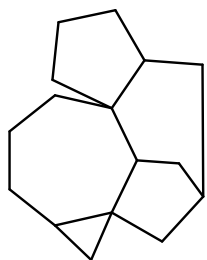
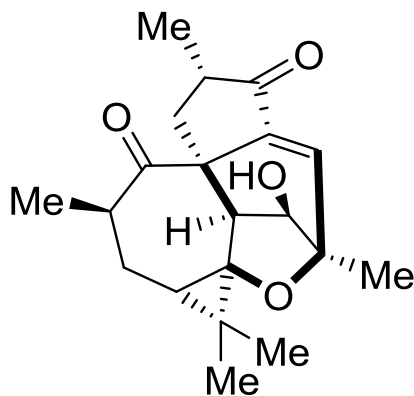


Total Synthesis of Diterpenoid Steenkrotin A

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Department of Chemistry, Zhejiang University, 148 Tianmushan Road,
Hangzhou 310028 (China)
Angew. Chem. Int. Ed. **2015**, 54, 6905 –6908.

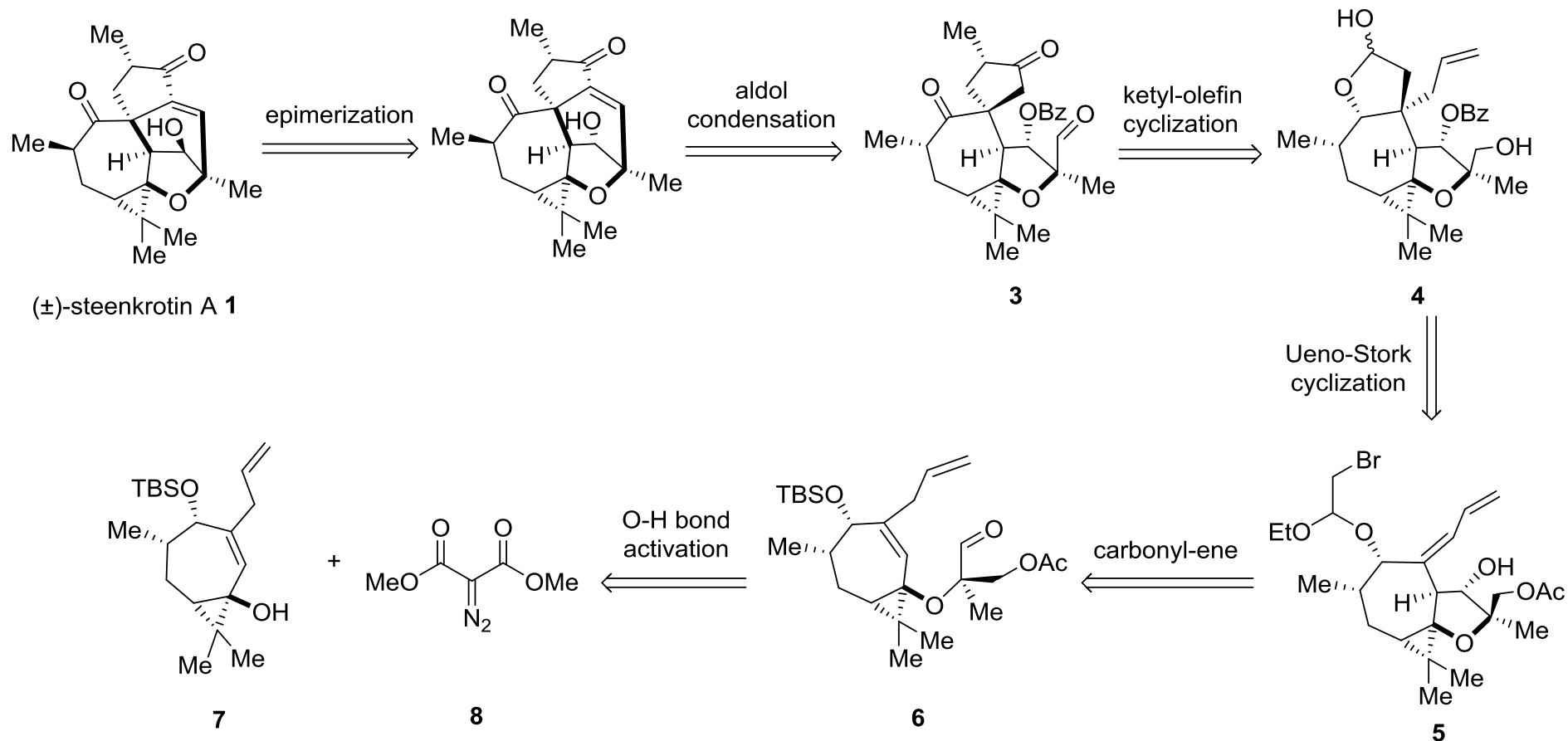
Introduction

Steenkrotin A was first isolated by Hussein and co-workers in 2008 from the extract of leaves of *C. steenkampianus*.

