Right to care™
Treating Health Seriously

An Approach to Treatment Failure in adults with HIV

Dr Julia Turner

Right to care™
Treating Health Seriously

Contents

Where does the HIV virus live?

- In the Blood?

✘ No

- Lymph nodes?

✓ Yes

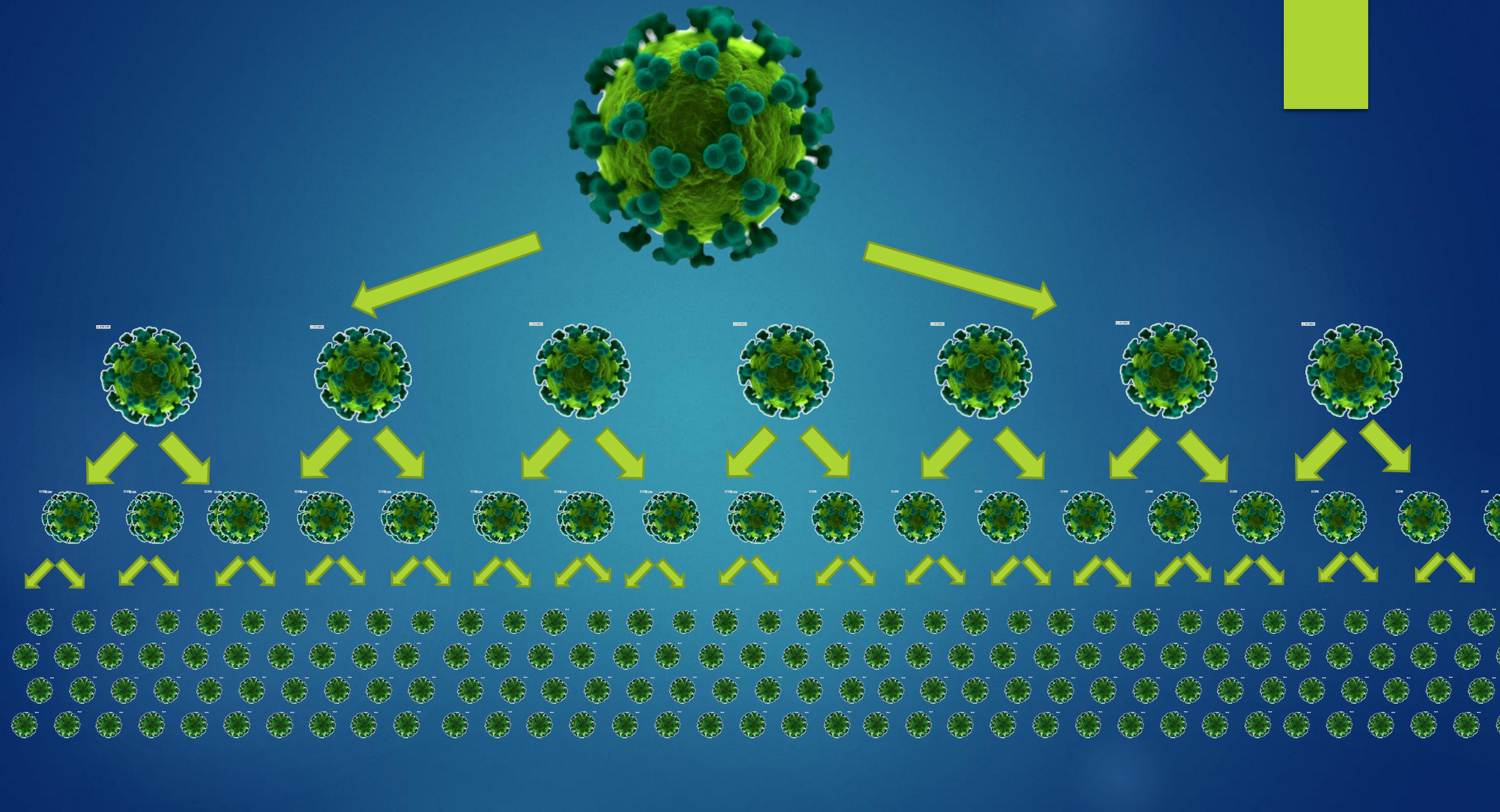
- In the liver?

✓ Yes

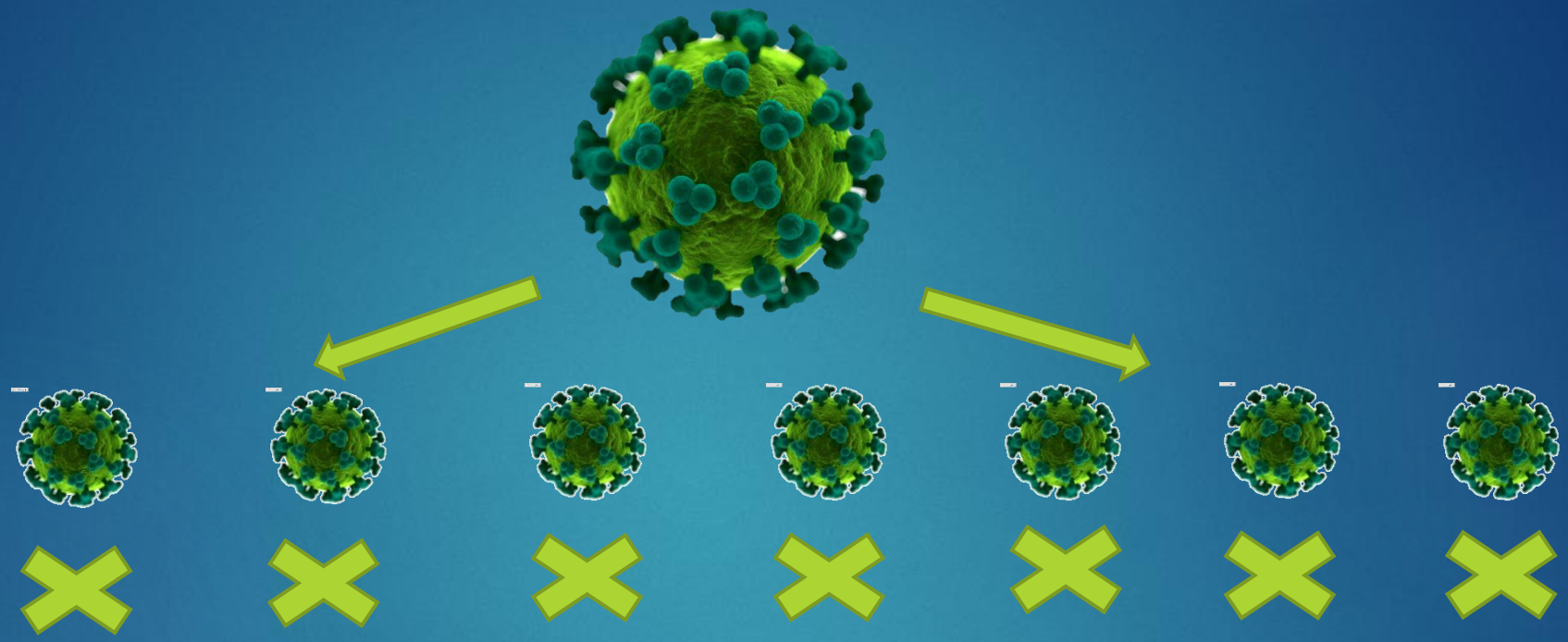
- Spleen?

✓ Yes

What does a Viral Load tell us?



What does an undetectable Viral Load tell us?



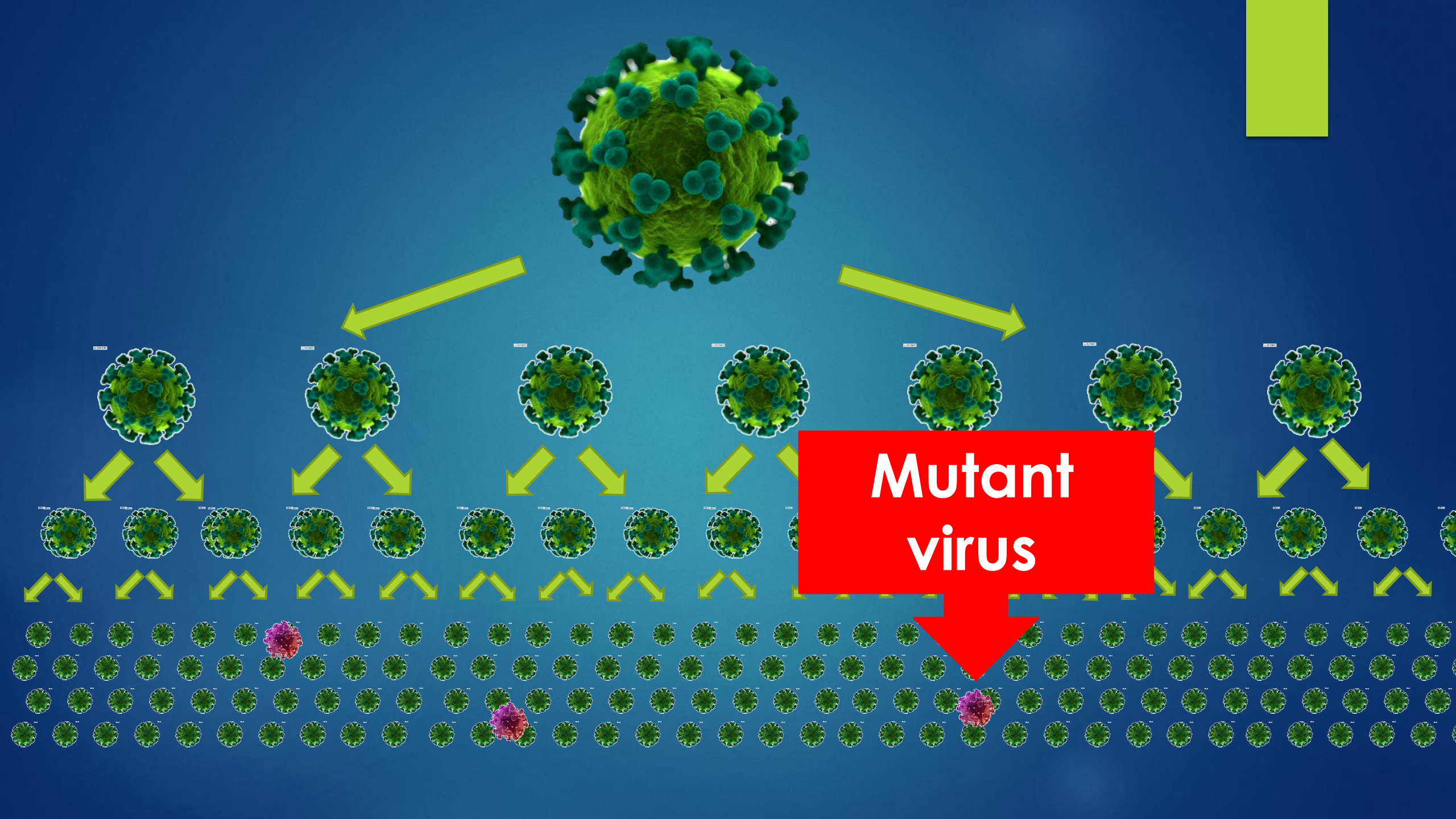
An Undetectable Viral load means that the ARVS are working and the virus is not multiplying

