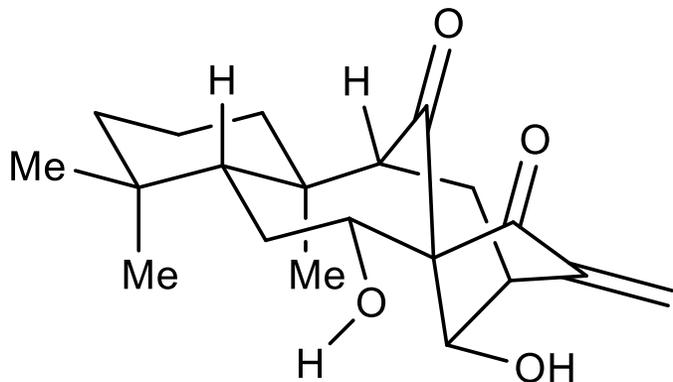
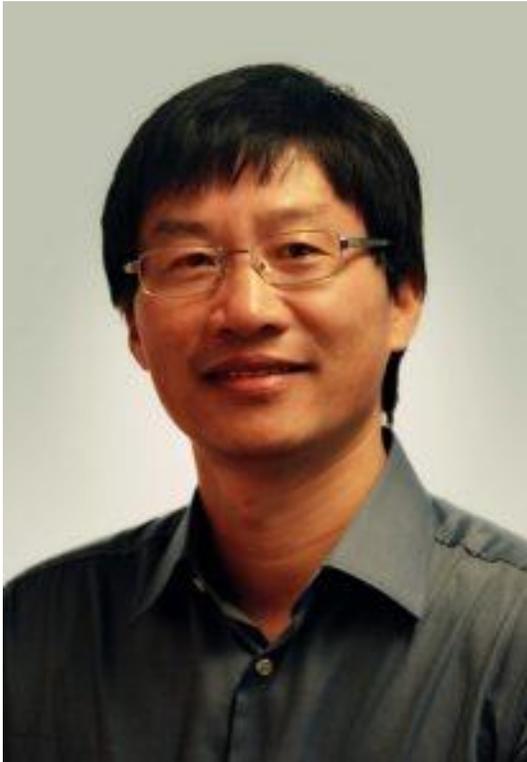