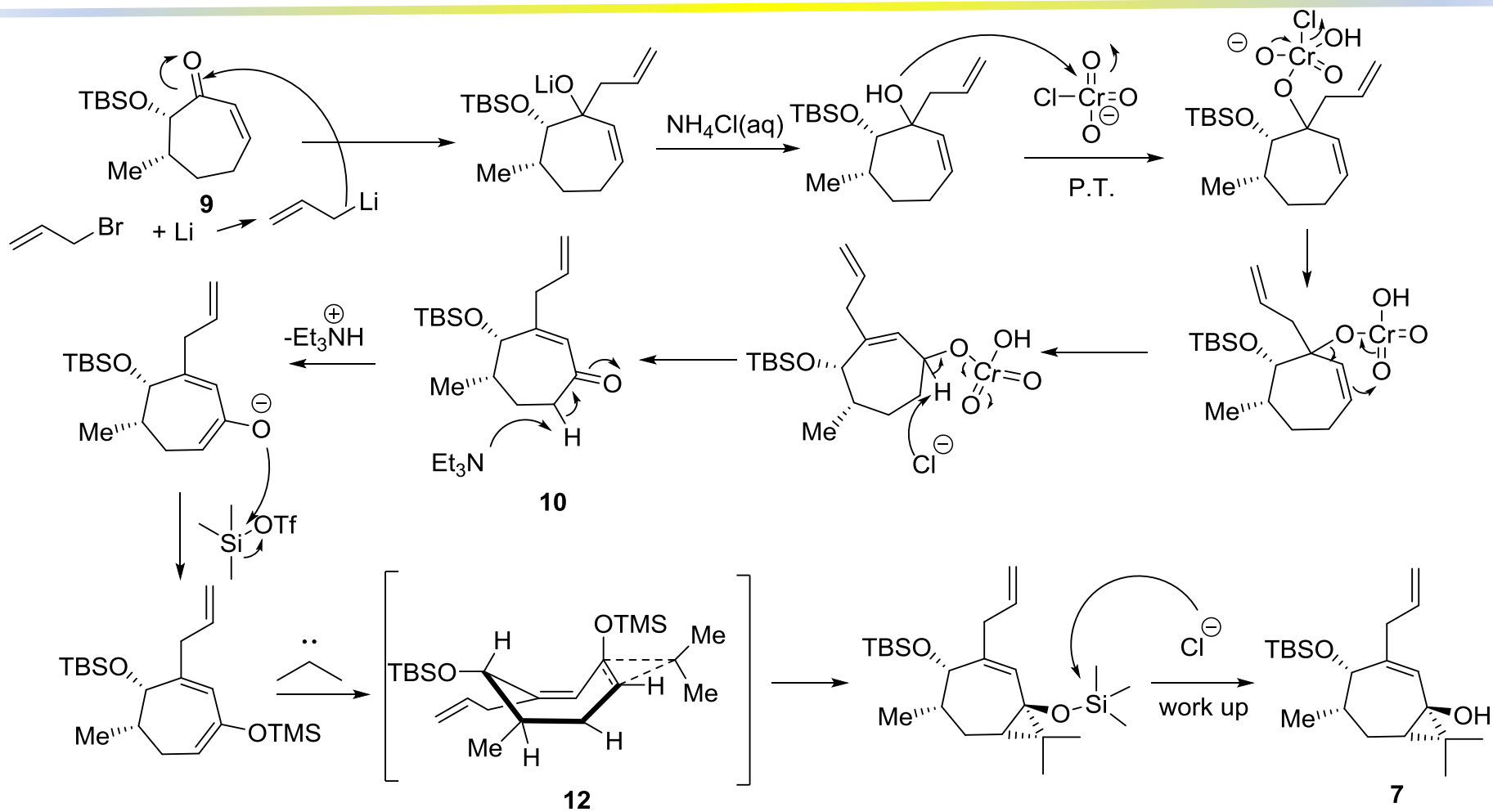
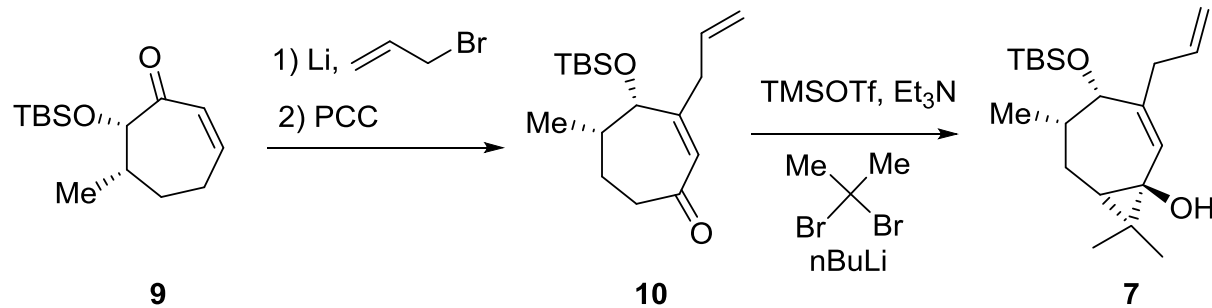


It has a [3,5,5,6,7] pentacyclic skeleton and eight stereocenters (including one quaternary center).

