

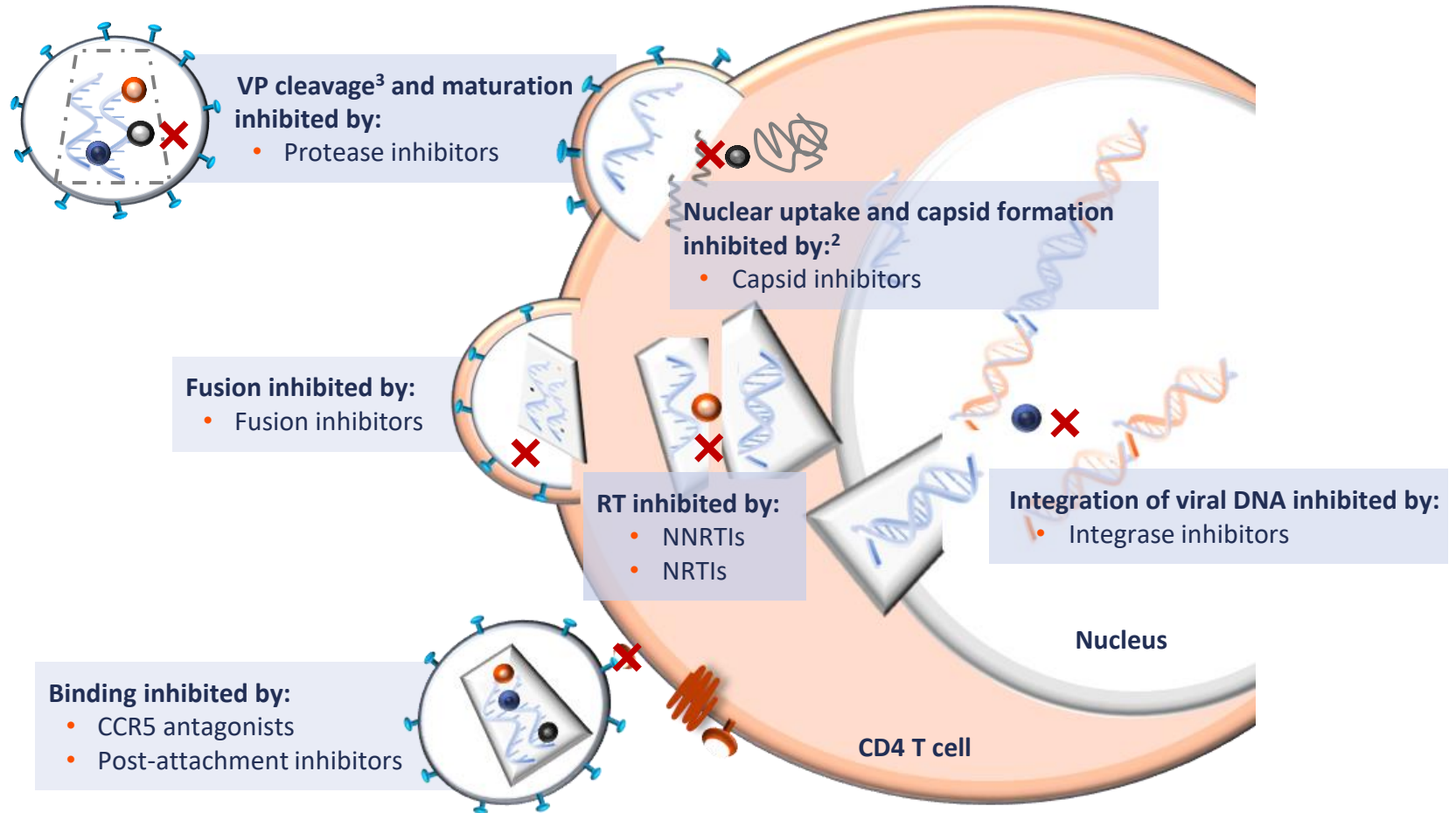











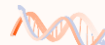

Selecting ART: Working with people living with HIV to find the best regimen

Practice aid for managing people living with HIV

For more information, visit: www.touchINFECTIOUS DISEASES.com

Overview of antiretroviral drugs/agents and their mechanisms of action¹



	HIV protease		HIV RNA		Cleaved HIV protein		CD4
	RT		HIV DNA		HIV polyprotein		CCR5
	Integrase		CD4 T-cell DNA		gp120 + gp41		

Adapted from: HIVinfo.NIH.gov. The HIV life cycle. Available at: <https://bit.ly/4bxhzPD> (accessed 10 August 2024).

