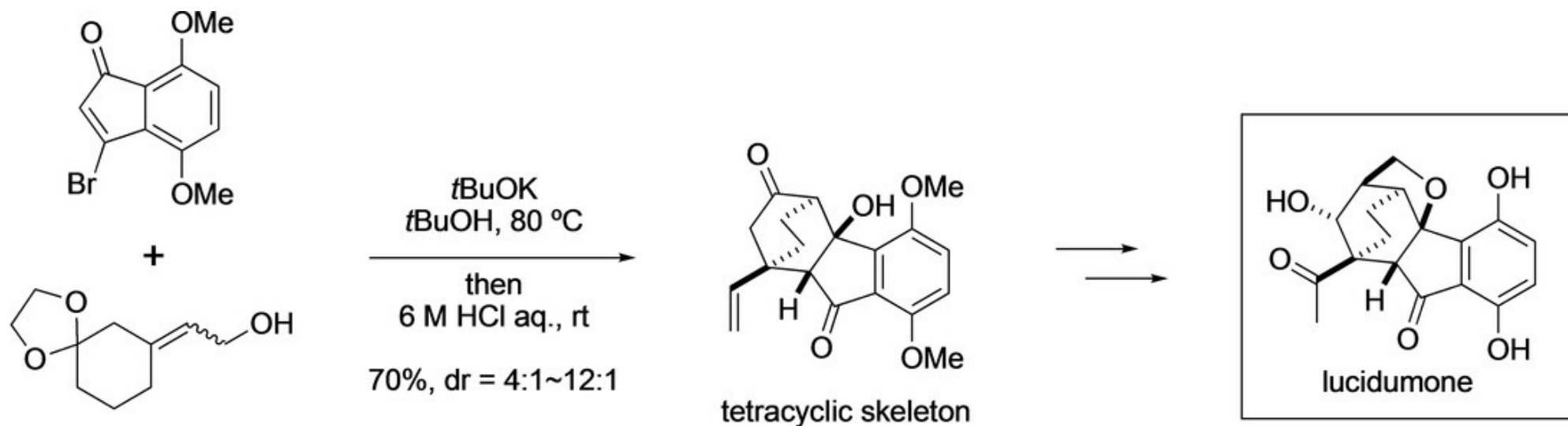


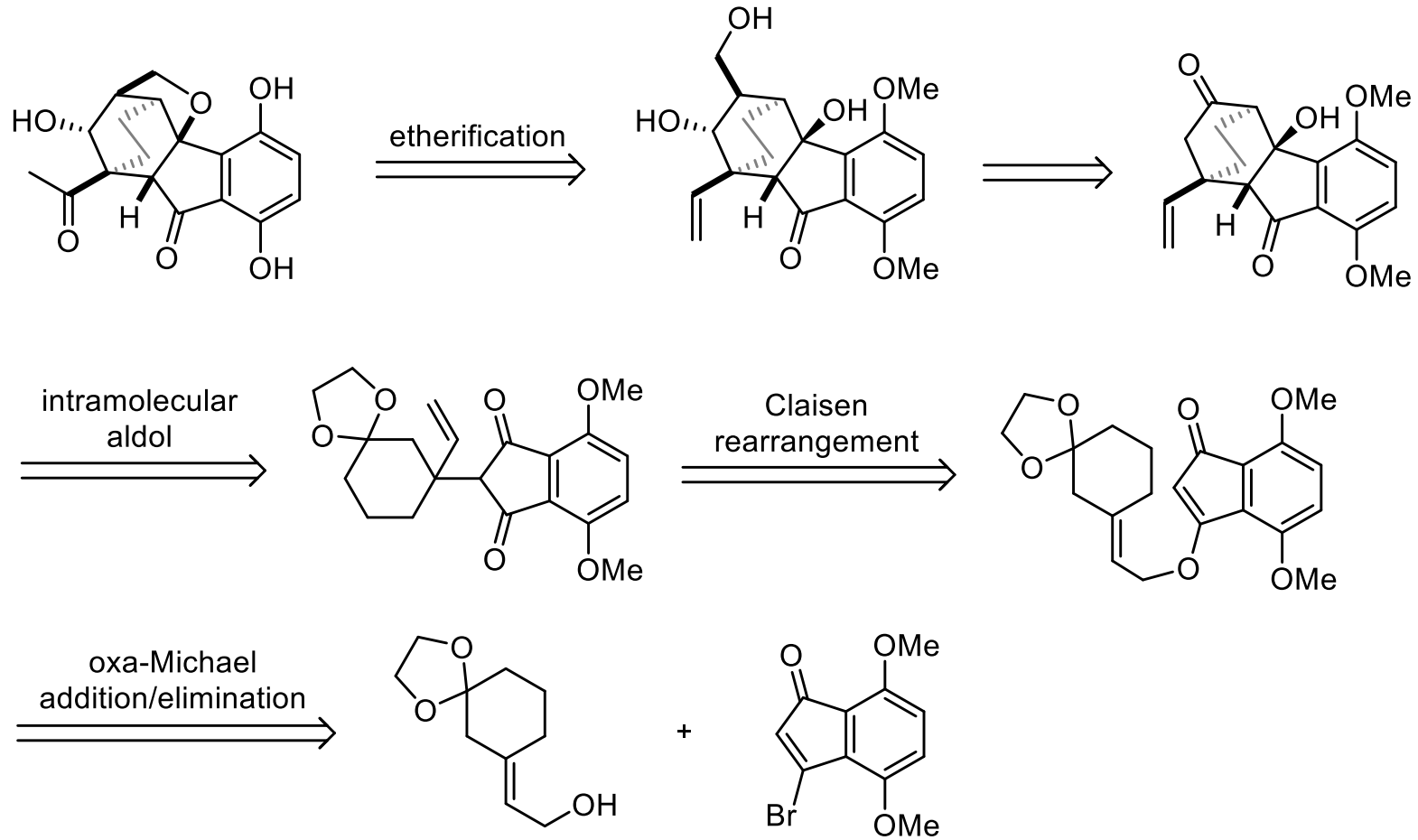
# Total Synthesis of Lucidumone through Convenient One-pot Preparation of the Tetracyclic