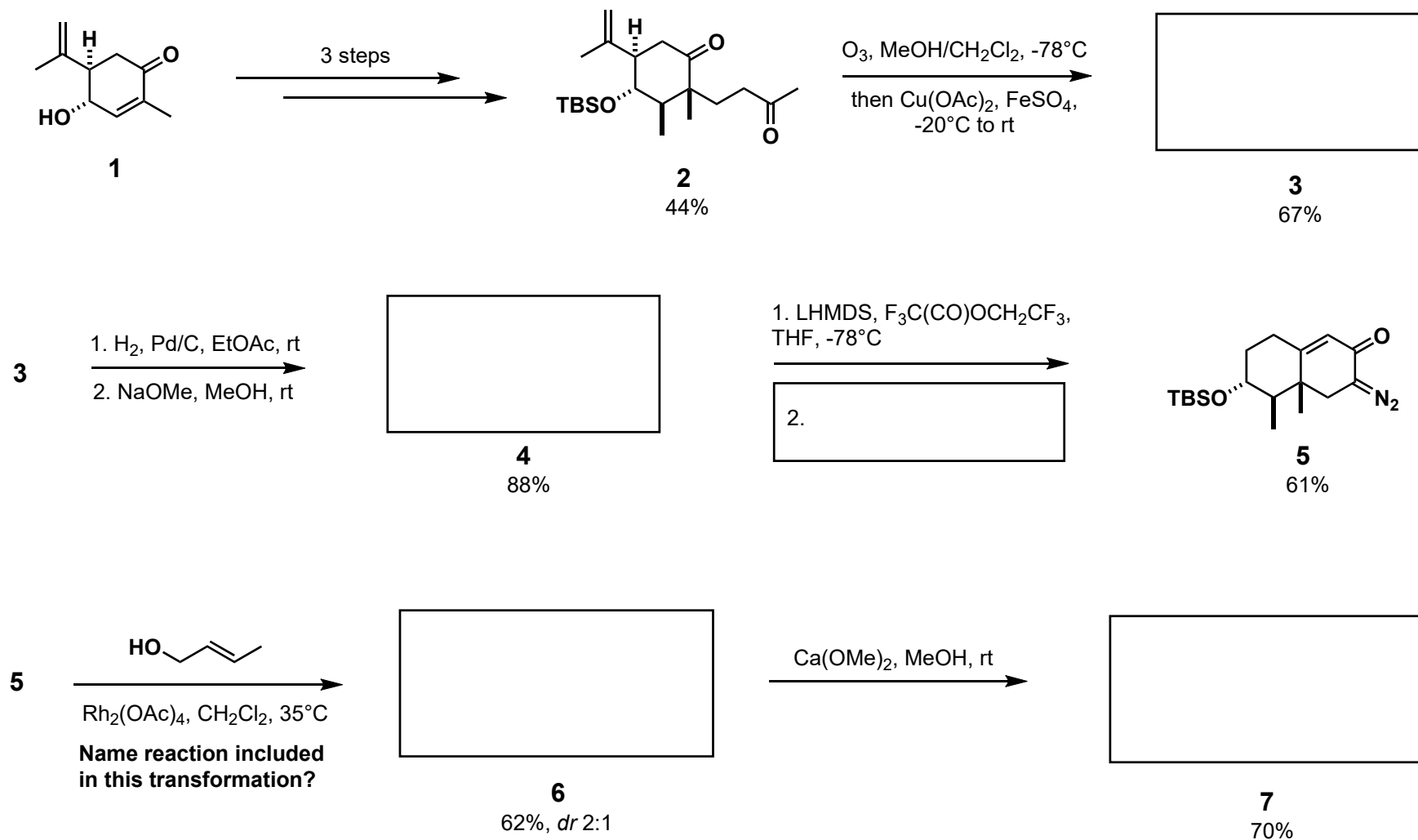
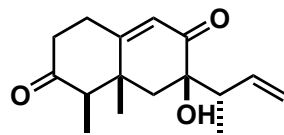
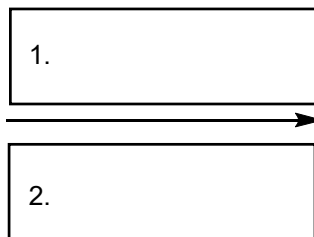


# The Furan Shuffling Hypothesis: A Biogenetic Proposal for Eremophilane Sesquiterpenoids

*Angew. Chem. Int. Ed.* **2019**, *58*, 7004–7007.  
*J. Am. Chem. Soc.* **2017**, *139*, 16096-16099. (For first 8 steps)



7



**8**  
89%

O<sub>3</sub>, pyridine,  
CH<sub>2</sub>Cl<sub>2</sub>/MeOH, -78°C

then PPh<sub>3</sub>, rt

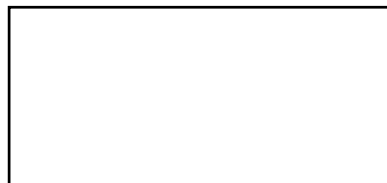
**Role of pyridine in  
ozonolysis?**



**9**  
76%

9

NaB(OAc)<sub>3</sub>H, CH<sub>2</sub>Cl<sub>2</sub>, rt



**10**  
63%

TBD, O<sub>2</sub>, THF, rt

**Potential alternative  
conditions for this  
transformation?**

**Microsphaeropsisin B**

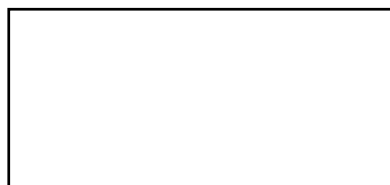
10%

+



**Microsphaeropsisin C**

35%



**Microsphaeropsisin B**

Ca(OMe)<sub>2</sub>, MeOH, 60°C  
**The Furan *Shuffling* Reaction**



**Periconianone C**

22% (65% brsm)