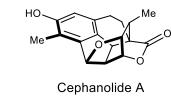
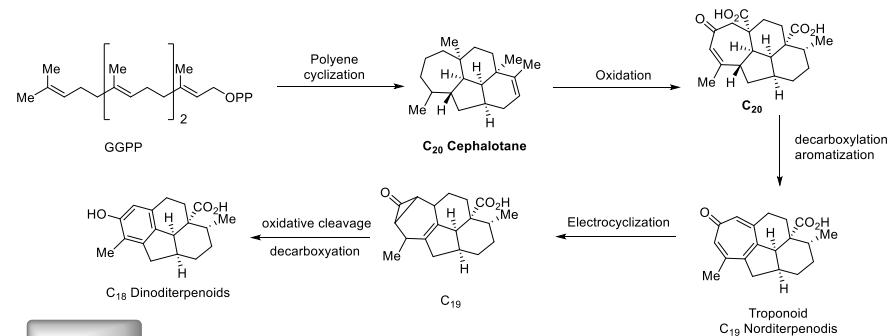


## Asymmetric Total Synthesis of Cephalolide A

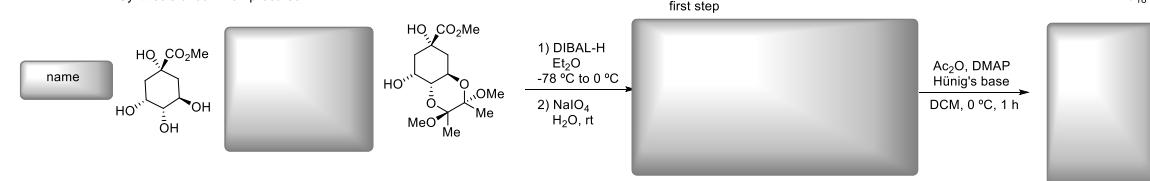
Zhang, H.; He, H.; Gao, S. *Angew. Chem. Int. Ed.* 2020 DOI: 10.1002/anie.202009562



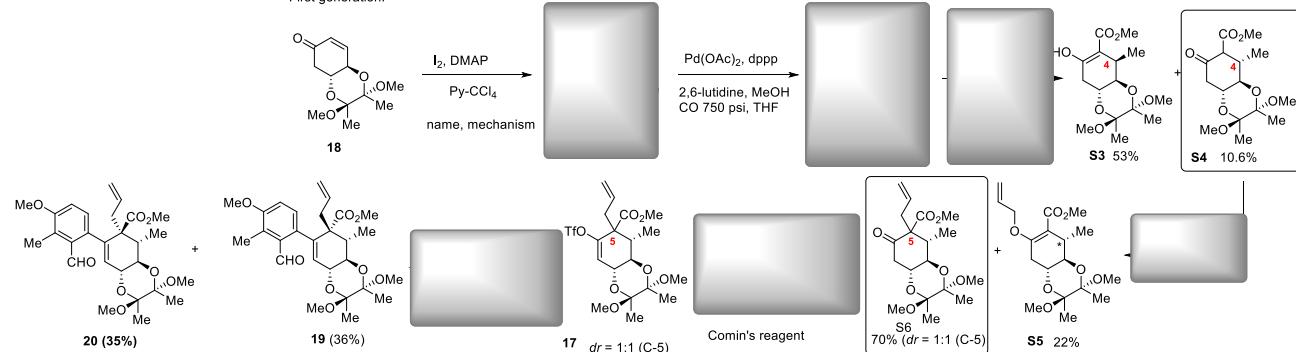
- Polycyclic terpenoids: drug discovery
- Cephalotaxus diterpenoids: unique structural features and potential biological activities
- tetracyclic carbon skeleton (A-B-C-D ring)
- bridging lactone
- tetrahydrofuran ring



