

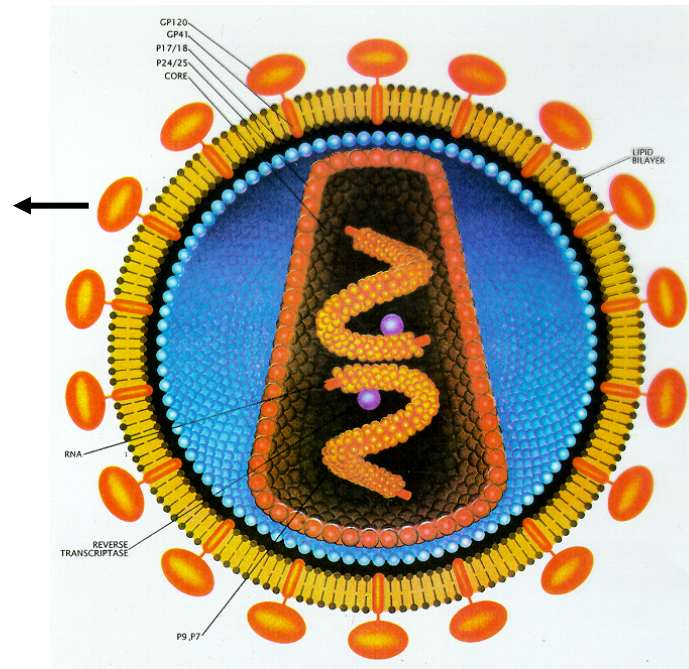
Tumores oportunistas

- O mais frequente tumor oportunista, sarcoma de Kaposi, é observado em 20% dos pacientes com AIDS.
- KS é agora associado com o herpes virus human 8 (HHV-8).
- Linfomas são frequentemente observados pacientes com AIDS.



