

Nucleoside and nucleotide analogues:

Aciclovir: Guanine analogue prodrug.

M.O.A: Phosphorylated to active triphosphate by virally encoded thymidine kinase after cellular uptake. Triphosphate interferes with viral DNA polymerase and inhibits DNA replication.

Spectrum of activity: Herpes simplex (I & II), Varicella-Zoster viruses

Indications: Treatment of Herpes simplex (I & II), Varicella-Zoster viruses. Prophylaxis of frequent recurrent episodes of herpes genitalis.

Drug interactions: Increased nephrotoxicity with nephrotoxic agents such as aminoglycosides.

Nucleoside and nucleotide analogues:

Ganciclovir:

Indications: Treatment of sight or life – threatening cytomegalovirus (CMV) infections.

Drug interactions: Concomitant administration with Zidovudine, azathiopurine and antineoplastic agents due to haematologic toxicity.

Adverse effects: Myelosuppression.

Nucleoside and nucleotide analogues:

Ribavirin:

Indications: Treatment of chronic hepatitis C infection in combination with peg-interferons.

Drug interactions: Increased nephrotoxicity with nephrotoxic agents such as aminoglycosides.

M.O.A: Active metabolite of phosphate prodrug inhibits neuraminidases of influenza types A and B.

NEURAMINIDASE INHIBITORS:

Oseltamivir

M.O.A: Active metabolite of phosphate prodrug inhibits neuraminidases of influenza types A and B.

Indications: Treatment of influenza A and B

Antivirals used for herpes viruses:

Aciclovir

Valaciclovir

Ganciclovir

Valganciclovir

Antivirals used in influenza:

Amantadine

Oseltamivir

Zanamivir

Antivirals used for hepatitis B:

Entecavir

Lamivudine

emtricitabine

tenofovir