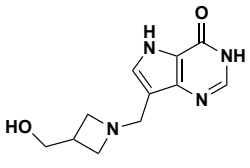
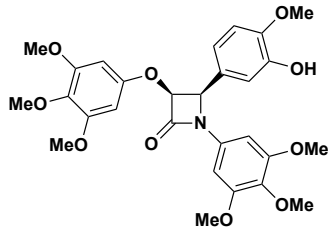
Lecture 19: Saturated Heterocycles

Suggested study music: We Are the Champions - Queen
The Final Countdown - Europe
When You Believe - Mariah Carey & Whitney Houston
Through the Fire and Flames - Dragonforce

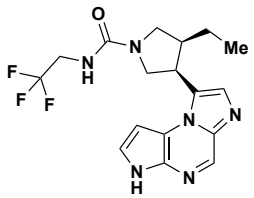
Syntheses discussed:



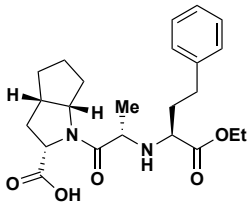
N-Ribosyl Hydrolase and Phosphorylase Inhibitors
J. Med. Chem. **2008**, *51*, 951



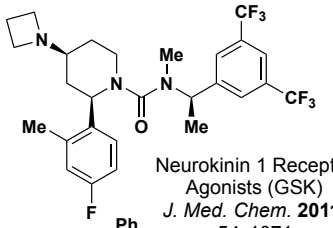
Tubulin-Targeting Antitumor Agent
J. Med. Chem. **2016**, *59*, 90



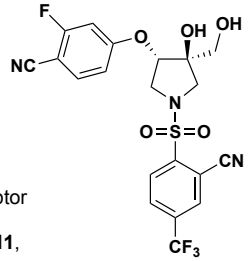
upadacitinib
(Abbvie)
WO 2011/068881
WO 2016/057372



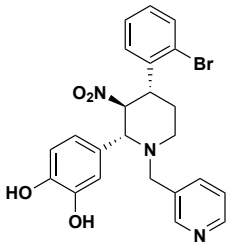
ramipril
Tetrahedron Letters,
1985, *26*, 1839



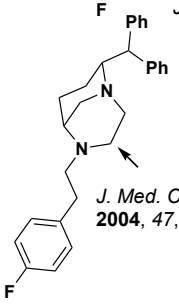
Neurokinin 1 Receptor Agonists (GSK)
J. Med. Chem. **2011**, *54*, 1071



J. Med. Chem.
2018, *61*, 9738
(GSK)

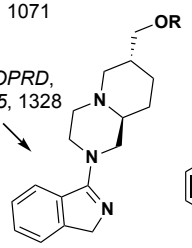


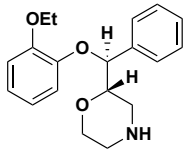
Farnesyltransferase Inhibitors
J. Med. Chem. **2002**, *46*, 2467



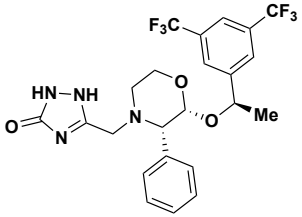
J. Med. Chem.
2004, *47*, 5101

Pfizer, *OPRD*,
2011, *15*, 1328



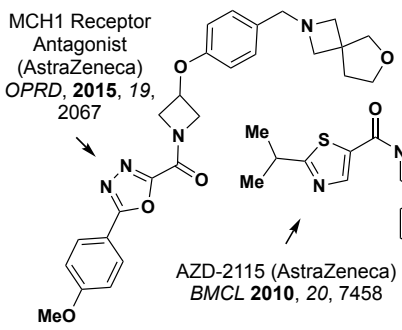


Reboxetine (Pfizer)
OPRD **2007**, *11*, 354



NK1 Receptor Agonist (Merck)
J. Med. Chem. **1996**, *39*, 9
JACS, **2003**, *125*, 2129

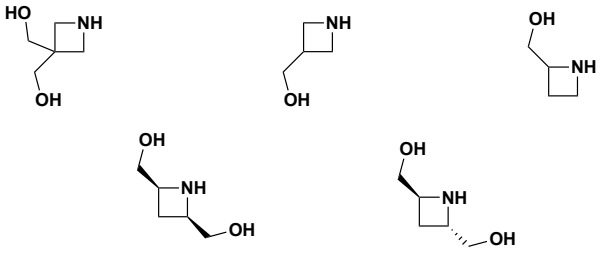
MCH1 Receptor Antagonist (AstraZeneca)
OPRD, **2015**, *19*, 2067



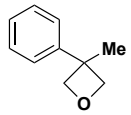
AZD-2115 (AstraZeneca)
BMCL **2010**, *20*, 7458

Problems of the day:

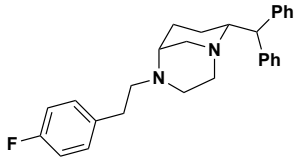
1 Propose syntheses of the following azetidines



2 Propose a synthesis of the following oxetane



3 Propose a synthesis of the following fused saturated heterocycle



4 Propose a synthesis of the following spirocyclic compound