Total Synthesis of (\pm)- Crokonoid A



Zhixuan Jiang

2025.11.13

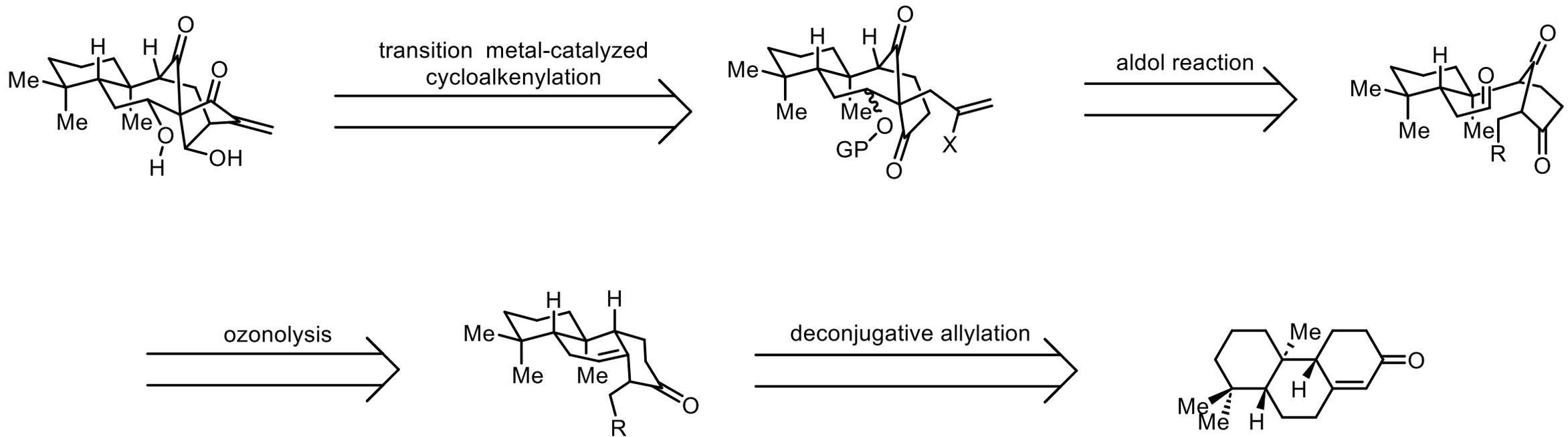


Jieping Zhu

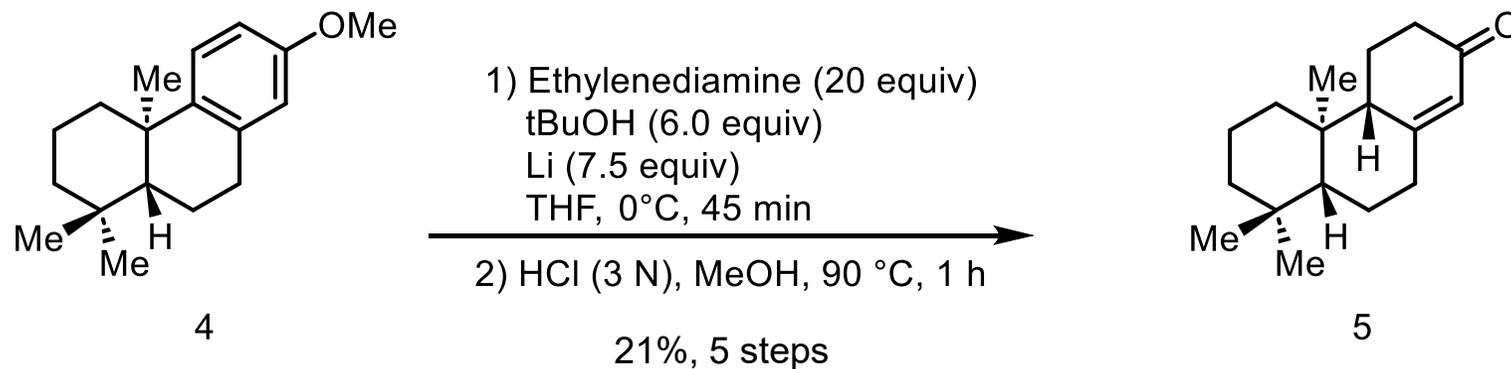
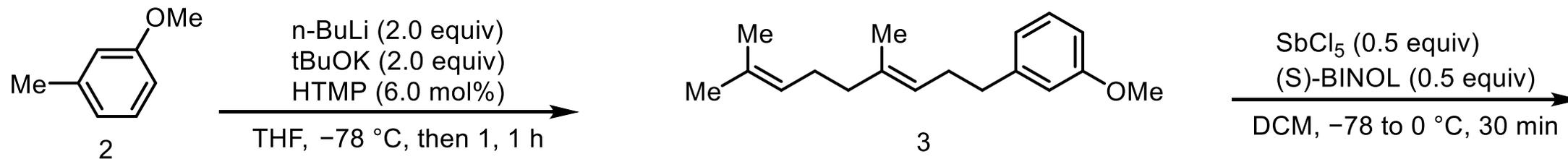
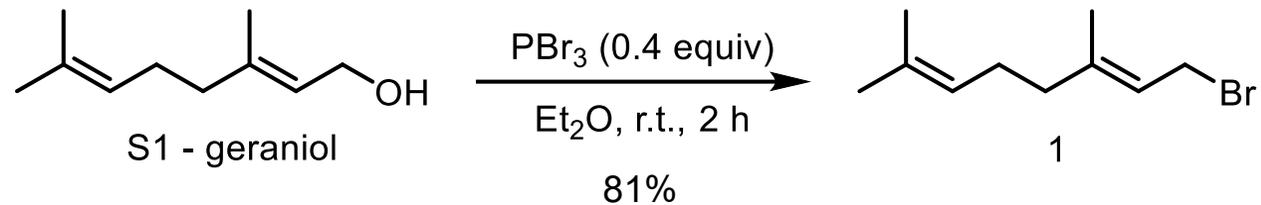
Resume

- 1984, B.Sc., Hangzhou Normal University, P. R. China
- 1987, M.Sc., Lanzhou University (Prof. Y.-L. Li), P. R. China
- 1991, Ph.D., Université Paris XI (Prof. H.-P. Husson and Prof. J.-C. Quirion), France
- 1991-1992, Post-doct., Texas A & M University (Prof. Sir D. H. R. Barton), USA
- 1992-2000, Chargé de Recherche, CNRS
- 2000-2006, Director of Research, 2nd class, CNRS
- 2006-2010, Director of Research, 1st class, CNRS
- 2010-- , EPFL, Professor

