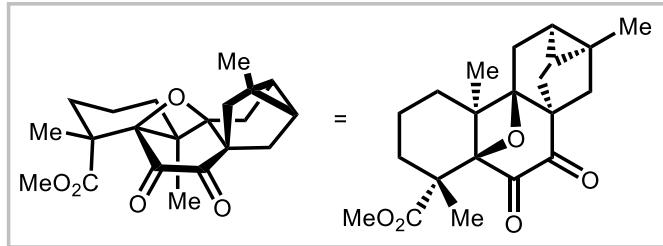


(—)-Mitrephorone A



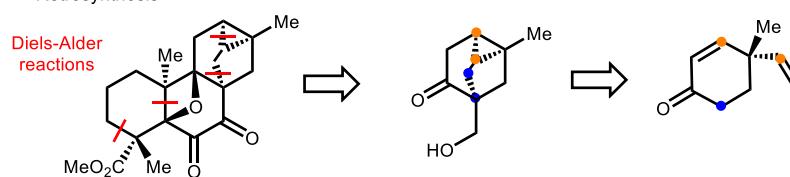
- isolated in 2005 by Oberlies and co-workers from the Bornean shrub *Mitrephora glabra*
- anticancer and antimicrobial activities
- embedded oxetane ring
- 1,2-diketone
- highly congested hexacycle
- 4 quaternary carbons
- 5 contiguous stereocenters

Carreira: *J. Am. Chem. Soc.* **2018**, 140, 16704.

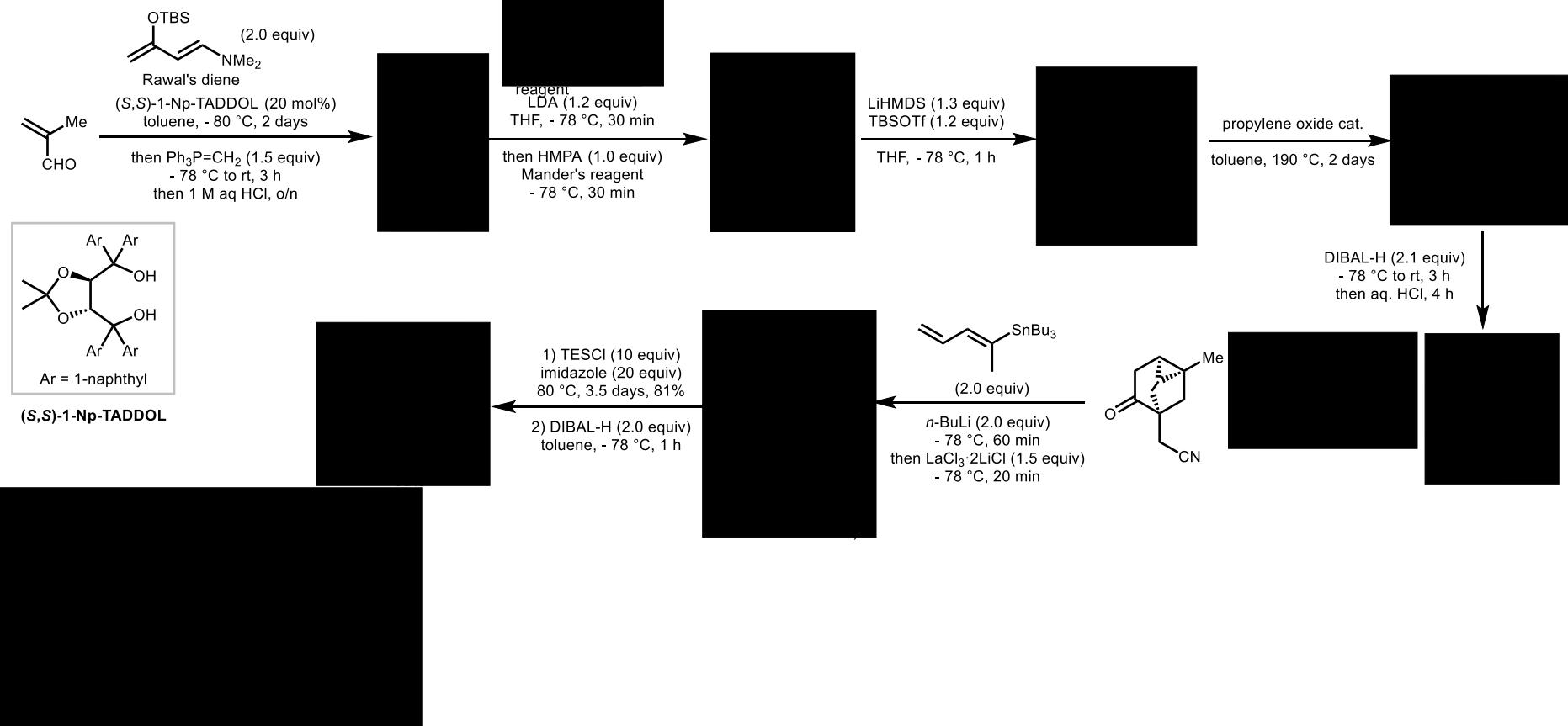
Carreira: *J. Am. Chem. Soc.* **2020**, 142, 17802.

