

## Title of the learning unit: Antivirals

### Relevant terms

antivirals

- local
- systemic

antiherpetics

- DNA polymerase inhibitors
  - **aciclovir** / **valaciclovir**
  - **ganciclovir** / **valganciclovir**

antiviral agents against influenza viruses

- uncoating inhibitors
  - amantadine
- neuraminidase inhibitors
  - **zanamivir**
  - **oseltamivir**

antiretrovirals

- reverse transcriptase inhibitors
  - nucleoside and nucleotide (NRTI)
    - zidovudine
    - emtricitabine
    - tenofovir
  - non-nucleoside (NNRTI)
    - efavirenz
- protease inhibitors
  - **ritonavir**
- entry inhibitors
  - fusion inhibitors- enfuvirtide
  - CCR5 receptor antagonists (entry inhibitors)- maraviroc
- integrase inhibitors
  - **raltegravir**
- multiple drugs – Highly Active Antiretroviral Therapy (HAART)

Respiratory infections

- RSV -palivizumab
- COVID-19    bamlanivimab  
                    remdesivir

viral hepatitis treatment

- HCV

- ribavirin
- HBV – viral polymerase inhibitors
  - adefovir

antiviral biological treatment

- interferons

### **Learning outcomes**

Student knows the basic pharmacological profile (mechanism of action, side effects, indications and contraindications) of individual classes of antiviral drugs.

Student knows major interactions of antivirals with other drugs.

### **Study literature**

Rang & Dale's Pharmacology, 9th ed., 2020

Study materials in IS aVLFA0822c and aVLFA08222p.

### **Exam questions**

*Special pharmacology:* 40. Antivirals

*"Essential" drugs:* acyclovir; zidovudine