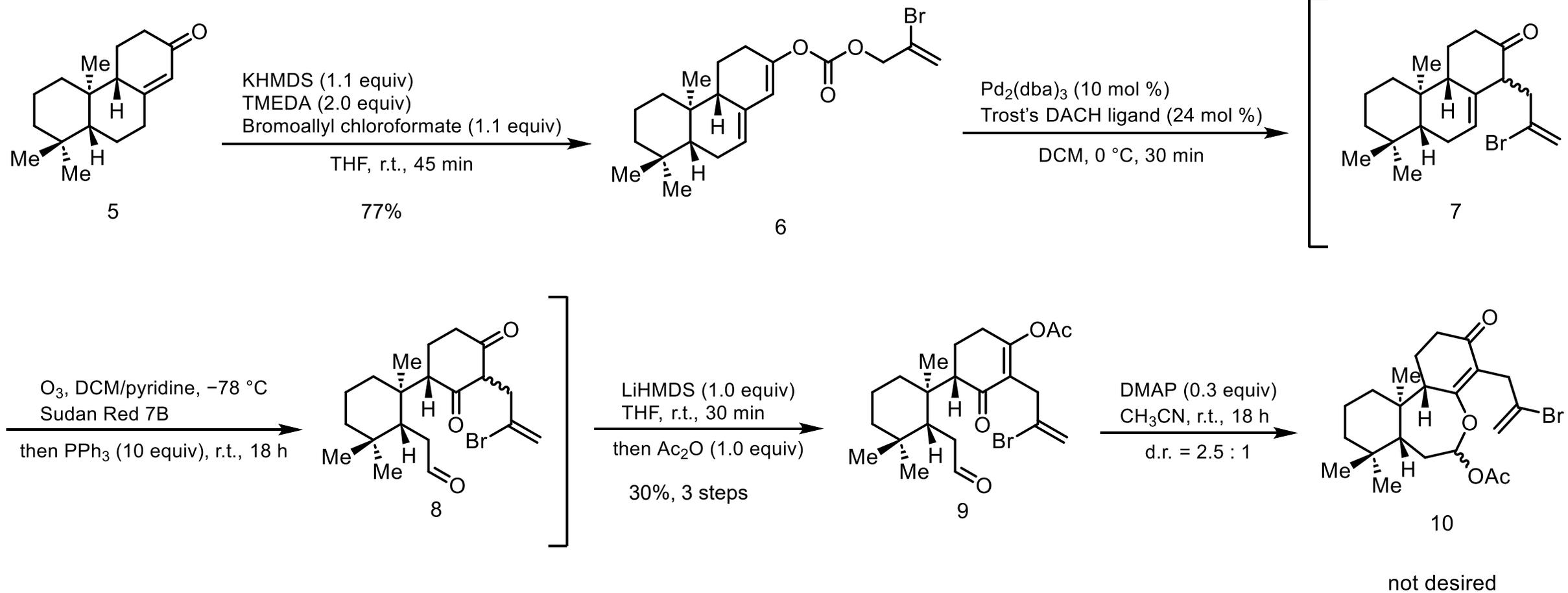
Retrosynthetic Analysis of Crokonoid A



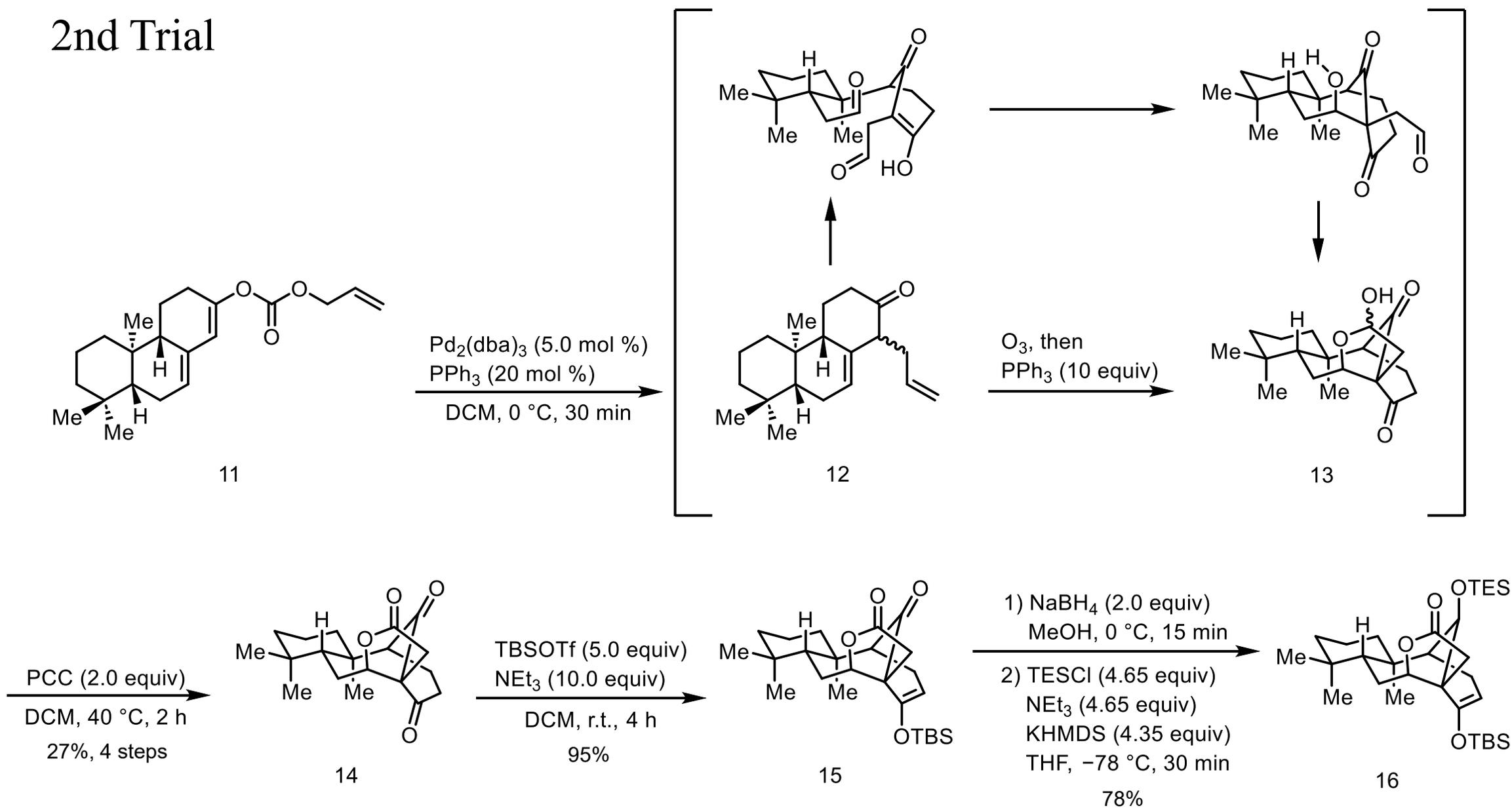
