

# HMG-CoA Reductase Inhibitors

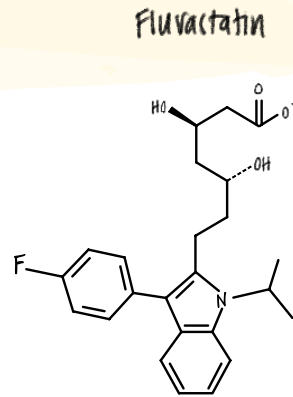
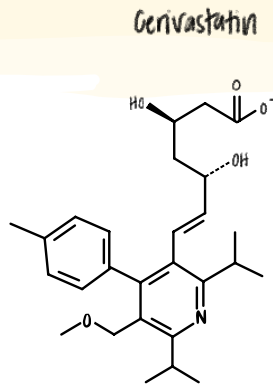
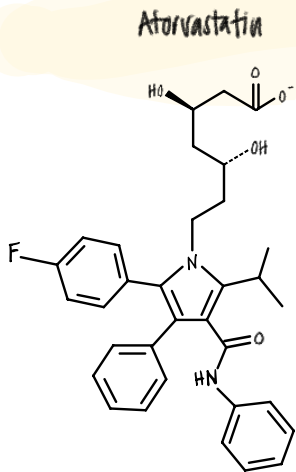
(STATINS)

- Inhibit cholesterol biosynthesis
- Stimulate receptor mediated LDL uptake
- Reduce LDL & Triglycerides

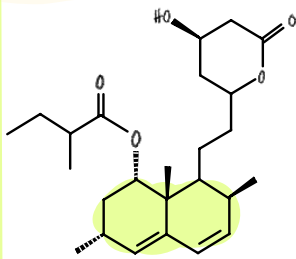
HEPATOCTE



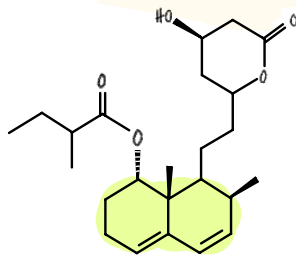
3-Hydroxy-3-methylglutaryl-coenzyme A reductase



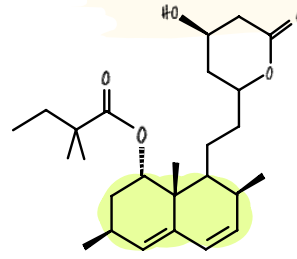
Lovastatin



Mevastatin

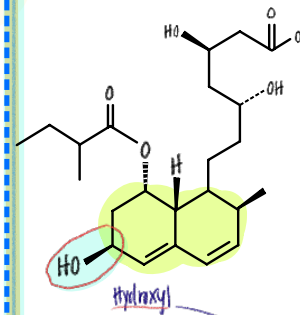


Simvastatin

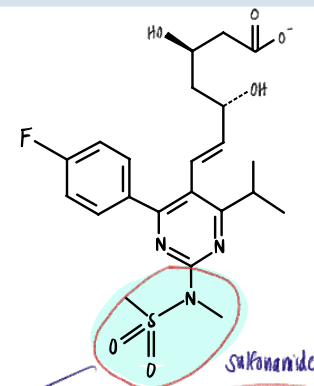


NATURAL - Hexahydronaphthalene

pravastatin



Posuvastatin



Additional hydrophilic groups on lipophilic / HMG part  $\downarrow$  lipophilicity

PRODRUG

HYDROPHILIC / "less lipophilic"