- So HIV cant overflow into the blood stream
- HIV will not kill off CD4 cells
- The patient will not get sick
- The patient will not transmit HIV to their baby
- The patient will not transmit HIV to their sexual partner

U=U

The Partner Study

What is ARV Resistance?

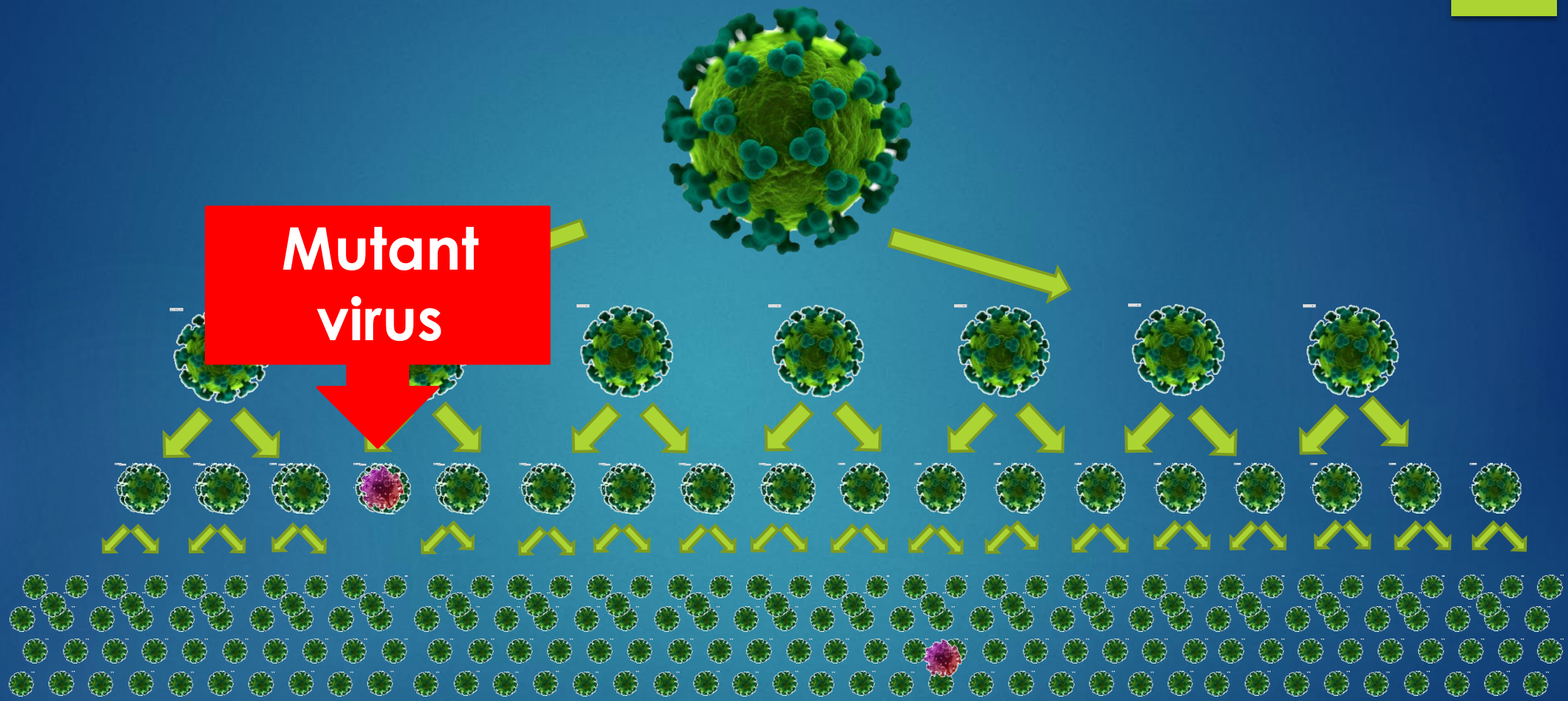

Mutant
virus

We need 2 things for resistance to develop

1)Viral multiplication (replication)

