduces a differentiated approach to management on re-engagement.
- Integrates contraception and TB preventative therapy into all service delivery models
- Aligns ART visit schedules to TB management and infant EPI schedules to enable integration
- Incorporates tools for:
  - enhanced adherence counselling
  - mental health assessment

# Changes to TB Screening and TPT

# Response: National SOP on the **FAST** Approach

**F**inding people with TB **A**ctively, **S**eparate safely, and **T**reating effectively, is a quality improvement intervention aimed at preventing the spread of TB in congregate settings.



## TB SCREENING AND TESTING STANDARD OPERATING PROCEDURE

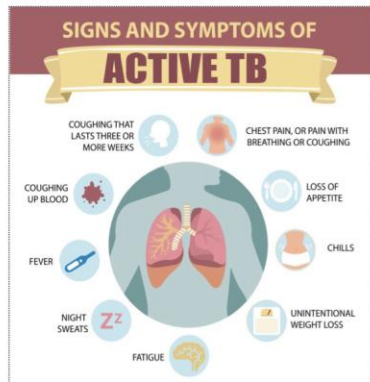
# Targeted Universal Testing for TB (TUTT)

## STUDY DESIGN

### Standard of care of clinics



30 PHC Clinics

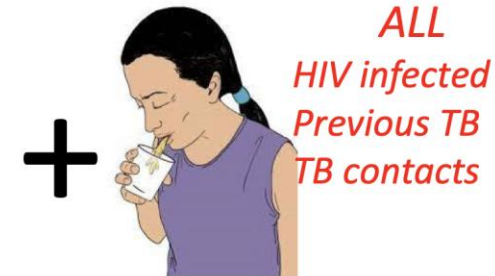
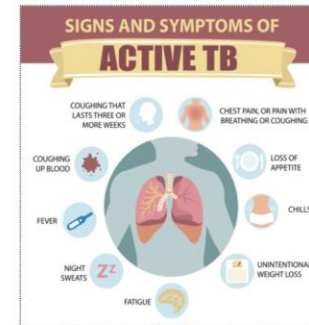


Xpert  
Ultra  
MTB/RIF

### Study Intervention clinics



30 PHC Clinics



ALL  
HIV infected  
Previous TB  
TB contacts

Xpert Ultra  
MTB/RIF

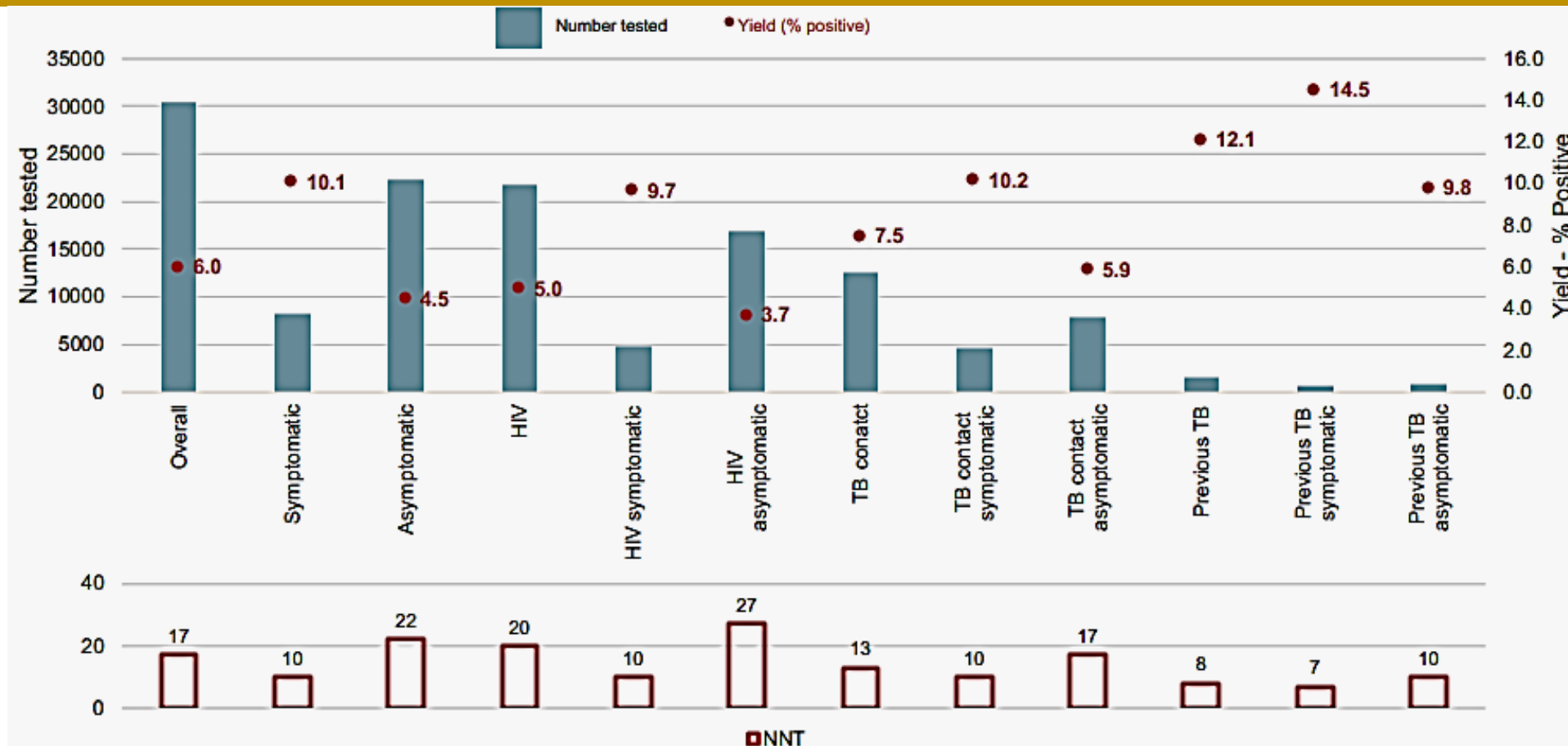
Xpert Ultra MTB/RIF  
& MGIT culture

Martinson et al. A Cluster Randomized Trial of Systematic Targeted Universal Testing for Tuberculosis in Primary Care Clinics of South Africa (The TUTT Study). Available at SSRN: <https://ssrn.com/abstract=4092970>



# Targeted Universal TB Testing (TUTT) study

## RESULTS: YIELD BY RISK FACTOR AND SYMPTOMS



Universal TB testing for patients at high risk for TB using Xpert and culture irrespective of the presence of TB symptoms resulted in a 6% overall yield in laboratory confirmed TB.

# TUTT Study Conclusions

- Systematic screening with Xpert & or culture diagnosed more TB cases in clinics
  - Overall: 6%
  - HIV-infected: 5%
- Clinics are diagnosing 8% fewer patients with TB year on-year under the standard of care
- The TUTT intervention resulted in a 17% net increase in TB cases diagnosed per clinic per month as compared to the standard of care clinics.
- Systematic screening with Xpert is recommended in sub-populations at high risk of TB

# Who must be tested for TB?

A specimen must be collected for TB testing in the following groups:

- People (children, adolescents, and adults) with any one of the TB symptoms
- People who have been in close contact with a person diagnosed with TB or TB treatment in the past year irrespective of TB symptoms
- People who have been treated and completed TB treatment in the past two years irrespective of TB symptoms.
- Newly diagnosed PLHIV irrespective of symptoms

# Frequency of testing

## 1. General population

- Only when they present with any TB symptom or chest x-ray changes suggestive of TB

## 2. People living with HIV

- At the time of HIV diagnosis
- On enrolment in Antenatal care for pregnant women
- Annually for PLHIV on treatment linked to VL monitoring follow up visits

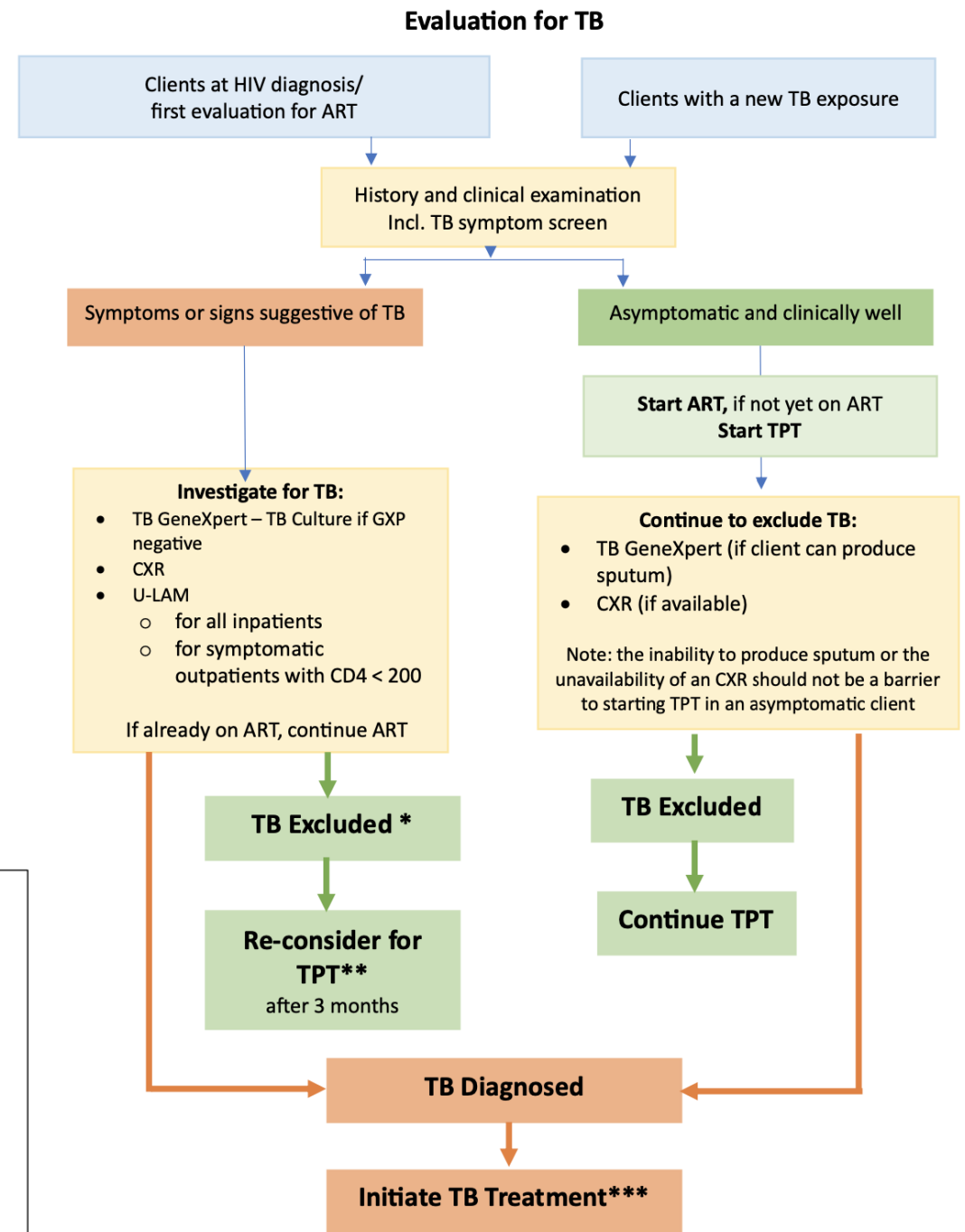
## 3. Household contacts of people diagnosed with TB