Skeleton by Claisen Rearrangement and Subsequent Intramolecular Aldol Reaction

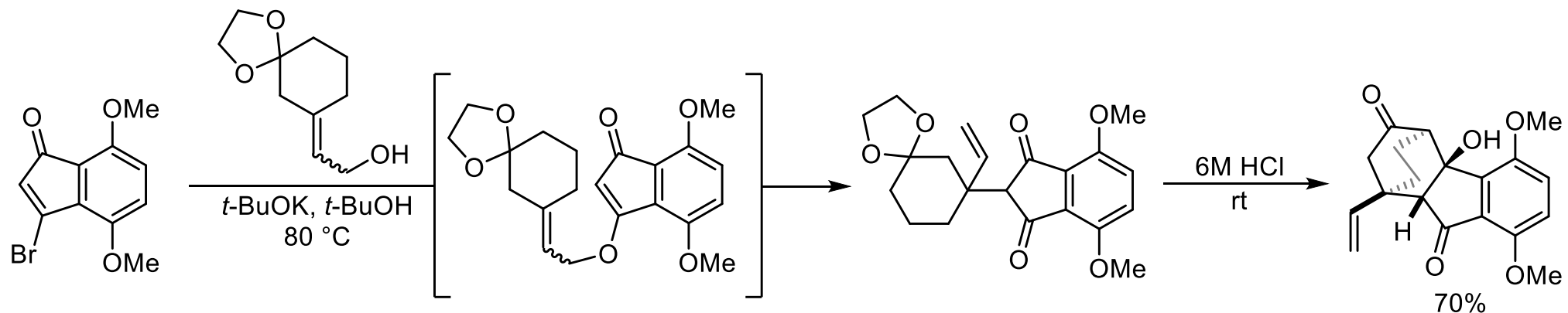
Yuichiro Kawamoto,\* Naoki Noguchi, Toyoharu