Fragment Preparation



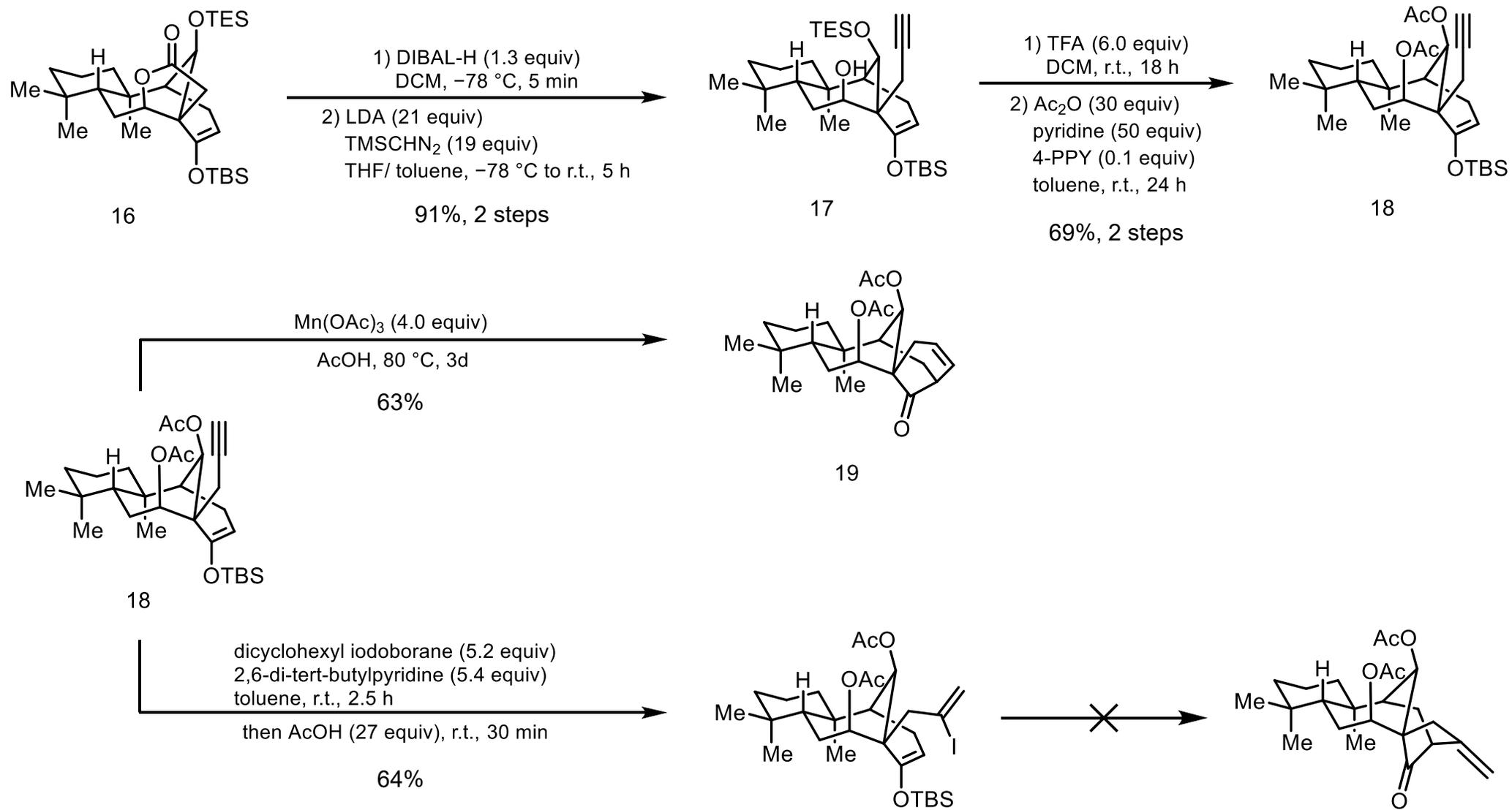
1st Trial



