

APPENDIX

APPENDIX A

Antiretroviral drugs

Reverse Transcriptase Inhibitors

Reverse transcriptase inhibitors (RTIs) inhibit the action of the reverse transcriptase enzyme. These drugs work to prevent the viral RNA from being converted into DNA. If the viral RNA is not converted to DNA, it cannot become part of the cell.

There are three classes of RTIs:

- **nucleoside analogue reverse transcriptase inhibitors** are often called "nukes" for short. You may also see them called "NRTIs" or just "nucleosides."
- **nucleotide analogue reverse transcriptase inhibitors** are referred to as "nucleotide RTIs." These drugs work the same way as nukes, but they require one less processing step (called phosphorylation) in the body.
- **non-nucleoside reverse transcriptase inhibitors** are usually called "non-nukes" or "NNRTIs."

All three classes of drugs target the same enzyme, but their molecular structure is very different and they work in different ways.

NRTIs :

Zidovudine (AZT)

Didanosine (ddI)

Lamivudine (3TC)

Stavudine (d4T)

Zalcitabine (ddC)

Abacavir (ABC)

Emtricitabine (FTC)

Nucleotide RTIs :

Tenofovir (TDF)

NNRTIs :

Nevirapine (NVP)

Delavirdine (DLV)

Efavirenz (EFV)

Protease Inhibitors

Protease inhibitors interfere with the action of the protease enzyme. These drugs prevent protease from cutting the newly made viral proteins into functional parts.

PIs :

Ampinavir (APV)

Atazanavir (ATV)

Fosamprenavir (f-APV)

Indinavir (IDV)

Lopinavir+Ritonavir (LPV/r)

Nelfinavir (NFV)

Ritonavir (RTV)

Saquinavir (SQV)

Tipranavir (TPV)

Reference : CATIE 2003. A practical guide to HAART for people living with HIV/AIDS. (eds:Pustil R), 1sted, pp 5-7, Toronto, Canada.

DHHS. Guidelines for the use of antiretroviral agents in HIV-infected adults and adolescents. 6 October,2005.