Kobayashi, and Hisanaka Ito\*



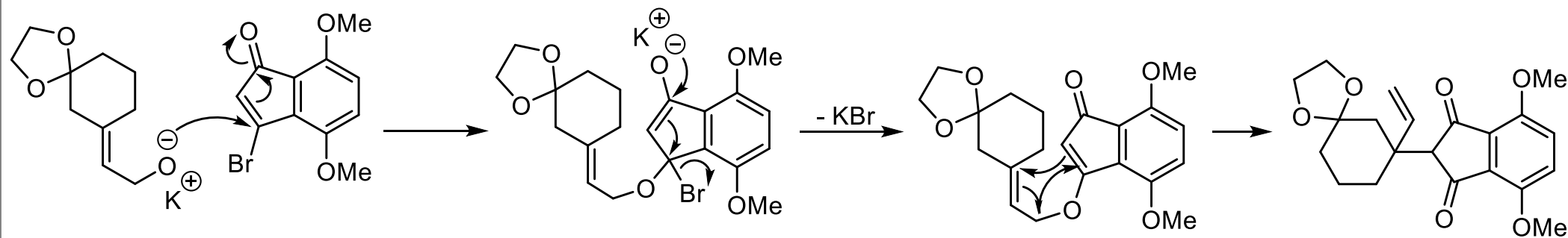
- One previously reported synthesis, 19 steps
- This work, 14 steps (racemic), 16 steps (asymmetric)