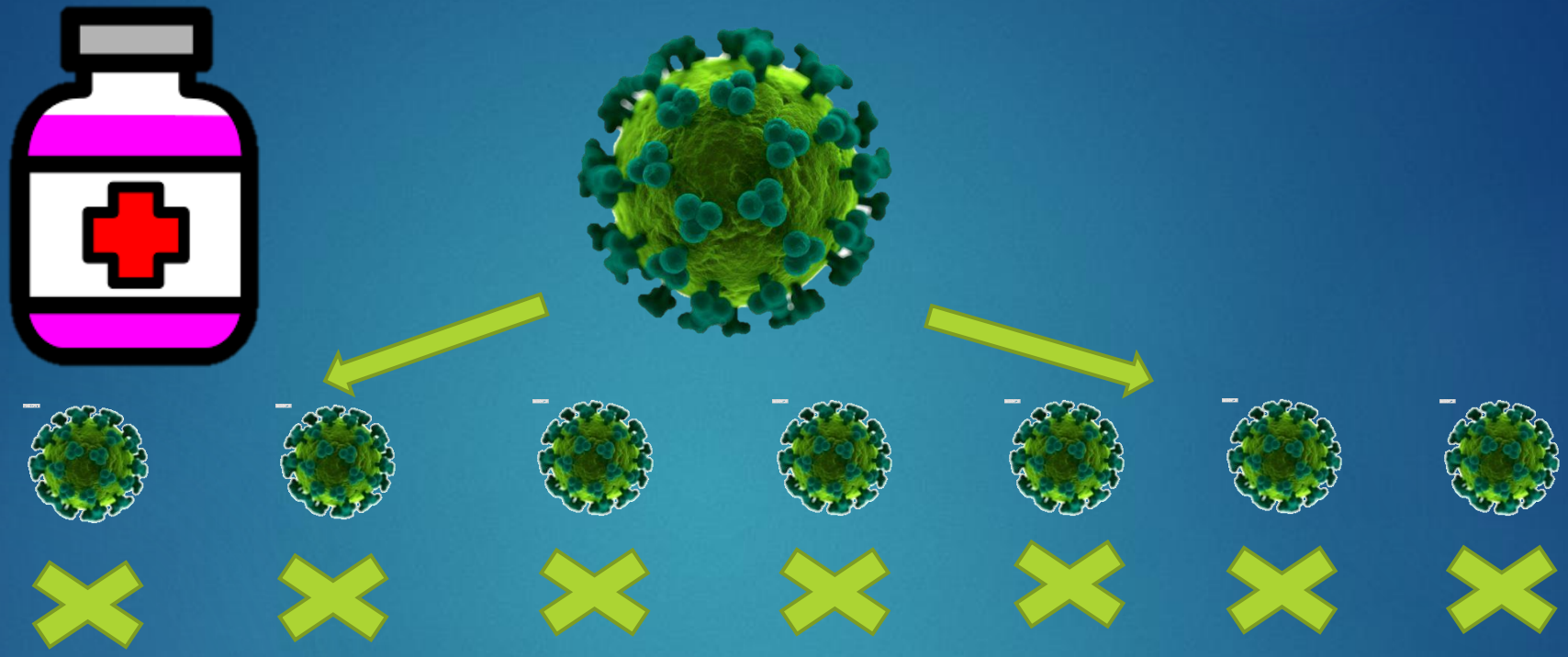
2)Low levels of ARVs in the body

NO ARVS



NO RESISTANCE

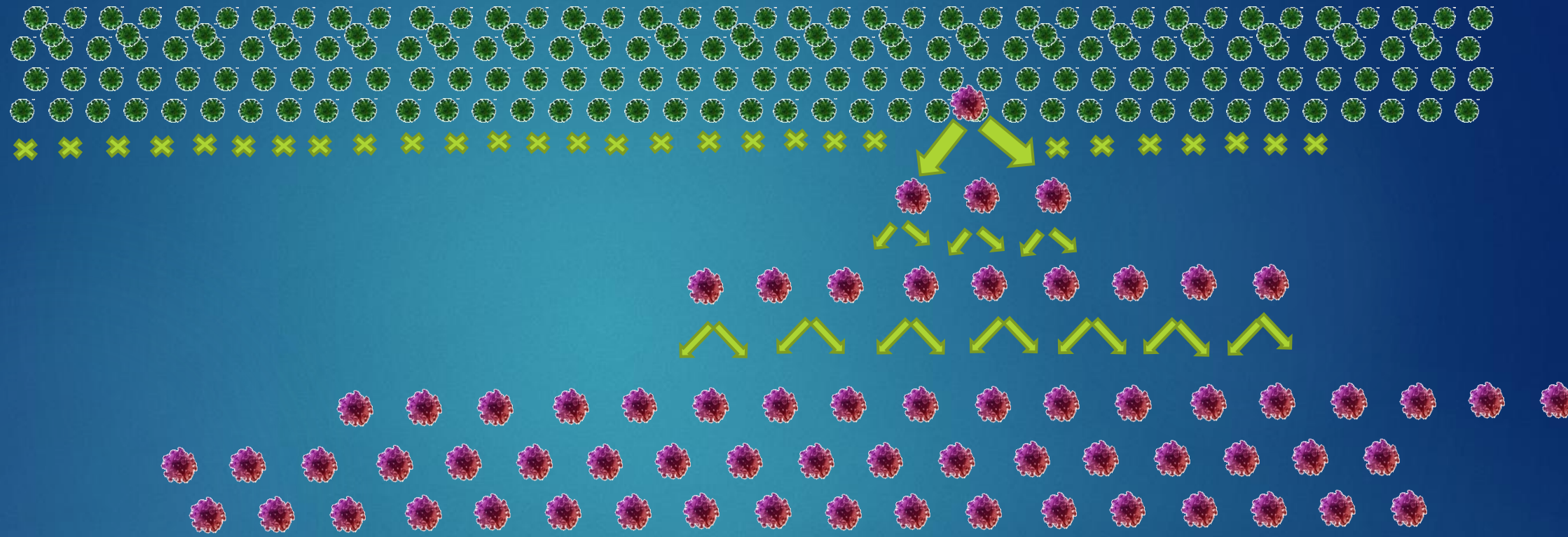
SUFFICIENT LEVELS OF ARVS



NO REPLICATION

NO RESISTANCE

LOW LEVELS OF ARVS PRESENT



REPLICATION + LOW LEVELS OF ARVs

=RESISTANCE

What will happen to this person?

- They will need to change ARV's

We need to prevent them from failing first line!

What can lead to resistance?

Anything which decreases the amount of ARVs in your body eg:

- Missing doses of ARVs
- Incorrect dosing
- Drug interactions which decrease the amount of ARV's in your body eg. Rifampicin with LPV/r or DTG
- Severe prolonged vomiting or diarrhoea/ malabsorption

Transmitted resistance

Approach to high VLs:

VL is suppressed

VL<50

Not replicating
Sufficient levels of effective ARVs

Low level viraemia

VL: 50-1000

- Viral blip
- Persistant low level viraemia

Viral Failure

VL>1000

- Not adherent
- Inadequate drug levels
- Resistance
- Or multiple

What is a viral blip?

- Small Increase in viral load between 50 and < 1000 copies/ml
- Caused by:
  - Normal burst of viral replication even if treatment is working
- Does not affect how ARVs work
- Does not cause resistance
- Only way to confirm that it is a blip is to repeat the viral load after 3 months and if the repeat viral load is <50 copies/ml then it was a blip

VL>1000

Not adherent	Inadequate drug levels	Resistant
• Assess adherence	• Correct doses? • Drug interactions?	

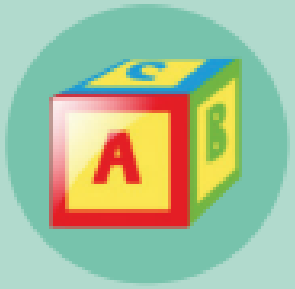
VL Monitoring Algorithm for Clients on TLD

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

Routine VL monitoring for virally suppressed clients as outlined in the algorithm
"Routine HIV VL Monitoring on ART" on page 20
VL monitoring should happen every 6 DCs in a breastfeeding woman

VL < 50 c/mL

VL unsuppressed (VL ≥ 50 c/ml)
(This includes previous VL level of 50-999 and VL > 1000 c/ml)



Do a thorough assessment of the cause of an elevated VL. Consider the possibility of:

A. **A**dherence problems *(see"Enhanced Adherence Support" on page 22)*
B. **B**ugs (Intercurrent infections)
C. In-**C**orrect ART dosage *(see Annexure 5 "Drug Dosing Chart" on page 34)*
D. **D**rug Interactions *(see"Drug Interactions with DTG and Rifampicin-containing TB Treatment" on page 13)*
E. R**E**sistance (if > 2 years on treatment)

Implement interventions to re-suppress the VL, including **Enhanced Adherence Support** if indicated
(See Annexure 3 Enhanced Adherence Counselling)
Recommend **condom use and contraception** as appropriate

Repeat VL after 3 months

If VL>50 do ABCDE

Assessing an Elevated Viral Load

A thorough assessment is essential for any client with a viral load measuring ≥ 50 c/ml

Adherence	A	Is adherence to medication poor? Ask about factors that may influence adherence e.g. Direct cost of clinic visits to patient, e.g. transport, loss of income, cost of paying another person to take on social responsibilities • Taking time away from existing work, finding work and/or social care responsibilities • Needing to travel for extended periods of time • Medication side-effects Pregnant women may experience nausea/vomitting, heartburn, and constipation. Assess the need for symptomatic treatment with an anti-emetic, anti-diarrhea agent, or fiber supplement. 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	**Tips** Ask open ended questions e.g. "What makes it difficult for you to collect or take your treatment?", and "How many doses have you missed this week?" Statements like "we all miss a dose now and then" can encourage a client to be more open. Create a safe and non-judgemental space for your client to discuss challenges.
Bugs	B		Remember that immune compromised, malnourished, and pregnant clients may not exhibit overt symptoms of TB. If in doubt, do a TB GXP.
Correct Dose	C	l function or previous renal impairment	
Drug Interactions	D	y	See also *"Drug Interactions with DTG and Rifampicin-containing TB Treatment" on page 13* If in any doubt, call the **HIV Hotline 0800 212 506** or one of the *"Helplines" on page 23*
REsistance	E	ded and	Refer to the algorithm *"Management of Confirmed Virological Failure on TLD" on page 23*

Adherence

Bugs

Correct dose

Drug interactions

rEsistance

How do you assess adherence?

Do patients tell you the truth?

I'm unemployed and drink alcohol with friends to pass the time, I usually drink so much I don't remember anything for 3-5 days of the week

Enhanced Adherence Counselling

Clinician considerations for providing Enhanced Adherence Counselling (EAC)

Barrier to adherence	Intervention	EAC indicated?
Difficulty getting to facility to collect treatment	Reduce unnecessary visits through enrolling client in a RPCs model or providing multi-month dispensing (MMD)	No need for EAC
Drug side effects or unpalatability impacting adherence?	Change to more palatable regimen	No need for EAC
Challenges with taking/remembering to take treatment	Provide EAC	

Enhanced Adherence Support

Enhanced Adherence Counselling (EAC) is aimed at non-stable clients presenting with adherence issues or poor treatment response and/or signs of treatment failure. Enhance Adherence Counselling focuses on:

- Providing education on the outcome of their latest clinical assessment and VL results
- Understanding what the client already knows or doesn't know regarding their treatment and the importance of VL suppression
- Doing a mental health screen
- Correcting any misconceptions and allowing flexibility around the most common barriers to adherence (such as alcohol/ drug consumption, forgetting doses due to a rigid schedule, etc.).
- Assessing and understanding the barriers that affect the client's adherence
- Developing adherence strategies to overcome these

'better late than never': clients should be counselled they can take their ARVs up to several hours late if they miss their chosen time

To support the above processes, the following useful tools extracted from the Differentiated Care Models Standard Operating Procedures 2023 included in the annexures:

- SOP 2 Enhanced Adherence Counselling (Annexure 3)
- Mental Health Screen (Annexure 4)
- Child and adolescent disclosure counseling for children living with HIV (Annexure 7)

More clues

If you see 2 patients with the following viral loads, which one do you think is more likely to have resistance?

- VL: 2 500
- VL: 800 000

Resistance mutations generally weaken the HIV virus and reduce its replicability, but it is not always the case.

Some ARVs are easy to develop resistance to and some are difficult

HIV

Quickly develops resistance

3TC / NVP / EFV

HIV

Takes a long time to develop resistance (> 2 years)

LPV/r & DTG

Approach to high VL on EFV/NVP

Switch to TLD

NADIA trial

- In Patients failing TDF/3TC/NNRTI regimen TDF/3TC/DTG (TLD)was superior to AZT/3TC/DTG in 2nd line
- ARTIST, VISEND and D²EFT Trials show similar results

Lancet HIV 2022

New ART Guidelines:

Switch all patients on EFV/NVP to TLD regardless of VL

VL considerations	Current Regimen	Criteria for switch	Regimen if change indicated
Switching regardless of VL result	**TEE** ABC/3TC/EFV (or NVP*) AZT/3TC/EFV (or NVP*) AZT/3TC/DTG	**Switch all to a DTG-containing regimen, regardless of VL result** 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	**TLD** provided no renal dysfunction and age ≥ 10 yrs and weight ≥ 30 kg If client does not qualify for TDF **ABC[1]/3TC/DTG** If client does not qualify for TDF and has ABC hypersensitivity **AZT/3TC/DTG**
	Any LPV/r or ATV/r regimen for **less than 2 years**		

ABC data Vs TDF data

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)

Approach to high VL on a PI (LPV/r or ATV/r)

LPV/r & DTG

New Guidelines:

If on PI < 2 years: switch to TLD

(Non VL-dependent regimen switches)

VL considerations	Current Regimen	Criteria for switch	Regimen if change indicated
Switching regardless of VL result	**TEE** 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** PTO	**Switch all to a DTG-containing regimen, regardless of VL result** 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	**TLD** provided no renal dysfunction and age ≥ 10 yrs and weight ≥ 30 kg If client does not qualify for TDF **ABC[1]/3TC/DTG** If client does not qualify for TDF and has ABC hypersensitivity **AZT/3TC/DTG**