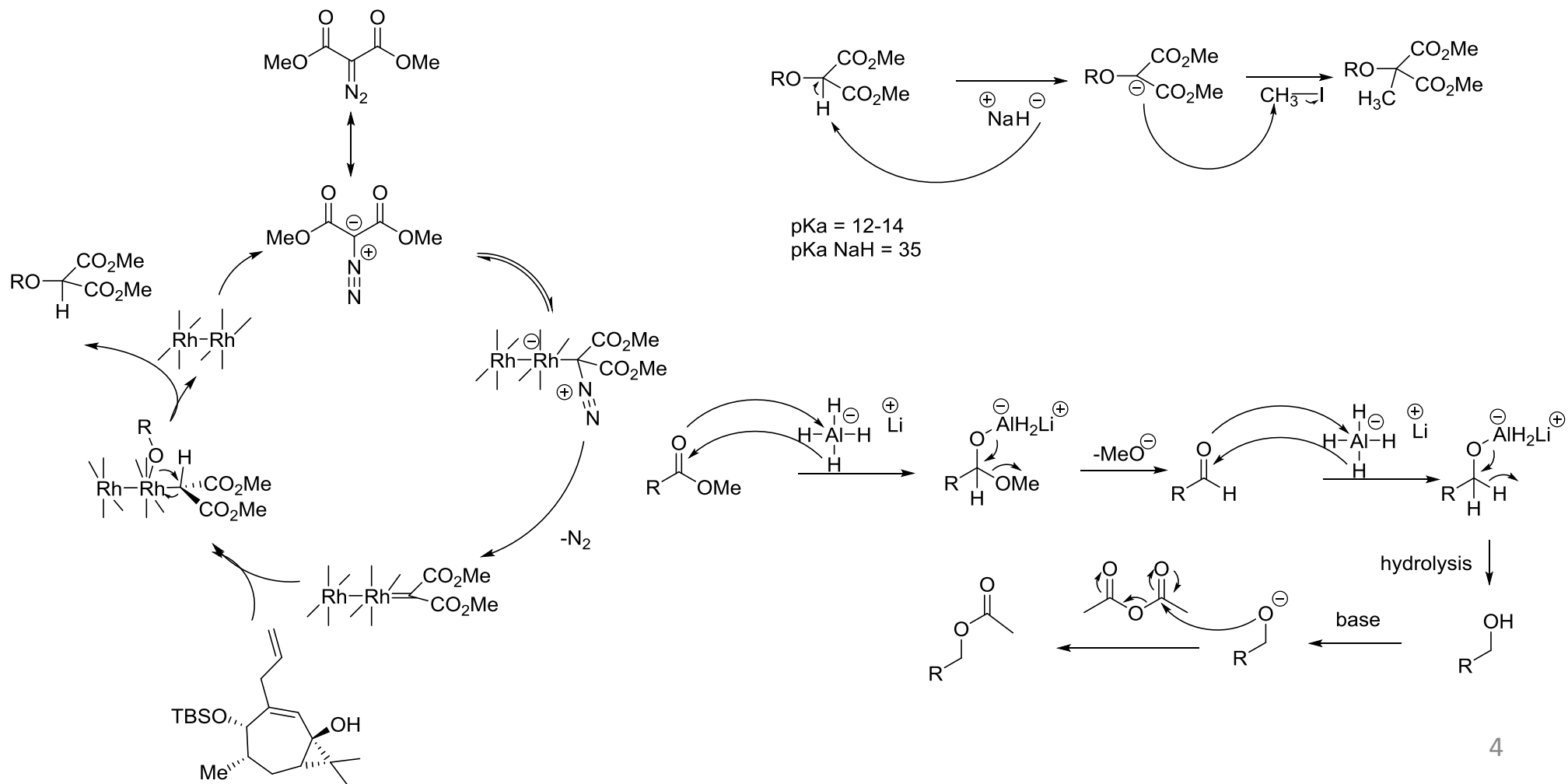
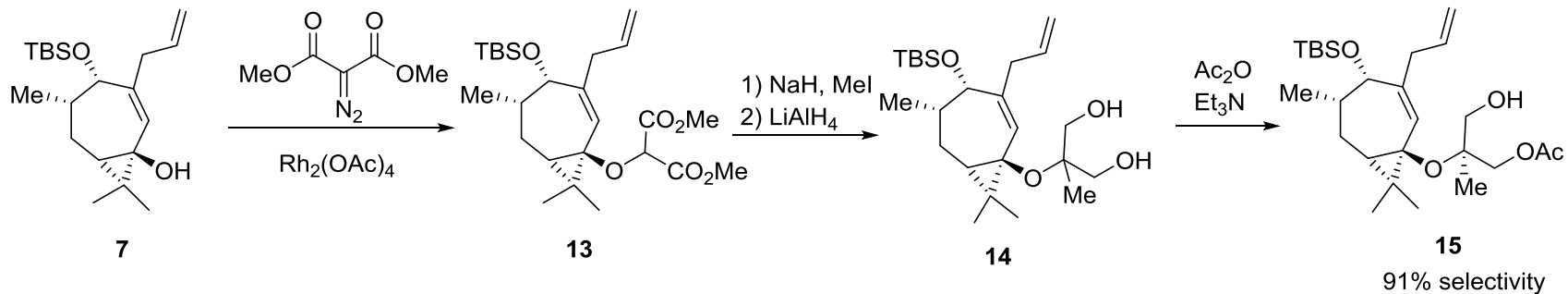
Retrosynthetic route



