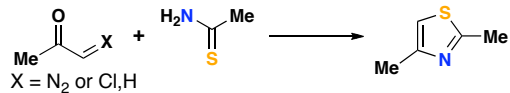
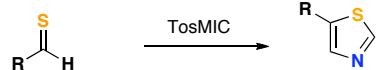
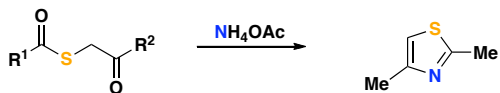
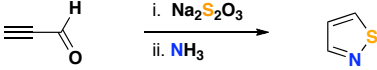
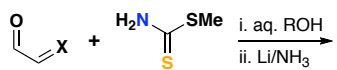


Thiazoles and Isothiazoles:

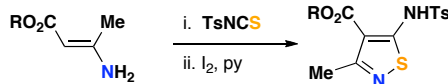
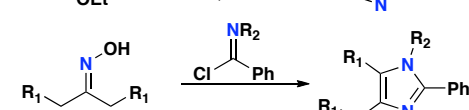
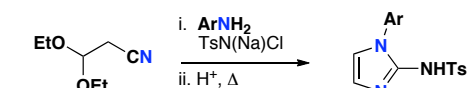
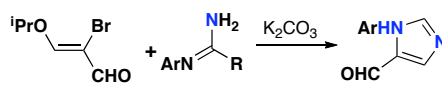
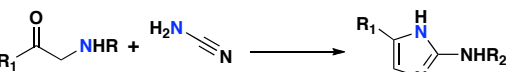
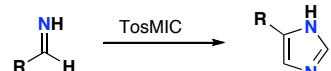
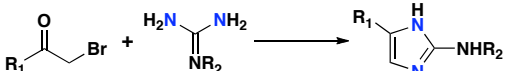
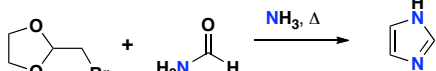
Hantzsch Thiazole Synthesis



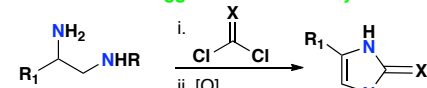
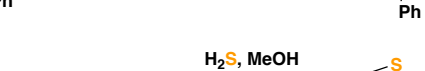
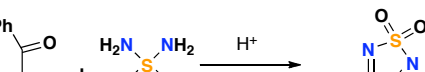
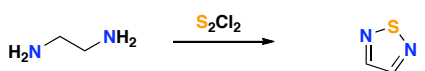
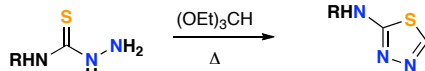
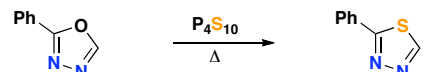
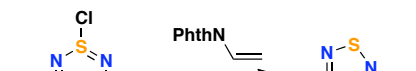
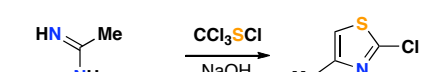
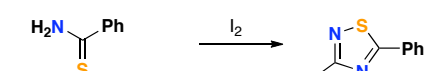
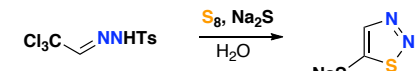
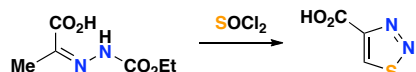
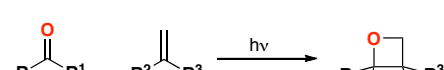
von Leusen Thiazole Synthesis