- After each exposure to a person with a confirmed TB diagnosis

## 4. People previously treated for TB

- Annually for a period of two years

# Evaluation for TB



\*Based on a clinician's assessment of the symptomatic client's clinical condition and all special investigations, and subsequently deciding that the client does not have TB

\*\*Symptomatic clients who were who subsequently considered NOT to have TB, should not immediately be initiated on TPT. They can be reconsidered for TPT 3 months later. However, at this later time, they should be screened and tested for TB again, before being considered for TPT

\*\*\*Clients who are asymptomatic and were initiated on TPT, and who were then subsequently diagnosed with TB, can stop TPT and initiate TB treatment. There is no risk of developing INH resistance in the short period of time that the client would have taken INH alone

# Algorithm to support TB evaluation approach

PATIENT CATEGORY		WHAT TO DO	REGIMEN
including children ≥25kg	HIV-positive	<b>PLHIV:</b> Test for TB regardless of ART status and give TPT once TB disease is excluded. If newly diagnosed with HIV, start ART immediately and TPT within the next two weeks.	3HP* or 12H
		<b>Post TB treatment:</b> Offer TPT to all PLHIV ≥25 kg after successfully completing treatment for TB disease, after active TB disease has again been excluded.	
		<b>Previously treated with TPT:</b> If re-exposed to any close contact with TB, retest for TB and give TPT once TB disease has been excluded.	
		Evaluate all <b>HIV-positive pregnant women</b> regardless of CD4 count and give TPT once TB disease has been excluded.	12H

# TPT Regimen Options for infants and children weight < 25 kg

Infants and children <25kg	HIV -positive	Children living with HIV (CLHIV): Evaluate all children older than 14 weeks of age living with HIV for TB and start TPT once active TB has been excluded. ART should be started immediately if newly diagnosed with HIV. TPT should be started within two weeks of ART initiation.	6H**
		<b>Contacts:</b> Evaluate all TB-exposed CLHIV and start TPT after TB disease has been excluded, regardless of previous treatment or TPT.	
	HIV-negative	<b>Contacts:</b> Evaluate HIV-negative children in close contact with a TB patient and start TPT after active TB disease has been excluded.	3RH
		Test other <b>HIV-negative at-risk children</b> (weakened immune system e.g., cancer, diabetes, autoimmune diseases, transplant patients on immunosuppressive drugs, receiving dialysis, or inherited immunodeficiencies) for TB and start TPT once TB disease has been excluded	

# Important to Note

- PLHIV present with pauci-bacillary PTB or EPTB therefore a negative Xpert MTB RIF result must be followed by clinical assessment, chest x-ray and culture and DST to confirm the diagnosis of TB.
- People who are asymptomatic but test positive on Xpert MTB RIF must be clinically assessed for TB (including proper history taking), chest x-rays, culture and DST or other tests must be conducted to confirm TB.
- In people who completed TB treatment in the past two years, a “Positive” or “Trace” Xpert MTB RIF test result may indicate presence of live (active TB disease) or dead (left over from previous TB episode) bacilli or DNA. Therefore, the test result must be considered along with the clinical findings before treatment initiation and a TB culture conducted to confirm active TB disease.



# Summary (1/2)

- All clients entering the health facility must be screened for symptoms of TB and Covid-19
- Where available, a chest x-ray may be conducted for people without TB symptoms to screen for TB
- People who present with any of the TB symptoms or who have an abnormal chest x-ray suggestive of TB must have a sputum sample collected for Xpert MTB RIF testing
- People living with HIV must have a sputum sample collected for Xpert MTB RIF Ultra testing, irrespective of TB symptoms

# Summary (2/2)

- People who are close contacts of TB patients must have a sputum sample collected for Xpert MTB RIF Ultra testing, irrespective of TB symptoms
- People who have been previously treated for TB must have a sputum sample collected for Xpert MTB RIF Ultra testing irrespective of TB symptoms
- Always offer an HIV test to people who do not know their HIV status and those who tested negative more than 3 months ago

# The non-stable Client

# Training Approach: Part 2 Patients Journey

DC/ Months* on ART	Routine monitoring tests	Overview of Management						
0		Baseline clinical and lab assessment as outlined on pages 4 to 6 ART initiation and session 1 of fast track initiation counselling						
1	Review test results	<ul style="list-style-type: none"> <li>Session 2 of fast track initiation counselling including planning for travel and VL education</li> <li>Clinical assessment and routine monitoring as outlined on page 17</li> <li>Integrated services for family planning and NCDs</li> <li>2 months ART dispensed (2MMD) - DMOG SOP 4</li> </ul>						
3	3-month* VL sCR and eGFR	<ul style="list-style-type: none"> <li>Clinical assessment including VL and any other routine monitoring bloods as outlined on page 17</li> <li>Integrated services for family planning and NCDs</li> </ul>						
4	Review test results	<ul style="list-style-type: none"> <li>Clinical assessment and review of VL and any other monitoring results</li> <li>Integrated services for family planning and NCDs</li> <li>Assess eligibility for Repeat Prescription Collection strategies (RPCs) (South Africa's differentiated models of care for stable patients)                             <ul style="list-style-type: none"> <li>VL &lt; 50 c/mL</li> <li>Clinically well</li> <li>No OIs, including TB</li> <li>Not pregnant</li> </ul> </li> </ul>						
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7		<ul style="list-style-type: none"> <li>Collect medication from preferred RPCs</li> </ul>						
10	10-month* VL sCR and eGFR CD4 count	<ul style="list-style-type: none"> <li>Clinical assessment including VL and any other monitoring bloods as per "Monitoring on ART" on page 17</li> <li>Integrated services for family planning and NCDs</li> <li>Check TPT eligibility</li> <li>Renew prescription for next 6 months</li> <li>Do not require clients to return to the facility in 1 month to review the VL results, unless other clinical indications exist that require review. Rather, recall to the facility only those clients with elevated VLs</li> </ul>						
11+		<ul style="list-style-type: none"> <li>12-monthly clinical assessment and family planning review as per "Monitoring on ART" on page 17</li> <li>12-monthly routine monitoring of VL, sCR and eGFR</li> <li>Check that chosen RPCs option is still suitable</li> <li>Collect medication from preferred RPCs</li> </ul>						

## Non-stable clients

If at any stage the client becomes clinically non-stable and /or non-adherent i.e. a client who has:

- missed a scheduled appointment by more than 28 days (including in an RPCs) (see also re-engagement algorithm on page 12)
- a VL  $\geq$  50 c/ml
- possible signs or symptoms of clinical failure, e.g. if the client is acutely unwell, or develops a new OI such as TB

## A clinician should:

- if in an RPCs, return the client to regular care to ensure more frequent clinical follow-up until they are stable again.
- Provide appropriate clinical management
- if clinically well and struggling with visit frequency: provide multi-month dispensing (DMOG SOP 4)
- if experiencing side effects or the child cannot tolerate their medication: switch drugs/formulation
- if struggling to take ART as prescribed: enhanced adherence counselling (See Annexure 3)

Including separate sub-sections on

- management of TB diagnosed once a person is already on ART
- management of cryptococcal meningitis

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3	3-month* VL sCR and eGFR	<ul style="list-style-type: none"> <li>Clinical assessment including VL and any other routine monitoring bloods as outlined on page 17</li> <li>Integrated services for family planning and NCDs</li> </ul>						
4	Review test results	<ul style="list-style-type: none"> <li>Clinical assessment and review of VL and any other monitoring results</li> <li>Integrated services for family planning and NCDs</li> <li>Assess eligibility for Repeat Prescription Collection strategies (RPCs) (South Africa's differentiated models of care for stable patients)                             <ul style="list-style-type: none"> <li>VL &lt; 50 c/mL</li> <li>Clinically well</li> <li>No OIs, including TB</li> <li>Not pregnant</li> </ul> </li> </ul>						
		<p align="center"><b>Repeat Prescription Collection strategies (DMOC for stable patients)</b></p> <table border="1"> <thead> <tr> <th>Facility Pick-up Point (FAC-PUP) (DMOC SOP 5.1)</th> <th>Adherence Clubs (AC) Facility or community-based support groups (DMOC SOP 5.2)</th> <th>External Pick-up point (EX-PUP) (DMOC SOP 5.3)</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Facility Pick-up Point (FAC-PUP) (DMOC SOP 5.1)	Adherence Clubs (AC) Facility or community-based support groups (DMOC SOP 5.2)	External Pick-up point (EX-PUP) (DMOC SOP 5.3)			
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<ul style="list-style-type: none"> <li>Renew prescription for next 6 months, with first 3 month's supply issued today from the facility</li> <li>If not eligible for RPCs or refused RPCs: Assess eligibility for facility provided multi-month dispensing (MMD) – DMOC SOP 4</li> </ul>								
7		<ul style="list-style-type: none"> <li>Collect medication from preferred RPCs</li> </ul>						
10	10-month* VL sCR and eGFR CD4 count	<ul style="list-style-type: none"> <li>Clinical assessment including VL and any other monitoring bloods as per "Monitoring on ART" on page 17</li> <li>Integrated services for family planning and NCDs</li> <li>Check TPT eligibility</li> <li>Renew prescription for next 6 months</li> <li>Do not require clients to return to the facility in 1 month to review the VL results, unless other clinical indications exist that require review. Rather, recall to the facility only those clients with elevated VLs</li> </ul>						
11+		<ul style="list-style-type: none"> <li>12-monthly clinical assessment and family planning review as per "Monitoring on ART" on page 17</li> <li>12-monthly routine monitoring of VL, sCR and eGFR</li> <li>Check that chosen RPCs option is still suitable</li> <li>Collect medication from preferred RPCs</li> </ul>						

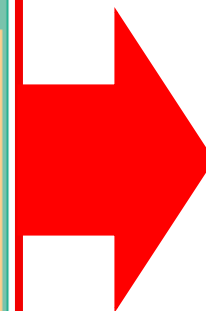
**Non-stable clients**

If at any stage the client becomes clinically non-stable and /or non-adherent i.e. a client who has:

- missed a scheduled appointment by more than 28 days (including in an RPCs) (see also re-engagement algorithm on page 12)
- a VL  $\geq$  50 c/ml
- possible signs or symptoms of clinical failure, e.g. if the client is acutely unwell, or develops a new OI such as TB

**A clinician should:**

- If in an RPCs, return the client to regular care to ensure more frequent clinical follow-up until they are stable again.
- Provide appropriate clinical management
- If clinically well and struggling with visit frequency: provide multi-month dispensing (DMOC SOP 4)
- If experiencing side effects or the child cannot tolerate their medication: switch drugs/formulation
- If struggling to take ART as prescribed: enhanced adherence counselling (See Annexure 3)