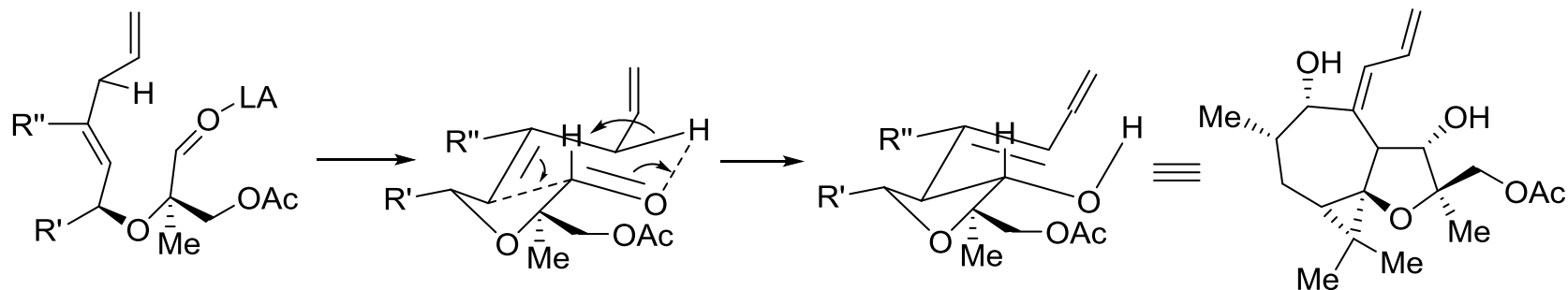
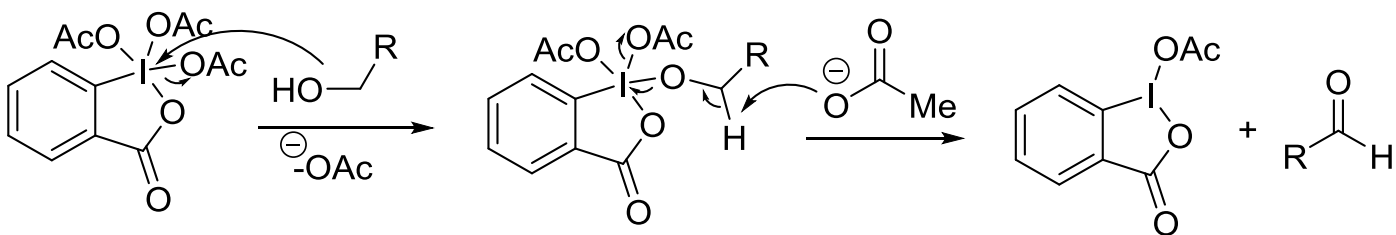
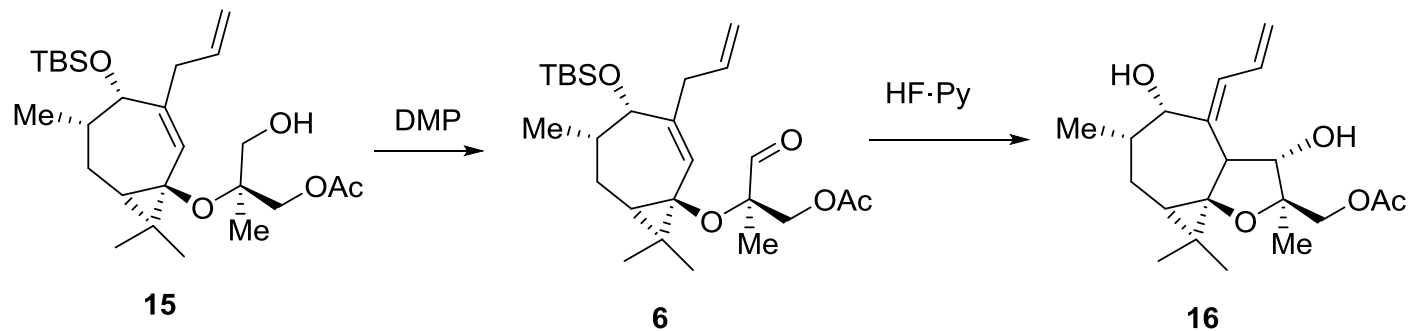
Towards compound 7