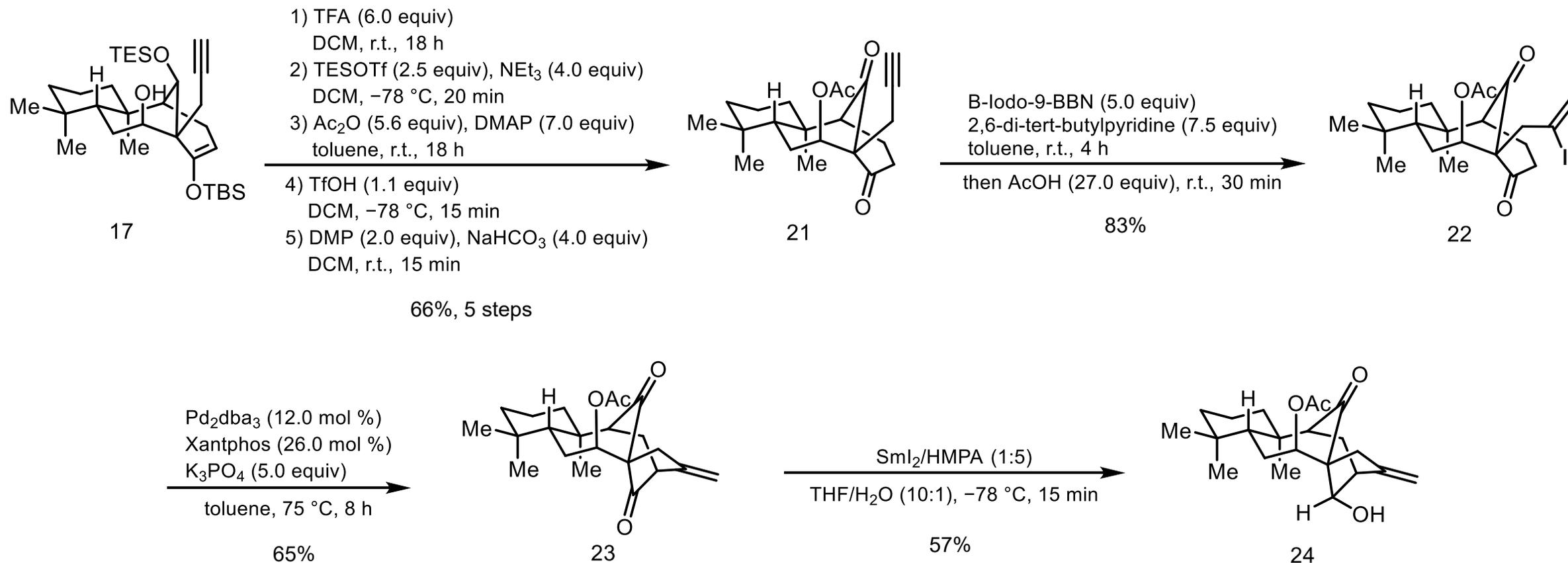
2nd Trial



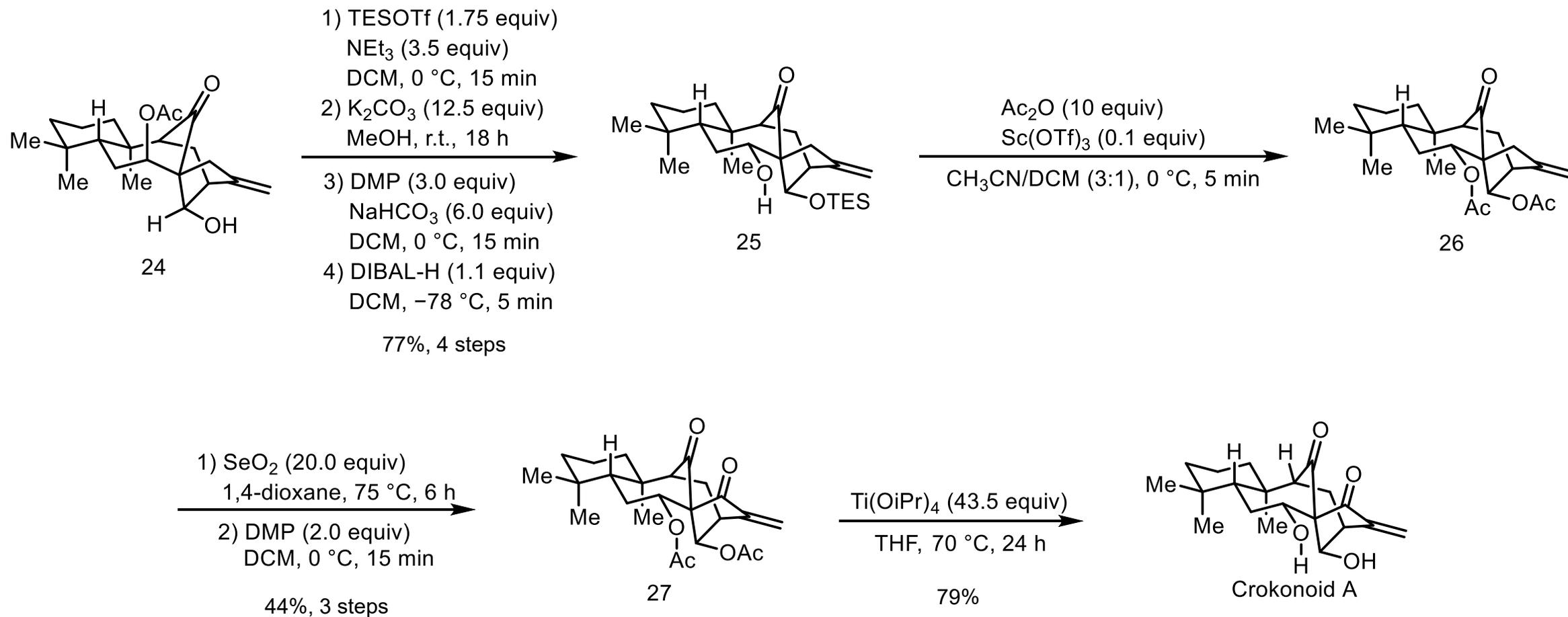
2nd Trial