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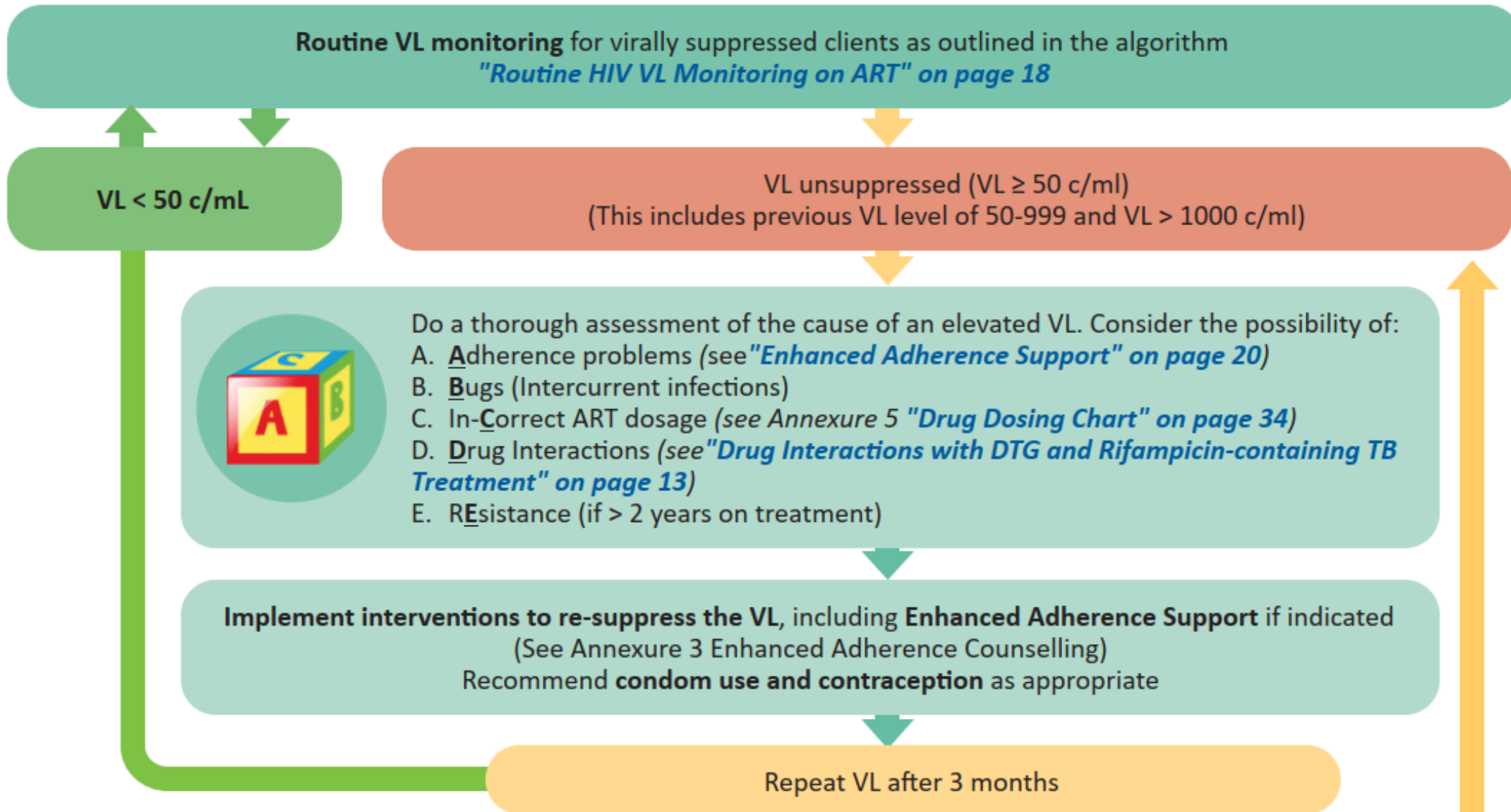
# Virological Failure

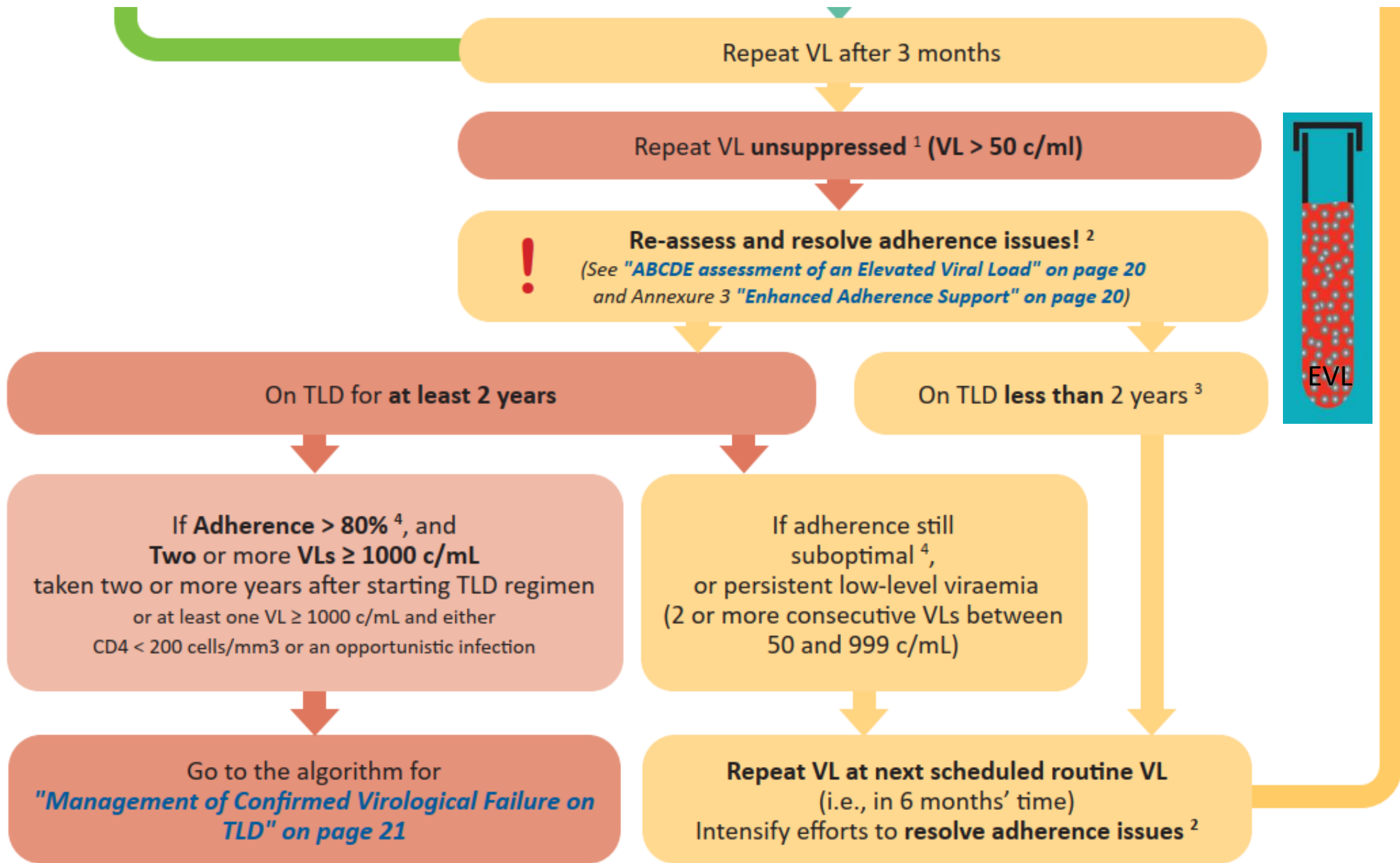
## Virological Failure

- **Definition:** two or more VLs  $\geq 1000$  c/mL taken two or more years after starting a DTG/PI-containing regimen and adherence  $> 80\%$
- **Focus on improved adherence:** Resistance to DTG is very uncommon. If other reasons for an unsuppressed VL (including drug interactions) have been addressed or excluded, the highest probability of improving adherence would be to remain on a once-daily, well-tolerated, fixed-dose combination regimen (TLD) while identifying and addressing the underlying root causes of non-adherence.
- **No regimen changes without a resistance test:** Switching off a DTG-containing regimen should only happen if InSTI resistance has been confirmed by a resistance test
- Resistance testing can only be authorised by a member of the National Third-line committee, one of the helpline consultants, or a nominated provincial expert

## VL Monitoring for Clients on TLD

(also applicable to ALD and other DTG-containing regimens)







# Under which circumstance should someone change from DTG to an alternative PI-based regimen?

- Only if DTG is proven to be in-active
- This requires a resistance test

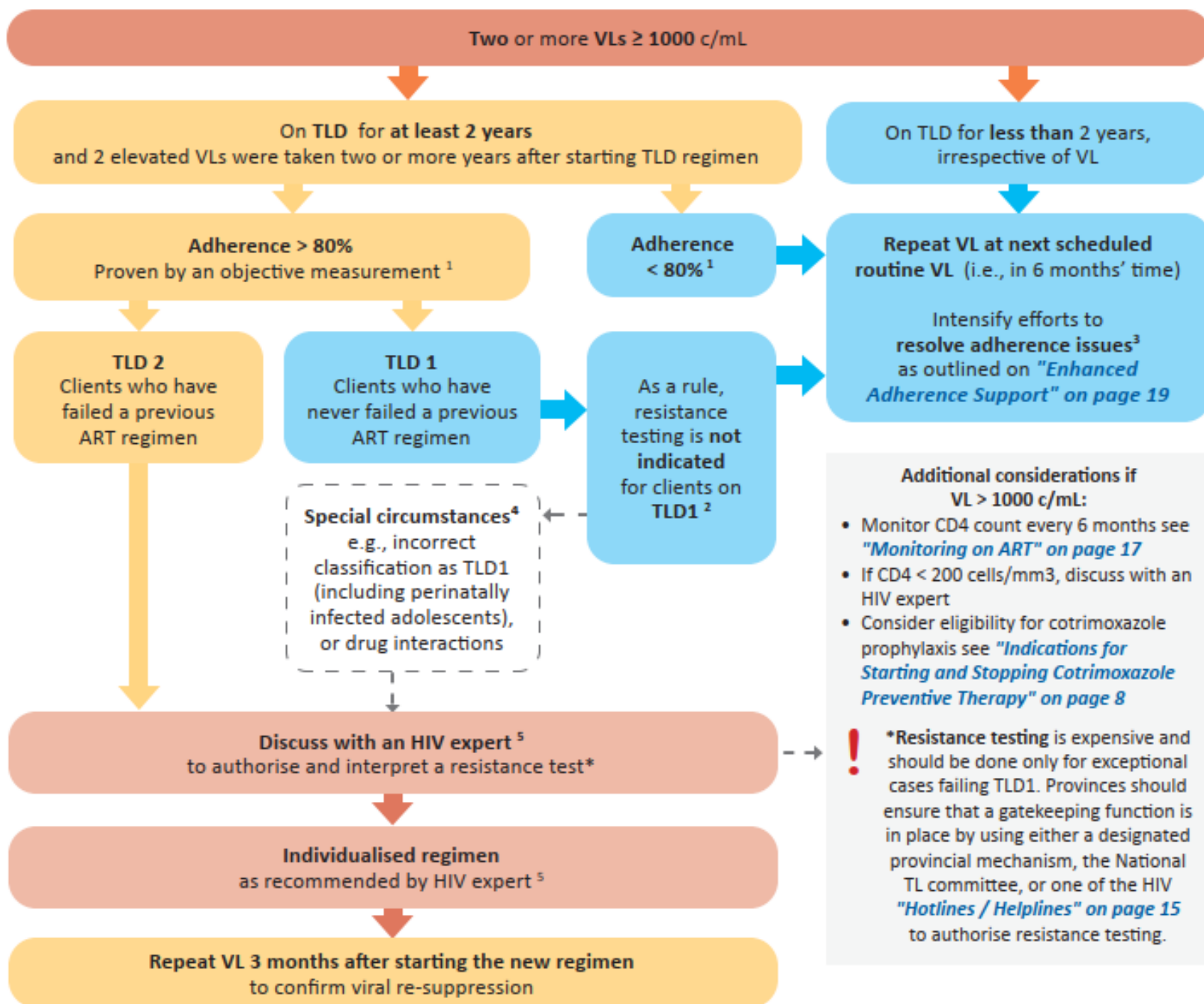
# Does that mean everyone failing DTG should get a resistance test?