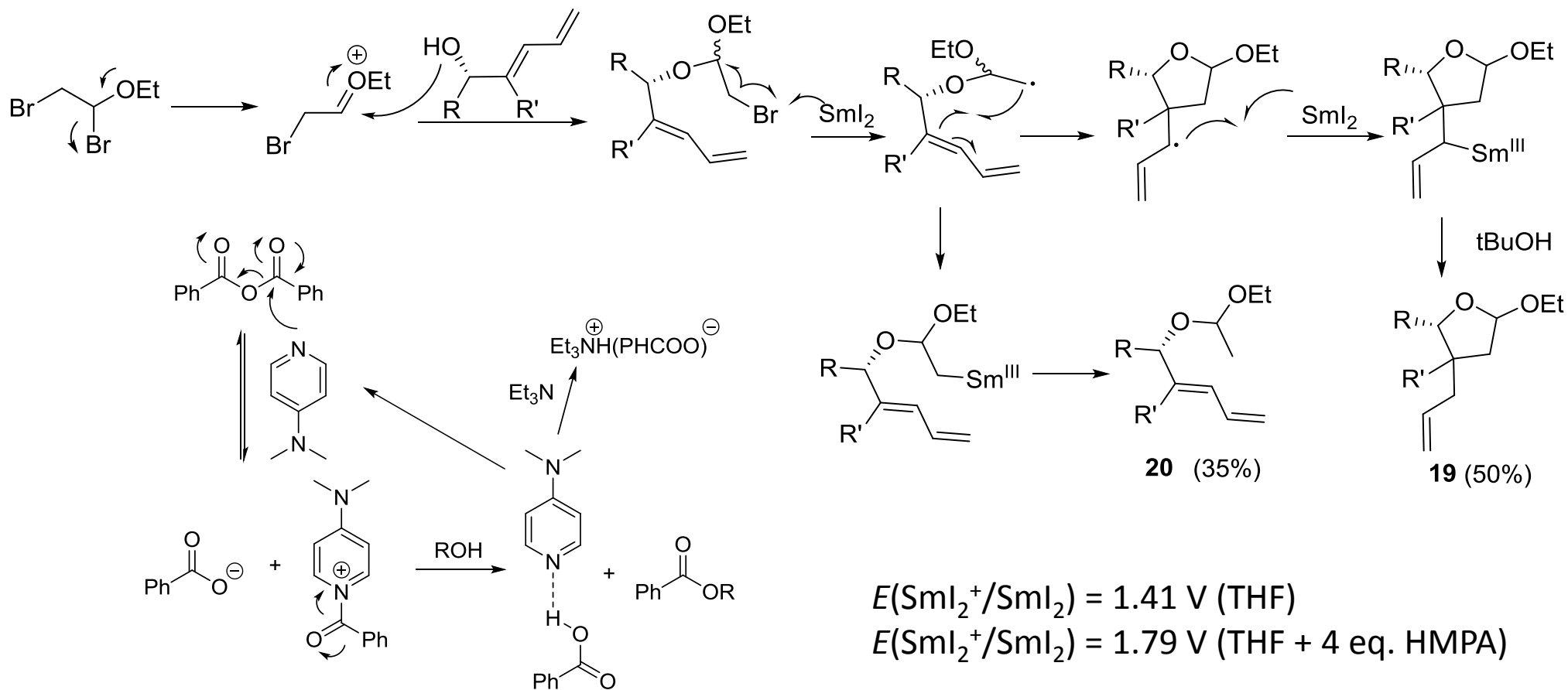
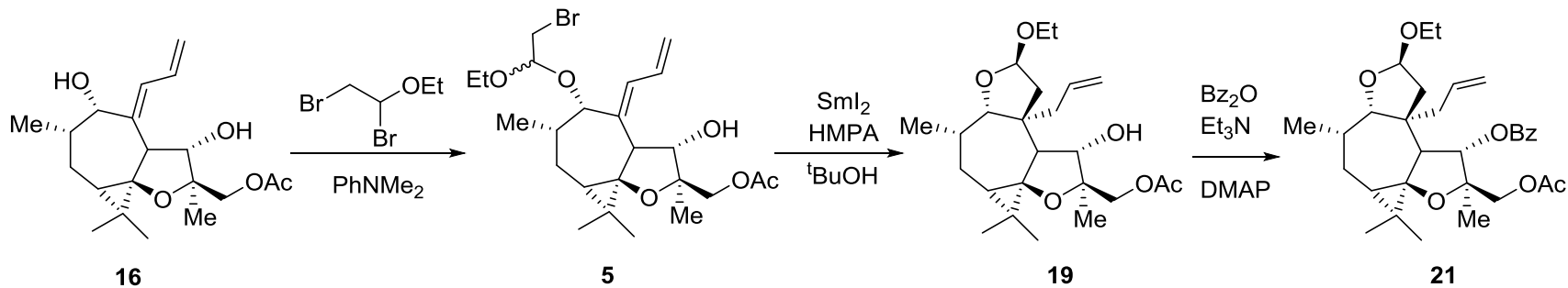
O-H bond activation



