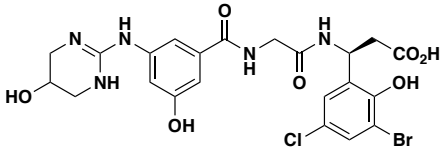
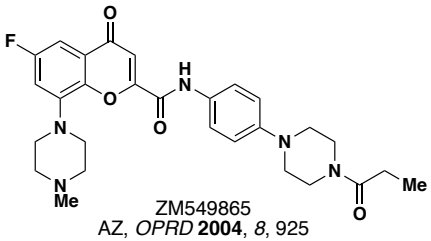
Lecture 11: Pyryliums and Pyrones

Study music: Scott Virgil, piano solo

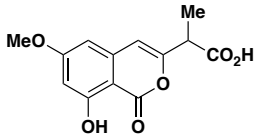
Syntheses discussed:



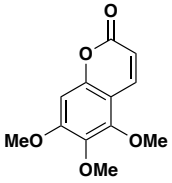
integrin antagonist
Pfizer, *OPRD* **2004**, *8*, 51



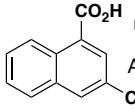
ZM549865
AZ, *OPRD* **2004**, *8*, 925



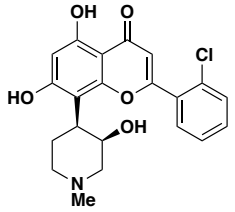
angiogenesis inhibitor
Oncology Inc., *JOC* **2003**, *15*, 5967



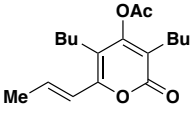
fraxinol methyl ether
Trost, *JACS* **2003**, *125*, 4518



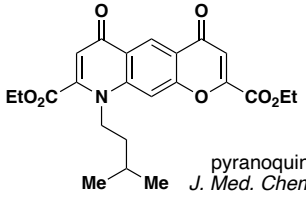
3-cyano-1-napthalenecarboxylic acid
AZ, *OPRD* **2003**, *7*, 74



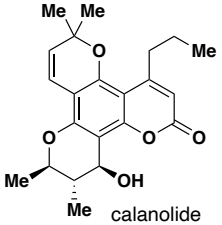
flavopiridol (L86-8275)
DuPont, *OPRD* **1999**, *3*, 256



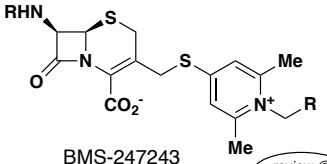
human leukocyte elastase inhibitor
Syntex, *J. Med. Chem.* **1985**, *28*, 1828



pyranoquinoline
J. Med. Chem. **1985**, *28*, 1832

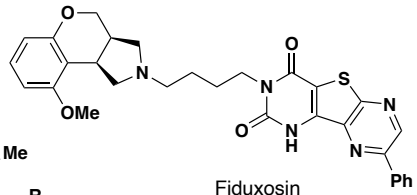


calanolide
J. Med. Chem. **1996**, *39*, 1303



BMS-247243
BMS, *OPRD* **2000**, *4*, 488

review @ home



Fiduxosin
Abbott, *OPRD* **2004**, *8*, 897

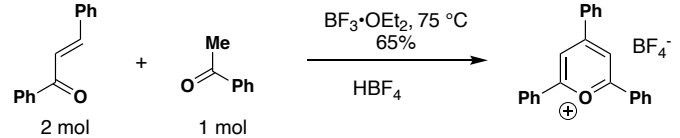
Reading assignment: HC chapters 10-12

Partial list of concepts/transforms discussed:

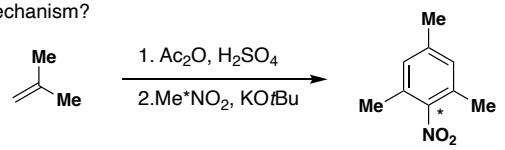
Kostanecki-Robinson	Trost coumarin synthesis
Baker-Venkataraman	Pechmann condensation
Algar-Flynn-Oyamada	Perkin condensation

Problems of the day:

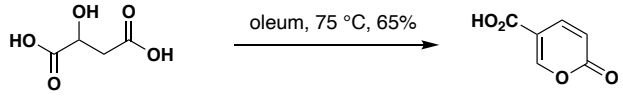
1 Mechanism?



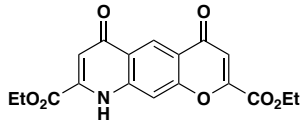
2 Mechanism?



3 Mechanism?

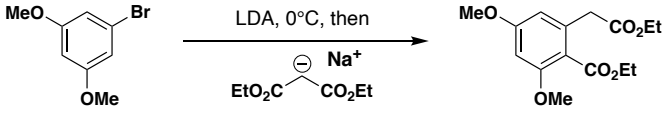


4 Propose a simple synthesis of the following compound:



5 Propose a retrosynthesis for calanolide A

6 Mechanism?



7 Mechanism?