- **No!!**
- **Only clients failing second-line TLD and meeting the following criteria for “confirmed virological failure”**
  - On a DTG-based regimen for more than 2 years
  - Two or more consecutive VLs  $\geq 1000$  c/mL, taken two or more years after starting DTG regimen
  - Adherent on their regimen
- **All Resistance tests will need to be authorised**

→ more on this later

## Management of Confirmed Virological Failure on TLD

(also applicable to other DTG-containing regimens)



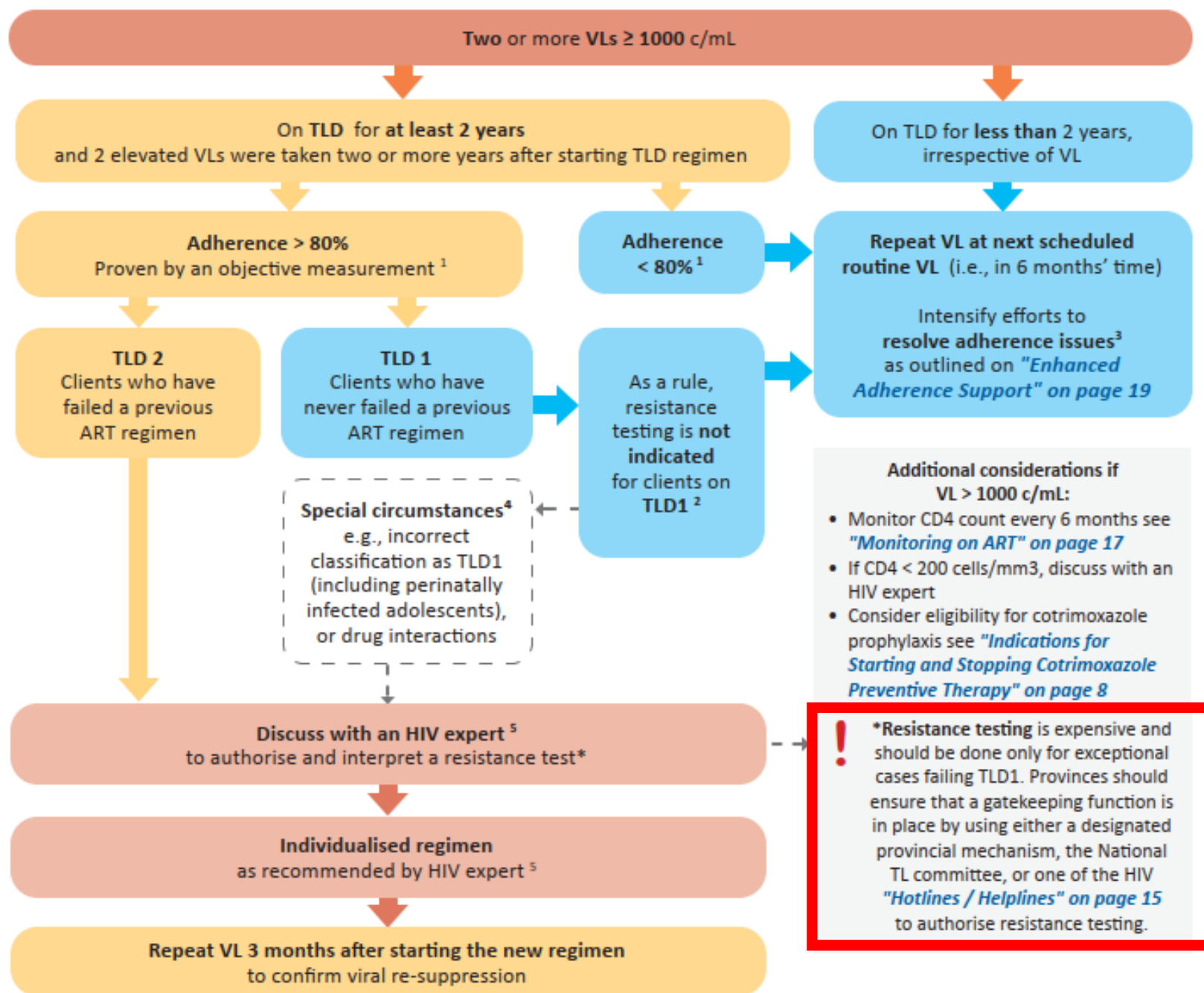
## Footnote 4: Special circumstances that may warrant a resistance test for clients on TLD1 include

- **Incorrect classification as TLD1** (clients who declare themselves as never having had ART before, but who have actually been exposed to ART and may have failed a regimen in the past)
- **Perinatally infected adolescents**: Unless a clearly documented drug history is available, perinatally infected adolescents should be classified as TLD2 due to the high likelihood of ART exposure and virological failure in the past
- **Current or previous drug interactions** with rifampicin, carbamazepine, phenytoin, phenobarbital, or the polyvalent cations may have resulted in the development of resistance. Drug interactions may also warrant an expert discussion and authorisation of a resistance test earlier than 2 years on the regimen.

In these types of exceptional circumstances, TLD1 clients with persistent virological failure despite confirmed good adherence may be discussed with an expert to authorise a resistance test on a case-by-case basis.

## Management of Confirmed Virological Failure on TLD

(also applicable to other DTG-containing regimens)



# Mechanisms for authorisation of RTs

1. National Third-line ART committee
2. One of the 3 HIV Helplines
3. Infectious disease specialists
4. Provincial gatekeepers
  - Consisting of 5-10 additional nominated experts
    - The lab will have a list of all nominated experts from provinces
    - All nominated experts will be provided with a code by NHLS that will authenticate authorisations



# Return from RPCs to clinician-managed care

## 1. Clients are returned to clinician-managed care at the facility when:

- VL > 50 copies/ml
- Clinically unwell including diagnosed with TB or other OI or an other condition that requires clinical review more frequently than 6 monthly
- More than 28 days late for their appointment

### ➤ Explain to client:

- Benefits of more intensive clinical management
- Timeline back to return to RPCs

#### CRITERIA FOR RETURN TO REGULAR CARE

- RPCs patient did not return to the facility or RPCs within 28 calendar days of their scheduled RPCs appointment date.
- RPCs patient is assessed as clinically unstable requiring more frequent clinical management, including diagnosed with TB or any other opportunistic infection or any other opportunistic infection.
- Other safety lab test results are abnormal.
  - For HIV: VL ≥50 copies/ml (unless clinician confirms persistent viraemia)
  - For Diabetes: HbA1c >8%
  - For Hypertension: BP >140/90
- RPCs patient becomes pregnant and is referred to integrated MNCWH services.

**All patients must be advised that they are being returned to regular care to ensure more frequent clinical care until they are stable again. Patients can return to their RPCs (or alternative preferred RPCs) after a single normal result and meeting other RPCs criteria (also see Re-engagement SOP 10).**

# Return from RPCs to clinician-managed care

## *How to manage: Drug switch-MMD-EAC*

### 2. Assess if enhanced adherence counselling would be helpful

- i. Drug side effects impacting adherence?
  - If yes and drug/s switched no need for EAC
- ii. Difficulty getting to facility to collect treatment probably no need for EAC
  - If difficulty getting to facility for treatment, provide 2 or 3-month supply until next NECESSARY clinical visit to support improved adherence
  - **New DMOC SOP 4** explains facility provided MMD aligned to clinical review dates including for TB and elevated VL
- iii. Challenges with taking/remembering to take treatment
  - Provide EAC session 1 (annexure 3 of ART guidelines/DMOC SOP 2)

ii. Enable adherence

i. Enable adherence

iii. Enable adherence

A clinician should:

- If in an RPCs, return the client to regular care to ensure more frequent clinical follow-up until they are stable again.
- Provide appropriate clinical management
- If clinically well and struggling with visit frequency: provide multi-month dispensing (DMOC SOP 4)
- If experiencing side effects or the child cannot tolerate their medication: switch drugs/formulation
- If struggling to take ART as prescribed: enhanced adherence counselling (See Annexure 3)



# Multi-month dispensing (MMD)



MULTI-MONTH  
DISPENSING (MMD)

SOP 4



- Previously MMD was only included in Repeat Prescription Collection Strategies (RPCs) SOPs.
- New SOP that specifically enables longer refills by facilities between clinical reviews for people:
  - People who are NOT eligible for RPCs
    - Elevated VL after EAC
    - Re-engaging (if clinically well)
    - TB continuation phase
    - 6 months old to 5 yrs old
    - Travelling
    - 6-months post-natally
  - Eligible but do not want RPCs/no RPCs suitable option at their facility

Coming up specifically  
later in agenda

Facility-based  
MMD  
Not RPCS  
therefore not  
supplied by  
CCMDD

**Sub-section to Part 3**  
**The not-stable client**

**The Integrated visit schedule for clients  
on TB and ART**

# TB: Eligibility/exit from RPCs

## 2019 ART guidelines

- Only eligible for RPCs if no OI
- If unwell or **screen positive for TB** – return to regular care for clinical management

## 2023 ART clinical guidelines

- No changes for RPCs eligibility
- **Change to exit criteria** – only exit if unwell OR diagnosed with TB
  - TB screening now includes annual GeneXpert – do not return all clients to regular care while waiting for GeneXpert result
- **Added facility-based MMD to support TB continuation phase**

Months on ART	Routine monitoring tests	Overview of Management			
0		Baseline clinical and lab assessment as outlined on pages 4 to 6 ART initiation and session 1 of fast track initiation counselling			
1	Review test results	<ul style="list-style-type: none"> <li>• Session 2 of fast track initiation counselling including planning for travel and VL education</li> <li>• Clinical assessment and routine monitoring as outlined on page 15</li> <li>• Integrated services for family planning and NCDs</li> <li>• 2 months ART dispensed (2MMD) - AGL SOP 4</li> </ul>			
3	3-month VL sCR and eGFR	<ul style="list-style-type: none"> <li>• Clinical assessment including VL and any other routine monitoring bloods as outlined on page 15</li> <li>• Integrated services for family planning and NCDs</li> </ul>			
		<ul style="list-style-type: none"> <li>• Clinical assessment and review of VL and any other monitoring results</li> <li>• Integrated services for family planning and NCDs</li> <li>• Assess eligibility for repeat prescription collection strategies (RPCs)                             <ul style="list-style-type: none"> <li>• VL &lt; 50 c/mL</li> <li>• Clinically well</li> <li>• No OIs, including TB</li> <li>• Not pregnant</li> </ul> </li> </ul>			
4	Review test results	<table border="1"> <tr> <td>Facility Pick-up Point (FAC-PUP) (AGL SOP 5)</td> <td>Adherence Clubs (AC) Facility or community-based support groups (AGL SOP 6)</td> <td>External Pick-up point (EX-PUP) (AGL SOP 7)</td> </tr> </table> <ul style="list-style-type: none"> <li>• Renew prescription for next 6 months, with first month's supply issued today from the facility</li> <li>• If not eligible for RPCs or refused RPCs: Assess eligibility for facility provided multi-month dispensing (MMD) – AGL SOP 4</li> </ul>	Facility Pick-up Point (FAC-PUP) (AGL SOP 5)	Adherence Clubs (AC) Facility or community-based support groups (AGL SOP 6)	External Pick-up point (EX-PUP) (AGL SOP 7)
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5 - 9		<ul style="list-style-type: none"> <li>• Collect medication from preferred RPCs</li> </ul>			
10	10-month VL sCR and eGFR CD4 count	<ul style="list-style-type: none"> <li>• Clinical assessment including VL and any other monitoring bloods</li> <li>• Integrated services for family planning and NCDs</li> <li>• Renew prescription for next 6 months.</li> <li>• Do not require the clients to return to the facility in 1 month to review the VL results. Rather, recall to the facility only those clients with elevated VLs</li> </ul>			
11+		<ul style="list-style-type: none"> <li>• Collect medication from preferred RPCs</li> <li>• Annual clinical assessment as outlined on page 15</li> <li>• 12-monthly routine monitoring of VL, sCR and eGFR</li> </ul>			