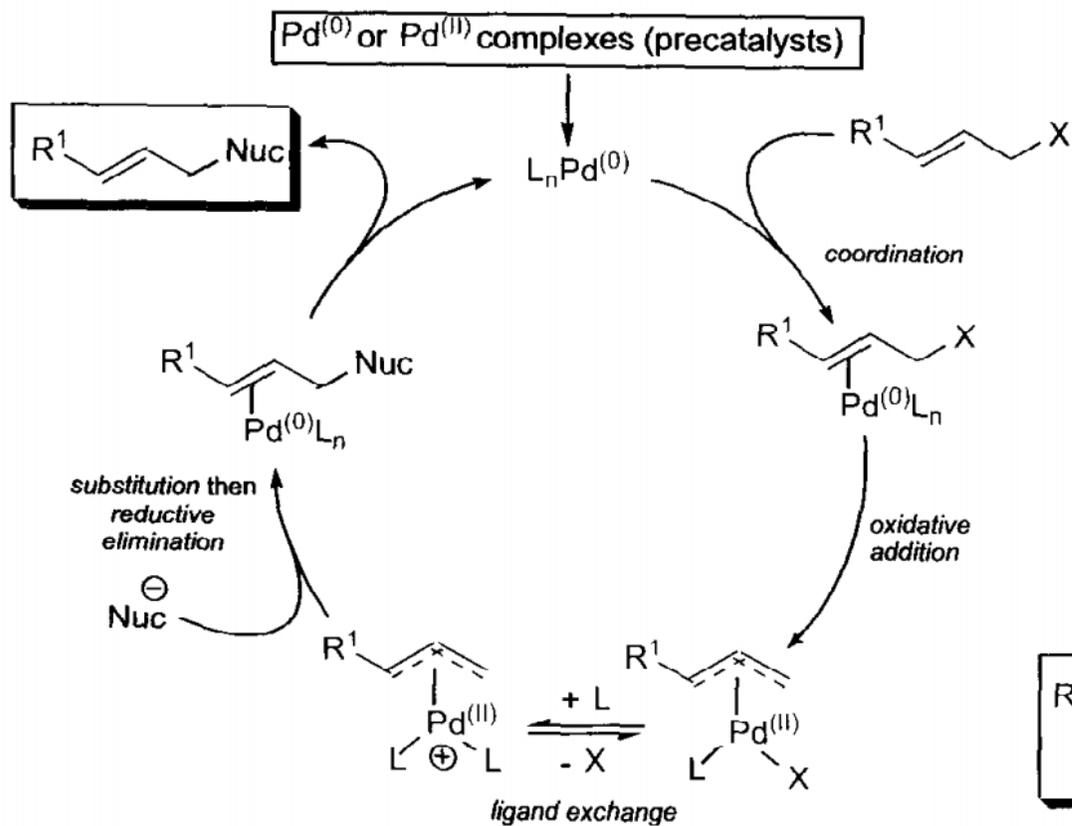
3rd Trial



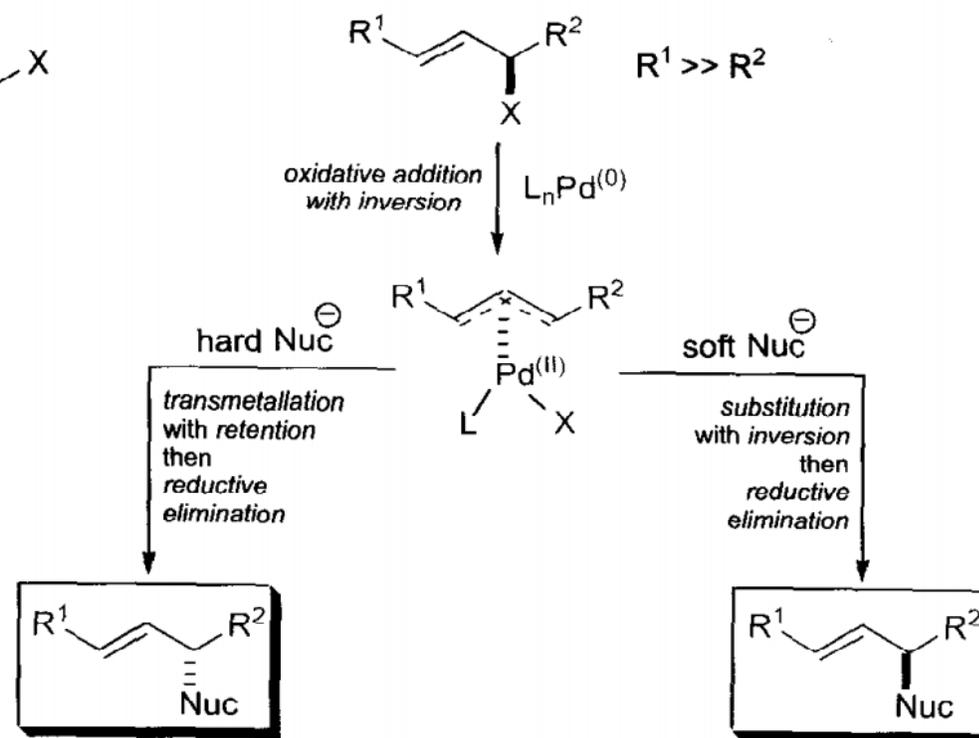
3rd Trial