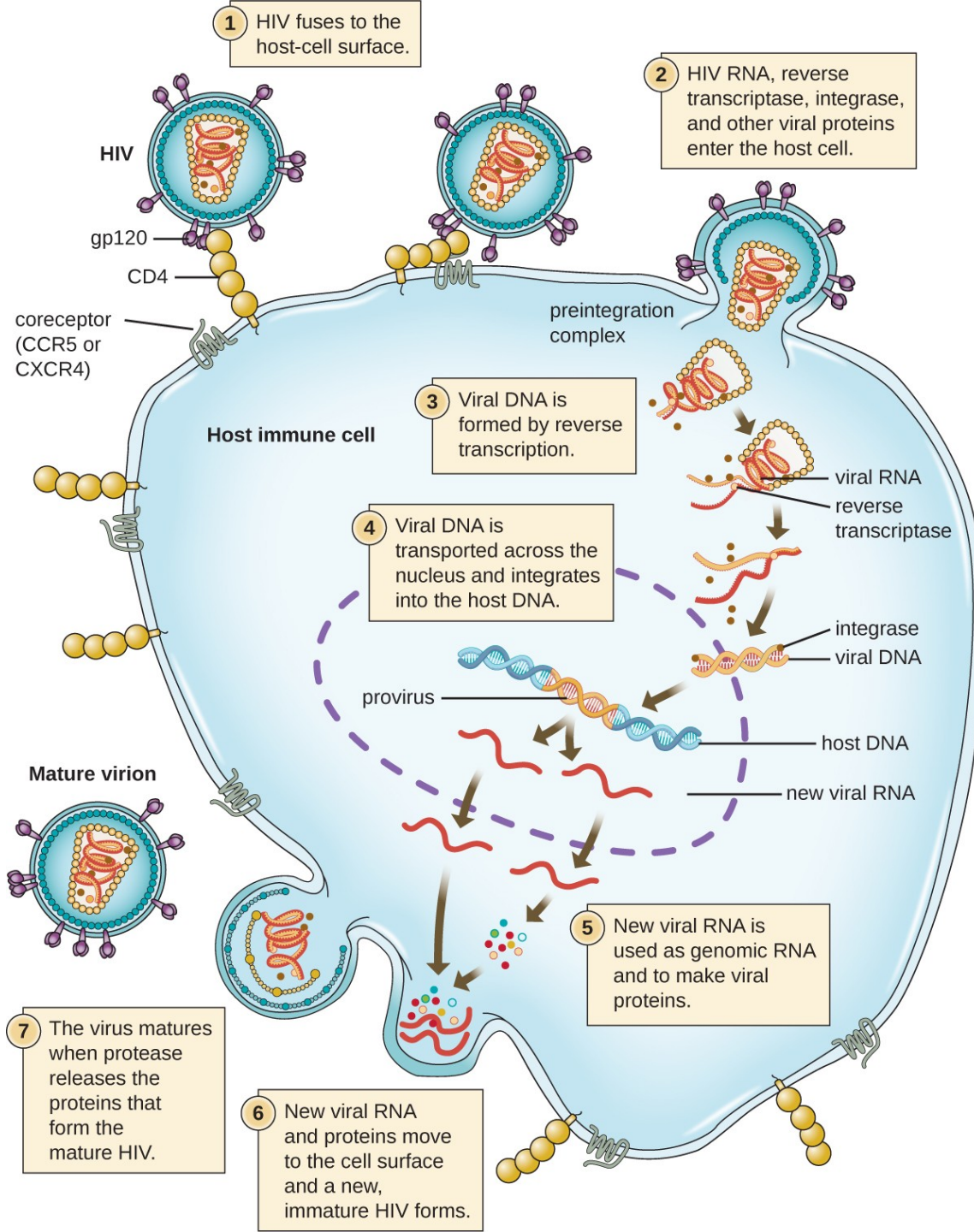
Particularidades do HIV

Regiões conservadas e variáveis.



HIV 100-120nm
de diâmetro

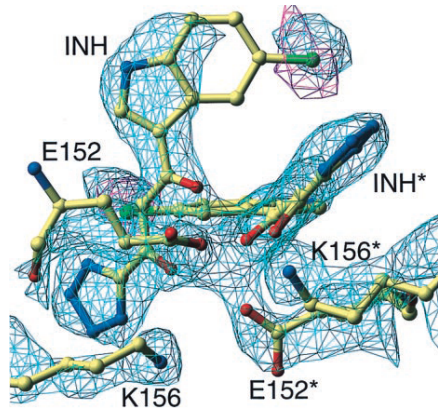
- Genoma consiste de 9200 nucleotídeos (HIV-1)
- Proteínas gag compõem o nucleocapsídeo - p15, p17 and p24
- Pol – Transcriptase Reversa, integrase/endonuclease, protease
- Env - gp160 (gp120:externa à membrana, gp41: transmembrana)
- Genes regulatórios. tat, rev, vif, nef, vpr e vpu



ANTIVIRAIS CONTRA RETROVÍRUS (HIV)

Bloqueio da integração

Existe uma aprovada e várias drogas em experimentação.

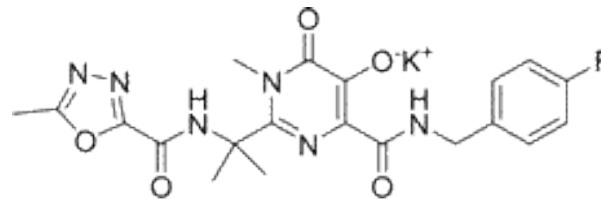


Structure of a complex of the HIV-1 integrase core domain with a novel inhibitor, 5CITEP, 1-(5-chloroindol-3-yl)-3-hydroxy-3-(2H-tetrazol-5-yl)-propanone, to 2.1-Å resolution.

