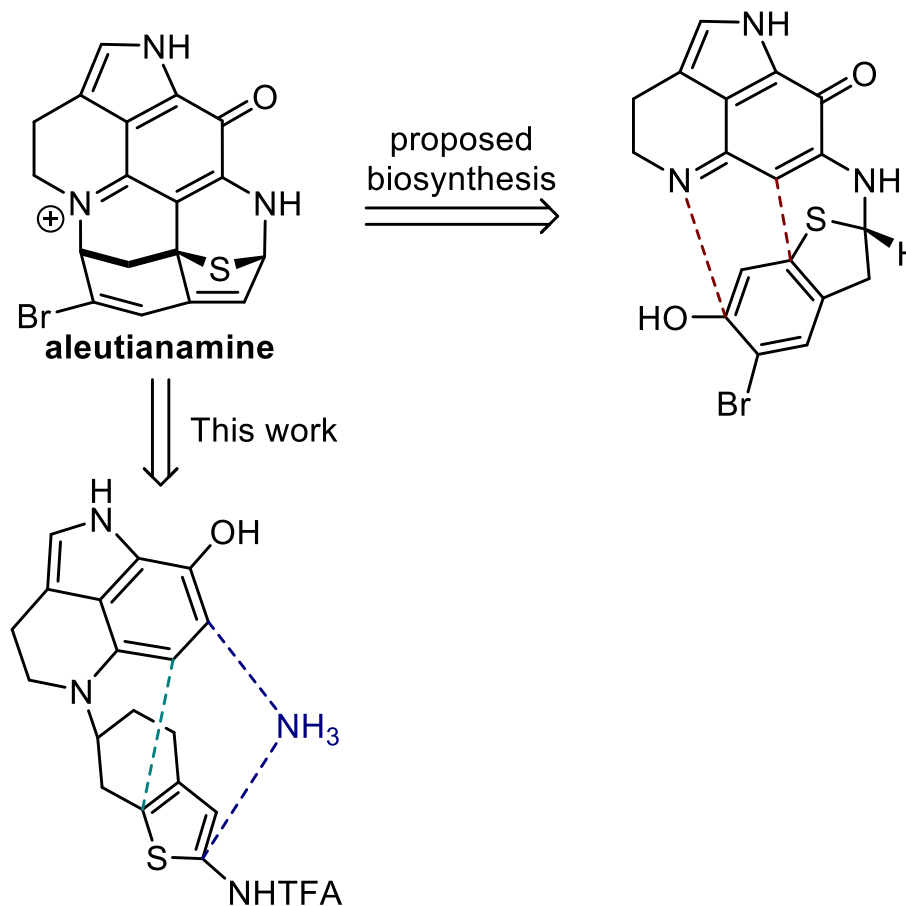
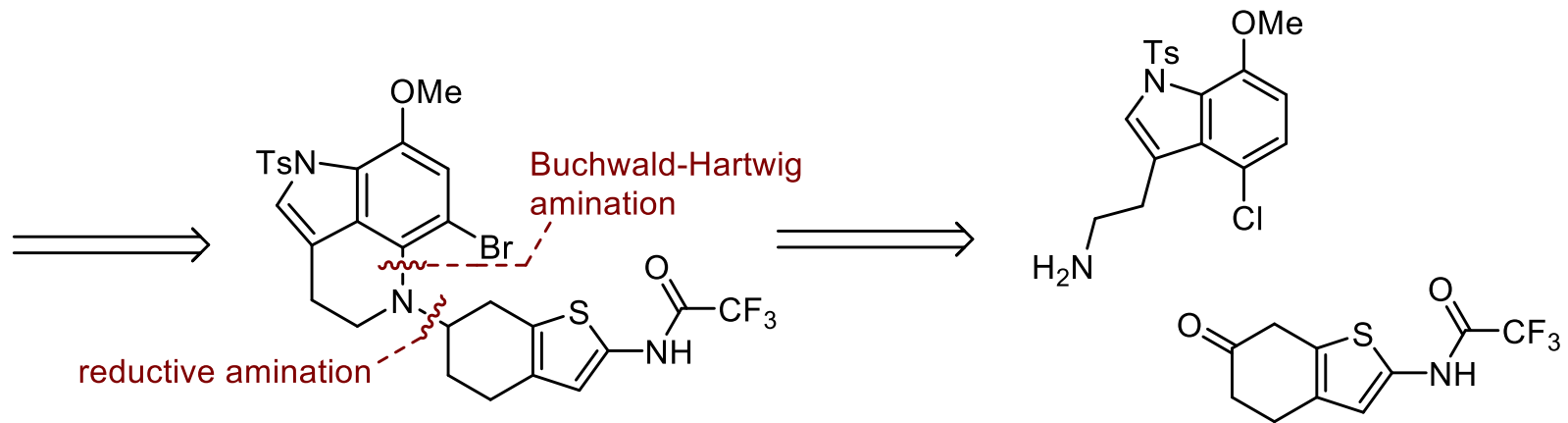
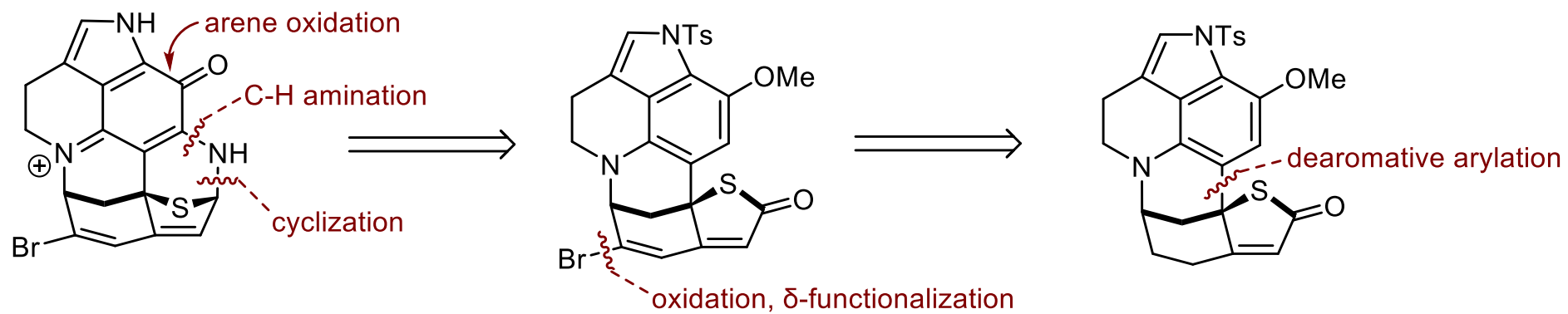


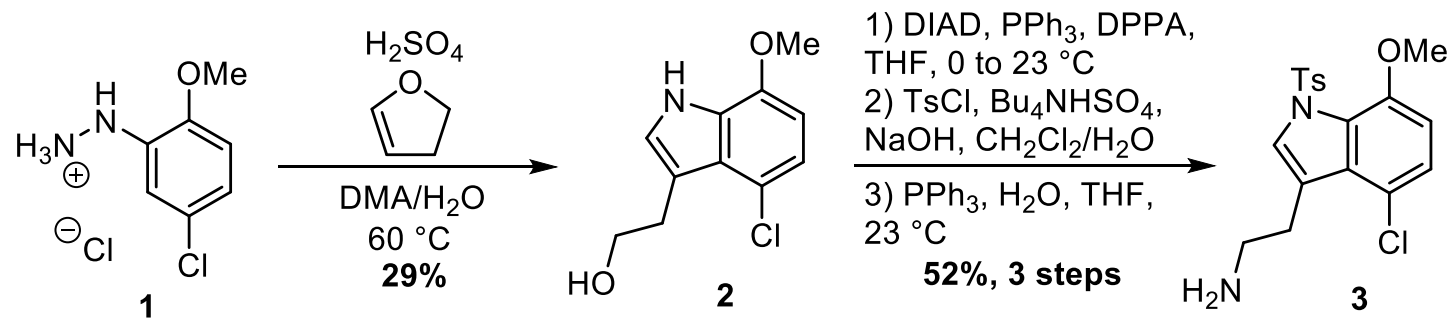
