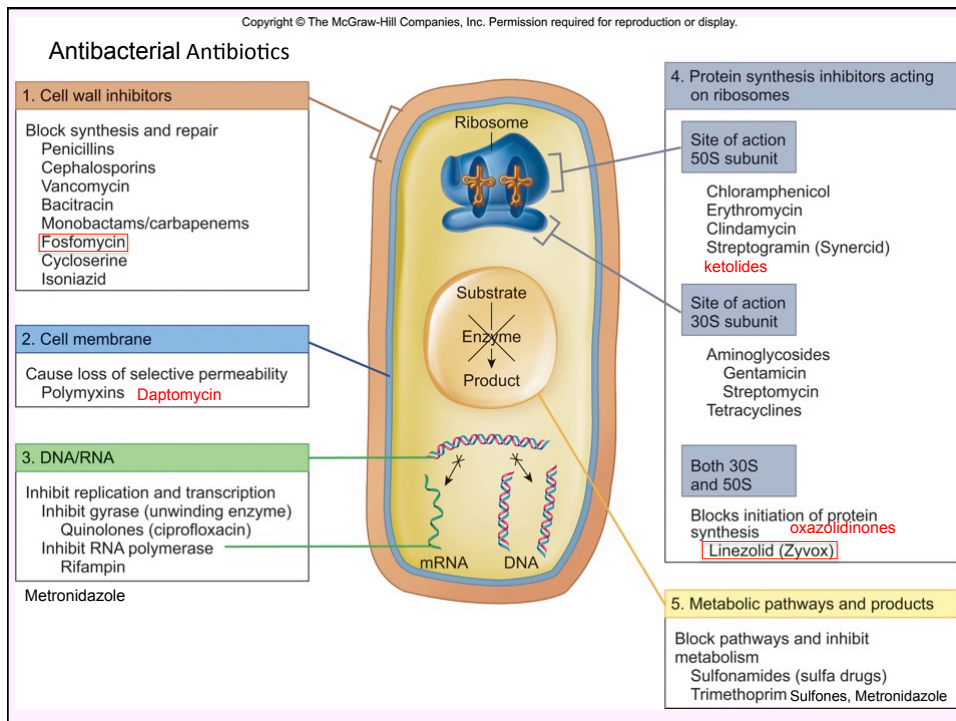


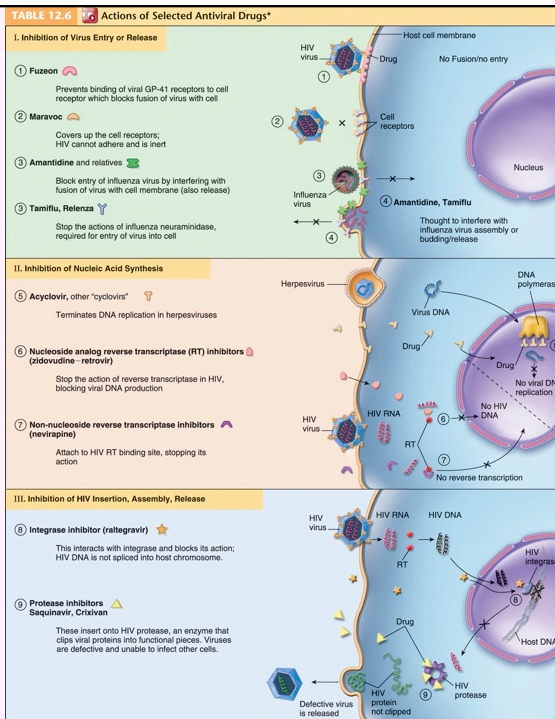
Ch 12 – Chemotherapy (overview)



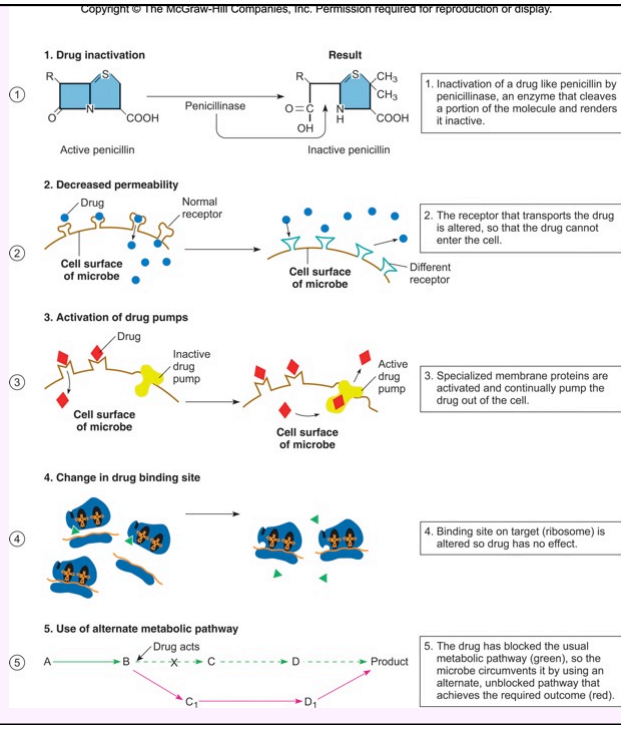
Mechanisms of drug action on Eukaryotic Pathogens

- A. affect cell wall
 - antifungal: **echinocandins**
- B. break down cell membrane or affect function
 - antifungal: polyenes, azoles
 - antiparasitic: quinacrine, praziquantel
- C. affect nucleic acid synthesis
 - antifungal: flucytosine (nucleotide analog)
 - antiparasitic: metronidazole
- D. inhibit metabolic pathways
 - antiparasitic: artemisins,, metronidazole, quinacrine
- E. others
 - inhibit microtubules: antifungal griseofulvin,
 - antihelminthics mebendazole, thiabendazole
 - bind to heme: antiparasitics quinine, chloroquine & mefloquine
 - paralyze muscles: antihelminthics pyrantel, piperazine
 - destroys scolex: niclosamide
 - affects pathogen nervous system: antihelminthic & antiarthropod ivermectin

Antivirals



Antibiotic resistance mechanisms



How does antibiotic resistance evolve?