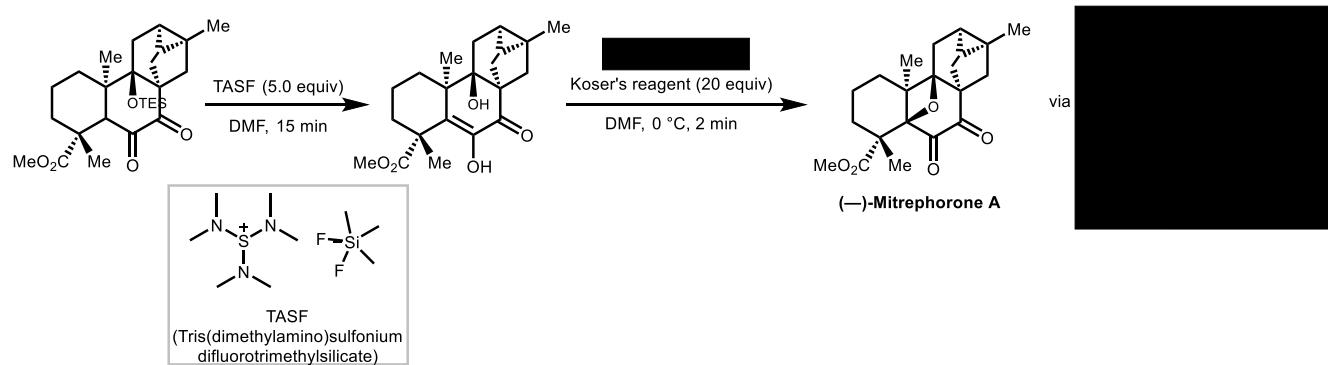
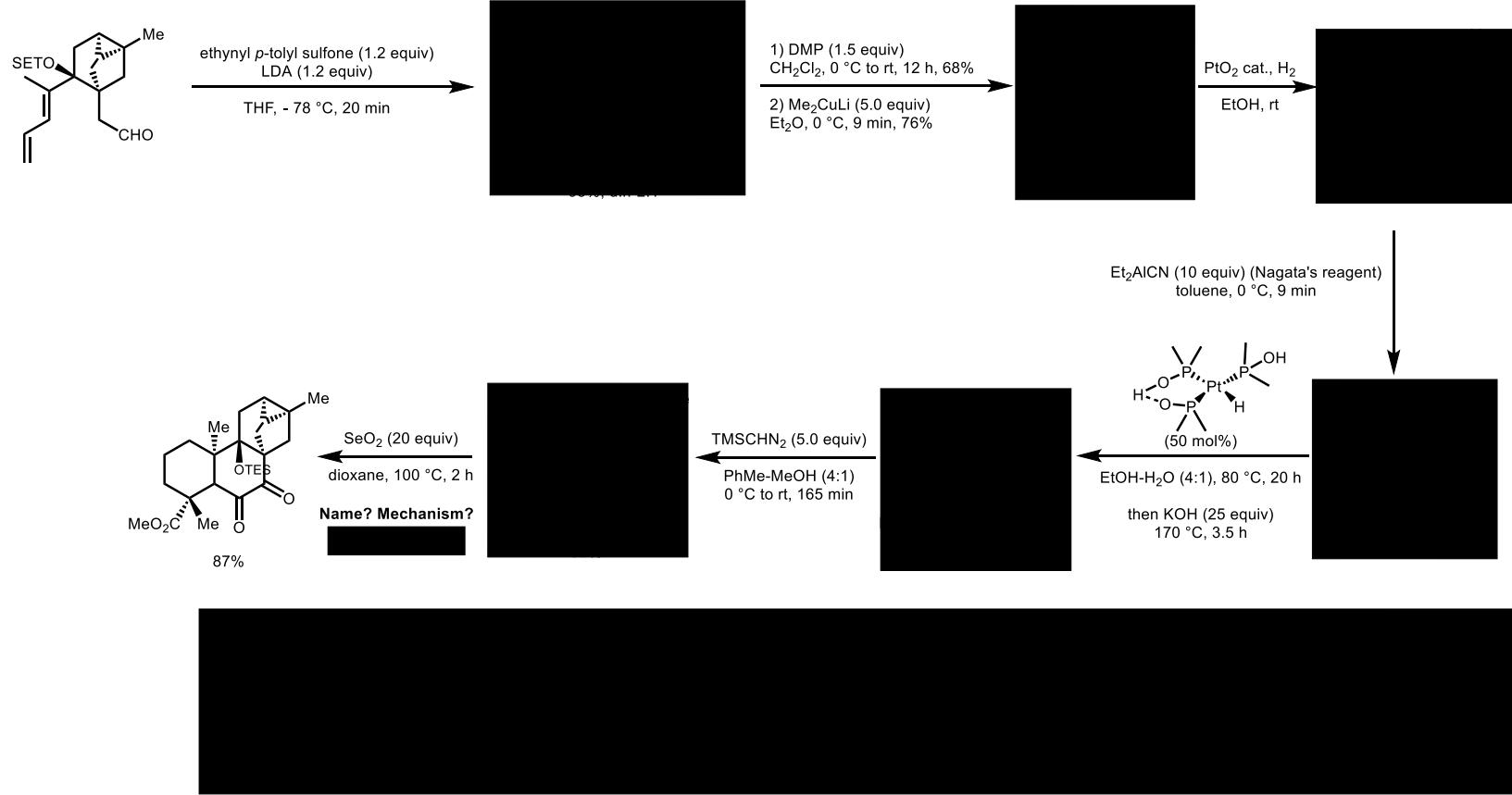
Carreira 2018:

Retrosynthesis



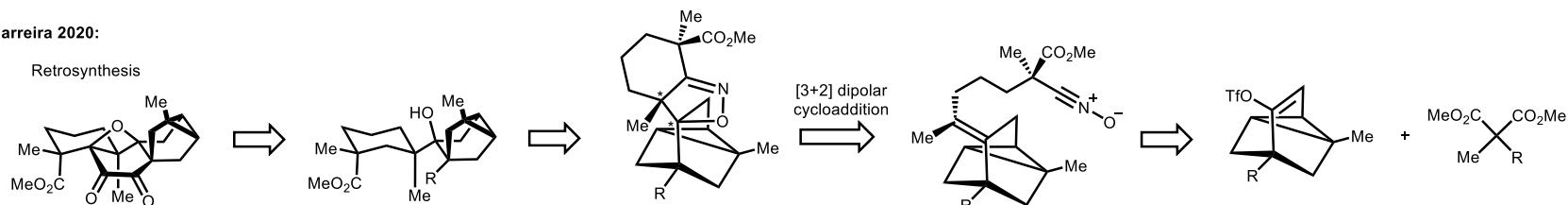
Synthesis



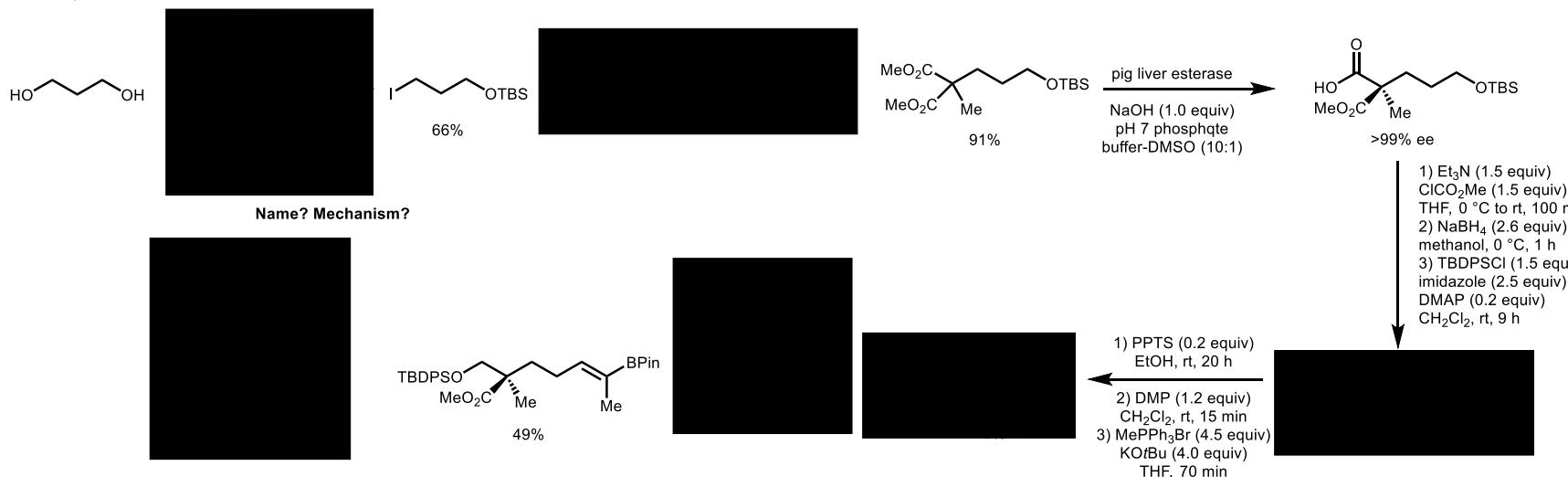


Carreira 2020:

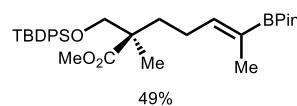
Retrosynthesis

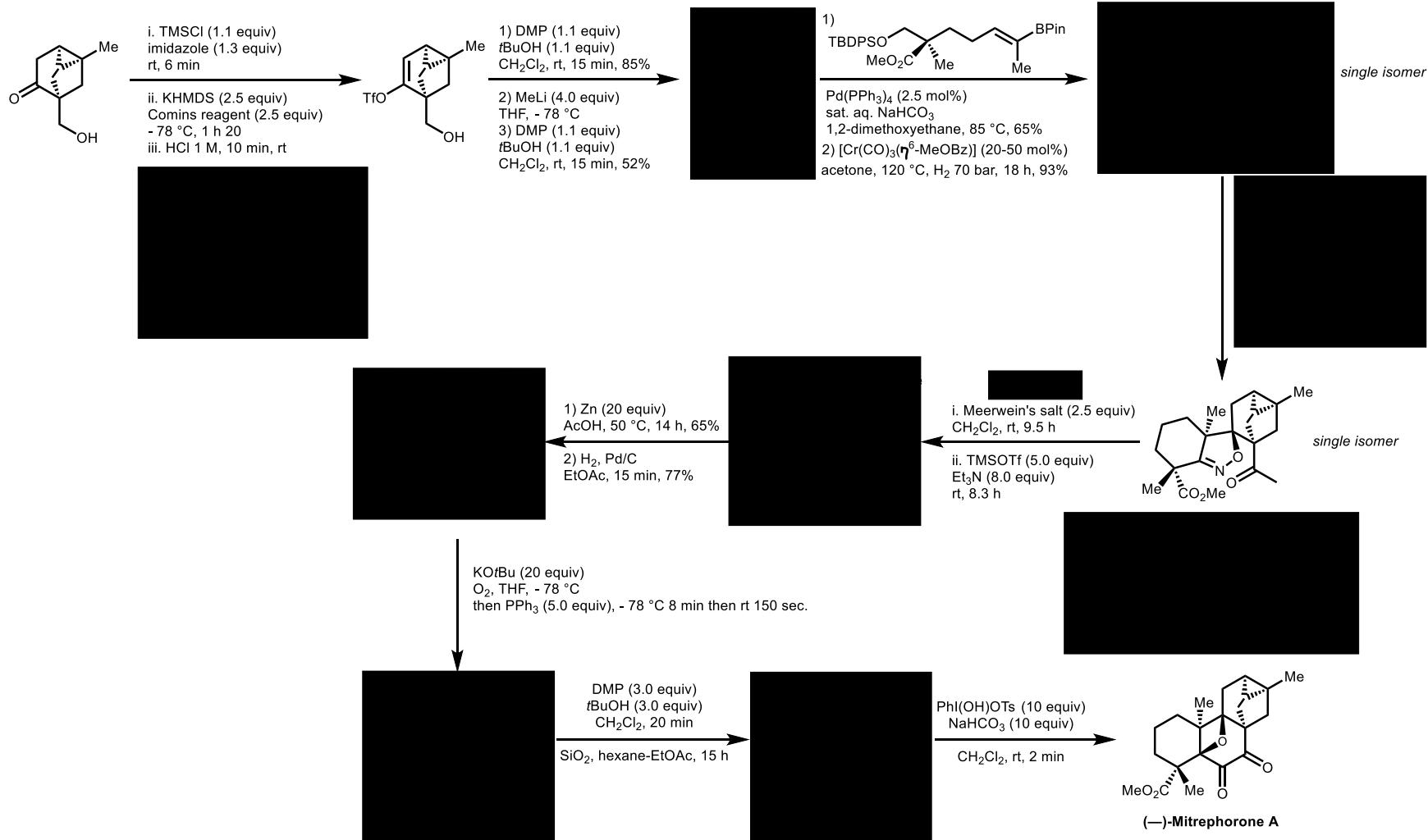


Synthesis



Name? Mechanism?