# Retrosynthetic Analysis

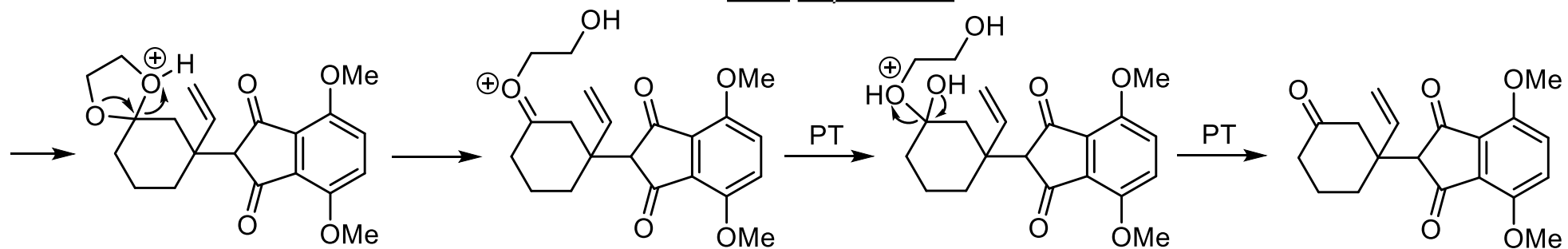


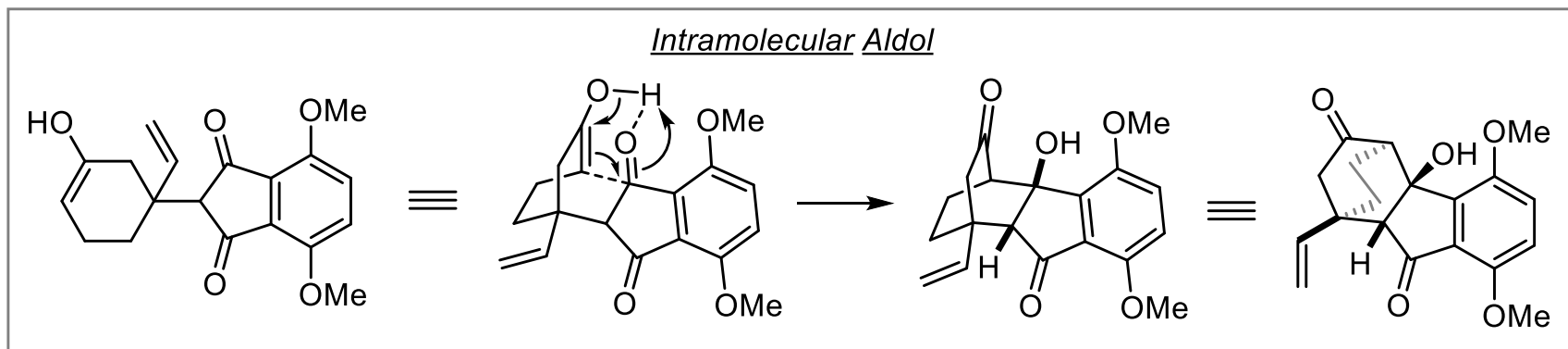
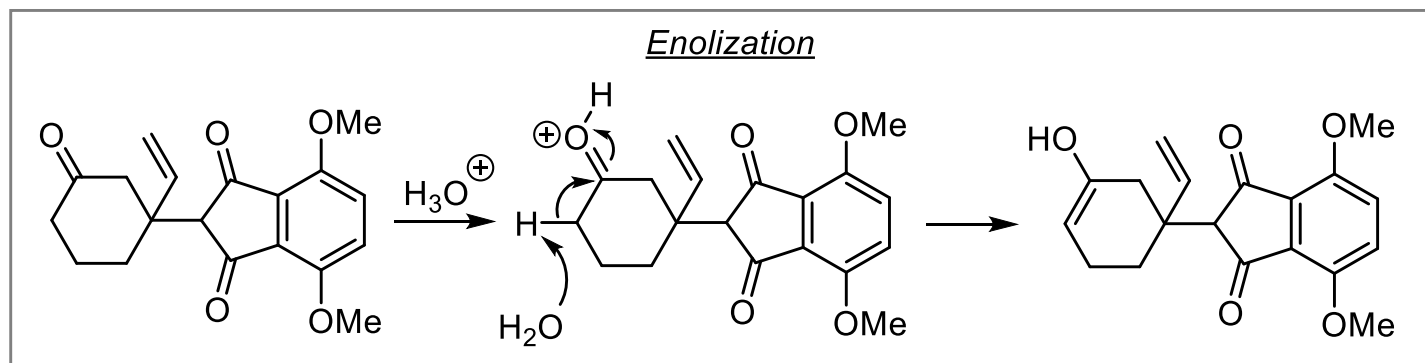
