

Lesson 2. Pharmaceutical factors.

1) Choose one of the dosage form:

1. Floracid® - film-coated tablets (API is Levofloxacin, excipients are croscopovidone, magnesium stearate, sodium lauryl sulfate, povidone, microcrystalline cellulose. Shell composition - opadry, polyvinyl alcohol, titanium dioxide)
2. Ibuprofen oral suspension 100 mg/5 ml (API is ibuprofen 100 mg; excipients - polysorbate 80, glycerol, sorbitol, sodium saccharinate, citric acid monohydrate, xanthan gum, hydrochloric acid, sodium hydroxide, methyl parahydroxybenzoate, propyl parahydroxybenzoate, flavoring orange, purified water.
3. Ofloxacine ointment (APIs are ofloxacin 10 mg; dioxomethyltetrahydropyrimidine (methyluracil) 40 mg; lidocaine hydrochloride (in the form of monohydrate) 30 mg;
Excipients: macrogol 1500 (polyethylene oxide 1500, low molecular weight polyethylene glycol 1500), macrogol 400 (polyethylene oxide 400, low molecular weight polyethylene glycol 400), propylene glycol, methyl parahydroxybenzoate (nipagin or methyl paraben), propyl parahydroxybenzoate (nipazole or propyl paraben).
4. Cytoflavin solution for intravenous administration (Active substances in 1 ml of solution: succinic acid 100 mg, inosine (riboxin) 20 mg, nicotinamide 10 mg, riboflavin mononucleotide 2 mg).

2) Provide a technological scheme for this dosage form.

- 3) Look up the chemical properties of the pharmaceutical substance using the websites DrugBank, PubChem (pay attention to solubility, presence of isomers, polymorphic modifications, simple modification)
- 4) List all pharmaceutical factors that may affect the bioavailability of this drug.