ABC data Vs TDF data

If on a PI > 2 years: VL dependent switches

- Look at their VL result in the last 12 months
- If they are failing a PI regimen, they might have PI resistance which means that 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**	**Switch all to a DTG-containing regimen** If VL in last 12 months was ≥ 50 c/mL, continue to switch same day, but do ABCDE assessment, provide EAC if needed, and repeat the VL after 3 months as per ***"The VL non-suppression algorithm" on page 19***	**TLD** provided no renal dysfunction and age ≥ 10 yrs and weight ≥ 30 kg If clients does not qualify for TDF **ABC[1]/3TC/DTG**
[2] Two or more VLs ≥ 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%[3]**	**Do not do a resistance test** 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 ***"The VL non-suppression algorithm" on page 19***	**TLD** provided no renal dysfunction and age ≥ 10 yrs and weight ≥ 30 kg If clients does not qualify for TDF **ABC[1]/3TC/DTG**
	Adult or adolescent on any **LPV/r or ATV/r** regimen and adherence **more than 80%[3]**	Clients who meet the definition of confirmed virological failure and have confirmed adherence more than 80% may need a resistance test. These clients do not qualify for a simple switch. Discuss with an HIV expert[4] 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 ***"Management of Confirmed Virological Failure on TLD" on page 21***	
	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 ***"Switching children on PI-containing regimens to DTG-containing regimens" on page 16***	

Fine print:

- Objective measures of good adherence include at least one of:
  - 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
  - Note: Self-reported adherence is not considered a reliable measure of good adherence

If there is PI resistance

Third Line ART:

- Likely TLD if DRV is fully susceptible
- Discuss with an expert

Approach to high VL on DTG

VL Monitoring for Clients on TLD

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

Routine VL monitoring for virally suppressed clients as outlined in the algorithm
"Routine HIV VL Monitoring on ART" on page 18

VL < 50 c/mL

VL unsuppressed (VL ≥ 50 c/ml)
(This includes previous VL level of 50-999 and VL > 1000 c/ml)

Do a thorough assessment of the cause of an elevated VL. Consider the possibility of:

A. **A**dherence problems *(see**"Enhanced Adherence Support" on page 20**)*
B. **B**ugs (Intercurrent infections)
C. In-**C**orrect ART dosage *(see Annexure 5 **"Drug Dosing Chart" on page 34**)*
D. **D**rug Interactions *(see**"Drug Interactions with DTG and Rifampicin-containing TB Treatment" on page 13**)*
E. R**E**sistance (if > 2 years on treatment)

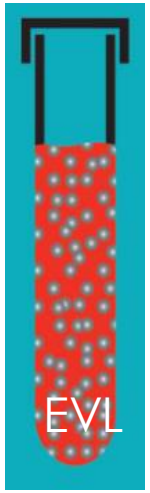
Implement interventions to re-suppress the VL, including **Enhanced Adherence Support** if indicated
(See Annexure 3 Enhanced Adherence Counselling)
Recommend **condom use and contraception** as appropriate

Repeat VL after 3 months

Repeat VL after 3 months

Repeat VL **unsuppressed** [1] **(VL > 50 c/ml)**

Re-assess and resolve adherence issues! [2]
*(See **"ABCDE assessment of an Elevated Viral Load" on page 20** and Annexure 3 **"Enhanced Adherence Support" on page 20**)*



On TLD for **at least 2 years**

On TLD **less than** 2 years [3]

If **Adherence > 80%** [4], and
Two or more **VLs ≥ 1000 c/mL**
taken two or more years after starting TLD regimen
or at least one VL ≥ 1000 c/mL and either
CD4 < 200 cells/mm3 or an opportunistic infection

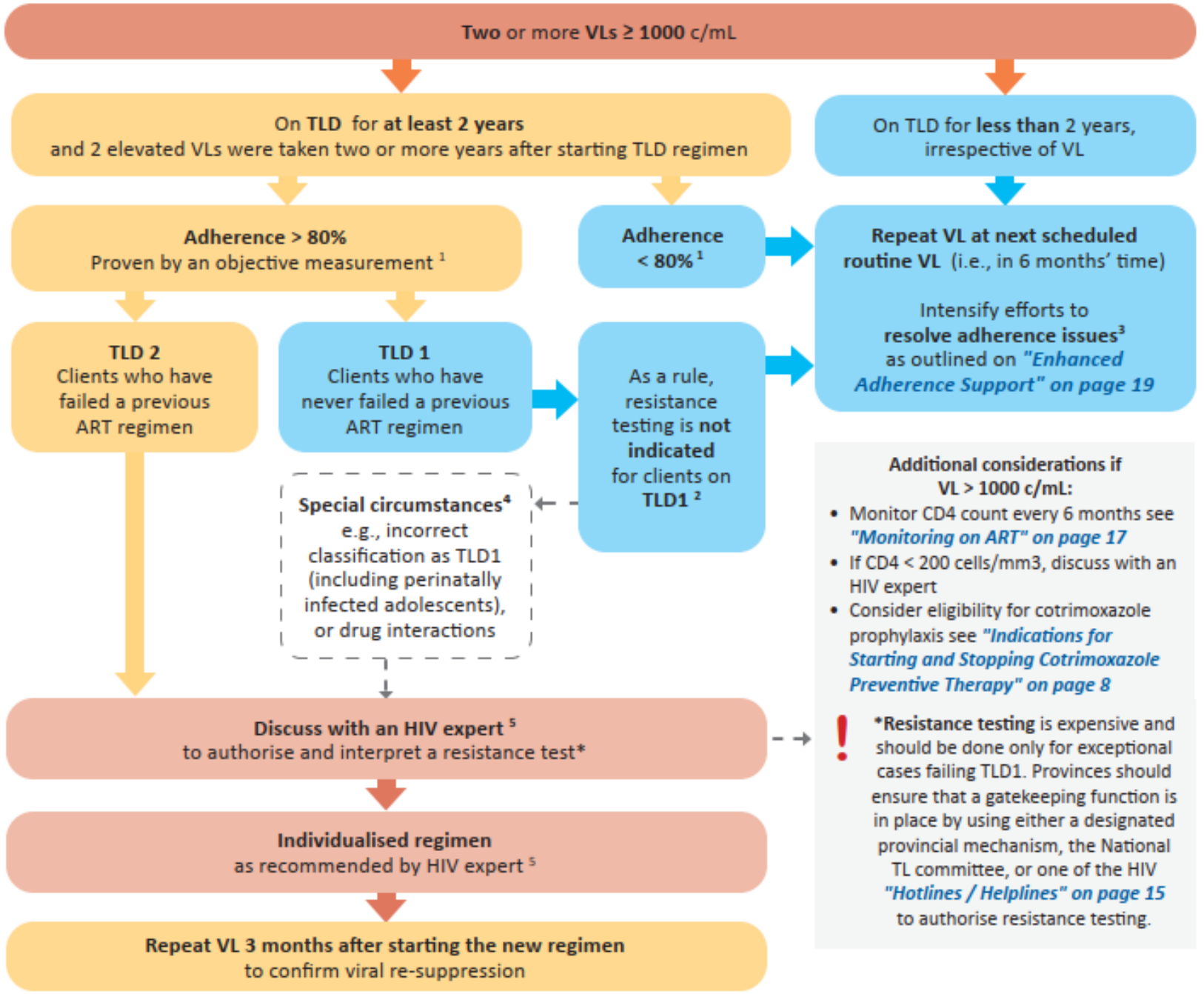
If adherence still
suboptimal [4],
or persistent low-level viraemia
(2 or more consecutive VLs between
50 and 999 c/mL)

Go to the algorithm for
"Management of Confirmed Virological Failure on TLD" on page 21

Repeat VL at next scheduled routine VL
(i.e., in 6 months' time)
Intensify efforts to **resolve adherence issues** [2]

Management of Confirmed Virological Failure on TLD

(also applicable to other DTG-containing regimens)



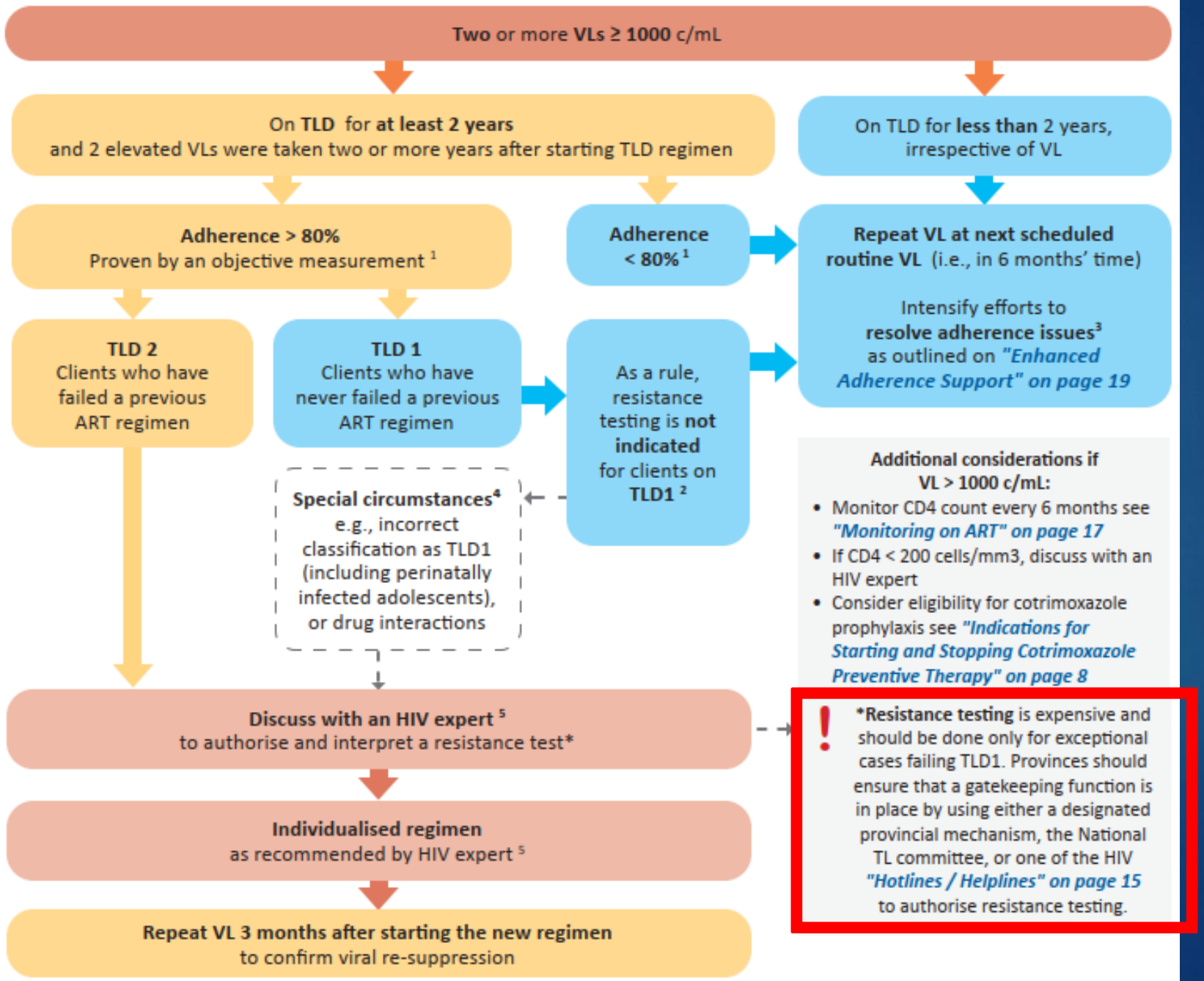
Footnote 4: Special circumstances that may warrant a resistance test for clients on TLD1 include