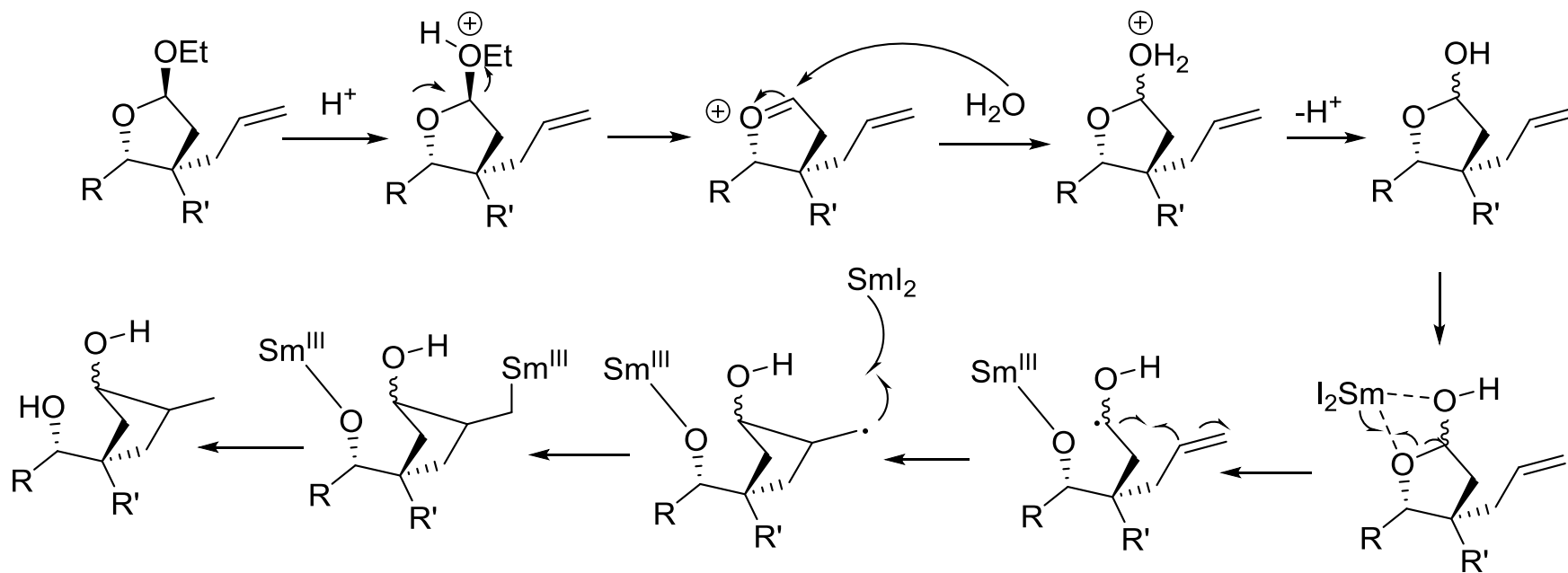
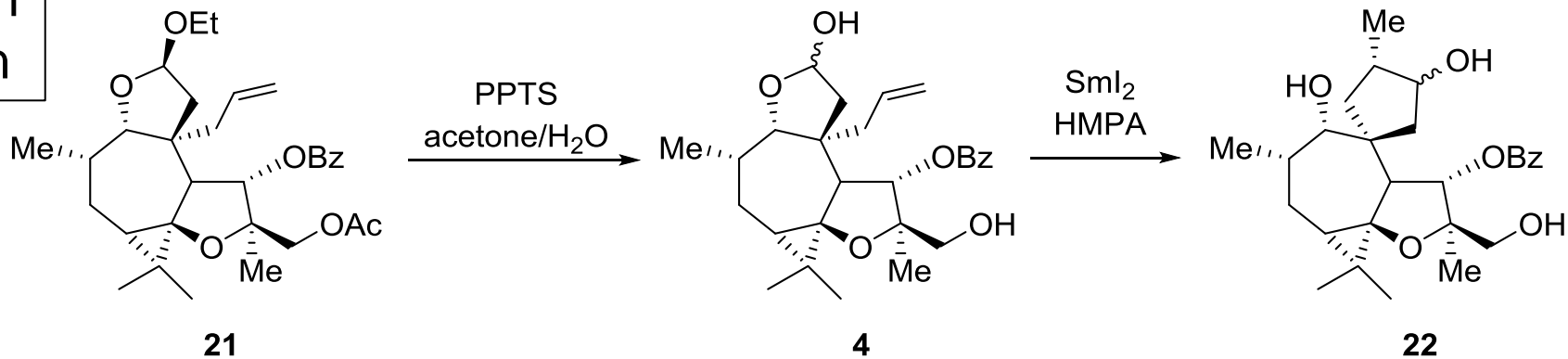
Carbonyl-ene reaction