### Non-stable clients

If at any stage the client becomes clinically non-stable and /or non-adherent i.e. a client who has:

- missed a scheduled appointment by more than 28 days (including in an RPCs) (see also re-engagement algorithm on page 10)
- a VL  $\geq 50$  c/ml
- possible signs or symptoms of treatment failure

A clinician should:

- If in an RPCs, return the client to regular care to ensure more frequent clinical follow-up until they are stable again.
- Provide appropriate clinical management
- If clinically well and struggling with visit frequency; provide multi-month dispensing (Adherence Guideline SOP 4)
- If experiencing side effects or the child cannot tolerate their medication: switch drugs/formulation
- If struggling to take ART as prescribed: enhanced adherence counselling (See Annexure 3)

# ART patient diagnosed with TB not in RPCs yet:

Clinicians should provide integrated TB management at clinical consultation visits and reduce visit schedules to limit disengagement

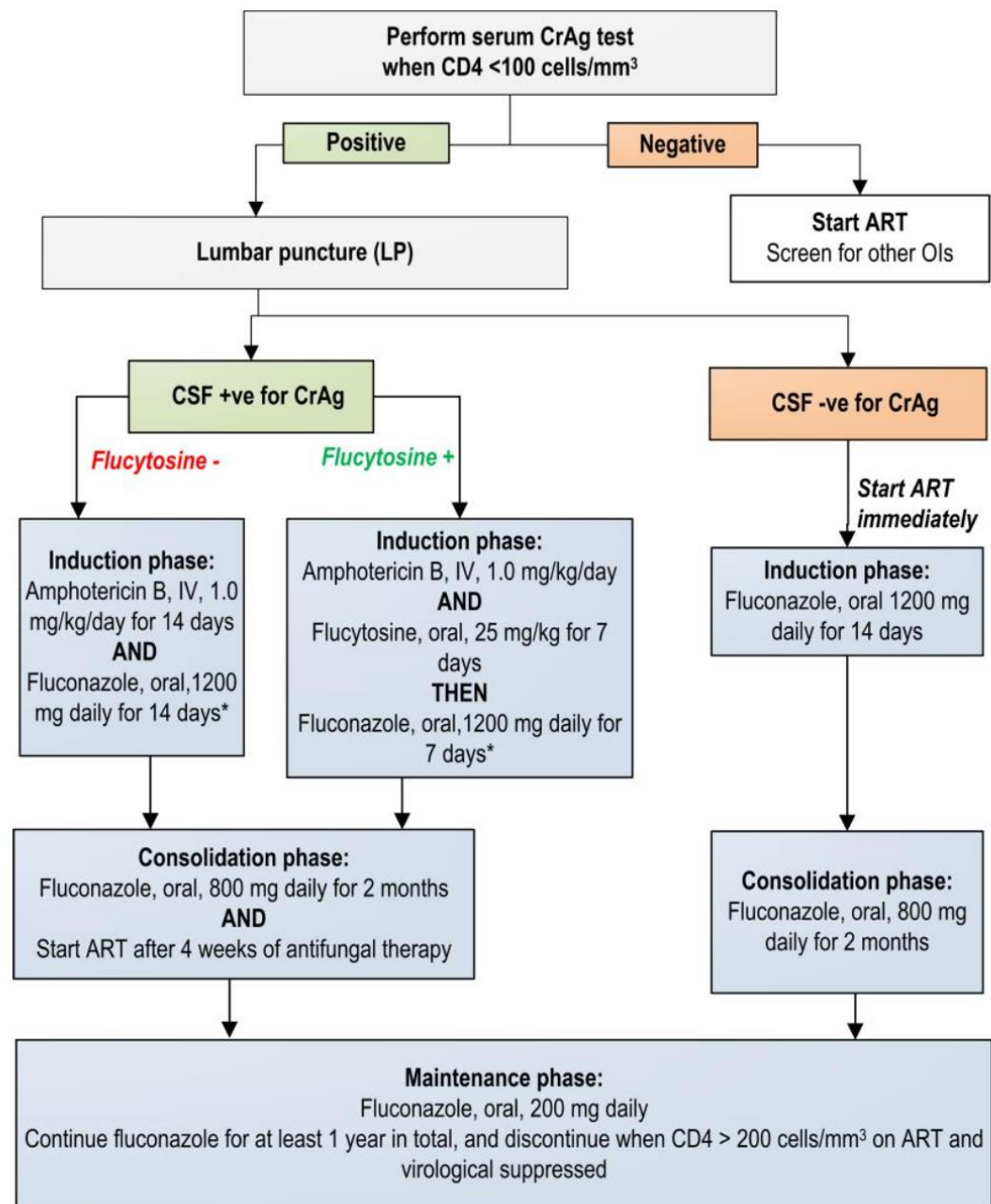
Integrated visit schedule for a client on ART who develops DS-TB (not in RPCs)		Months (M) on TB Treatment (Rx)						
		Intensive Phase (IP) (months 1-2)			Continuation Phase (CP) (months 3-6)			
		TB M0	TB M1 (4 completed weeks)	7 wks	TB M2 (8 completed weeks)	TB M4 (16 completed weeks)	23 wks	TB M6 (24 completed weeks)
<b>Integrated TB/ART clinical consult</b>	TB screening as part of routine care	TB diagnosis and TB Rx initiation	Clinician-managed care at facility		Assess smear conversion and transition to CP of TB Rx, if smear result is negative	Clinician-managed care at facility		Confirm TB Rx completion Assess for RPCs enrolment
<b>Investigations</b>	TB GeneXpert and any other investigations as clinically indicated	Review result		Smear	Review result		Smear	Review end-of-Rx result
<b>ART/TB script</b>	Script ART for 1 month	Combined script for 1 month of IP TB Rx and ART	Combined script for 1 month of IP TB Rx and ART		Combined script for 2 months** of CP TB Rx and ART	Combined script for 2 months** CP of TB Rx and ART"		If eligible for RPCs: RPCs ART script for 6 months
<b>ART-TB drug supply dispensed by facility</b>	Dispense ART for 1 month	Dispense 1 month of IP TB Rx and DTG boosted ART	Dispense 1 month of IP TB Rx and DTG boosted ART		Dispense 2 months of CP TB Rx and 2 months DTG boosted ART	Dispense 2 months of CP TB Rx and 2 months DTG boosted ART		Dispense 3 months of ART
<b>Ask client to return:</b>	If client has TB symptoms or is unwell, ask client to return in 5-7 days for review *	After 4 weeks for clinical review	After 3 weeks for sputum smear	After 1 week for smear results	After 8 weeks for clinical review	After 7 weeks for end of Rx smear	After 1 week for smear results	If eligible and enrolled in RPCs: return for next ART supply at RPCs pick-up point after 3 months

# Changes to Management of Cryptococcal Meningitis

# Cryptococcal Antigen (CrAg) screening guidelines

- Currently a reflex CrAg test is performed on all CD4 samples <100.
- If CrAg test positive, all patients should have a lumbar puncture, regardless of whether symptoms of meningitis are present, since asymptomatic cryptococcal meningitis may be present.
  - Give first fluconazole dose 1200mg oral
- Fluconazole prophylaxis should be continued for at least 1 year, can be stopped once the CD4 count increases to > 200cells/mm<sup>3</sup> on ART and Viral load is suppressed.
  - If the CD4 count does not increase continue treatment indefinitely.

# Screening for and Management of Cryptococcal Disease



**Note:** If there is a delay in performing LP, obtaining LP results or in starting amphotericin B therapy, start fluconazole 1200 mg immediately.

# SA Recommended Treatment Regimen using Flucytosine

INDUCTION	CONSOLIDATION	MAINTENANCE
<p>1 week regimen: Flucytosine, oral 25 mg/kg 6 hourly for 7 days + Amphotericin B (1mg/kg/day).[same dose children &amp; adolescents]</p> <p>followed by 1 week of fluconazole (1200 mg daily for adults; 12 mg/kg/day for children and adolescents to a maximum of 800 mg daily</p>	<p>8 weeks Fluconazole (800mg daily)</p> <p>6-12 mg/kg/day for children &amp; adolescents -max 800 mg daily</p>	<p>Fluconazole (200 mg/day). For at least 12 months and until a single CD4 count is &gt;200 cells/<math>\mu</math>l and the HIV viral load is suppressed</p> <p>6 mg/kg/day children and adolescents - max 200 mg daily</p>



# Indications for CM treatment

- Serum CrAg+ with symptoms of meningitis (1st instance detected)
  - LP should always be done unless declined by the patient
- Detection in CSF, regardless of symptoms (1st instance detected)
  - CSF India ink positive or CSF CrAg positive (better diagnostic performance than india ink) or CSF culture positive
- Recurrent symptomatic episode with CSF culture+
- Culture + ve from any specimen (disseminated cryptococcosis)
  - For Mx of pulmonary crypto, cryptococcomas, and other disseminated disease seek expert advice / consult 2010 IDSA guidelines

# Post discharge – CrAg positive patients and those completing hospital induction therapy

- Adherence support is recommended for all patients who screen CrAg-positive and are followed up as outpatients
- Particularly among those who decline an LP as may have subclinical meningitis
- Provide supply on discharge and ensure knows how to get resupply
- Provide patient information on discharge – if any symptoms to urgently return to hospital
- Try to ensure there is a treatment buddy who can support adherence and identify symptoms of meningitis if they develop
- If patient stops fluconazole maintenance prematurely then restart