- **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)



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**

KZN Paediatric Hotline: **0800 006 603**

Right to Care HELPLINE

For nurses, doctors, pharmacists and other health care workers needing expert advice on all paediatric, adolescent and adult HIV and TB management.

Call during office hours
"please call me", sms or whatsapps may be sent and we can call you back.

HIV Helpline
(adult and paediatric)

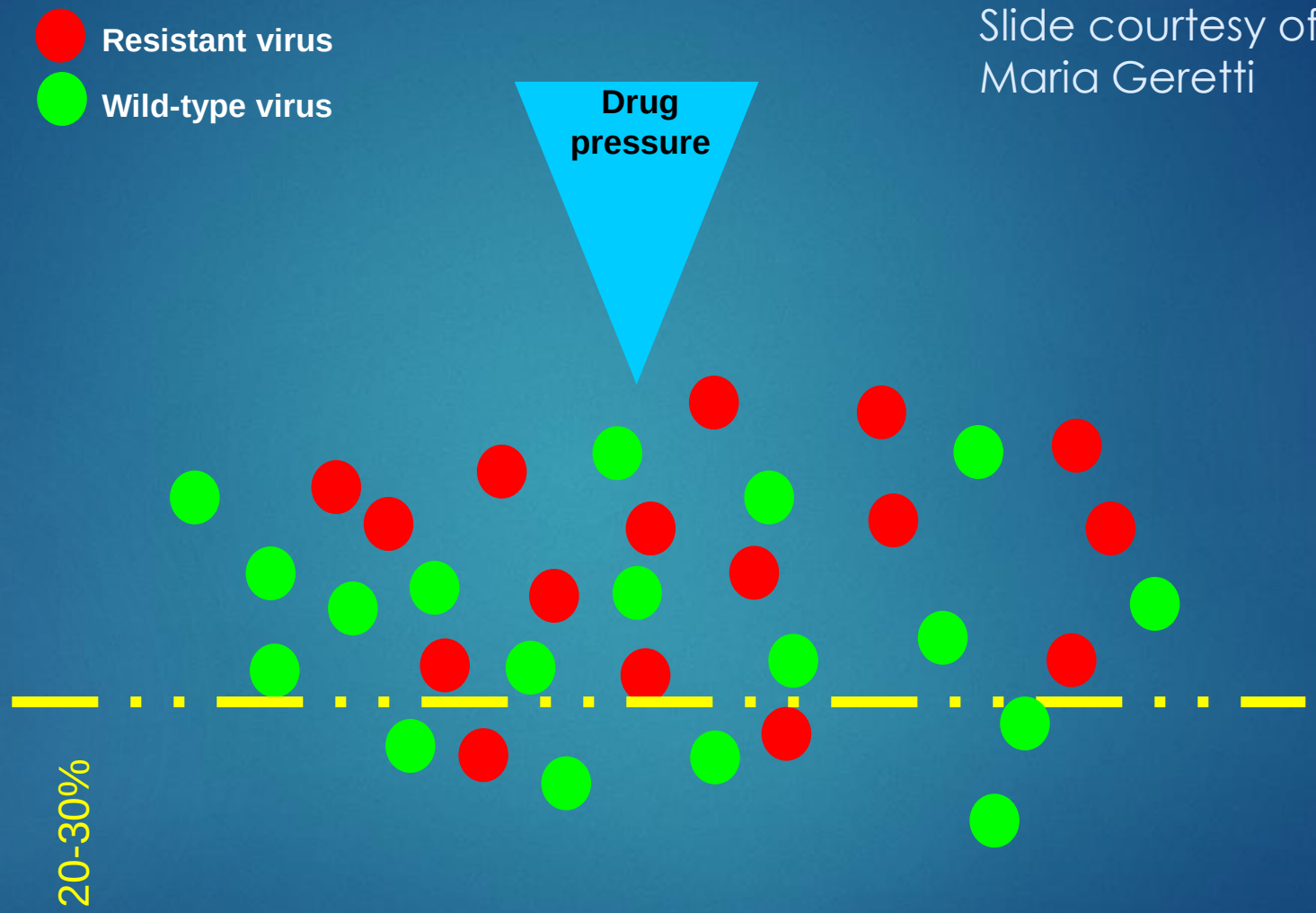
082 352 6642

TB Helpline

063 698 6543

How to do resistance testing

- Patient must be adherent before doing resistance testing



Slide courtesy of Dr Anna Maria Geretti

All Mutations Detected (HXB2 reference Sequence) Resistance mutations in bold

Reverse transcriptase	V35T, E36A, T39D, S48T, D123N, K173A, Q174K, D177E, T200A, Q207E, L214F, V245Q, E248D, I274V, R277K, Q278H, K281R, T286A, E291D, D324E, I329L, Q334N, G335D, R356K, G359T, T376S, T377L, T386I
Protease	V3I, T12S, **I15V**, L19T, **M36I**, S37N, **R41K**, **H69K**, **I93L**

Class	Drug	* STAN v6.2.0 29/05/2012
NRTI	Zidovudine	S
	Didanosine	S
	Stavudine	S
	Lamivudine	S
	Emtricitabine	S
	Abacavir	S
	Tenofovir	S
NNRTI	Nevirapine	S
	Efavirenz	S
	Etravirine	S
	Rilpivirine	S
PI/Boosted PI	Indinavir/r	S
	Saquinavir/r	S
	Nelfinavir	S
	Fosamprenavir/r	S
	Lopinavir/r	S
	Atazanavir/r	S
	Tipranavir/r	S
	Darunavir/r	S

How to do resistance testing

- Ask patient to take ARVs regularly for 1 month and then do resistance testing

- Call an expert to authorise and find out how to do the resistance test and again so they can help interpret the results
- If PI resistance apply to Third Line ART (TLART) Committee
  - **TLART@health.gov.za**
  - Third Line ART website: https://www.righttocare.org/what-we-do/third-line-art/

If there is DTG resistance

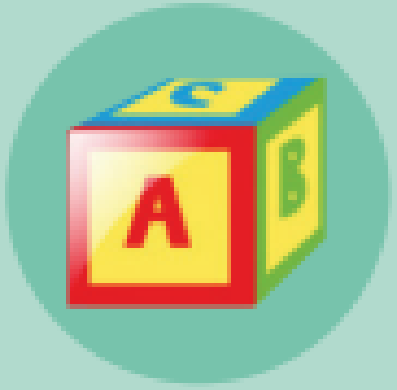
Third Line ART:

- Likely DRV/r-based regimen
- Discuss with an expert

4 very important things to remember

1

For everyone with a VL>50



Do a thorough assessment of the cause of an elevated VL. Consider the possibility of:

A. **A**dherence problems *(see "Enhanced Adherence Support" on page 22)*
B. **B**ugs (Intercurrent infections)
C. In-**C**orrect ART dosage *(see A[illegible]xure 5 "Drug Dosing Chart" on page 34)*
D. **D**rug Interactions *(see "Drug I[illegible]ractions with DTG and Rifampicin-containing TB Treatment" on page 13)*
E. R**E**sistance (if > 2 years on tre[illegible]ent)

Implement interventions to re-suppress the VL, i[illegible]luding **Enhanced Adherence Support** if indicated (See Annexure 3 Enhanced Adherence Counselling)

Recommend **condom use and contraception** as appropriate

2

Management of Confirmed Virological Failure on TLD

(also applicable to other DTG-containing regimens)

Two or more **VLs ≥ 1000** c/mL

Additional considerations if VL > 1000 c/mL:

- Monitor CD4 count every 6 months see *"Monitoring on ART" on page 17*
- If CD4 < 200 cells/mm3, discuss with an HIV expert
- Consider eligibility for cotrimoxazole prophylaxis see *"Indications for Starting and Stopping Cotrimoxazole Preventive Therapy" on page 8*

Individualised regimen
as recommended by HIV expert [5]

Repeat VL 3 months after starting the new regimen
to confirm viral re-suppression

provincial mechanism, the National TL committee, or one of the HIV *"Hotlines / Helplines" on page 15* to authorise resistance testing.