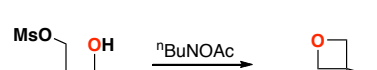
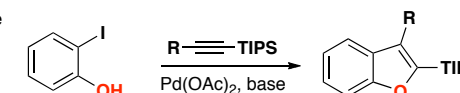
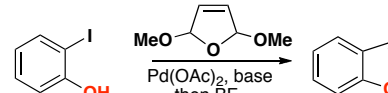
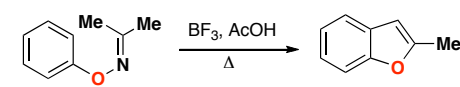
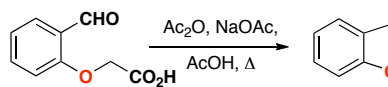
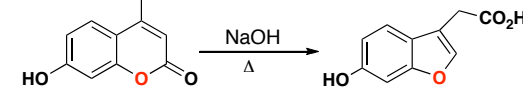
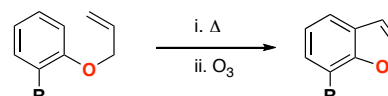
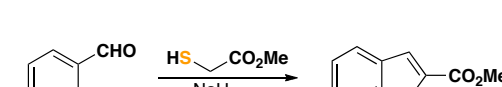
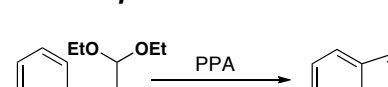
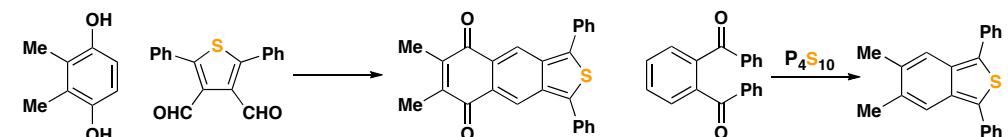
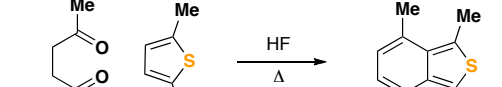
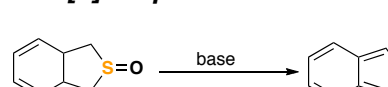
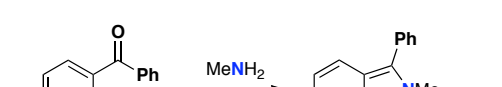
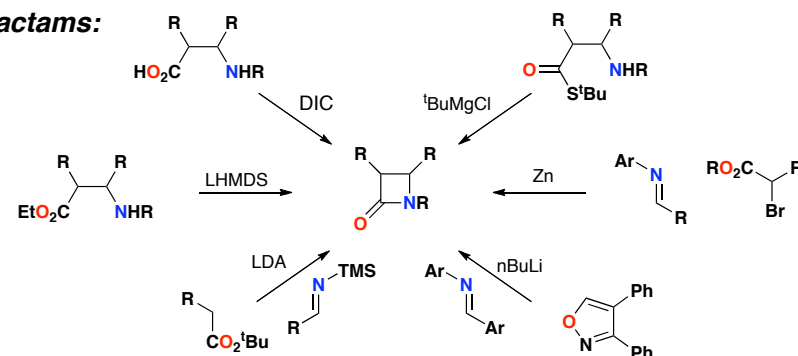
Robinson-Gabriel Thiazole Synthesis

**Imidazoles:**

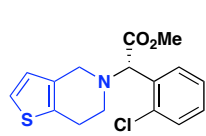
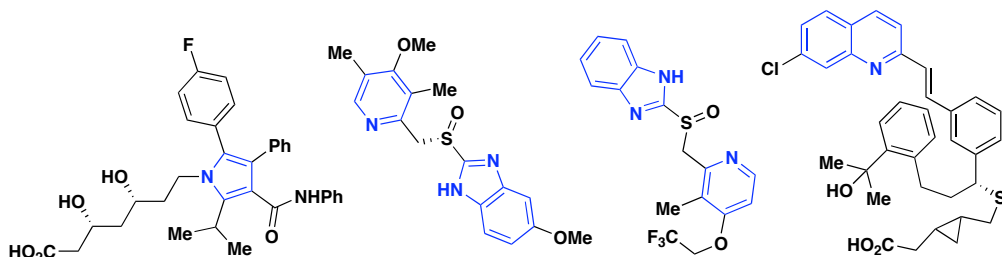
Lantos-Eggleston Imidazole Synthesis

**Thiadiazoles:****Oxetanes:**

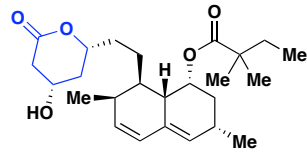
Paterno-Büchi Reaction

**Benzofurans:****Benzothiophenes:****Benzo[c]thiophenes:****Isoindoles:****Beta-lactams:**

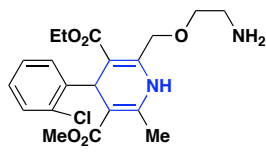
Top 15 Brand-Name Pharmaceuticals with Heterocycles:



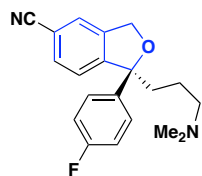
Plavix (BMS)
2006 rank: 7
2006 sales: **\$2.23B**
Treats: stroke/heart attack