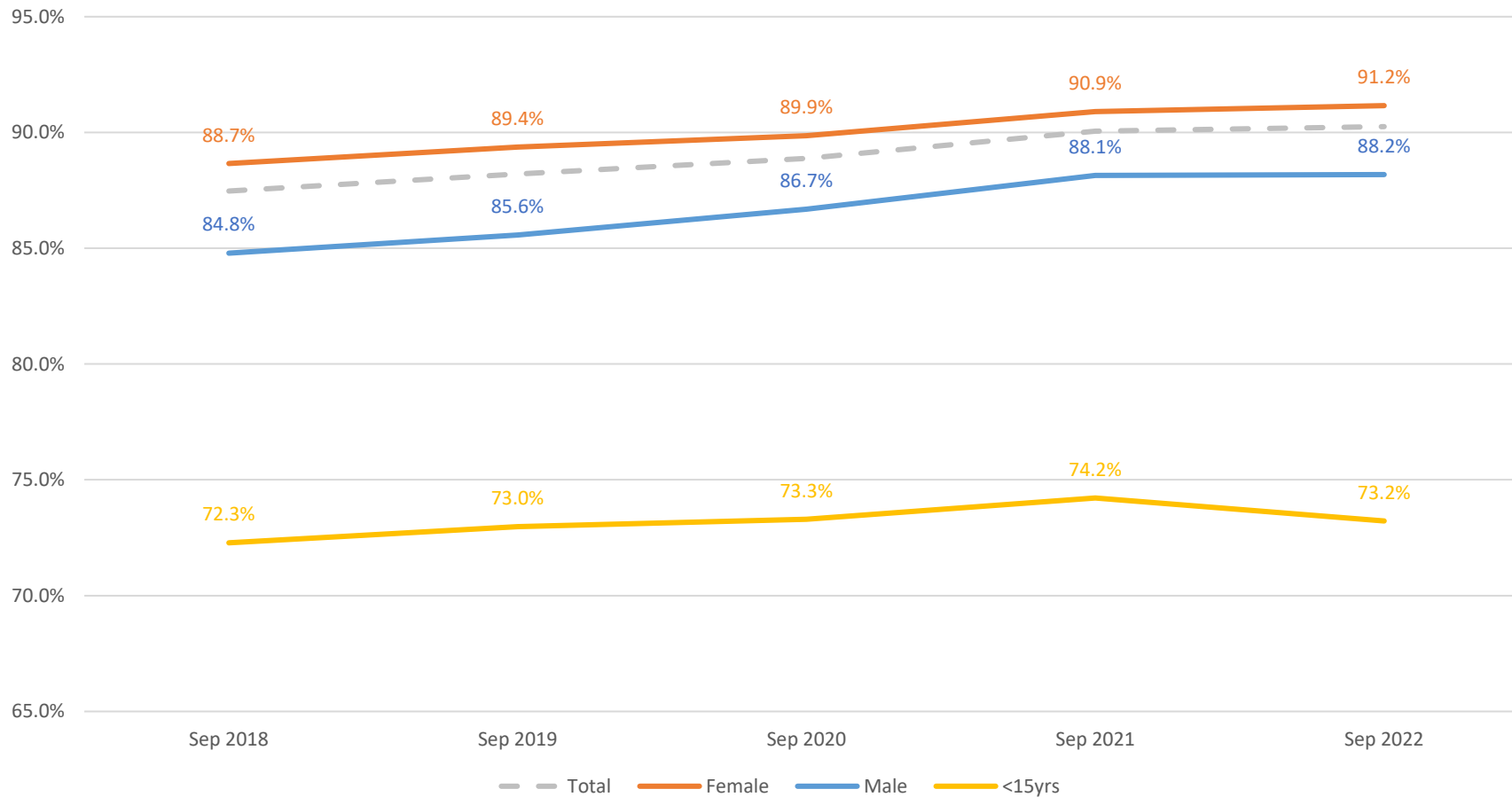
# Paediatric HIV

# What is New in this Guideline

- TLD 1 /ALD 1: Clients on a DTG-containing regimen, who have never failed any other regimen
- TLD 2 /ALD 2: Clients on a DTG-containing regimen, who have failed an earlier regimen
- The preferred first-line ART regimen is abacavir-lamivudine-dolutegravir (ALD).
- All paediatric clients already on ART and not on dolutegravir (DTG), whether on first-line or second-line regimens, should be evaluated for a switch to a dolutegravir-containing regimen.
- Atazanavir/r replaces lopinavir/r as the preferred protease inhibitor except when on TB treatment
- First VL after ART initiation to be done after 3 dispensing cycles
- Virological Failure:
  - two or more VLs  $\geq 1000$  c/mL taken two or more years after starting a DTG/PI-containing regimen and adherence  $> 80\%$ .
  - Switching off a DTG-containing regimen should only happen if InSTI resistance has been confirmed by a resistance test

# The Goal of Antiretroviral Therapy (ART)

HIV VL Suppression (<1000cpml) rolling 12mo trends, Sept 2018-2022



Source: NICD

# 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 NVP-based regimens

## Bolsters Adherence:

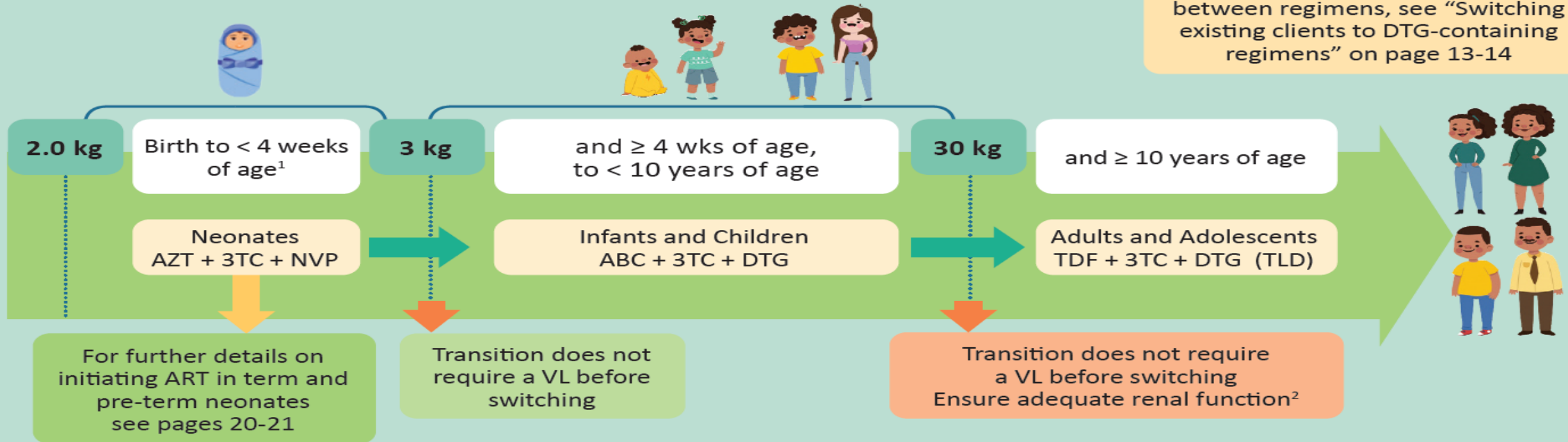
- ✓ DTG is taken once daily
- ✓ Better side effect profile
- ✓ DTG dispersible tablet is easily dissolved in **water, juice, milk, breast milk, yoghurt and porridge** and allows easier administration as a solution or can be swallowed whole.
- ✓ DTG dispersible tablet has a strawberry taste and is more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

# 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.

## Neonates, Infants and Children 0 to < 10 years of Age

For further detail on transitioning between regimens, see “Switching existing clients to DTG-containing regimens” on page 13-14



# Changes to the 1st 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.**



# 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		OPTIMAL PRODUCT	ELIGIBILITY
Abacavir 20mg/ml oral solution	Initiate the process of switching	Abacavir 120mg, Lamivudine 60mg dispersible tablet	Weight 3 -24.9kg
Abacavir 60mg dispersible/crushable tablet		Abacavir 120mg, Lamivudine 60mg dispersible tablet	Weight 3 -24.9kg
Lamivudine 10mg/ml oral solution		Abacavir 120mg, Lamivudine 60mg dispersible tablet	Weight 3 -24.9kg
Abacavir 600mg and Lamivudine 300mg tablet		Abacavir 600mg, Lamivudine 300mg, Dolutegravir 50mg tablet	If on Dolutegravir 50mg tablet
Lopinavir 40mg, Ritonavir 10mg capsule		Dolutegravir 10mg dispersible tablet	Weight 3 -19.9kg
Lopinavir 80mg, Ritonavir 20mg/ml oral solution		Dolutegravir 10mg dispersible tablet	Weight 3 -19.9kg
Lopinavir 100mg and Ritonavir 25mg film coated		Dolutegravir 10mg dispersible tablet	Weight 3 -19.9kg
Lopinavir 200mg, Ritonavir 50mg film coated tablet		Dolutegravir 10mg dispersible tablet	Weight 14-19.9kg
Lopinavir 200mg, Ritonavir 50mg film coated tablet		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
Switching regardless of VL result	TEE	<p><b>Switch all to a DTG-containing regimen, regardless of VL result</b></p> <p>Review VL in last 12 months.</p> <p>If VL in last 12 months was not suppressed, continue to switch same day, but do ABCDE assessment and provide enhanced adherence counseling (EAC) if needed.</p> <p>If VL was not done in last 12 months, do it at this visit, but do not wait for the result to switch</p>	<p><b>TLD</b></p> <p>provided no renal dysfunction and age ≥ 10 yrs and weight ≥ 30 kg</p> <p>If client does not qualify for TDF <b>ABC<sup>1</sup>/3TC/DTG</b></p> <p>If client does not qualify for TDF and has ABC hypersensitivity <b>AZT/3TC/DTG</b></p>
	ABC/3TC/EFV (or NVP*)		
	AZT/3TC/EFV (or NVP*)		
	AZT/3TC/DTG		
	Any LPV/r or ATV/r regimen for less than 2 years		