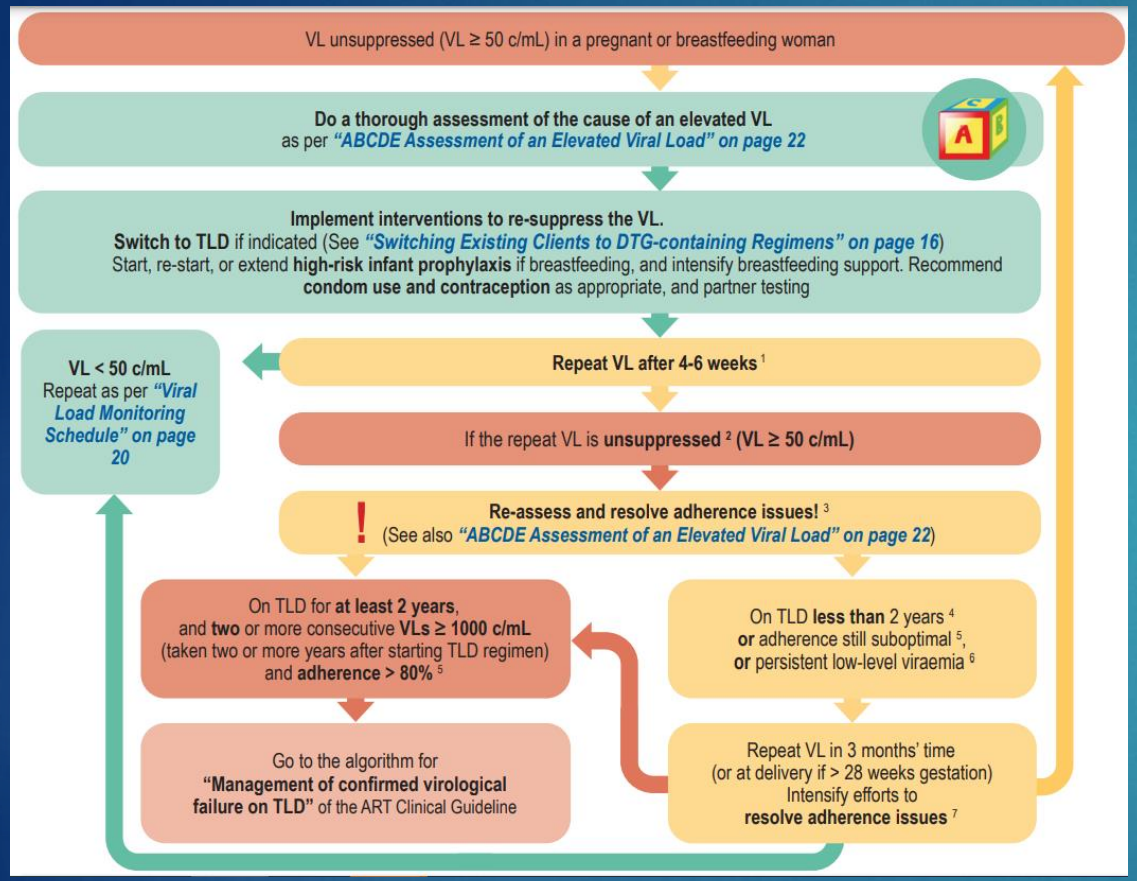
If CD4<200 provide AHD package of care

Discuss with an expert

- Screening for OIs
- Prophylaxis:
- Diagnosis and management of OIs
- Risk of IRIS when starting or switching ART
- Urgent help to achieve treatment optimisation and viral suppression

Medical Indications to Defer ART	
Indication	**Action**
TB symptoms (cough, night sweats, fever, recent weight loss)	Investigate symptomatic clients for TB before initiating ART. If TB is excluded, proceed with ART initiation and TB preventive therapy (after excluding contra-indications to TPT). If TB is diagnosed, initiate TB treatment and defer ART. The timing of ART initiation will be determined by the site of TB infection and the client's CD4 cell count
Diagnosis of drug-sensitive (DS) TB at a non-neurological site (e.g. pulmonary TB, abdominal TB, or TB lymphadenitis)	Defer ART initiation as follows: • If CD4 < 50 cells/µL – initiate ART within 2 weeks of starting TB treatment, when the client's symptoms are improving, and TB treatment is tolerated • If CD4 ≥ 50 cells/µL – initiate ART 8 weeks after starting TB treatment • In pregnant and breastfeeding women (PBFW) initiate ART within 2 weeks of starting TB treatment, when the client's symptoms are improving, and TB treatment is tolerated. Defer ART for 4-6 weeks if symptoms of meningitis are present. For further details, refer to the Family-Centered Transmission Prevention Guideline 2023
Diagnosis of drug-resistant (DR) TB at a non-neurological site (e.g. pulmonary TB, abdominal TB, or TB lymphadenitis)	Initiate ART after 2 weeks of TB treatment, when the client's symptoms are improving, and TB treatment is tolerated
Diagnosis of DS-TB or DR-TB at a neurological site (e.g. TB meningitis or tuberculoma)	Defer ART until 4-8 weeks after start of TB treatment
Signs and symptoms of meningitis	Investigate for meningitis before starting ART
Cryptococcal antigen (CrAg) positive in the absence of symptoms or signs of meningitis and if lumbar puncture is (LP) negative for cryptococcal meningitis (CM)	No need to delay ART. ART can be started immediately.
Confirmed cryptococcal meningitis	Defer ART until 4-6 weeks of antifungal treatment has been completed
Other acute illnesses e.g. *Pneumocystis jirovecii* pneumonia (PJP) or bacterial pneumonia	Defer ART for 1-2 weeks after commencing treatment for the infection
Clinical symptoms or signs of liver disease	Confirm liver injury using ALT and total bilirubin levels. ALT elevations > 120 IU/L with symptoms of hepatitis, and/or total serum bilirubin concentrations > 40 µmol/L are significant. Investigate and manage possible causes including TB, hepatitis B, drug-induced liver injury (DILI), or alcohol abuse

3



Ask all
WOCP with a high VL
if they are pregnant or breastfeeding

Discuss with an expert

4

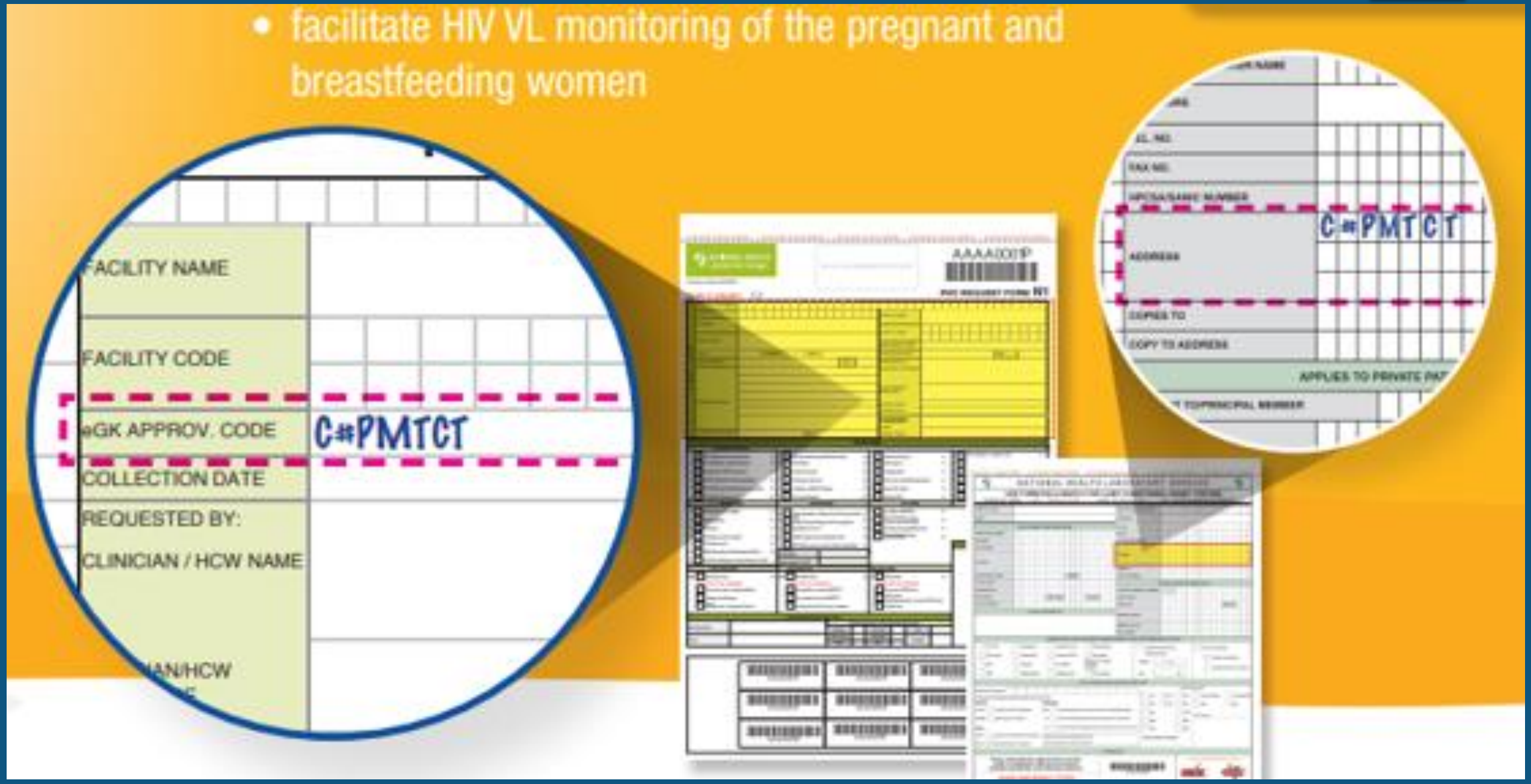
NHLS tools

- High VL RfA (results for action)
- Maternal VL eGK codes (electronic gatekeeping)

EGK codes serve three functions:

