

# HIV controversy

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25 yo male presents to us with a mononucleosis syndrome.

Past Medical History:

- Smoker. Alcohol abuse at weekends. Sniffed cocaine.
- Depressive syndrome
- STD (*N. gonorrhoea* urethritis)

Blood test: normal. Chest X-ray: normal.

Serology:

- ELISA negative
- WB indeterminate
- HIV RNA: 1.650.000 cop/mL

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This patient has an acute HIV infection,  
What to do next?

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The NEW ENGLAND JOURNAL of MEDICINE

REVIEW ARTICLE

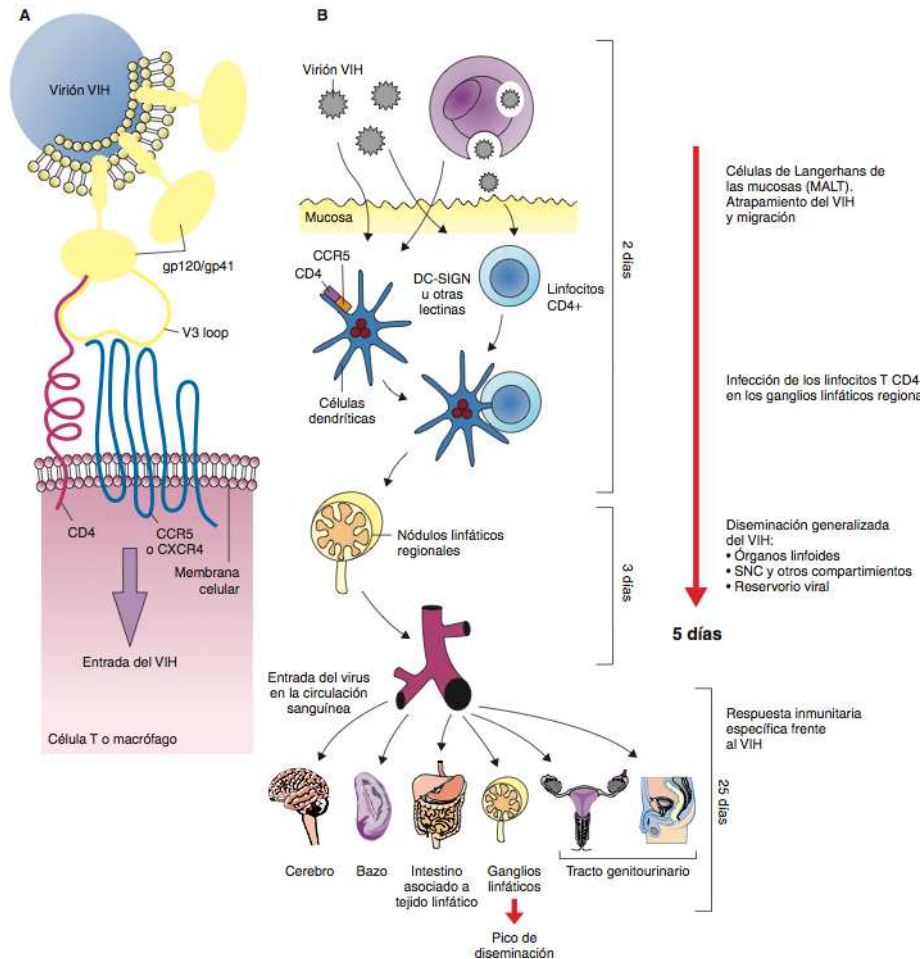
MEDICAL PROGRESS

## Acute HIV-1 Infection

Myron S. Cohen, M.D., George M. Shaw, M.D., Ph.D.,  
Andrew J. McMichael, M.B., B.Ch., Ph.D., and Barton F. Haynes, M.D.