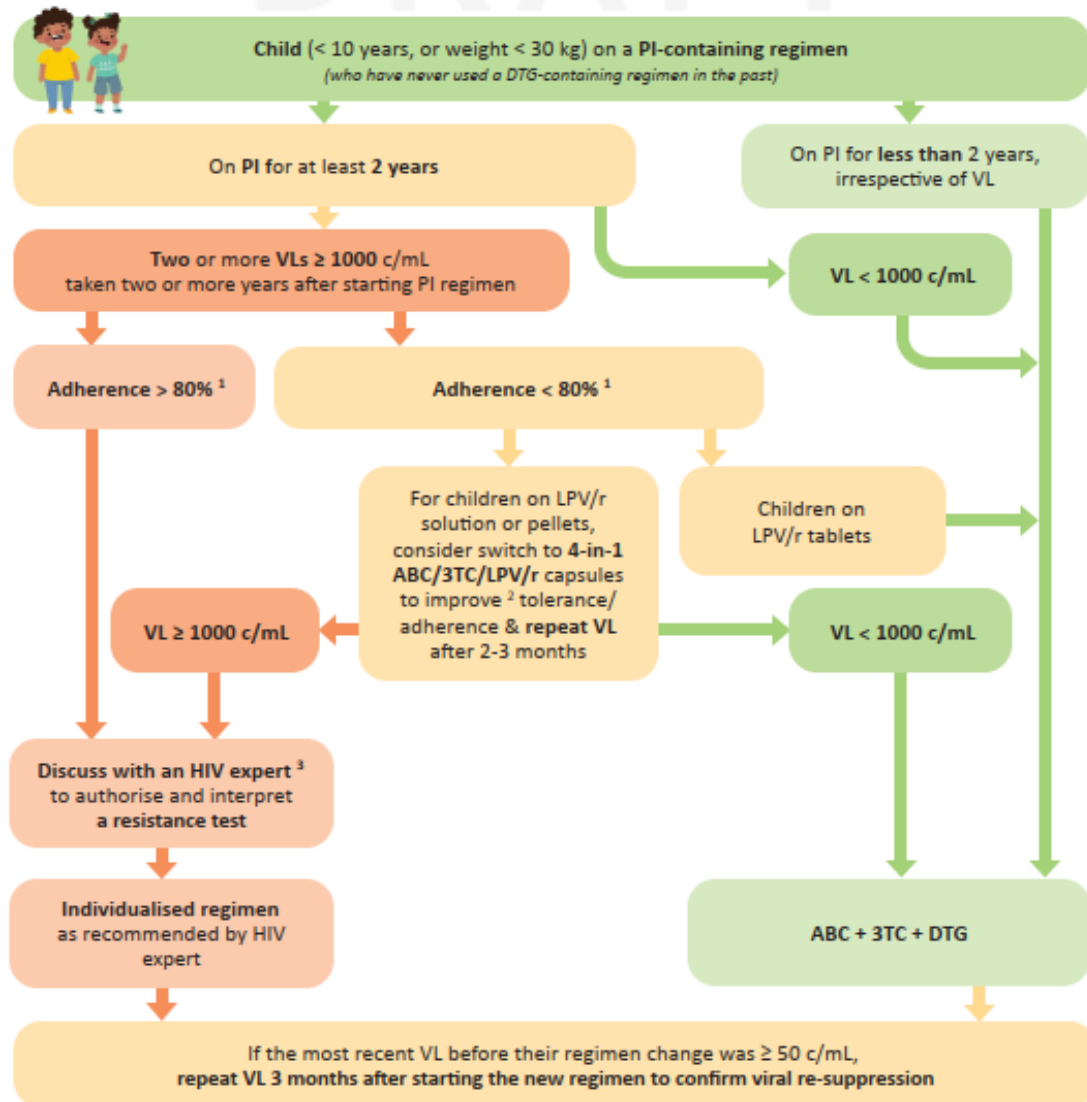
ABC data Vs TDF data

# 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	<p><b>Switch all to a DTG-containing regimen</b></p> <p>If VL in last 12 months was <math>\geq 50</math> c/mL, continue to switch same day, but do ABCDE assessment, provide EAC if needed, and repeat the VL after 3 months as per <i>"The VL non-suppression algorithm"</i> on page 19</p>	<p><b>TLD</b></p> <p>provided no renal dysfunction and age <math>\geq 10</math> yrs and weight <math>\geq 30</math> kg</p> <p>If clients does not qualify for TDF <b>ABC<sup>1</sup>/3TC/DTG</b></p>
Two or more VLs $\geq 1000$ 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	<p>These clients do not yet qualify for TLD and may require a resistance test. Refer to algorithm <i>"Switching children on PI-containing regimens to DTG-containing regimens"</i> on page 16</p>	

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



Source : 2023 ART Clinical Guidelines

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


- 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:
  - Pharmacy refills > 80% in the last 6-12 months (if this is known)
  - Attendance of > 80% of scheduled clinic visits in the last 6-12 months (if this is known)
  - Detection of current antiretroviral drug/s in the client's blood or urine, if available
- 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
- The following would qualify as HIV experts: the HIV Helplines, a paediatric infectious disease specialist or the paediatric Third line ART committee

# 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)

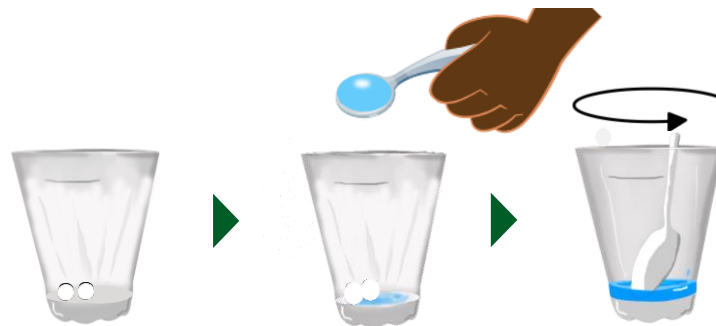


Weight	No. of pDTG (10 mg) Daily Tablets	No. of ABC/3TC (120/60 mg) Daily Tablets
3 – 5.9kg	0.5	1
6 – 9.9kg	1.5	1.5
10 – 13.9kg	2	2
14 – 19.9kg	2.5	2.5
20 – 24.9kg	-	3

**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

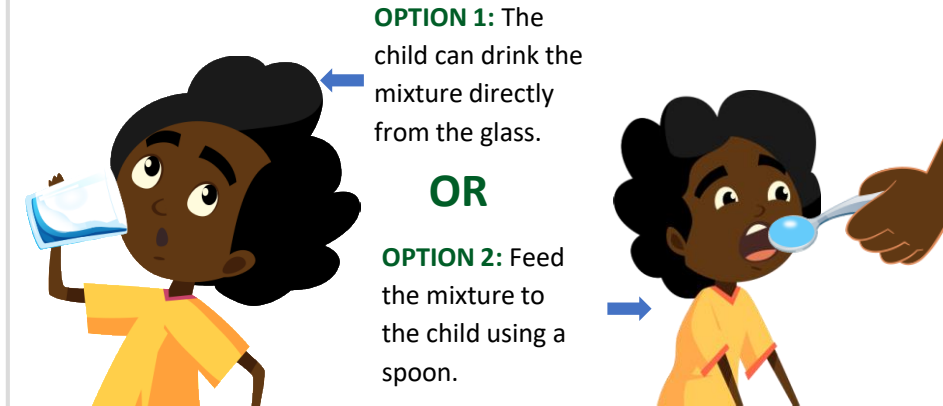
Add 10 -20mL (2-4 teaspoons) of clean water into the glass or cup and stir until the tablets dissolve.



**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.



**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](#)

# 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).**



**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

# Routine HIV VL Monitoring on ART

Routine VL monitoring	Intervention	EAC indicated?
First VL after ART initiation	Do 1st VL after <b>3 dispensing cycles</b>	<ul style="list-style-type: none"> <li>• Allows for earlier detection of factors influencing viral suppression</li> <li>• Allows for earlier decanting for suppressed clients to minimise visits and promote continued engagement in care</li> <li>• This VL will form part of the <b>6 month VL completion cohort</b> in Tier.net</li> </ul>
Second routine VL after ART initiation (in clients who remain virally suppressed)	This VL can be done from <b>10 dispensing cycles</b> but should be aligned with the clients scripting cycle	<ul style="list-style-type: none"> <li>• This VL will form part of the <b>12 month VL completion cohort</b> in Tier.net</li> </ul>
Third routine VL after ART initiation (in clients who remain virally suppressed)	This VL can be done <b>from 22 dispensing cycles</b> , but should be aligned with the clients scripting cycle	<ul style="list-style-type: none"> <li>• This VL will form part of the <b>24 month VL completion cohort</b> in Tier.net</li> </ul>
Fourth and all subsequent VLs	VLs will be taken at intervals of 12 dispensing cycles for all clients who remain virally suppressed	
<p><b>The timing of dispensing cycles, follow-up visits, and VL monitoring is illustrated in the diagram below</b></p>		

# 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:**

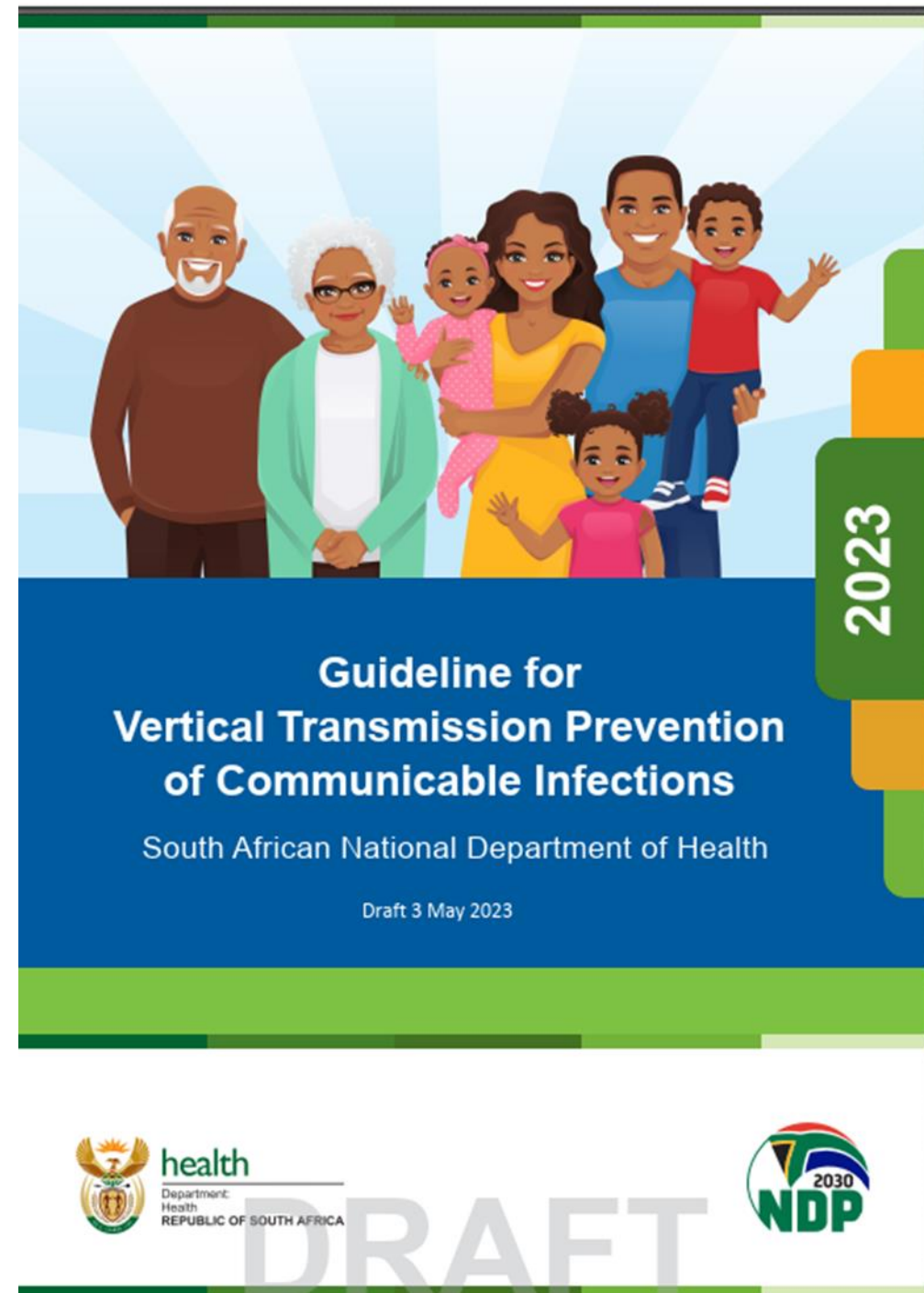
- This helpline can be contacted by calling 0800 006 603

Weight based dosing for all other paediatric formulations are available on [KnowledgeHub](#) in the 2023 ART Clinical Guidelines for the Management of HIV in Adults, Pregnancy, Adolescents, Children, Infants and Neonates, April 2023