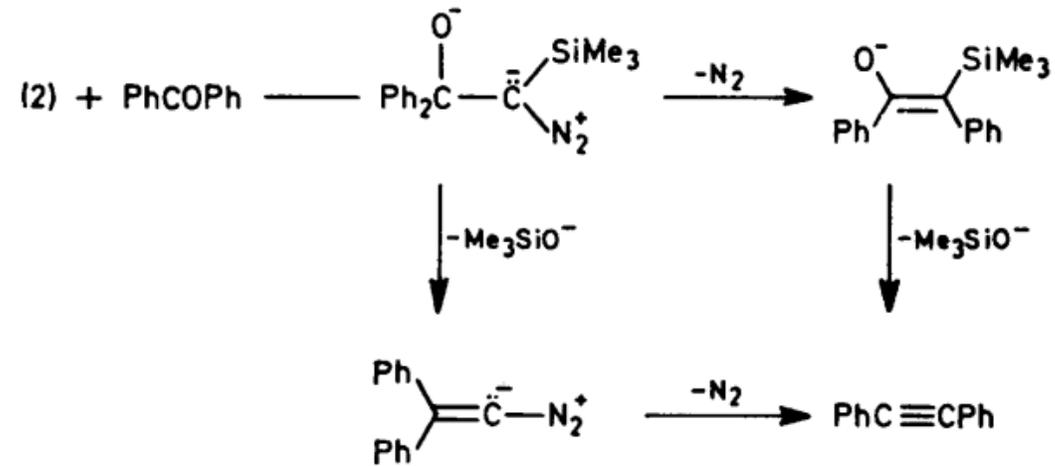
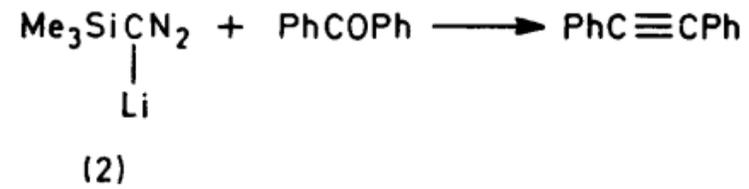
Tsuji-Trost reaction