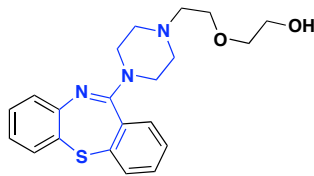
Zocor (Merck)
2006 rank: 8
2006 sales: **\$2.17B**
Treats: high LDL Cholesterol



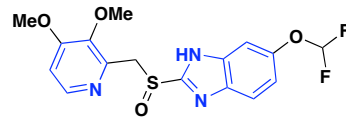
Norvasc (Pfizer)
2006 rank: 9
2006 sales: **\$2.15B**
Treats: hypertension/angina



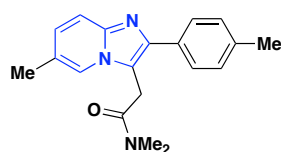
Lexapro (Forest)
2006 rank: 10
2006 sales: **\$2.10B**
Treats: depression and anxiety



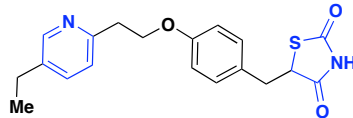
Seroquel (Astra-Zeneca)
2006 rank: 11
2006 sales: **\$2.07B**
Treats: schizophrenia/bipolar mania



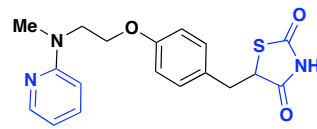
Protonix (Wyeth)
2006 rank: 12
2006 sales: **\$2.02B**
Treats: esophagitis



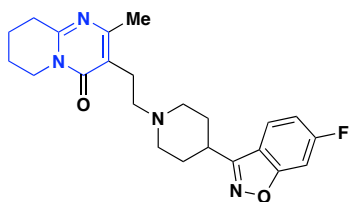
Ambien (Sanofi Aventis)
2006 rank: 13
2006 sales: **\$1.94B**
Treats: insomnia



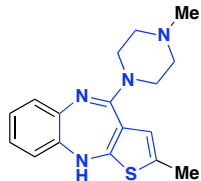
Actos (Eli Lilly)
2006 rank: 14
2006 sales: **\$1.93B**
Treats: type 2 diabetes



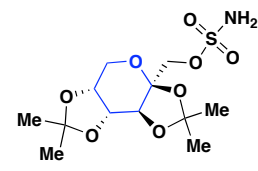
Avandia (GSK)
2006 rank: 17
2006 sales: **\$1.66B**
Treats: type 2 diabetes



Risperdal (J & J)
2006 rank: 18
2006 sales: **\$1.66B**
Treats: schizophrenia/bipolar mania

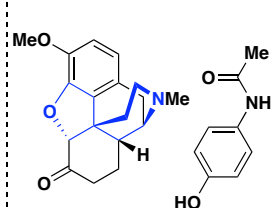


Zyprexa (Eli Lilly)
2006 rank: 19
2006 sales: **\$1.54B**
Treats: schizophrenia/bipolar mania

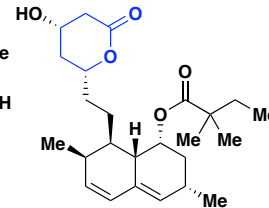


Topamax (J & J)
2006 rank: 20
2006 sales: **\$1.52B**
Treats: seizures and migranes

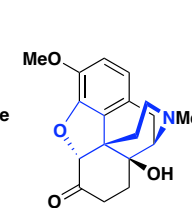
Top 21 Generic Pharmaceuticals with Heterocycles:



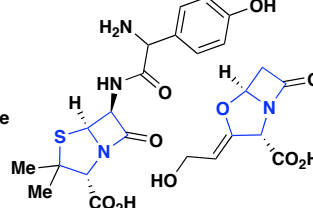
Hydrocodone/Acetaminophen
2006 rank: 1
2006 sales: **\$1.62M**
Treats: pain



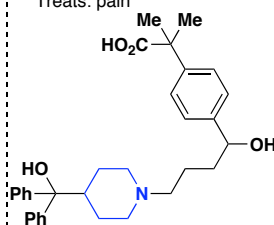
Simvastatin
2006 rank: 2
2006 sales: **\$1.39M**
Treats: cholesterol



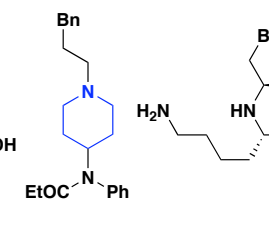
Oxycodone
2006 rank: 4
2006 sales: **\$1.18B**
Treats: pain