Combination regimens for ART-naïve adults⁴

Three-drug regimens	Drug classes	Combinations	Pills/day ⁵⁻¹⁴
	2x NRTIs + 1x INSTI	ABC/3TC/DTG TAF/FTC/BIC	One
		ABC/3TC + DTG TAF/FTC + DTG TDF/XTC* + DTG TAF/FTC + RAL TDF/XTC* + RAL	Two or more
		TDF/3TC/DOR	One
		TAF/FTC + DOR TDF/XTC* + DOR	Two
	2x NRTIs + 1x NNRTI		

Two-drug regimens	Drug classes	Combinations	Pills/day ^{8,15-17}
	1x NRTIs + 1x INSTI	3TC/DTG	One
XTC + DTG		Two or more	

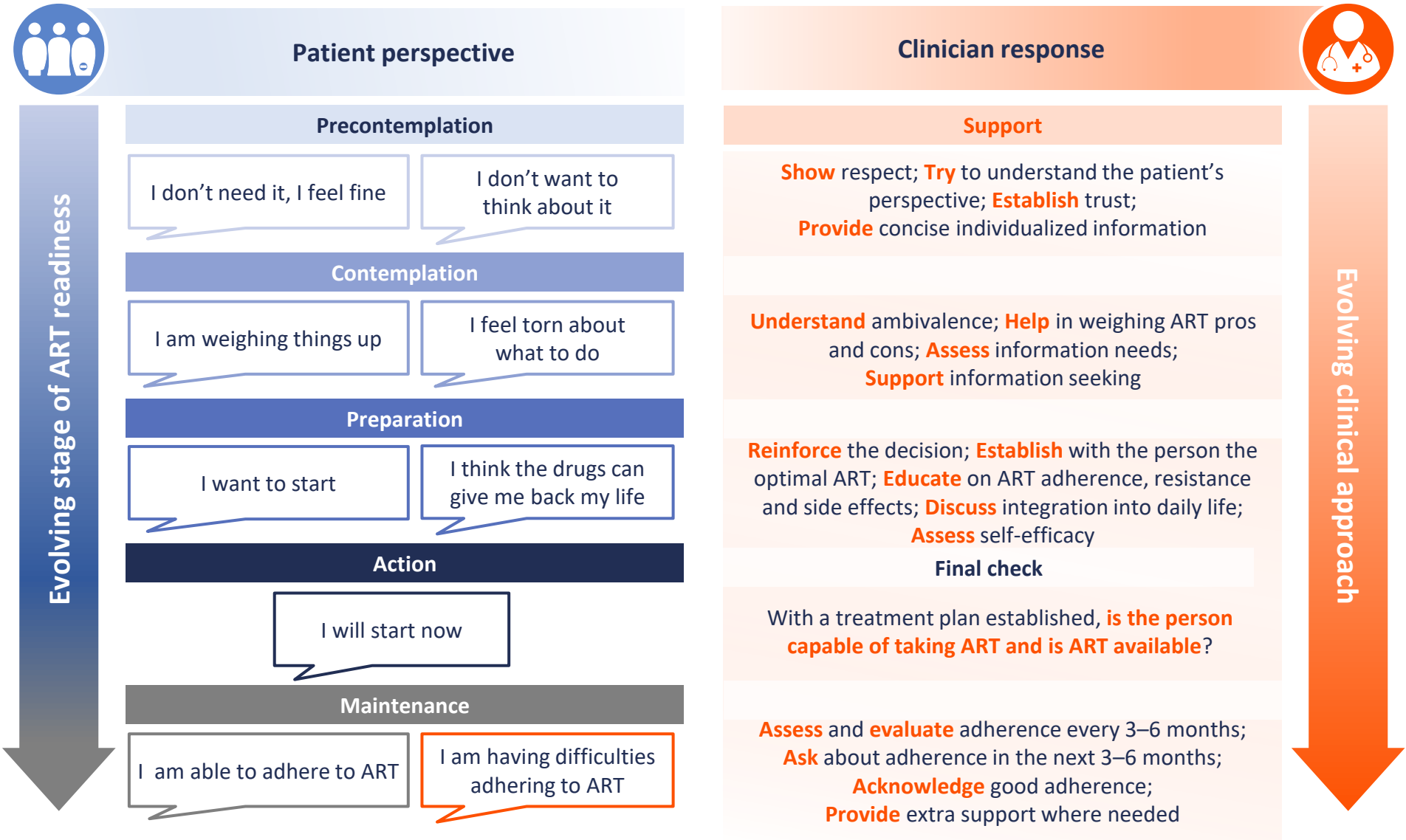
*TDF/3TC fixed-dose combination is not listed in www.ema.europa.eu/en/medicines and may not be available in some European countries.