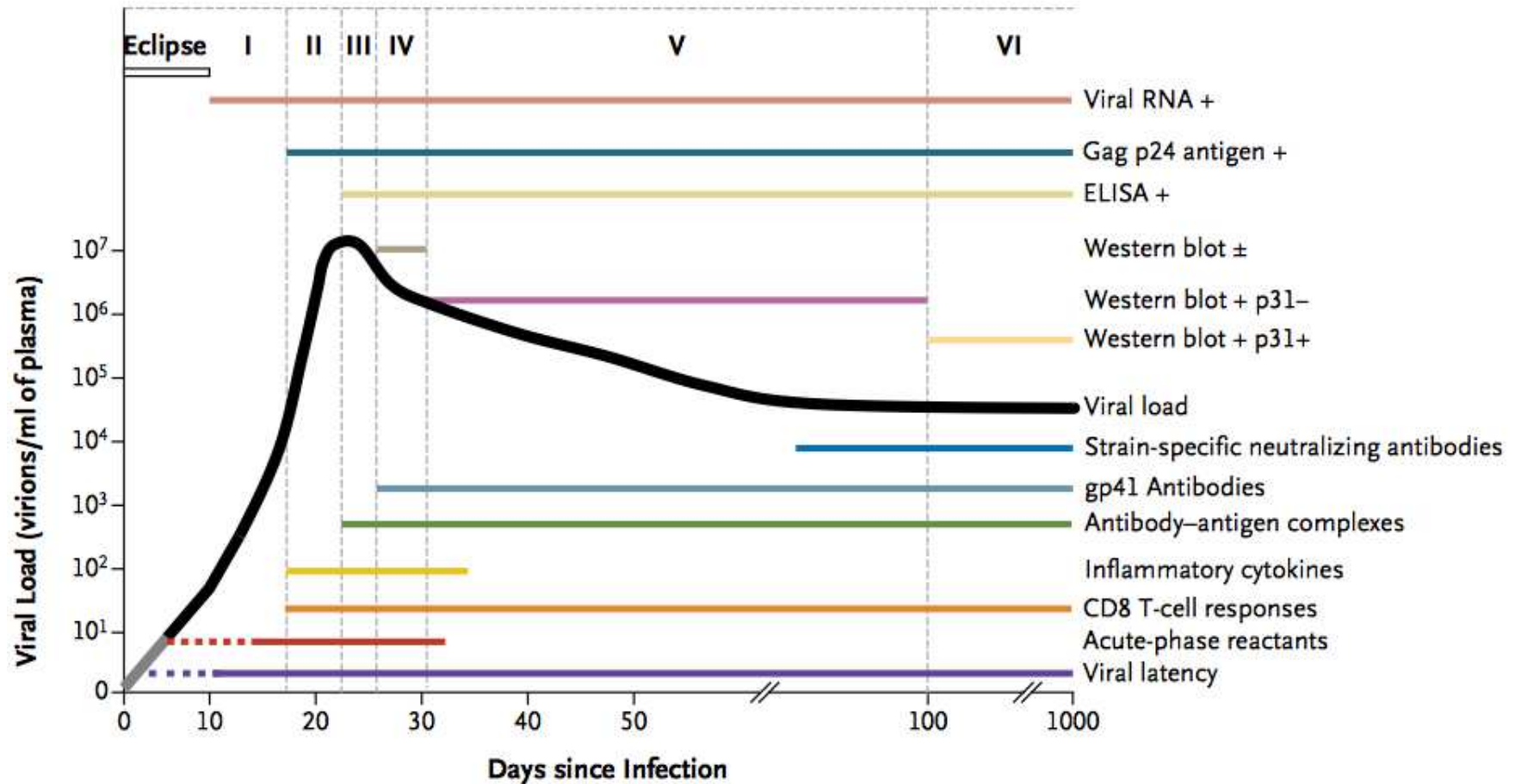
*Myron S. Cohen et al. N Engl J Med 2011;364:1943-54*

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José M. Miró et al. *Enferm Infecc Microbiol Clin* 2004;22(10):643-59

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Myron S. Cohen et al. *N Engl J Med* 2011;364:1943-54

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## Should We Treat Acute HIV Infection?

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*Meagan O'Brien and Martin Markowitz. Curr HIV/AIDS Resp. 2012 June;9(2):101-10*

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The principal reasons to treat acute HIV infection are:

- 1) Highly symptomatic patients, they are more like to progress rapidly
- 2) To preserve CD4 T+ cell counts and reduce the viral set point
- 3) To limit the size of viral reservoirs
- 4) To preserve HIV-specific immunity
- 5) Time to CD4 T+ cell count <500 is short, why to wait?
- 6) Acutely HIV patients are at risk of transmitting

*Meagan O'Brien and Martin Markowitz. Curr HIV/AIDS Resp. 2012 June;9(2):101-10*



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*The* NEW ENGLAND  
JOURNAL *of* MEDICINE

