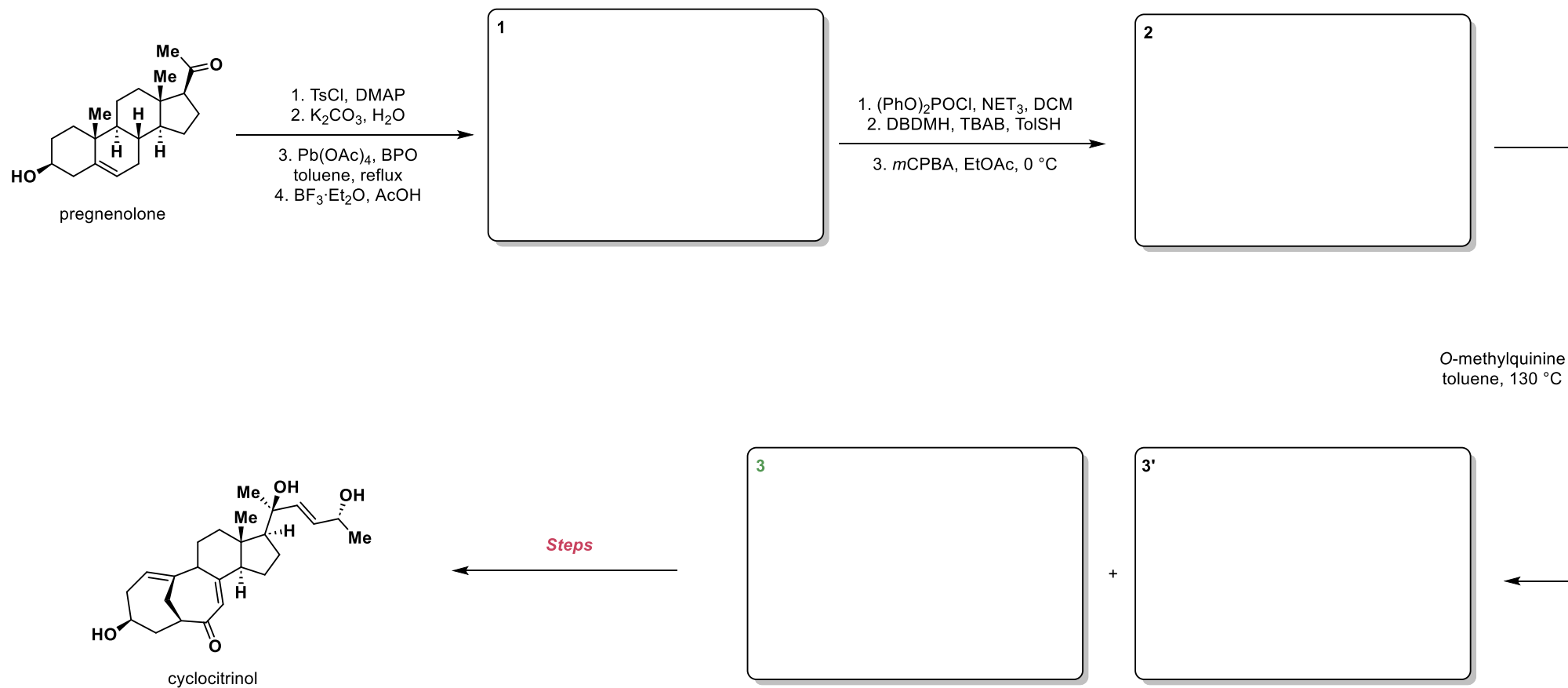
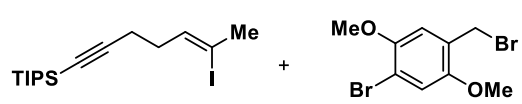