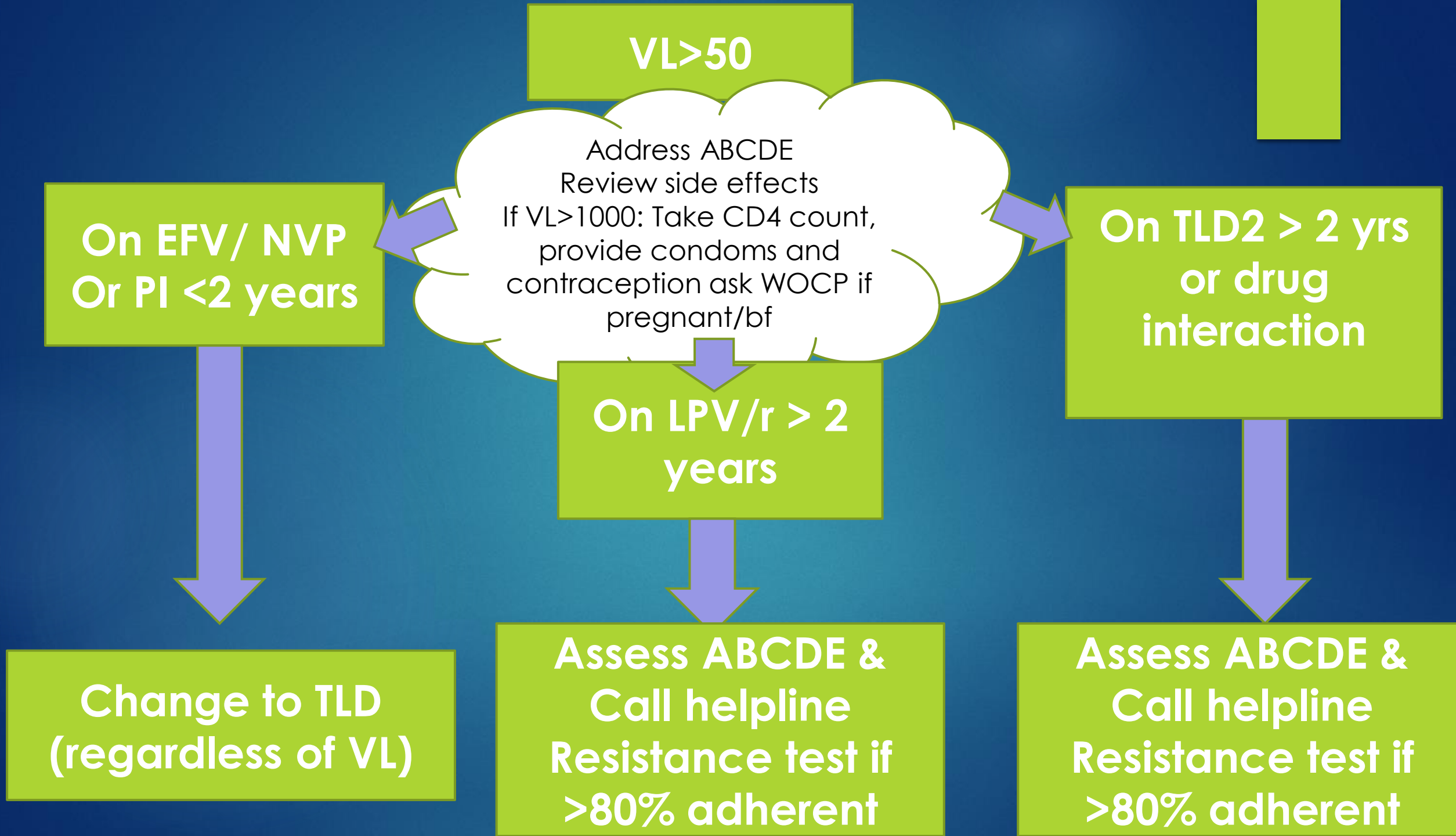
1. Prevent sample rejection
2. Allow individual patients to be traced using the NHLS RfA reports
3. Monitor VL suppression rates at a program level

C#PMTCT – pregnancy & breastfeeding
C#DELIVERY – labour/delivery



Summary

- Need to act on high VLs urgently
- Resistance develops quicker in NNRTIs than in PI's or DTG, therefore we approach them differently
- Aim to get most patients onto TLD
- Patients must be adherent to have accurate resistance test
- When in doubt call for help


VL>50
Address ABCDE
Review side effects
If VL>1000: Take CD4 count, provide condoms and contraception ask WOCP if pregnant/bf
On EFV/ NVP Or PI <2 years
On LPV/r > 2 years
On TLD2 > 2 yrs or drug interaction
Change to TLD (regardless of VL)
Assess ABCDE & Call helpline Resistance test if >80% adherent
Assess ABCDE & Call helpline Resistance test if >80% adherent

Case 1

20 year old female on TEE with a high VL. what will you do?

- CD4 count
- SRH counselling, condoms and contraception
- Assess ABCDE
- EAC and switch to AZT 3TC LPV/r
- EAC and switch to AZT 3TC DTG
- EAC and switch to TLD1
- EAC and switch to TLD2
- Call a helpline/ID consultant

Case 2

36 year old male who was on TEE and was switched to TDF 3TC LPV/r in 2022 due to treatment failure. He now has a high VL. What will you do?

- CD4 count
- SRH counselling and condoms
- Assess ABCDE
- EAC and continue TDF 3TC LPV/r
- EAC and switch to AZT 3TC DTG
- EAC and resistance test
- EAC and switch to TLD2
- Call a helpline/ID consultant

Case 3

17 year old female on AZT 3TC LPV/r since age 3, with multiple high VL over the years. She has not suppressed since 10 years old. She weighs 38kg and has a mild cough.

- CD4 count, Cr, FBC and differential
- Sputum GXP
- SRH counselling, condoms and contraception
- Assess ABCDE
- EAC and switch to TLD2 today
- EAC and HIV resistance test before switching to TLD2
- EAC and wait for blood results before switching to TLD2
- Call a helpline/ID consultant

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**	**Switch all to a DTG-containing regimen** If VL in last 12 months was ≥ 50 c/mL, continue to switch same day, but do ABCDE assessment, provide EAC if needed, and repeat the VL after 3 months as per ***"The VL non-suppression algorithm" on page 19***	**TLD** provided no renal dysfunction and age ≥ 10 yrs and weight ≥ 30 kg If clients does not qualify for TDF **ABC[1]/3TC/DTG**
[2] **Two or more VLs ≥ 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%[3]**	**Do not do a resistance test** 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 ***"The VL non-suppression algorithm" on page 19***	**TLD** provided no renal dysfunction and age ≥ 10 yrs and weight ≥ 30 kg If clients does not qualify for TDF **ABC[1]/3TC/DTG**
	Adult or adolescent on any **LPV/r or ATV/r** regimen and adherence **more than 80%[3]**	Clients who meet the definition of confirmed virological failure and have confirmed adherence more than 80% may need a resistance test. These clients do not qualify for a simple drug switch. Discuss with an HIV expert[4] 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 ***"Management of Confirmed Virological Failure on TLD" on page 21***	
	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 ***"Switching children on PI-containing regimens to DTG-containing regimens" on page 16***	

Case 4

55 year old male started TEE in 2014 and switched to TLD in 2019 with a suppressed VL.

In 2020 and 2021 VL<50.

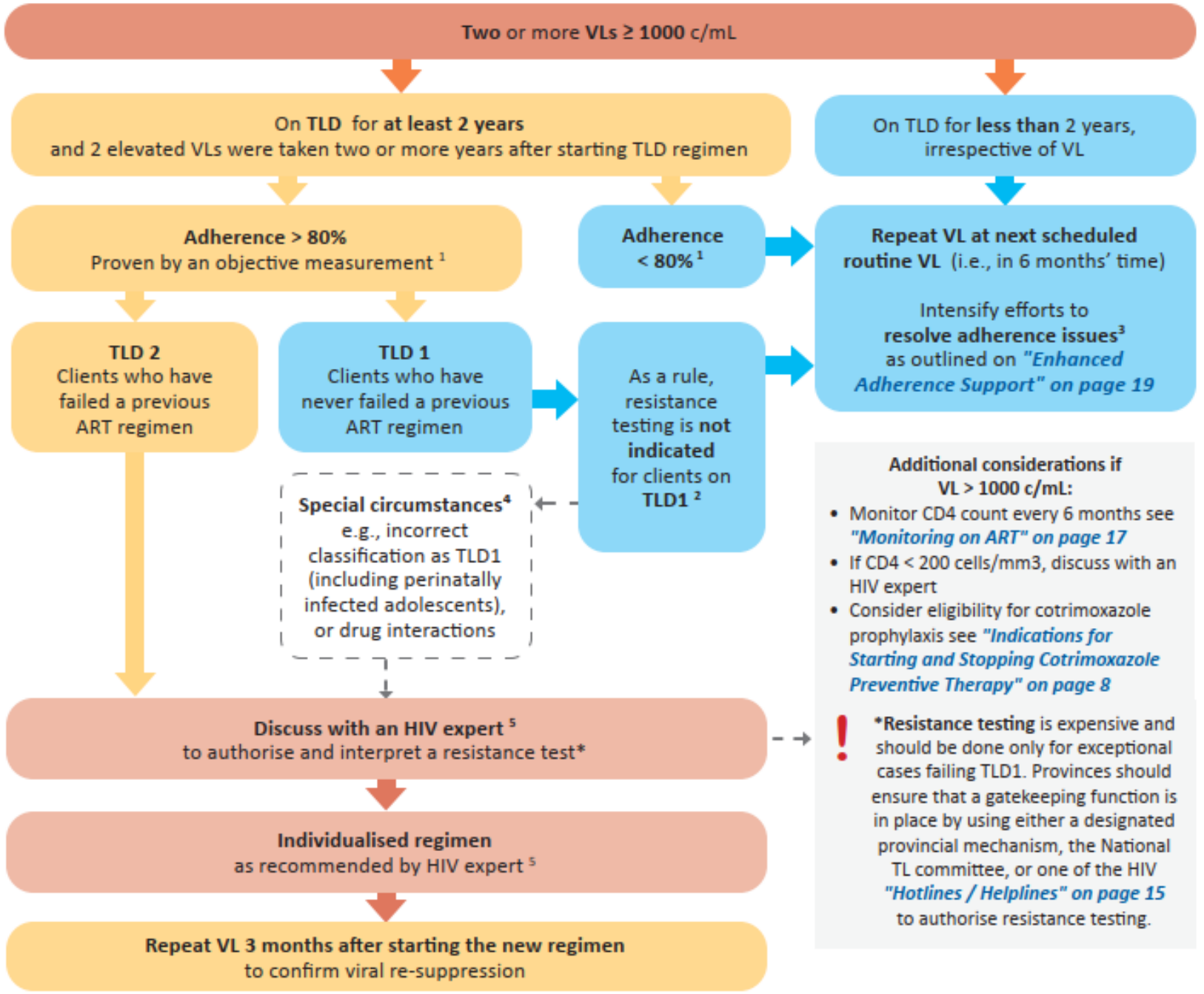
In 2022 VL: 1,2 mill.