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## Short-Course Antiretroviral Therapy in Primary HIV Infection

The SPARTAC Trial Investigators\*

*N Engl J Med 2013;368:207-17*

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## **No Treatment versus 24 or 60 Weeks of Antiretroviral Treatment during Primary HIV Infection: The Randomized Primo-SHM Trial**

*The Randomized Primo-SHM Trial. PLoS Med 9(3): e1001196*

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MAJOR ARTICLE

## The Setpoint Study (ACTG A5217): Effect of Immediate Versus Deferred Antiretroviral Therapy on Virologic Set Point in Recently HIV-1–Infected Individuals

*The Setpoint Study. JID 2012;205 (1 January)*

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**Documento de consenso de GeSIDA/Plan Nacional sobre el Sida  
respecto al tratamiento antirretroviral en adultos infectados  
por el virus de la inmunodeficiencia humana  
(Actualización enero 2014)**

**Panel de expertos de GeSIDA y Plan Nacional sobre el Sida\***



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## Recomendaciones

- En los pacientes con una infección aguda sintomática se recomienda iniciar TAR de forma inmediata en todos los casos graves (con afectación neurológica o de otro órgano, sintomatología prolongada [más de 7 días de duración], eventos clínicos B o C de la clasificación de los CDC de 2003, o un recuento de linfocitos CD4+ inferior a 350 células/ $\mu$ L) (**A-II**) y se debe considerar el TAR en el resto de pacientes (**B-III**).

*Documento de consenso nacional de GESIDA*

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- En los pacientes asintomáticos con infección aguda o reciente, se recomienda iniciar TAR en los primeros cuatro meses si el paciente tiene una cifra inferior a 500 linfocitos CD4+/ $\mu$ L o una CVP superior a 100.000 copias/mL (**B-II**).
- Se debe recomendar iniciar el TAR en todos los casos en los que exista un alto riesgo de transmisión del VIH (**A-II**).
- Se debe recomendar el inicio del TAR en aquellas indicaciones de inicio de TAR que sean independientes de la cifra de linfocitos CD4+ y que se describen en el apartado de la infección crónica por el VIH (**A-II**) (**tabla 2**) y cuando la infección aguda por el VIH ocurre durante el embarazo (**A-I**).

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**Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents**



**Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents**



Developed by the HHS Panel on Antiretroviral Guidelines for Adults and Adolescents – A Working Group of the Office of AIDS Research Advisory Council (OARAC)

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## What's New in the Guidelines? (Last updated February 12, 2013; last reviewed February 12, 2013)

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### *Acute and Recent (Early) HIV Infection*

- The term “early” HIV infection is now used when describing both the acute phase of HIV infection (i.e., immediately after HIV infection and before seroconversion) and recent (i.e., within first 6 months) HIV infection.
- The recommendation for initiation of ART in patients with early infection was changed from “should be considered optional (CII)” to “should be offered (BII).”
- The section was updated to include a summary of recent randomized controlled trials that examined the role of time-limited ART in patients with early HIV infection.

*Guidelines of the Use of Antiretroviral Agents in HVI-1 Infected Adults and Adolescents*

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## Considerations for Antiretroviral Use in Special Patient Populations

### Acute and Recent (Early\*) HIV Infection (Last updated February 12, 2013; last reviewed February 12, 2013)

- Antiretroviral therapy (ART) is recommended for all persons with HIV infection and should be offered to those with early\* HIV infection (**BII**), although definitive data are lacking as to whether this approach will result in long-term virologic, immunologic, or clinical benefits.
- All pregnant women with early HIV infection should start ART as soon as possible to prevent perinatal transmission of HIV (**AI**).
- If treatment is initiated in a patient with early HIV infection, the goal is to suppress plasma HIV RNA to below detectable levels (**AIII**).

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The principal reasons to treat acute HIV infection in this patient are:

- 1) He is a symptomatic patient, he would be more like to progress rapidly
- 2) To reduce the viral set point (VL 1650000 cop/mL)
- 3) GESIDA: VL > 100000 cop/mL, (BII)
- 4) American Guidelines: treatment should be offered (BII)
- 5) He is 25 yo male: high risk of transmittion?
- 6) To limit the size of viral reservoirs
- 7) To preserve HIV-specific immunity
- 8) Time to CD4 T+ cell count <500 is short, why to wait?

