ANTIVIRAL DRUGS III

- 1. Lamivudine
- 2. Zidovudine
- 3. Zalcitabine

1. Zidovudine (azidothymidine, AZT), Retrovir

CHEMICAL NAME:

IUPAC: 1- [4-azido-5-(hydroxymethyl) oxolan-2-yl]-5-methylpyrimidine-2, 4- Dione;

3' Azido 3' deoxy thymidine

MOA and Uses: Zidovudine is in a class of medications called nucleoside reverse transcriptase inhibitors (NRTIs). It acts by termination of viral DNA Chain elongation, due to N3 (Azido group)

Zidovudine, also known as azidothymidine, is an antiretroviral medication used to prevent and treat HIV/AIDS.

Usual DOSE: 100,300 Mg tablets; 50 mg/5 ml syrup, 10mg/ml injection

2. Lamivudine (3TC), EPIVIR; Epivir-HBV

CHEMICAL NAME:

IUPAC: 4-amino-1- [4-(hydroxymethyl) 1, 3-oxthialan-5-yl]-pyrimidine-2- one;

(-)-L-2', 3'-dideoxy-3'-thiacytidine

USES:

- 1. Lamivudine, is an antiretroviral medication used to prevent and treat HIV/AIDS.
- 2. It is also used to treat chronic Hepatitis B when other options are not possible. It is effective against both HIV-1 and HIV-2.

MOA: It is in a class of medications called nucleoside reverse transcriptase inhibitors (NRTIs); It has less cyto-toxic effect.

Usual DOSE: 150mg and 300 mg tablets; 10 mg/ml oral suspension

3. Zalcitabine (ddc; HIVID)

Ddc= Di-de- oxy cytidine

MOA: It has a role as an antiviral drug, an antimetabolite and a HIV-1 reverse transcriptase inhibitor (NRTIs). The active form is nucleoside tri phophate metabolite.

BA (oral): 52-75%

CHEMICAL NAME:

IUPAC: 4-amino-1- [4-(hydroxymethyl) 1, 3-oxthialan-5-yl]-pyrimidine-2- one

USES: Zalcitabine is a pyrimidine 2', 3'-dideoxyribonucleoside compound having cytosine as the nucleobase

Usual DOSE: 0 .375mg tablets