In 2023 VL: 1.4 mill.

- CD4 count
- Assess ABCDE
- SRH counselling and condoms
- EAC and switch to AZT 3TC LPV/r
- EAC and he needs third line ART
- EAC and consider HIV resistance test
- EAC and continue TLD
- Call a helpline/ID consultant

Management of Confirmed Virological Failure on TLD

(also applicable to other DTG-containing regimens)



Case 5

42 year old female was on TEE since 2017 then switched to AZT 3TC DTG due to treatment failure in 2020.

In 2021 VL: 2380

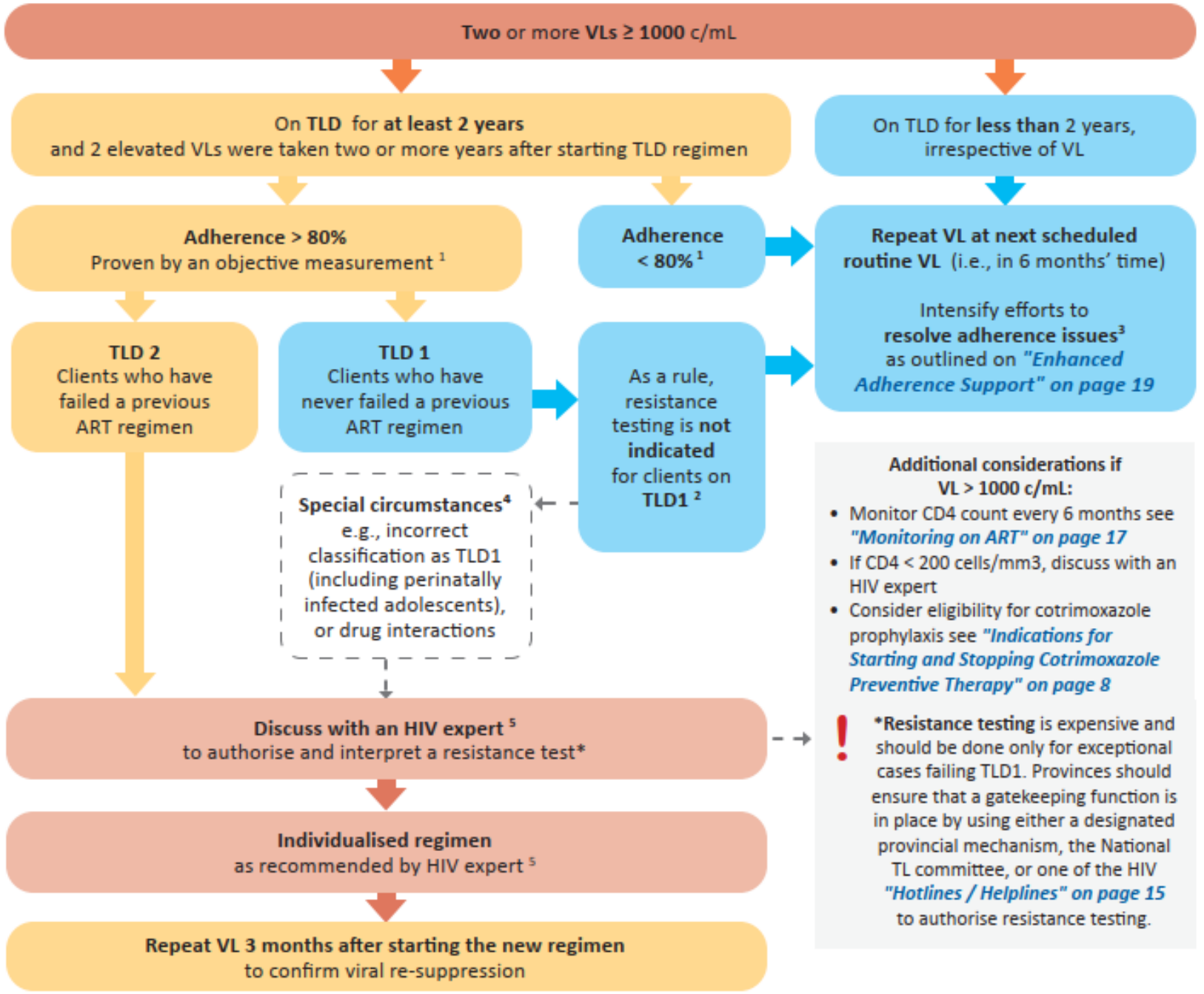
In 2022 VL: 4330

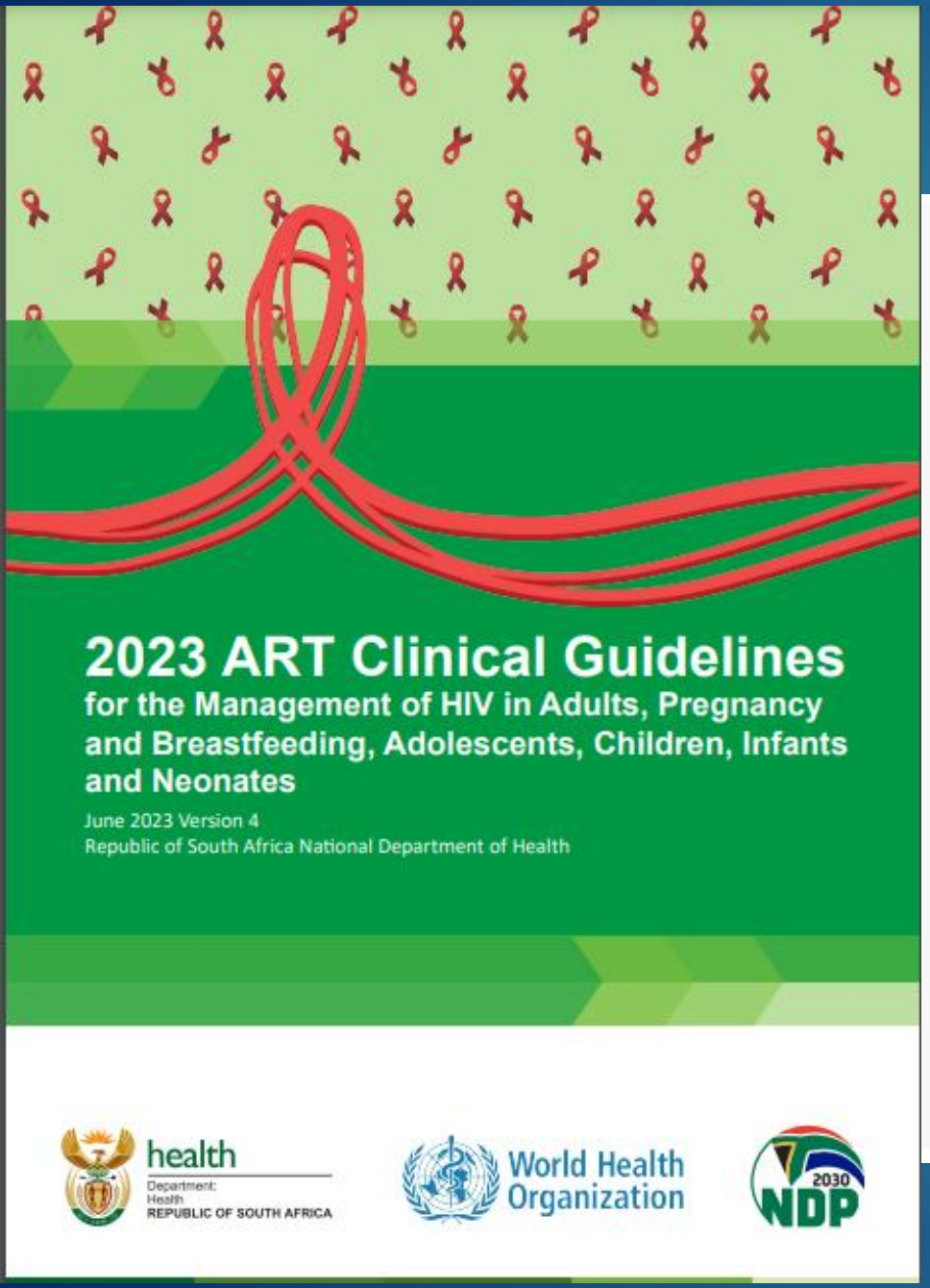
In 2023 VL: 12070

- CD4 count
- Assess ABCDE
- SRH counselling, condoms and contraception
- EAC and switch to TDF 3TC ATV/r
- EAC and he needs third line ART
- EAC and consider HIV resistance test
- EAC and switch to TLD
- Call a helpline/ID consultant

Management of Confirmed Virological Failure on TLD

(also applicable to other DTG-containing regimens)




2023 ART Clinical Guidelines
for the Management of HIV in Adults, Pregnancy and Breastfeeding, Adolescents, Children, Infants and Neonates
June 2023 Version 4
Republic of South Africa National Department of Health
health
Department:
Health
REPUBLIC OF SOUTH AFRICA
World Health Organization
2030
NDP


Right to Care HELPLINE
For nurses, doctors, pharmacists and other health care workers needing expert advice on all paediatric, adolescent and adult HIV and TB management.
Call during office hours
"please call me", sms or whatsapps may be sent and we can call you back.
HIV Helpline
(adult and paediatric)
082 352 6642
TB Helpline
063 698 6543
USAID
Right to care

THANK YOU

DISCLAIMER

This presentation is made possible by the support of the American people through the United States Agency for International Development (USAID).

The contents are the sole responsibility of Right to Care and do not necessarily reflect the views of USAID or the United States Government.