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How do we treat it?

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**Documento de consenso de GeSIDA/Plan Nacional sobre el Sida  
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- Si se decide iniciar TAR se recomienda hacerlo con las mismas pautas preferentes para tratar la infección crónica por el VIH (**A-I**) (**tabla 3**). Una pauta con dos ITIAN y un inhibidor de la integrasa podría reducir más rápidamente la CVP durante las primeras 4-8 semanas en comparación con los IP o los ITINN, lo que podría facilitar la reducción de la transmisión del VIH. La combinación de RAL+2 ITIAN (preferentemente TDF/FTC) tendría, además, la ventaja de alcanzar mayores concentraciones en las secreciones genitales (**B-III**).

*Documento de consenso nacional de GESIDA*

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- Se debe efectuar siempre una prueba de resistencia y un tropismo viral en el momento del diagnóstico de la infección aguda o reciente, se vaya a iniciar TAR o no (**A-II**).
- Si no se dispone del resultado del estudio de resistencias es preferible comenzar con una pauta basada en un IP/r hasta tener los resultados (**A-II**).
- Si se inicia el TAR, éste debe administrarse por tiempo indefinido (**A-I**). En los pacientes sin criterios de TAR se recomienda reevaluar la indicación del mismo a los 6 meses, cuando la infección pasa a ser crónica.

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## Considerations for Antiretroviral Use in Special Patient Populations

### Acute and Recent (Early\*) HIV Infection (Last updated February 12, 2013; last reviewed February 12, 2013)

Genotypic drug-resistance testing should be performed before initiation of ART to guide the selection of the regimen **(AII)**. If therapy is deferred, genotypic resistance testing should still be performed because the results will be useful in selecting a regimen with the greatest potential for achieving optimal virologic response when therapy is ultimately initiated **(AII)**.

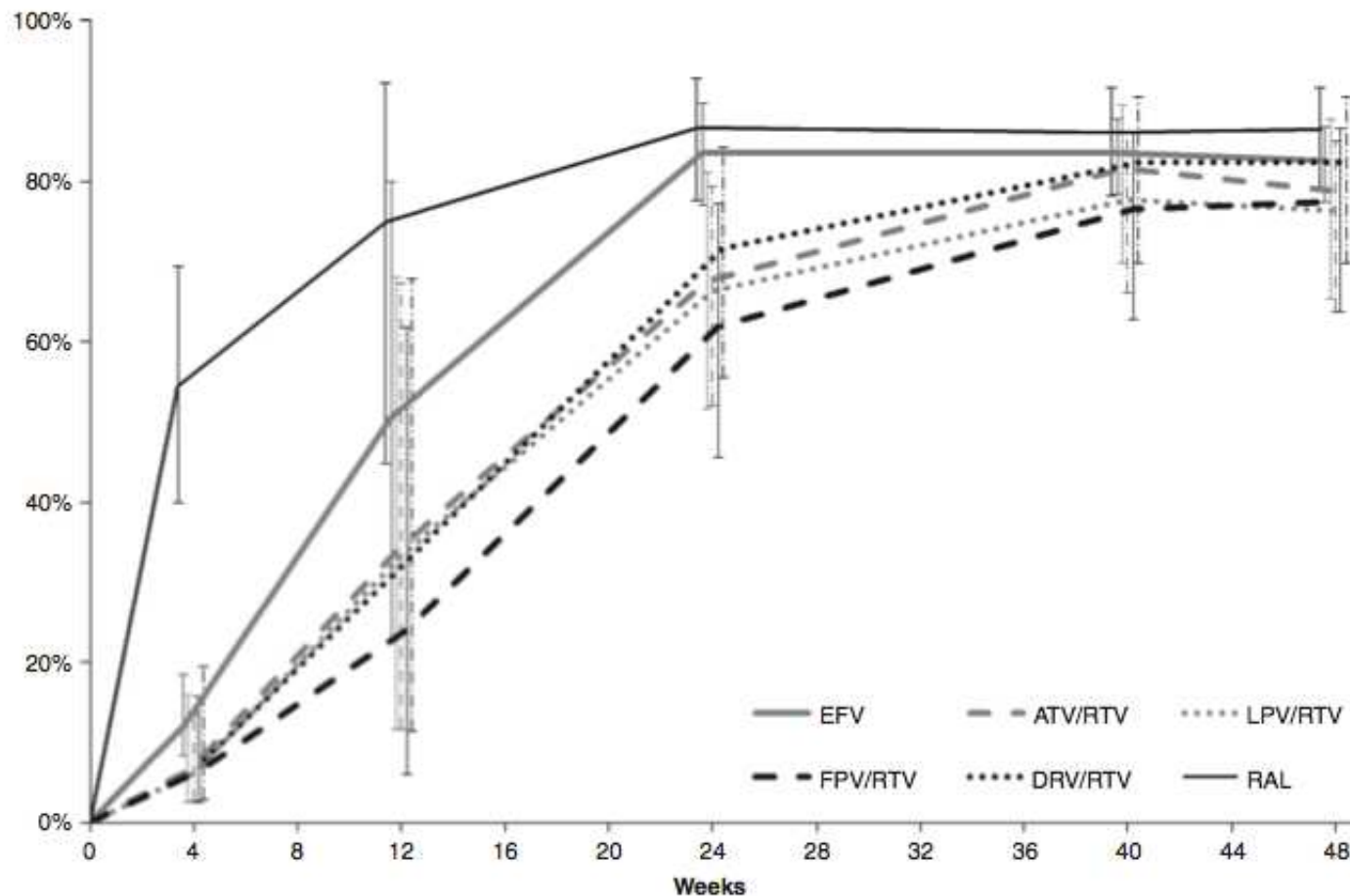
For patients without transmitted drug resistant virus, therapy should be initiated with a regimen that is recommended for patients with chronic HIV infection (see [What to Start](#)) **(AIII)**.

