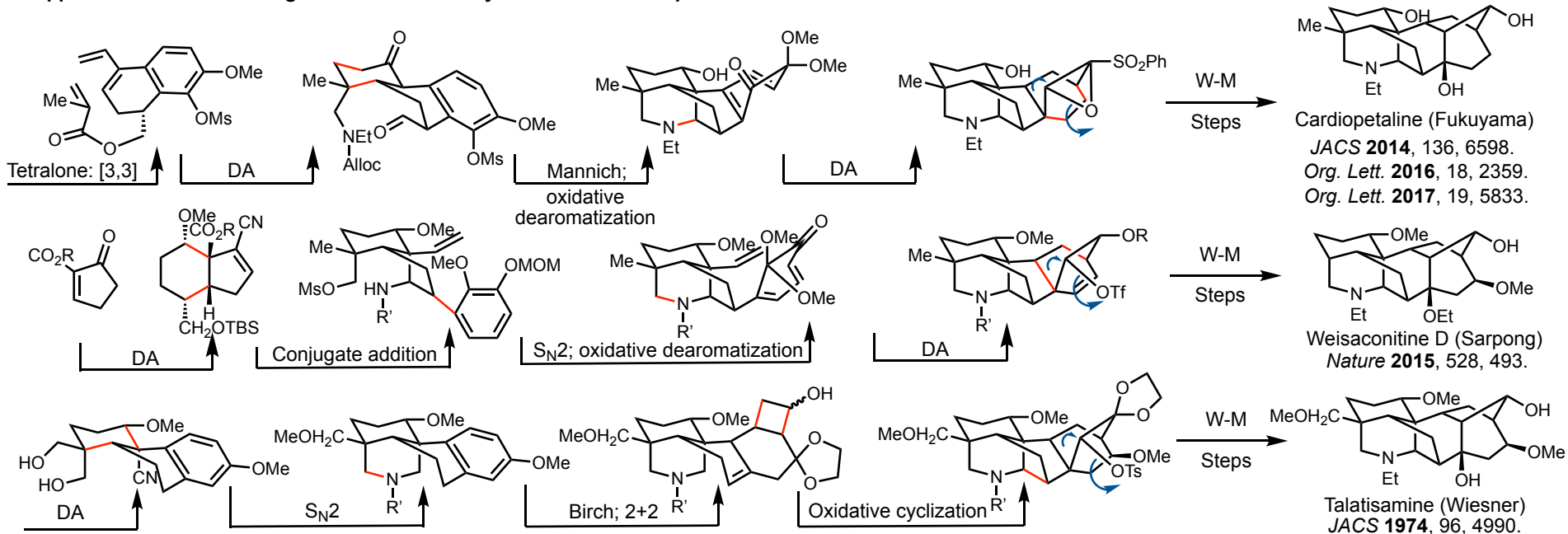


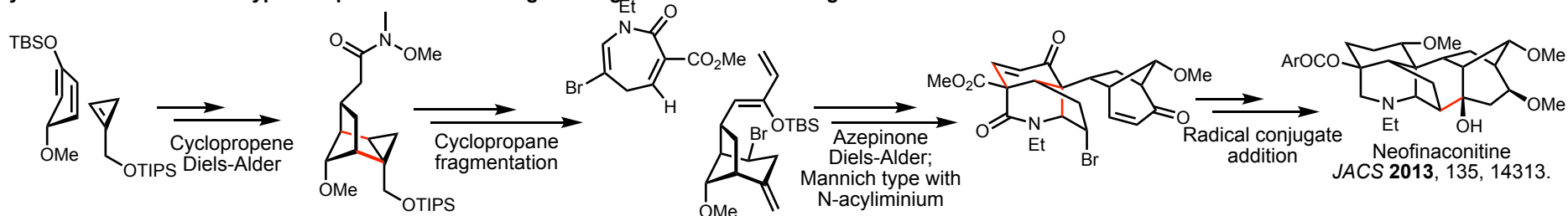
Norditerpenoid:

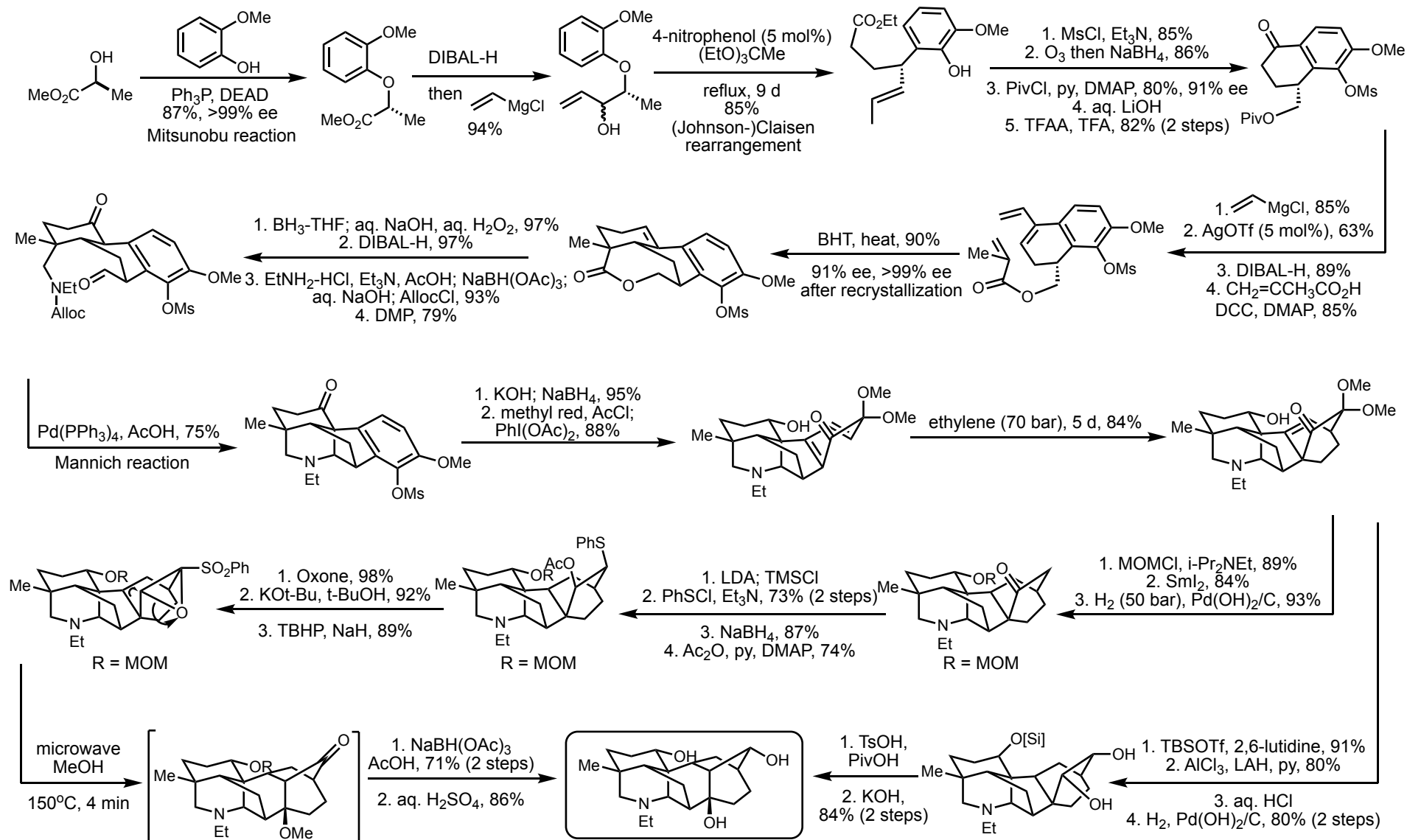
- Bioactivities: extremely high (i.e. aconitine: one of the most toxic plant poisons; lappaconitine: antiarrhythmic drug)
- Structural features: hexacyclic skeleton containing two bicyclo[3.2.1]octane and one 2-azabicyclo[3.3.1]nonane moieties that are highly oxygenated
- Biosynthesis suggests a Wagner-Meerwein rearrangement as a key step

Application of W-M rearrangement in chemical syntheses of norditerpenoids:



Synthesis of an aconitine-type diterpenoid without using the Wagner-Meerwein rearrangement:





JACS **2014**, 136, 6598.
Org. Lett. **2016**, 18, 2359.

Org. Lett. **2017**, 19, 5833.