# Vertical Transmission Prevention (VTP)

# Vertical Transmission Prevention

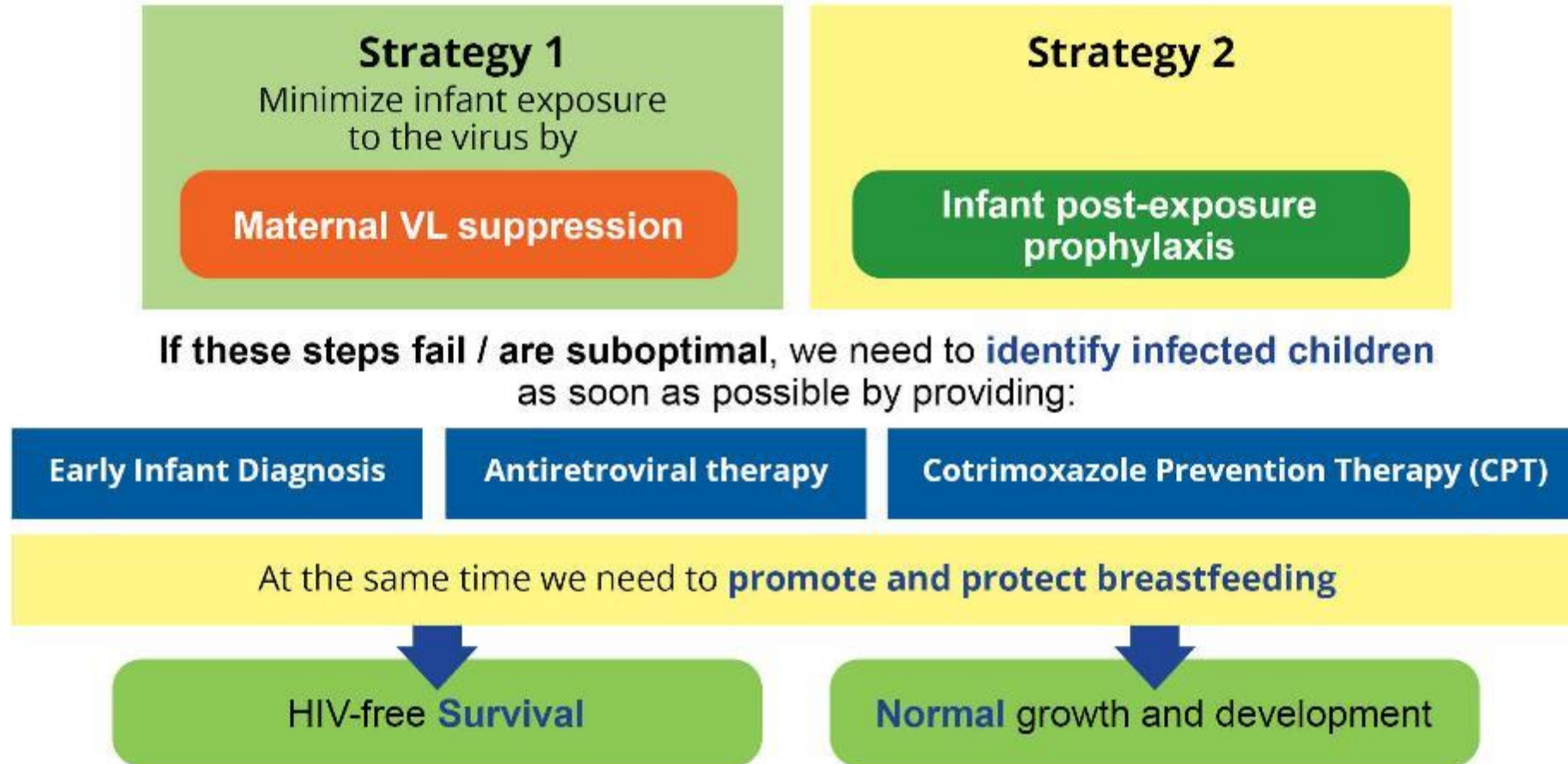
Mother-to-child transmission will be known as vertical transmission



# Changes for the VTP programme -mother

- Name change from PMTCT to Vertical Transmission Prevention (VTP)
- Increase access to optimised ART regimens (TLD) for pregnant women
  - Same as for all other adults
  - No longer an increased risk for neural tube defects
  - Focus still strongly on achieving and maintaining maternal viral load suppression

# Overview of Recommended Interventions to for Vertical Transmission Prevention



# Changes for the VTP programme – HIV-exposed Infant

Delivery VL will determine the final risk profile of the HIV exposed Infant

High-risk until proven low-risk

## Change 1: Tightening the definition of “high-risk” for transmission

- All babies will receive **Dual prophylaxis** at birth (NVP & AZT) until the results of the delivery VL are known
- Once delivery is VL known, the threshold for defining “high-risk” has been moved from **VL > 1000 c/ml** <sup>to</sup> **VL > 50 c/ml**

566 HIV infections prevented



Cost-saving of R11,3 million





# Cotrimoxazole Prophylaxis Therapy for HIV-exposed Infants

- Evidence for earlier guidance is outdated.
- Current evidence shows:
  - **No benefit for mortality or morbidity for HEUs**
  - **Potential harm (incl. antimicrobial resistance)**
- In the context of tighter management of high-risk HEIs and very low transmission rates:

Cost-saving



## Change 2: No CPT for HIV-exposed infants

### Focus should be on preventing HIV infection

- Achieving and maintaining **maternal VL suppression**
- **keeping HIV-exposed infants in care** with
- **PCR testing** as per guidelines, and
- **ART initiation** in the small proportion of children who do become HIV infected

CPT should still be given to confirmed HIV-infected infants and children (unchanged)

# Visit Schedule for Integrated Care for the Mother-baby Pair Living with HIV

The principles are as follows:

1. Wherever possible, the mother's and child's ART follow-up visits with the routine well-baby visits should be at the RTHB
2. Wherever possible, the mother's and child's ART follow-up visits with the routine well-baby visits should be at the RTHB facility once the mother and child are in the same facility
3. Wherever possible, the mother's and child's ART follow-up visits with the routine well-baby visits should be at the RTHB facility

**RTHB**

**ART for baby**

**ART for mother**

**Other care for baby**

**Family Planning**

Age group	Age of child	Routine visits as per RTHB	1DC cycle (DC)	ART Follow-up for baby	ART Follow-up for mother	Immunisations	Feeding advice	Growth monitoring	Development	Head circumference	Vit A	Deworming	Oral Health	TB Screen	Mother's Family planning (FP)
Neonate (birth PCR positive)	1 - 3 week	3-6 days postnatal visit for mother and baby	1	Follow up 1 week ART initiation, then 1-2 weekly thereafter	2 months ART provided at discharge from labour ward which will last mother until 6 week PN visit		x	x						x	x**
	4 weeks			Clinical review and renew script Switch to ABC/3TC/DTG if eligible. Give TCA date in 2 weeks to align with 6-week well-baby visit											
2-6 months (monthly follow-up)	6 weeks*	6 weeks	2*	Clinical review Repeat script for 1DC for baby*	Postnatal clinical review and adherence check-in. Provide breastfeeding support. Provide treatment for 2 DCs (2MMD) for mother	x	x	x						x	
	10 weeks	10 weeks	3	Clinical review Repeat script for 1DC for baby	If mother received either DMPA (Depo Provera®) or NET-EN (Nur Isterate®) after delivery, give repeat injection at this visit***	x	x	x						x	x
	14 weeks	14 weeks	4	Clinical review and VL Repeat script for 1DC for baby	Adherence check-in for mother Provide breastfeeding support. Provide treatment for 3 DCs (3MMD) for mother	x	x	x	x	x				x	
	18 weeks	4 months	5	Clinical review and VL results review Repeat script for 1DC for baby			x	x						x	
	22 weeks	5 months	6	Clinical review Repeat script for 1DC for baby			x	x						x	
	26 weeks	6 months	7	Clinical review Renew script and provide treatment for 3DCs at a time (3MMD) If any concerns, follow up at shorter intervals	Clinical review and '6-month' VL. Provide breastfeeding support. Script for and provide treatment for 3DCs at a time (3MMD). Alternatively, if VL suppressed, offer RPCs options, if this suits the PCGs needs.	x	x	x	x		x			x	x

# Syphilis

PPIP Analysis of the modifiable factors in 52 cases of congenital syphilis in KZN revealed:

If quality of care related to testing and f/up of test results is improved  
**38% of CS cases could be prevented**

If testing was more frequent  
**37% of cases could be prevented**

**Total preventable**  
**38% + 37% =**

**75%**

**Rapid testing**

To facilitate immediate results and treatment

**Change 1: Use of single and dual syphilis rapid tests**

**More frequent testing**

To identify seroconversion later in pregnancy

**Change 2: Alignment of HIV and syphilis testing schedule**

# Summary

- **Increase access to TLD** TLD as both first (TLD 1) and second (TLD 2) line regimens (NADIA and ARTIST trials)
  - Simplified switching from TEE to TLD not dependant on VL
  - DTG 10mg dispersible for children aged 4 weeks and > 3kg
- **Reduce unnecessary client visits** (VL from 6 to 3 months/DCs)
- **Tighten the definition of high-risk** for HEIs VL threshold for high-risk moves from 1000 to 50
  - Dual prophylaxis for all at birth until delivery VL is known
  - Cotrimoxazole only for confirmed HIV-infected children
- **Syphilis** testing, treatment and notification
- **Alignment of clinical, adherence and service delivery components** with an increased focus on how to practically deliver integrated care

# Help Line

## HELPLINES



If in doubt about any aspect of viral load management or switching to second-line, contact one of the following resources:



National HIV & TB Health  
Care Worker Hotline:  
**0800 212 506**



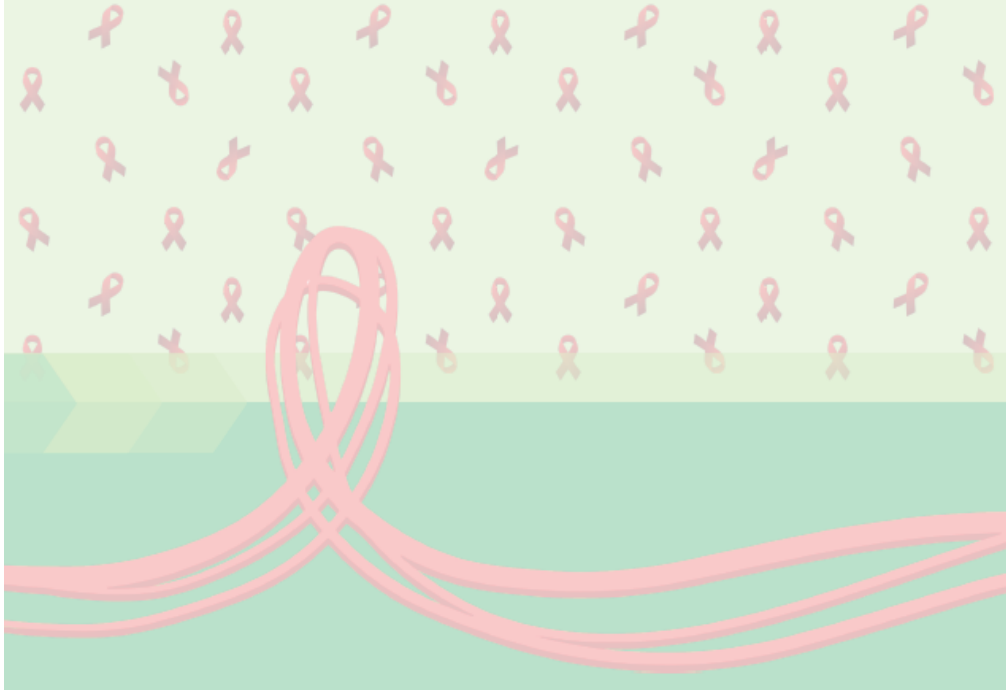
Right to Care Paediatric,  
Adolescent and Adult HIV  
Helpline: **082 352 6642**



health

Department:  
Health  
REPUBLIC OF SOUTH AFRICA

KZN Paediatric Hotline:  
**0800 006 603**



health

Department:  
Health  
REPUBLIC OF SOUTH AFRICA

2023 ART Clinical  
for the Management of HIV in Adults  
and Breastfeeding, Adolescents  
and Neonates

April 2023  
Republic of South Africa National Department of Health

*Thank you!*