ART can be initiated before drug resistance test results are available. Since resistance to ritonavir (RTV)-boosted protease inhibitors (PIs) emerges slowly and since clinically significant transmitted resistance to PIs is uncommon, these drugs combined with nucleoside reverse transcriptase inhibitors (NRTIs) should be used in this setting **(AIII)**.

Patients starting ART should be willing and able to commit to treatment and should understand the possible benefits and risks of therapy and the importance of adherence **(AIII)**. Patients may choose to postpone therapy, and providers, on a case-by-case basis, may elect to defer therapy because of clinical and/or psychosocial factors.

*Guidelines of the Use of Antiretroviral Agents in HVI-1 Infected Adults and Adolescents*

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Vieira et al. *HVI Clin Trials* 2011;12(4):175-89

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## High Concentration of Raltegravir in Semen of HIV-Infected Men: Results from a Substudy of the EASIER-ANRS 138 Trial

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*Caroline Barau et al. Antimicrob. Agents Chemother. 2010, 54(2):937-9*

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The principal reasons to treat acute HIV infection with Raltegravir+2NRTIs are:

- 1) His VL is 1650000 cop/mL: try to get undetectable viremia as soon as possible
- 2) Transmitted Antiretroviral Drug Resistance to Integrase Inhibitors are rare
- 3) With Raltegravir+TDF/FTC we get a higher concentration in semen or genital secretions

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He prefers one single tablet per day...

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Drug	Position	Wild Type	Resistance Mutations	Count
Dolutegravir	138	E	A, K	138
	140	G	S, A	140
	148	Q	H	148
Elvitegravir	66	T	I, A, K	66
	92	E	Q, G	92
	97	T	A	97
	147	S	G, H, K	147
	148	Q	R, H, K	148
155	N	H	155	
Raltegravir	74	L	M	74
	92	E	Q	92
	97	T	A	97
	138	E	A, K	138
	140	G	A, S	140
	143	Y	R, H, C	143
	148	Q	H, K, R	148
	155	N	H	155

*IAS-USA Drug Resistance Mutation Panel*

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## 4.1 Therapeutic indications

Stribild is indicated for the treatment of human immunodeficiency virus-1 (HIV-1) infection in adults aged 18 years and over who are antiretroviral treatment-naïve or are infected with HIV-1 without known mutations associated with resistance to any of the three antiretroviral agents in Stribild (see sections 4.2, 4.4 and 5.1).

*European Medicine Agency. Stribild.*



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The principal reasons to simplify his treatment to Stribild are:

- 1) He has no detectable VL with Raltegravir (similar resistance profile)
- 2) He endorses good adherence (undetectable)
- 3) He asked for it
- 4) I do not have his GF, but his blood test (included kidney function) was normal

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