Goldgur *et al.* PNAS, vol. 96, 13040–13043, 1999

MK-5018, a Novel HIV-1 Integrase Inhibitor, Merck

First HIV-integrase inhibitor approved by FDA for the treatment of HIV:



Raltegravir

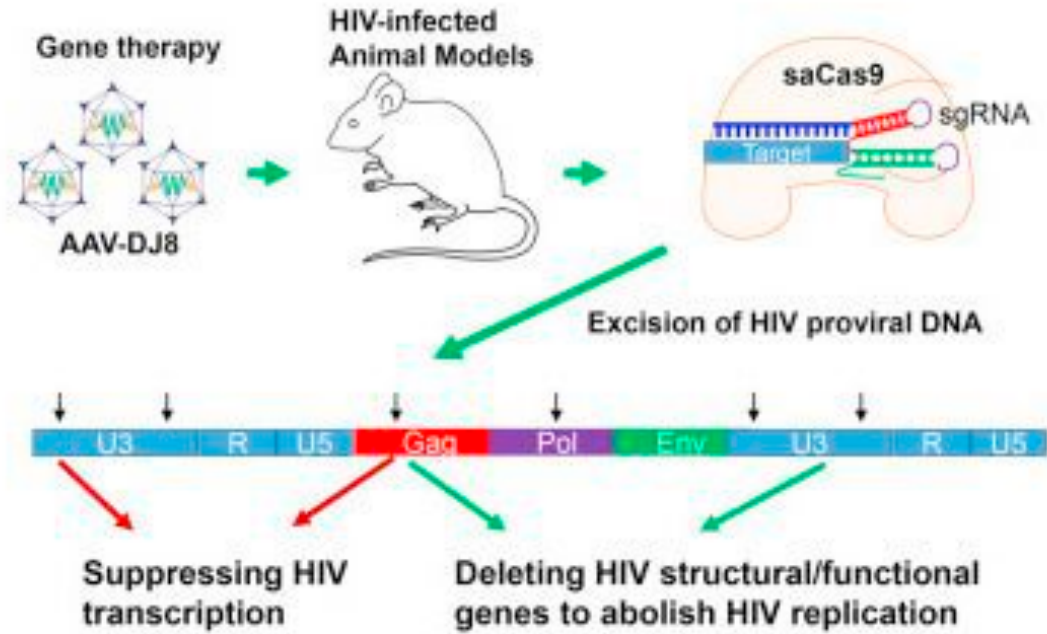


Table 1**Completed HIV-1 vaccine efficacy trials**

Trial	Vaccine description	Immune responses observed	Efficacy outcome
VAX004	AIDSVAX B/B gp120 (MN and GNE8 subtype B) gp120 in alum	Non-neutralizing antibody response; ADCVI	No efficacy
VAX003	AIDSVAX B/E gp120 (subtype B MN and CRF01_AE CM244) gp120 in alum	Non-neutralizing antibody response	No efficacy
HVTN 502/Step Trial	Adenovirus type 5 Clade B gag/pol/nef	HIV-1 specific CD4+ and CD8+ responses	No efficacy, increased infection risk
HVTN 503 (Phambili trial)	Adenovirus type 5 Clade B gag/pol/nef	HIV-1 specific CD4+ and CD8+ responses	No efficacy, increased infection risk
RV144	ALVAC-HIV (recombinant canarypox vector)/vCP1521 and AIDSVAX B/E rgp120 in alum	Humoral and cellular immune responses; Non-neutralizing Ab to V1V2*, high ADCC, HIV-1 specific IgG3, Fc γ RIIC receptor * Correlate of protection	31.2% efficacy at 42 months, 60% efficacy at 12 months
HVTN 505	DNA Gag, Pol, and Nef from HIV-1 subtype B and Env from subtypes A, B, and C, and rAd5 subtype B Gag-Pol and Env A, B, and C	T-cell responses to HIV-1 potential T-cell epitopes; CD4+ HIV Gag responses	No efficacy

HVTN, HIV Vaccine Trials Network; ADCVI, antibody-dependent cell-mediated virus inhibition; ADCC, antibody-dependent cellular cytotoxicity.