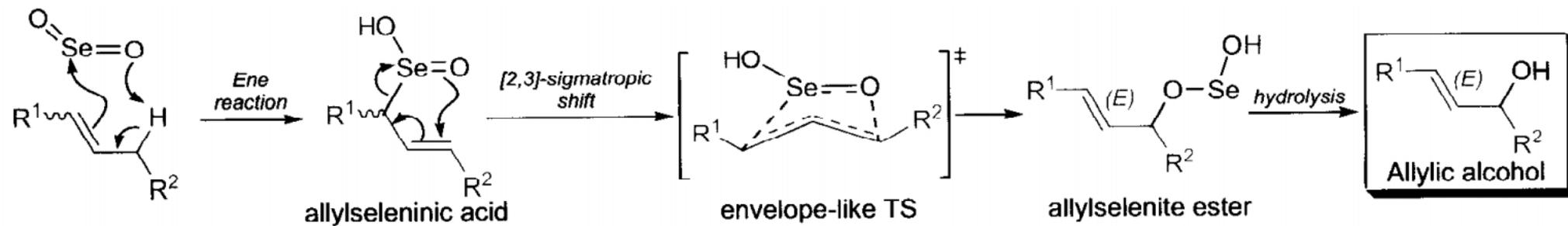
Mechanism with soft and hard nucleophiles:



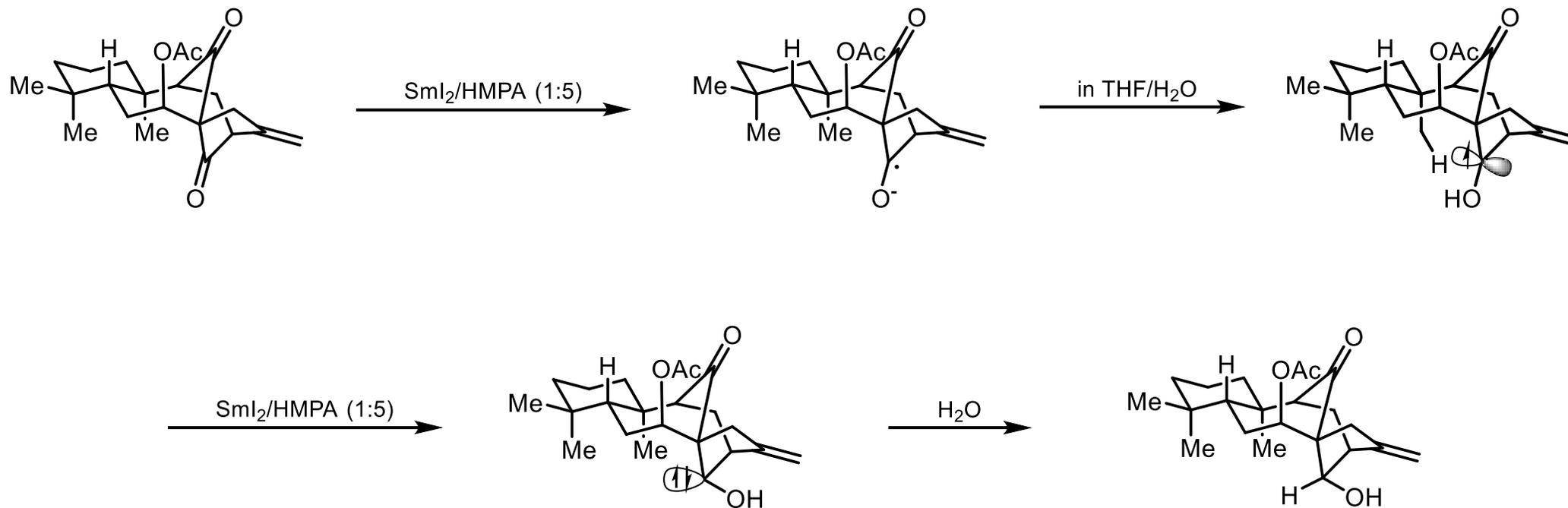
Colvin rearrangement



Riley oxidation



SET reduction



The hydroxyl group, likely H-bonded to the solvent (THF or H₂O), was expected to reside on the sterically less hindered exo face.

SET reduction: byproduct