Key considerations when selecting an ART regimen⁴

Does the person living with HIV:	Recommendations
Want to conceive or become pregnant?	<ul style="list-style-type: none"> Initiate treatment as soon as possible Preferred regimens: TDF/XTC* or TAF/FTC + DTG; TDF/XTC* or TAF/FTC + RAL
Have an opportunistic infection or TB?	<ul style="list-style-type: none"> Initiate treatment within 2 weeks of starting treatment for the opportunistic infection Initiate ART within 2 weeks of initiating TB treatment regardless of CD4 count Recommended regimens: TXF/XTC + EFV or TDF/FTC/EFV or ABC/3TC + EFV
Have treatment limiting comorbidities or regularly take other medications	<ul style="list-style-type: none"> Adjust dosing according to guideline recommendations for renal and liver impairments Review proposed ART for potential drug–drug interactions
Have acquired HIV while on regular PrEP?	<ul style="list-style-type: none"> Change PrEP to a triple-drug ART regimen, including a third drug with a high barrier to resistance (preferably, DTG, BIC or alternatively, DRV/b) plus TDF/XTC
Have difficulty swallowing?	<ul style="list-style-type: none"> Review guidelines for advice about alternative administration of ARVs



Assessing readiness to start ART and adhere to it⁴



Switch strategies for virologically suppressed persons⁴



Goal of switching: To eliminate or improve adverse events, facilitate adequate treatment of comorbid conditions and improve quality of life

Reasons for considering a regimen switch⁴



- Documented toxicity
- Prevention of long-term toxicity
- Avoidance of drug–drug interactions
- Planned pregnancy or women wishing to conceive
- Ageing and/or comorbidity
- Simplification
- Protection from HBV
- Regimen fortification
- Cost reduction



Always review possible side effects or tolerability issues with current ART. Do not assume that the person is well adapted and tolerating the current regimen, just because the viraemia is suppressed

Considerations for dual therapies (including long-acting IM dual therapy)⁴



Can be considered, if suppression of HIV-VL <50 copies/mL for ≥6 months, **but only if:**

- No historical resistance
- HBV immunity with anti-HBs antibodies
 - If non-immune, provide HBV vaccination (EACS guidelines provide further information on the treatment and monitoring of persons with HBV/HIV co-infection)



Increased risk of virological failure and resistance with long-acting IM dual therapy when ≥2 of the following baseline factors are present:

- Archived RPV-associated mutations
- HIV subtype A6/A1
- BMI ≥30 kg/m²

Abbreviations and references

Abbreviations

3TC, lamivudine; ABC, abacavir; ART, antiretroviral therapy; ARV, antiretroviral; BIC, bictegravir; BMI, body mass index; CCR5, C-C chemokine receptor type 5; CD, cluster of differentiation; DOR, doravirine; DRV/b, boosted darunavir; DTG, dolutegravir; EACS, European AIDS Clinical Society; EFV, efavirenz; FTC, emtricitabine; gp, glycoprotein; HBs, hepatitis B surface; HBV, hepatitis B virus; IM, intramuscular; INSTI, integrase strand transfer inhibitor; NNRTI, non-nucleoside RT inhibitor; NRTI, nucleos(t)ide RT inhibitor; PrEP, pre-exposure prophylaxis; RAL, raltegravir; RPV, rilpivirine; RT, reverse transcriptase; TAF, tenofovir alafenamide; TB, tuberculosis; TDF, tenofovir disoproxil fumarate; VL, viral load; VP, viral polyprotein; XTC, 3TC or FTC.

References

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16. EMA. 3TC. SmPC. 2022.
17. EMA. FTC. SmPC. 2023.

All EMA SmPCs are available at: <https://bit.ly/4dvfpkS> (all accessed 10 August 2024).

The guidance provided by this practice aid is not intended to directly influence patient care. Clinicians should always evaluate their patients' conditions and potential contraindications and review any relevant manufacturer product information or recommendations of other authorities prior to consideration of procedures, medications, or other courses of diagnosis or therapy included here.

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