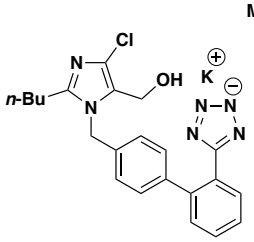
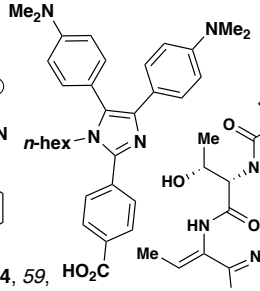
Study music: Philip Glass (part 2)

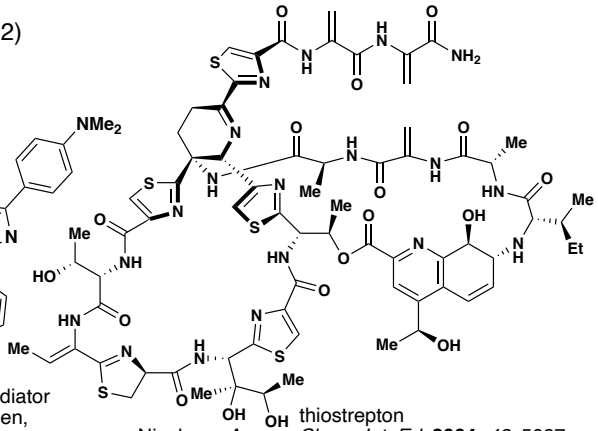
Syntheses discussed:



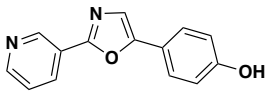
Cozaar (losartan)
Merck, *J. Org. Chem.* **1994**, *59*, 6391; *Org. Lett.* **2004**, *6*, 929



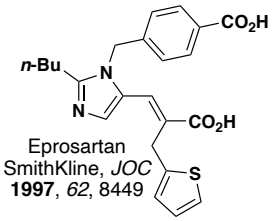
PGP mediator
Ontogen, *BMCL* **2000**, 2599



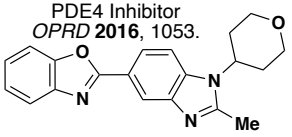
thiostrepton
Nicolaou, *Angew. Chem. Int. Ed.* **2004**, *43*, 5087



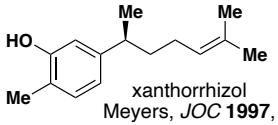
halfordinol
Onaka, *TL* **1971**, 4393



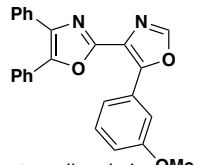
Eprosartan
SmithKline, *JOC* **1997**, *62*, 8449



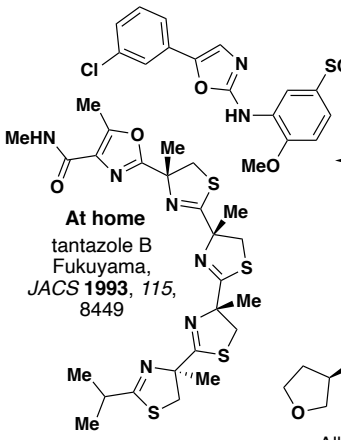
PDE4 Inhibitor
OPRD **2016**, 1053.



xanthorrhizol
Meyers, *JOC* **1997**, *62*, 5219



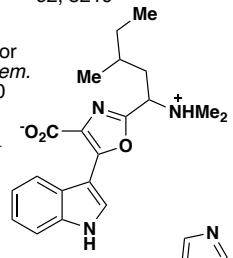
prostacyclin mimic
BMS, *JMC* **1993**, *36*, 3884

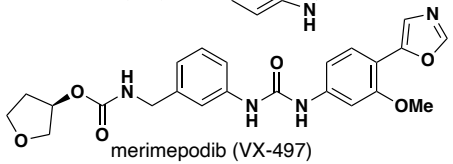


At home
tantazole B
Fukuyama, *JACS* **1993**, *115*, 8449

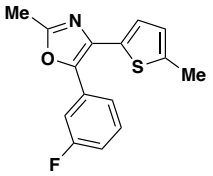
VEGFR2 inhibitor
GSK, *J. Med. Chem.* **2005**, *48*, 1610

martefragin A
Nakagawa, *TL* **1998**, *39*, 5983

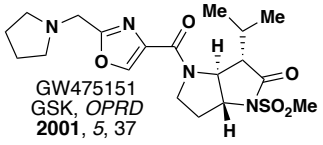




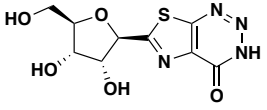
merimepodib (VX-497)
Albany Molecular, *OPRD* **2002**, *6*, 677



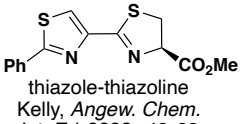
COX-2 inhibitor
JMC **2002**, *45*, 1511