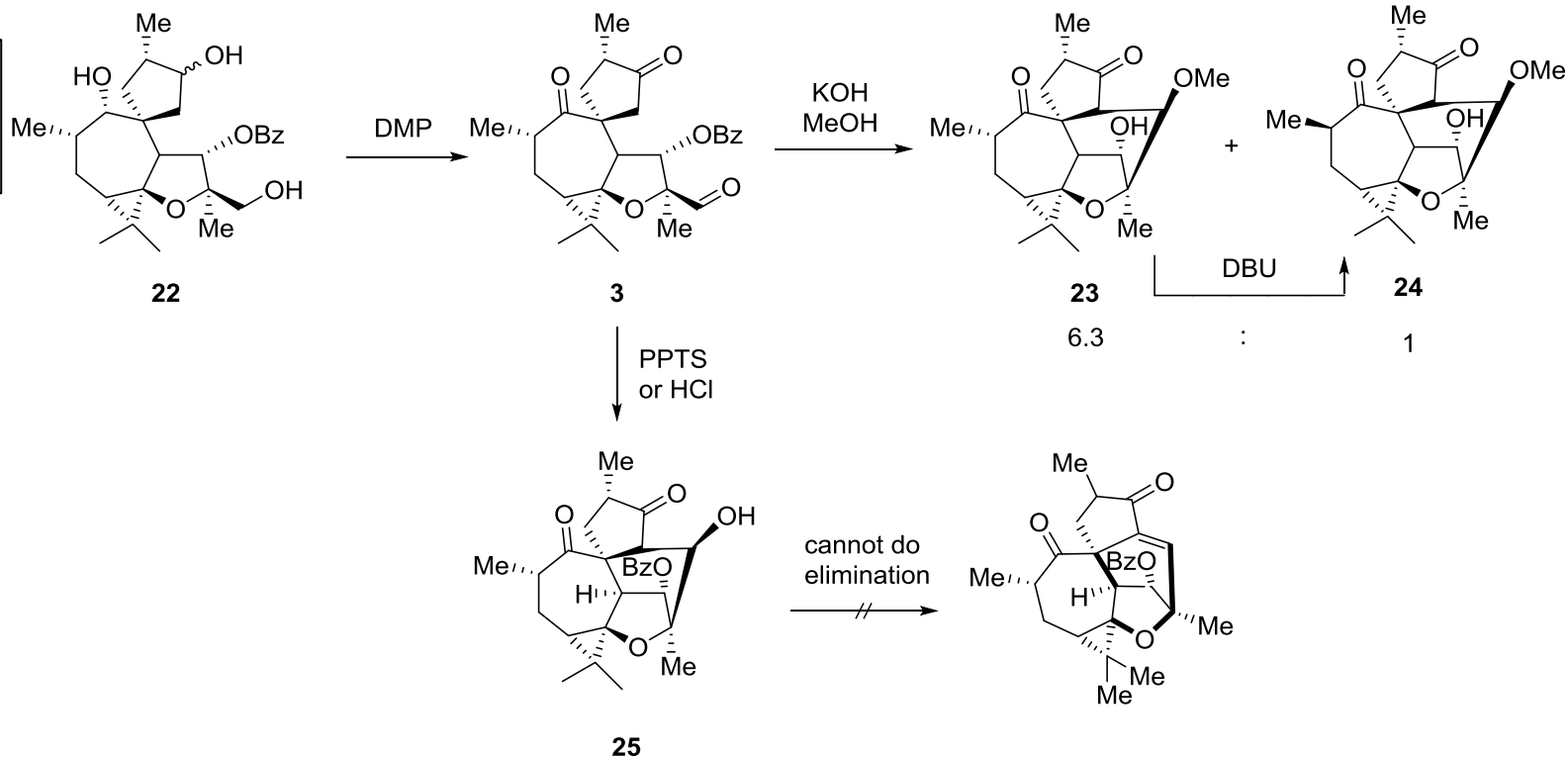
Ueno-Stork Reaction



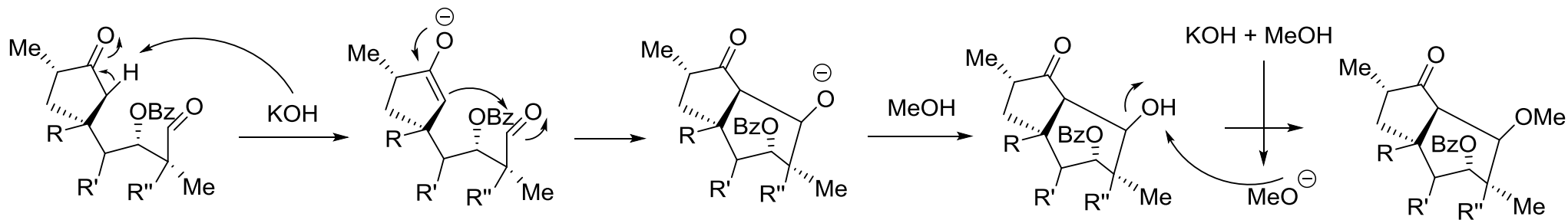
Ketyl-olefin cyclization



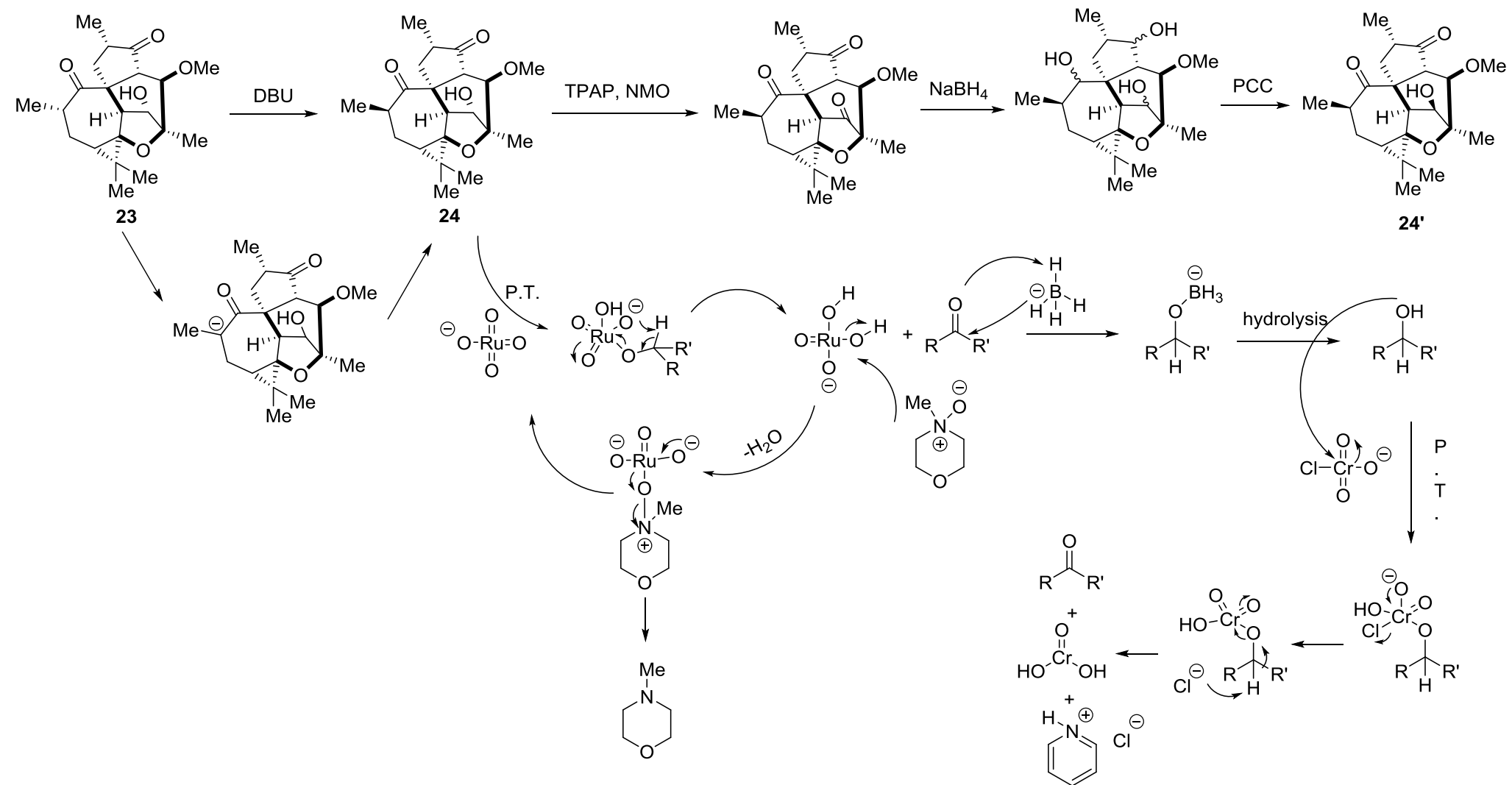