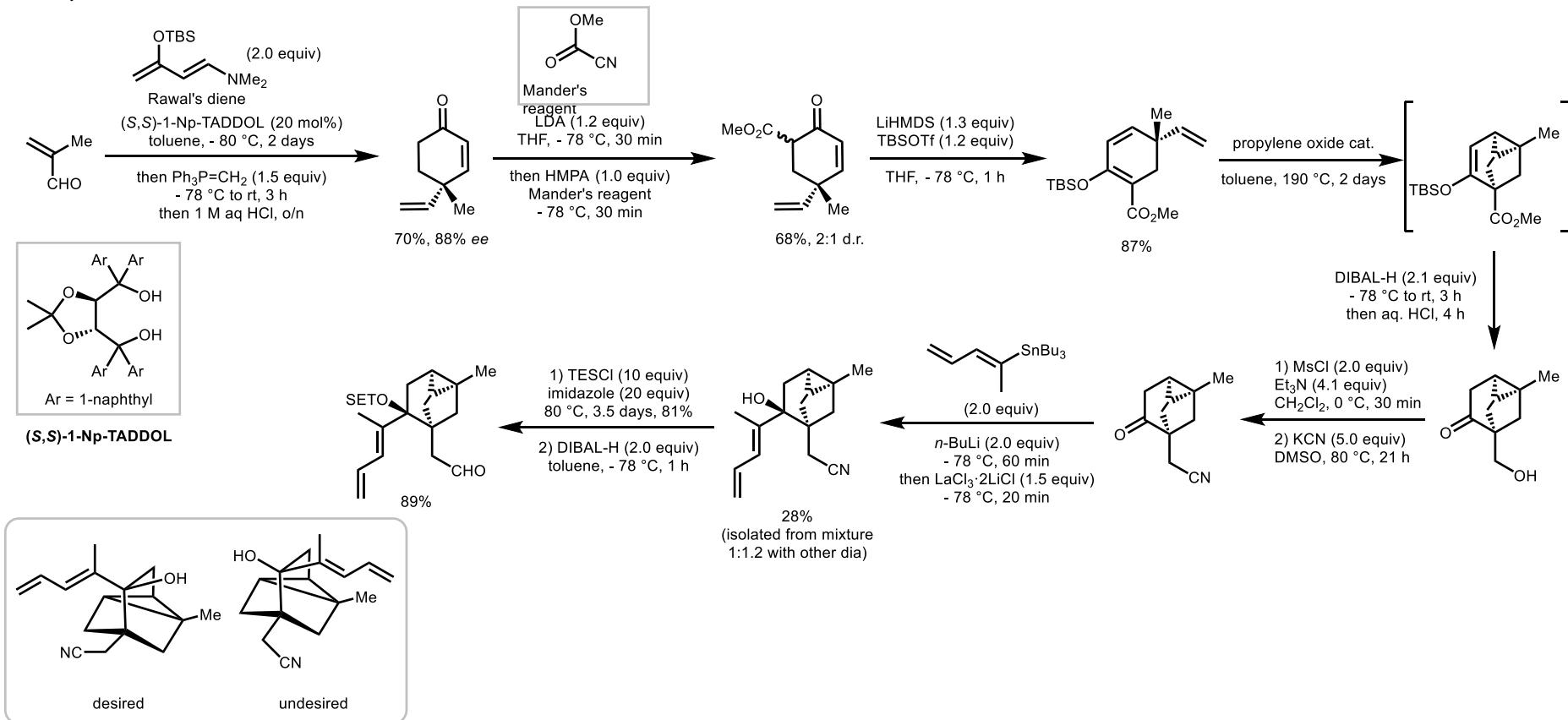


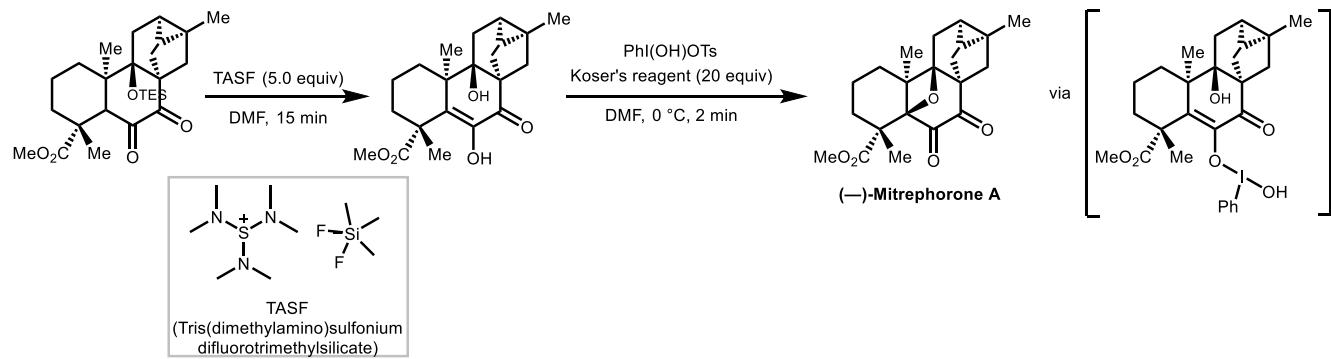