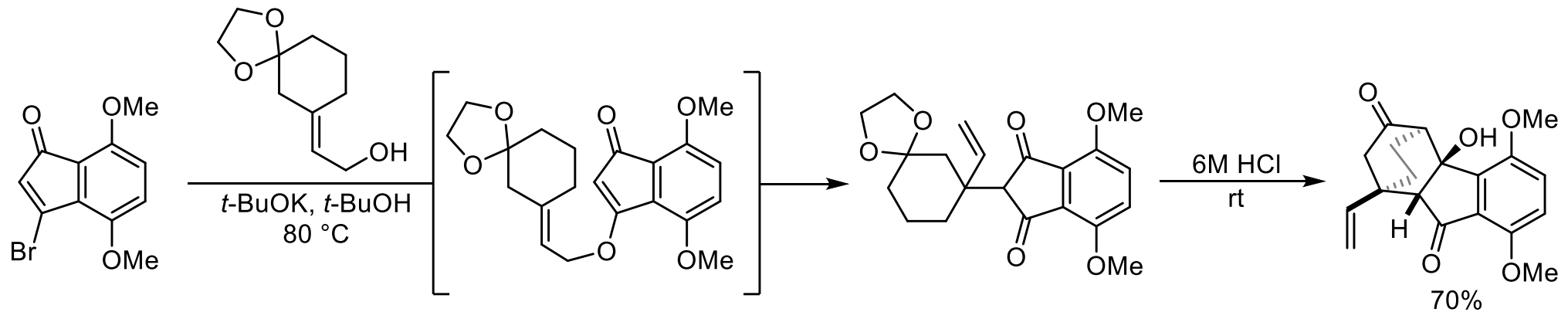


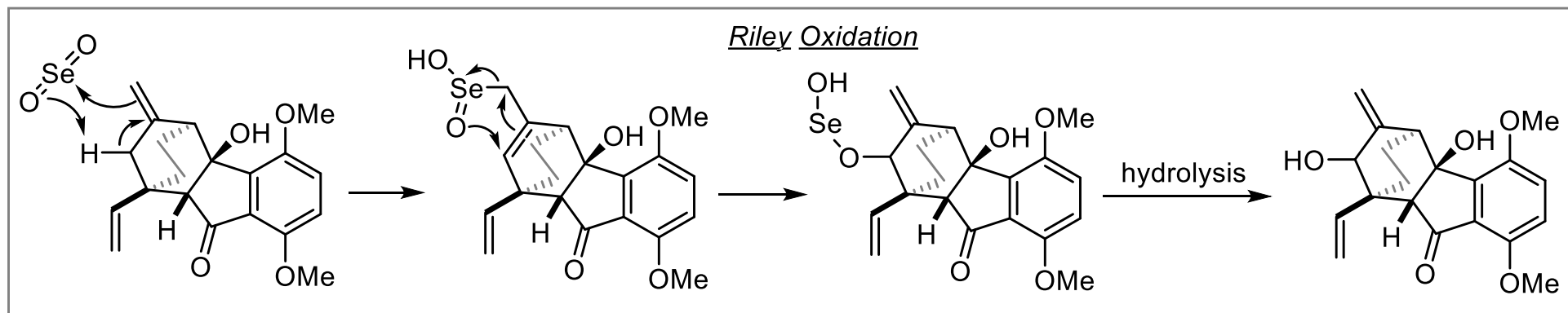
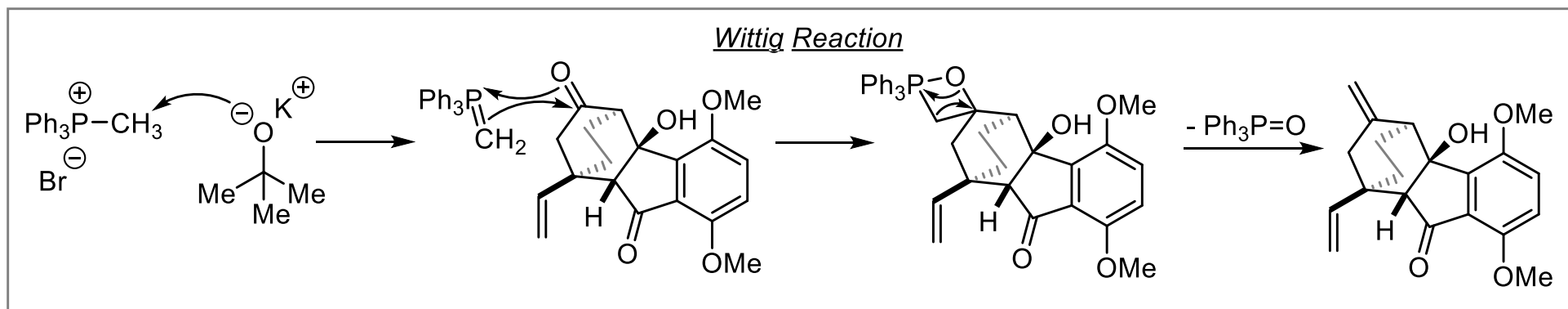
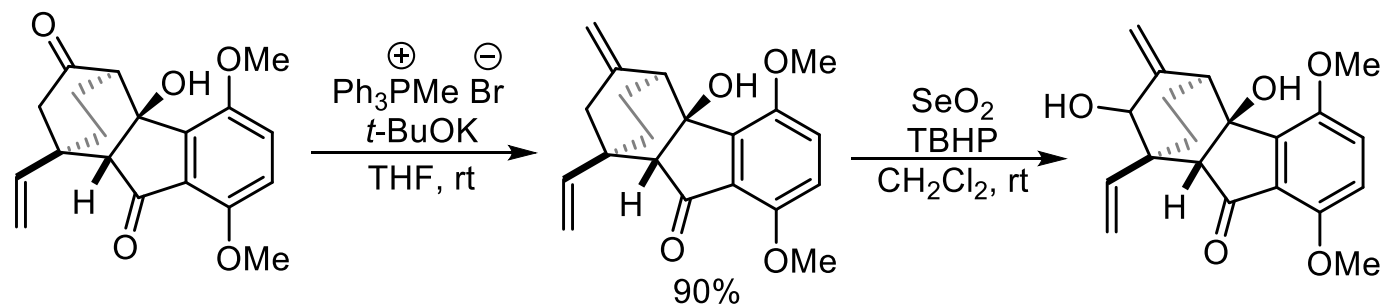