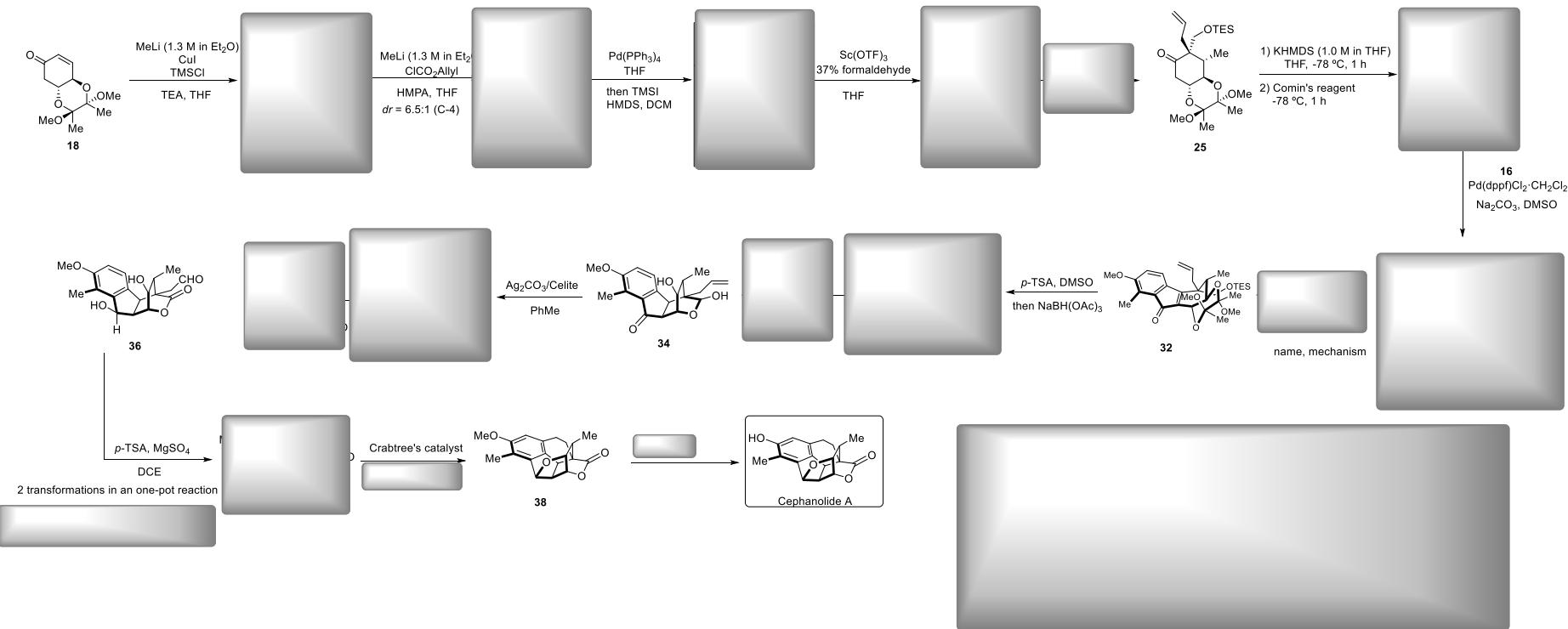
Synthesis of common precursor



First generation:



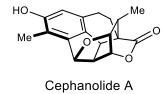
Second generation



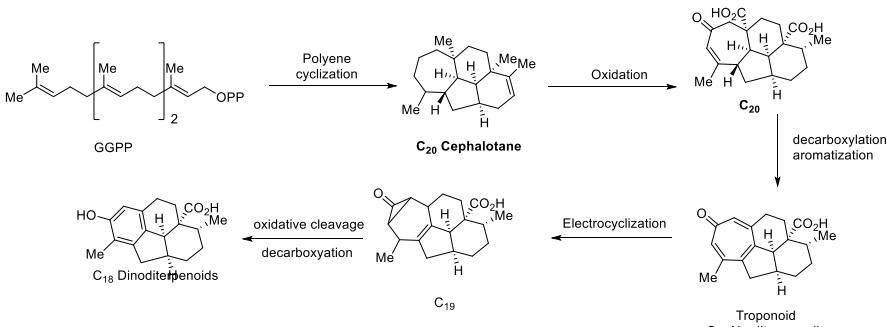
# SOLUTION

## Asymmetric Total Synthesis of Cephalolide A

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Synthesis of common precursor