Biomimetic Total Synthesis of Cyclocitrinol and (–)-Longithorone A

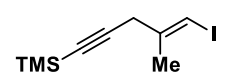
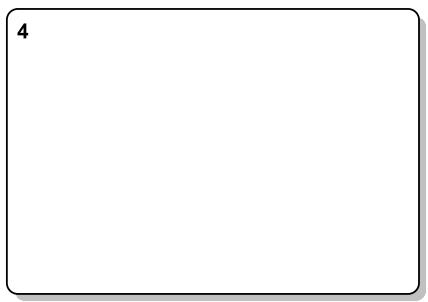
Cyclocitrinol, Gui (2018)



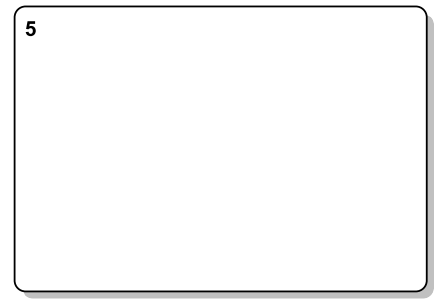
(-)-Longithorone A, Shair (2002)



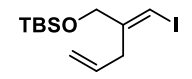
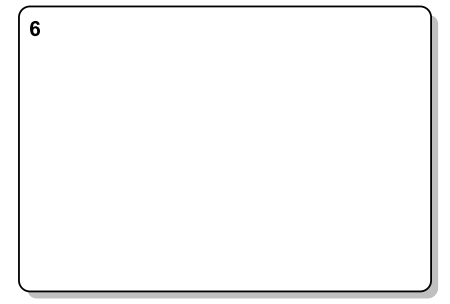
1. Zn, Pd(PPh₃)₄, THF, RT
2. *n*BuLi, DMF, Et₂O, -78 °C to RT
3. BBr₃, DCM, -78 °C to RT
4. TBSOTf, *i*Pr₂NEt, DCM



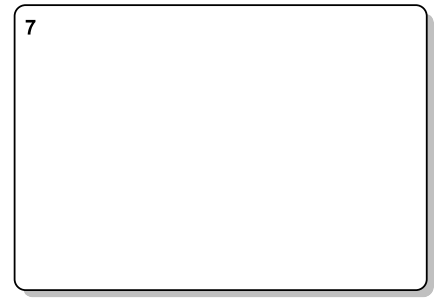
1. *t*BuLi
2. TBAF
3. Pd/BaSO₄, quinoline, H₂
4. TBAF
5. TBSCl, imidazole



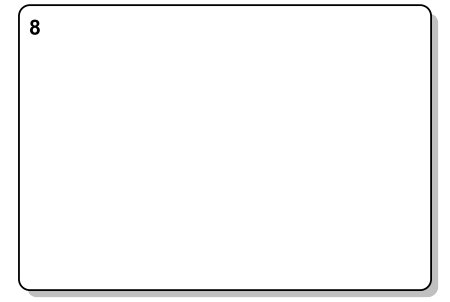
1. (Cy₃P)₂Cl₂RuCHPh, ethylene
2. TBAF
3. NaCNBH₃, TFA
4. TBSOTf, *i*Pr₂NEt



1. *t*BuLi
2. TBAF
5. TBSCl, imidazole



1. (Cy₃P)₂Cl₂RuCHPh, ethylene
2. TFA, Et₃SiH
3. PPTS
4. DMP

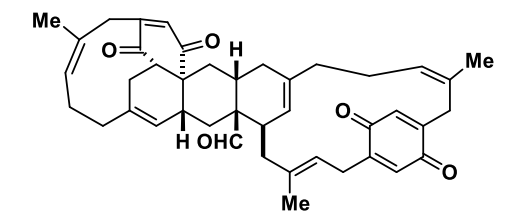


6 + 8

1. Me₂AlCl, -20 °C
2. TBAF



PhI(O)



(-)-longithorone

Solutions:

Cyclocitrinol, Gui, *J. Am. Chem. Soc.* 2018, 140, 30, 9413