oxa-Michael Addition/Elimination

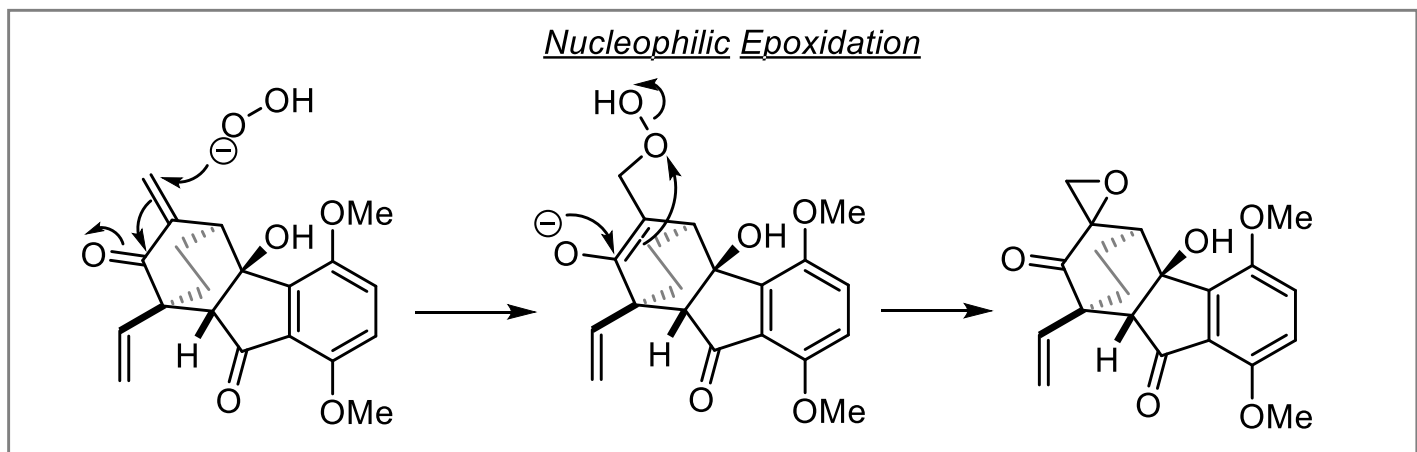
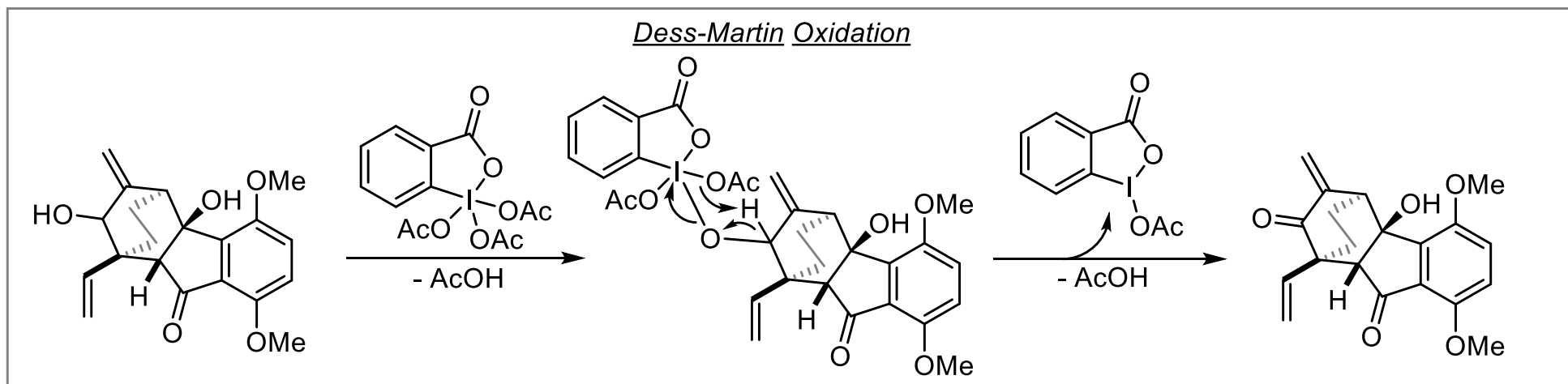
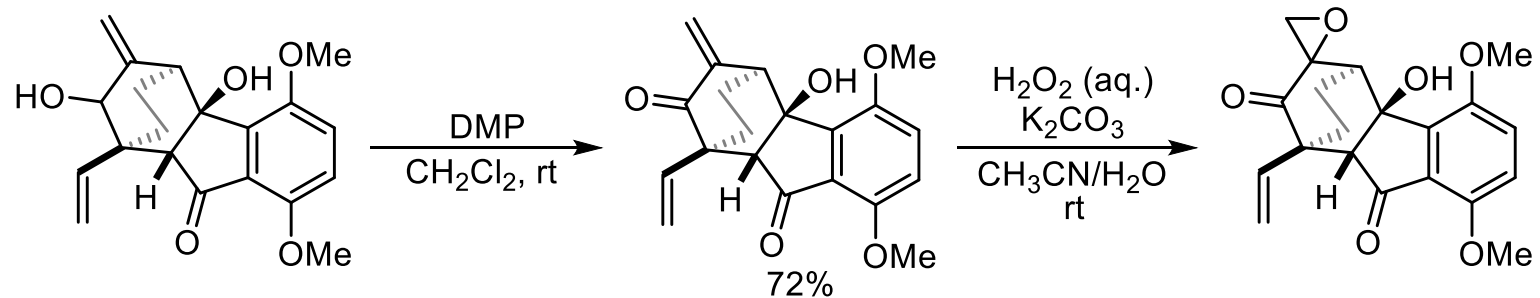


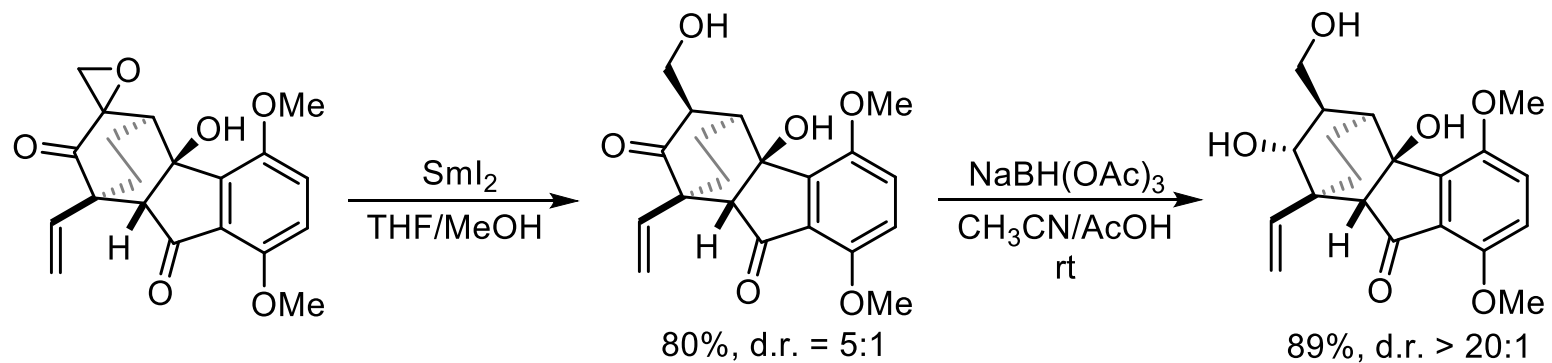
Ketal Deprotection



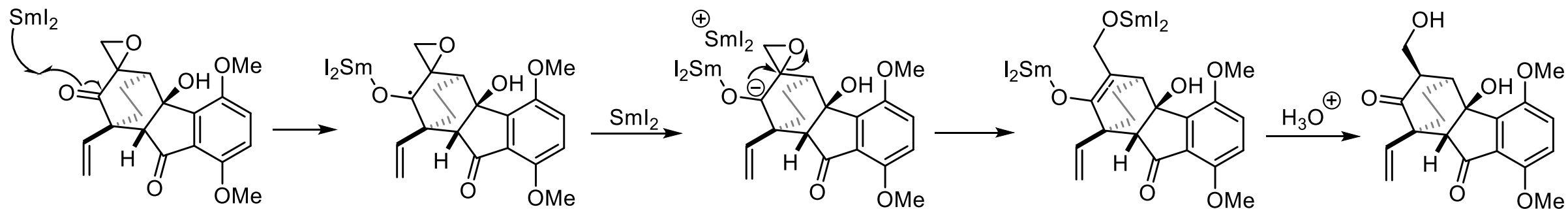








*$\text{SmI}_2$ -Mediated Epoxide Reduction*



*Alcohol-Directed Ketone Reduction*