GW475151
GSK, *OPRD* **2001**, *5*, 37



JOC **1985**, *50*, 1741



thiazole-thiazoline
Kelly, *Angew. Chem. Int. Ed.* **2003**, *42*, 83

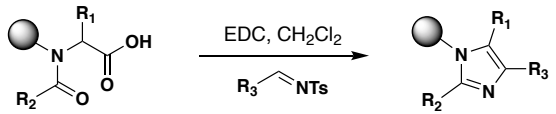
Reading assignment: HC chapters 23-24, PCC imidazoles

Partial list of concepts/transforms discussed:

Hantzsch azole synthesis
van Leusen azole synthesis
Robinson-Gabriel cyclodehydration
Fischer oxazole synthesis
Meyers oxazoline method
Cook-Heilbron thiazole synthesis

Problems of the day:

1



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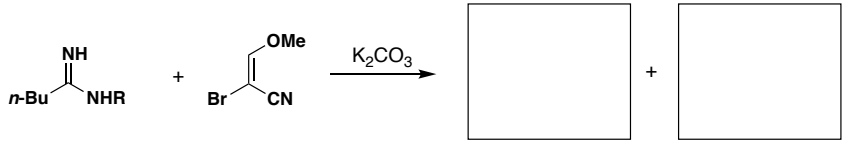
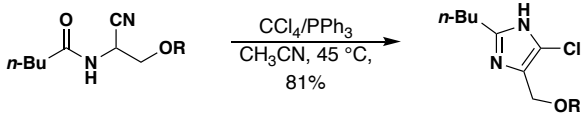


major minor

3



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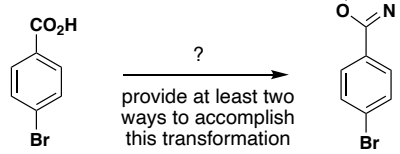
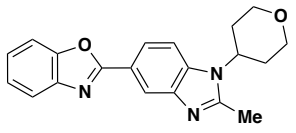
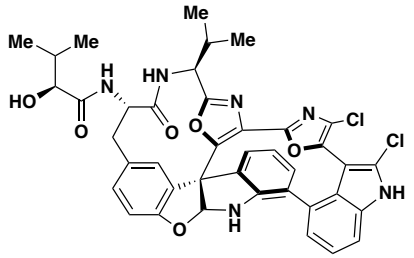


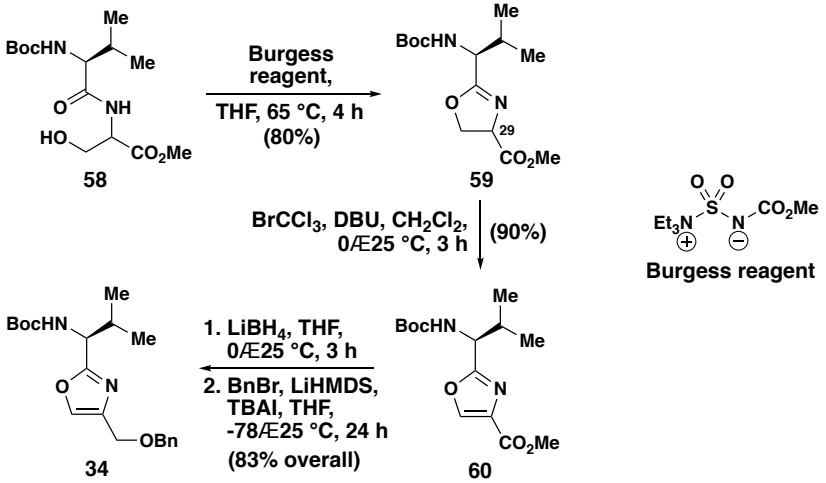
5 Provide a viable disconnection for the compound below:

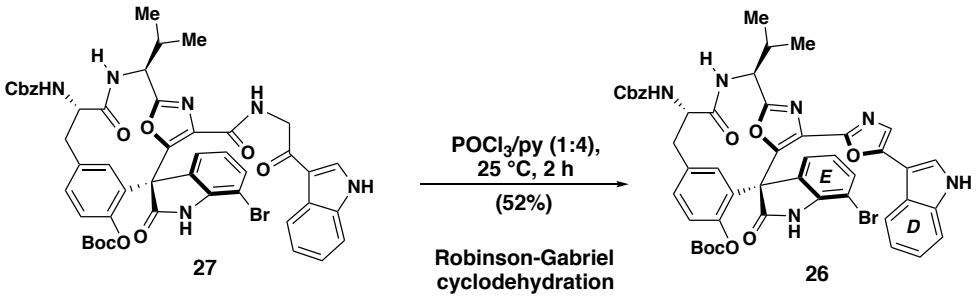




diazonamide A
Nicolaou, *Classics II,* chapter 20

Key oxazole-forming steps in Nicolaou's diazonamide A synthesis (first):





Key oxazole-forming steps in Nicolaou's diazonamide A synthesis (second):