Aldol condensation



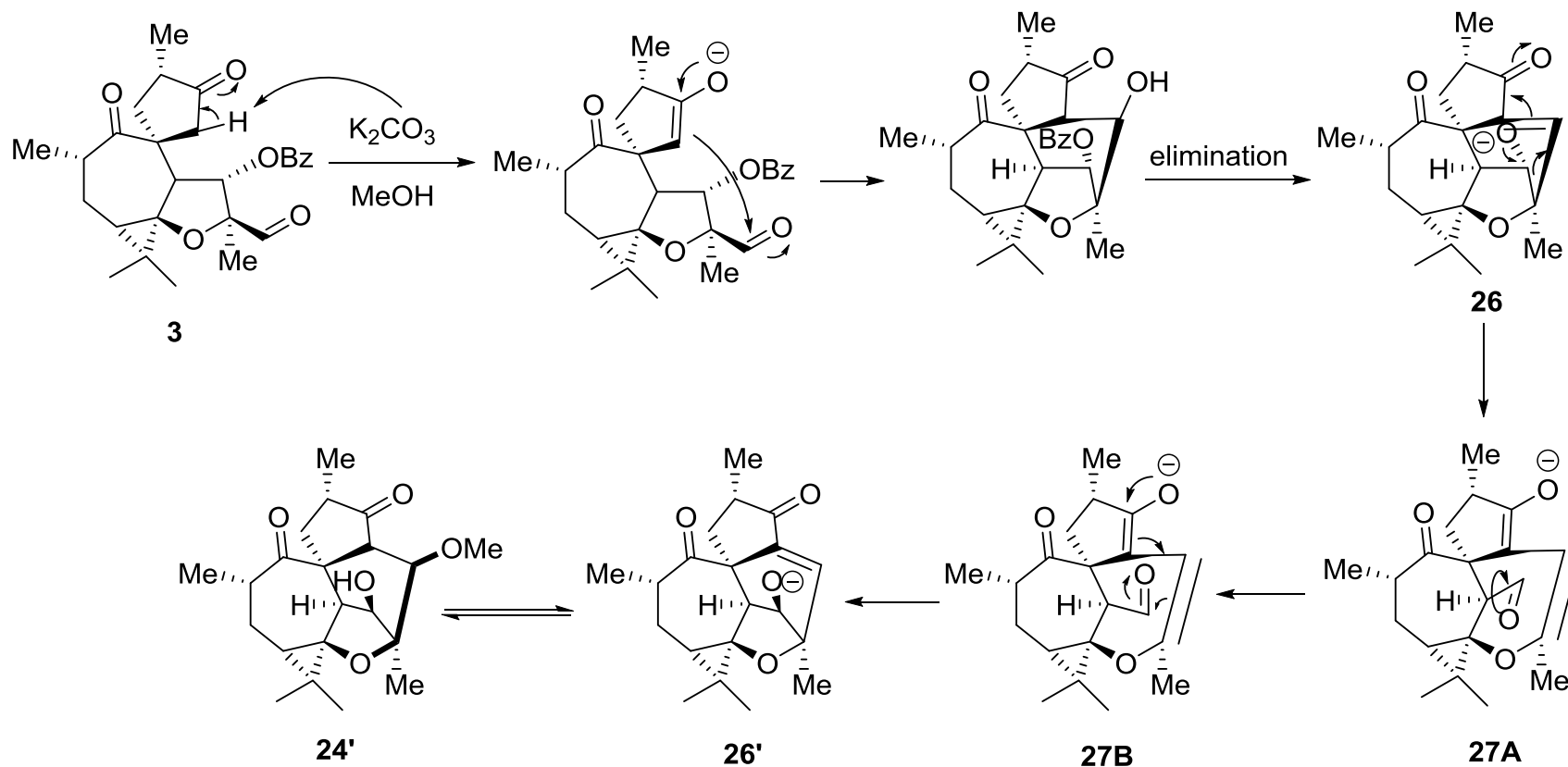
DMP mechanism has been illustrated in the previous slide.



Epimerization



Cascade method



one step 60% yield

Final step

