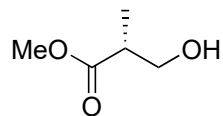
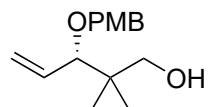


Enantioselective Total Synthesis of (+)-Aberrarone

W. M. Amberg, E. M. Carreira, *J. Am. Chem. Soc.* **2022**, *144*, 15475–15479.



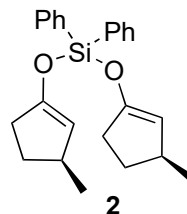
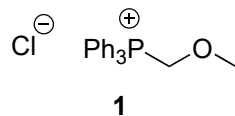
1–7



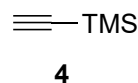
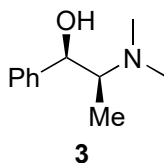
8–11



- 1) TBDPSCI, Imidazole
- 2) DIBAL-H, -78 °C
- 3) **1**, NaHMDS, -78 °C *then* 2M HCl
- 4) **2**, MeLi, -78 °C *then* SM (after step number 3)
- 5) NaHMDS, CS₂, MeI
- 6) *n*-Bu₃SnH, AIBN
- 7) KHMDS, Comins' reagent *then* TBAF



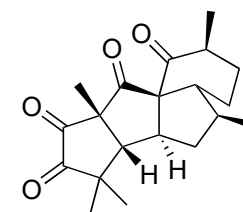
- 8) DMSO, DIPEA, SO₃•Py
- 9) **3**, Zn(OTf)₂, Et₃N, **4**
- 10) TBAF
- 11) Et₃N, DMAP, Ac₂O



5) + 6) Name of the reaction?

7) Structure Comin's reagent?

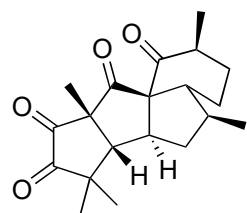
8) Name of the reaction?



(+)-Aberrarone

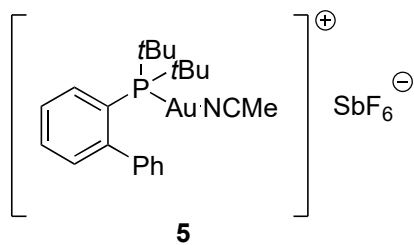
A

12–19



(+)-Aberrarone

- 12) Et₃N, PdCl₂(PPh₃)₂, CuI *then* **B**
- 13) DMSO, DIPEA, SO₃•Py
- 14) **5** (5 mol%), DCE, 0 °C *then*, *n*-Bu₃SnOMe
- 15) DDQ
- 16) LiAlH₄
- 17) H₂, PtO₂
- 18) DMSO, DIPEA, SO₃•Py
- 19) SeO₂



12) Name of the reaction?

14) cyclization cascade occure (4 reactions)

19) Name of the reaction?