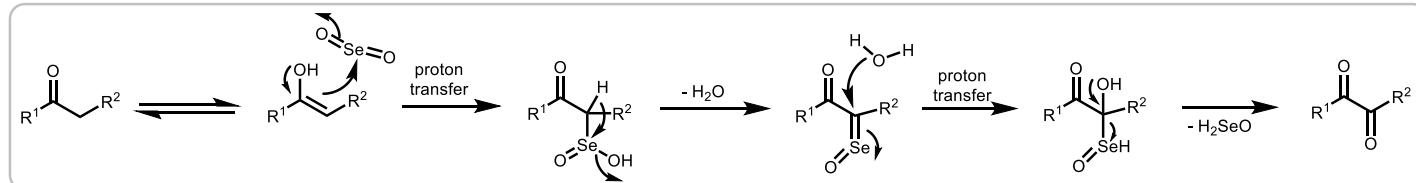
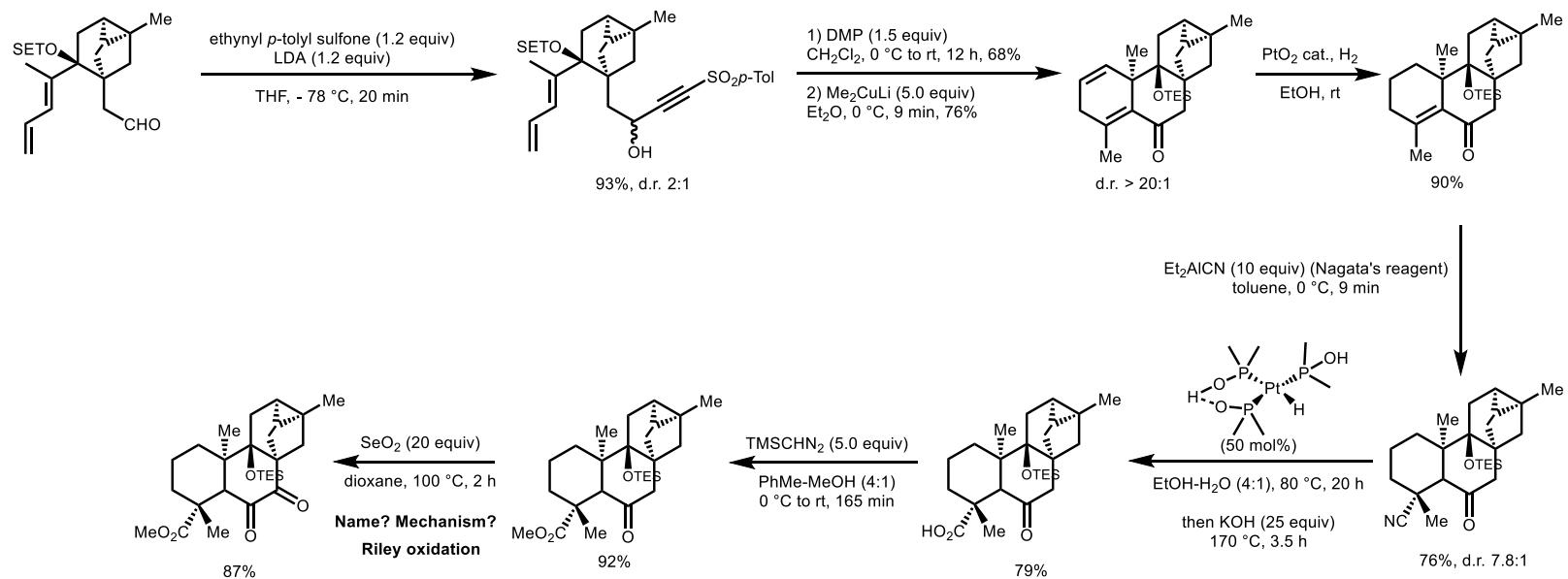


SOLUTION

Carreira 2018

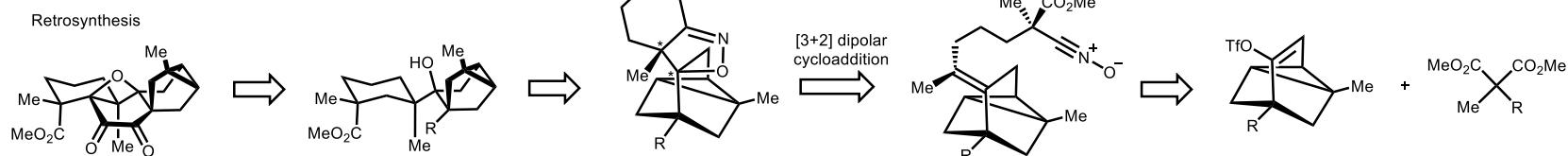
Synthesis





Carreira 2020

Carreira 2020:



Synthesis