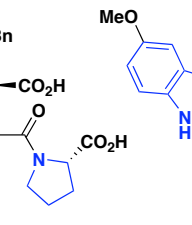
Amoxicillin/Pot Clav
2006 rank: 6
2006 sales: **\$0.93B**
Treats: antibiotic



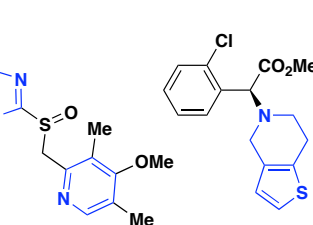
Fexofenadine
2006 rank: 7
2006 sales: **\$0.91B**
Treats: allergies



Fentanyl
2006 rank: 8
2006 sales: **\$0.84B**
Treats: pain

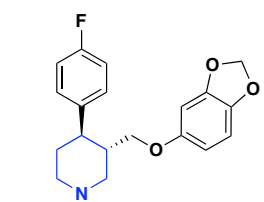


Lisinopril
2006 rank: 9
2006 sales: **\$0.73B**
Treats: hypertension

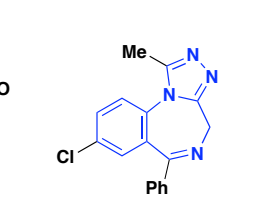


Omeprazole
2006 rank: 12
2006 sales: **\$0.64B**
Treats: heartburn

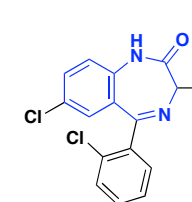
Clopidogrel
2006 rank: 13
2006 sales: **\$0.63B**
Treats: stroke, heart attack



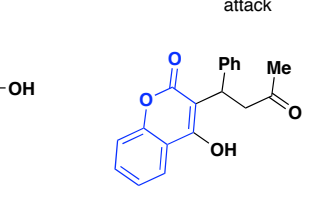
Paroxetine
2006 rank: 14
2006 sales: **\$0.62B**
Treats: depression, panic



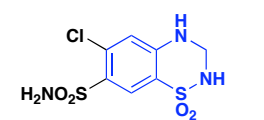
Alprazolam
2006 rank: 18
2006 sales: **\$0.43B**
Treats: anxiety, panic



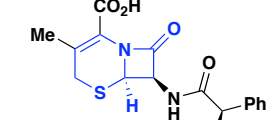
Lorazepam
2006 rank: 25
2006 sales: **\$0.36B**
Treats: anxiety



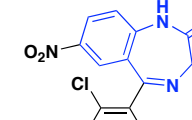
Warfarin
2006 rank: 26
2006 sales: **\$0.34B**
Treats: hypertension



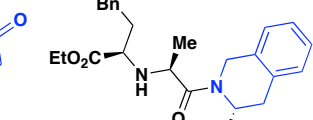
Hydrochlorothiazide
2006 rank: 30
2006 sales: **\$0.30B**
Treats: fluid buildup



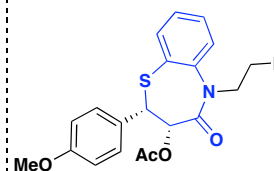
Cephalexin
2006 rank: 31
2006 sales: **\$0.30B**
Treats: antibiotic



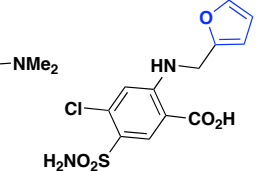
Clonazepam
2006 rank: 33
2006 sales: **\$0.27B**
Treats: seizures, panic



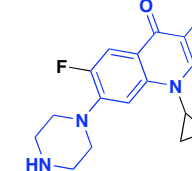
Quinapril
2006 rank: 31
2006 sales: **\$0.24B**
Treats: hypertension



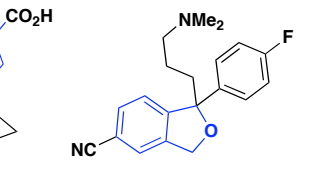
Diltiazem
2006 rank: 38
2006 sales: **\$0.23B**
Treats: hypertension, angina



Furosemide
2006 rank: 42
2006 sales: **\$0.22B**
Treats: edema, hypertension



Ciprofloxacin HCl
2006 rank: 43
2006 sales: **\$0.22B**
Treats: ulcers



Citalopram HBr
2006 rank: 45
2006 sales: **\$0.22B**
Treats: depression