# Total Synthesis of Aleutianamine

Hao Yu,<sup>‡</sup> Zachary P. Sercel,<sup>‡</sup> Samir P. Rezgui, Jonathan Farhi, Scott C. Virgil, and Brian M. Stoltz\*

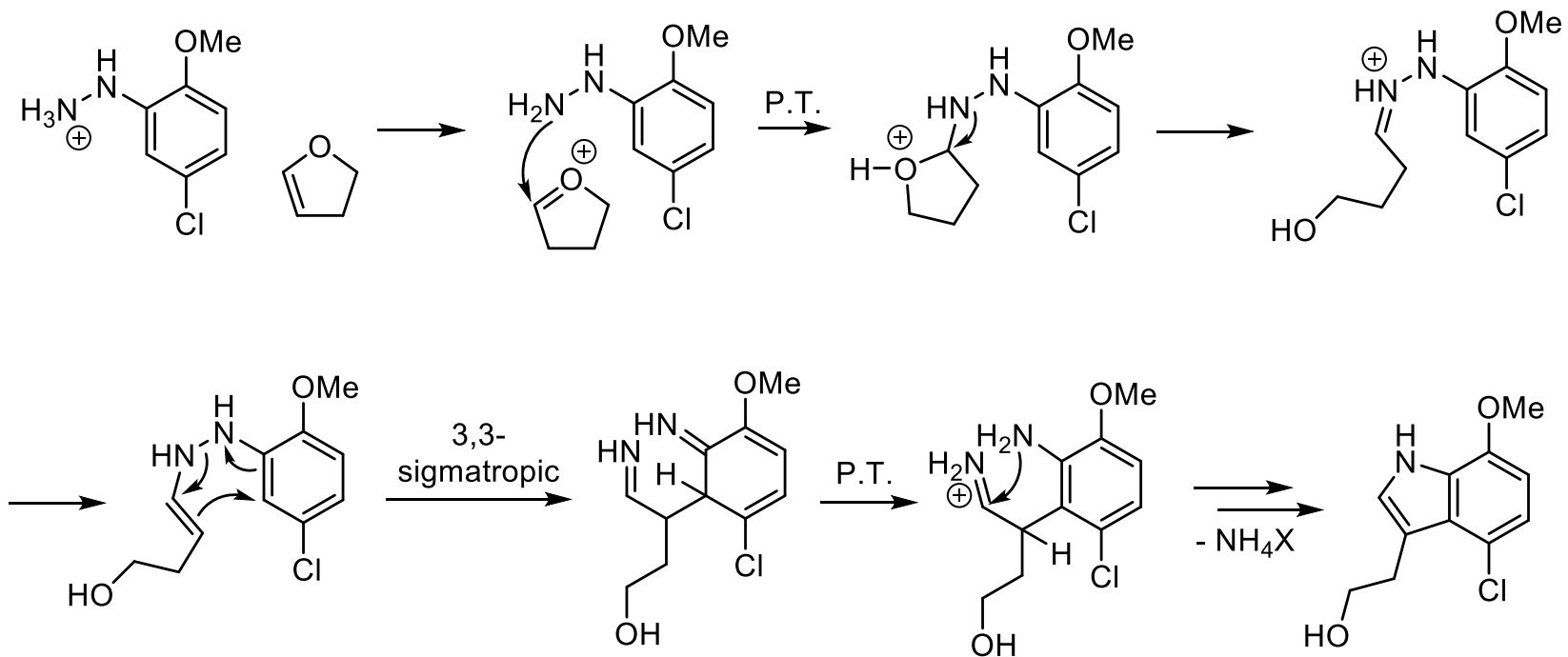
- isolated in 2019 by Hamann
- potent, selective cytotoxicity towards pancreatic adenocarcinoma cell line
- one previous total synthesis (Tokuyama, 2023)

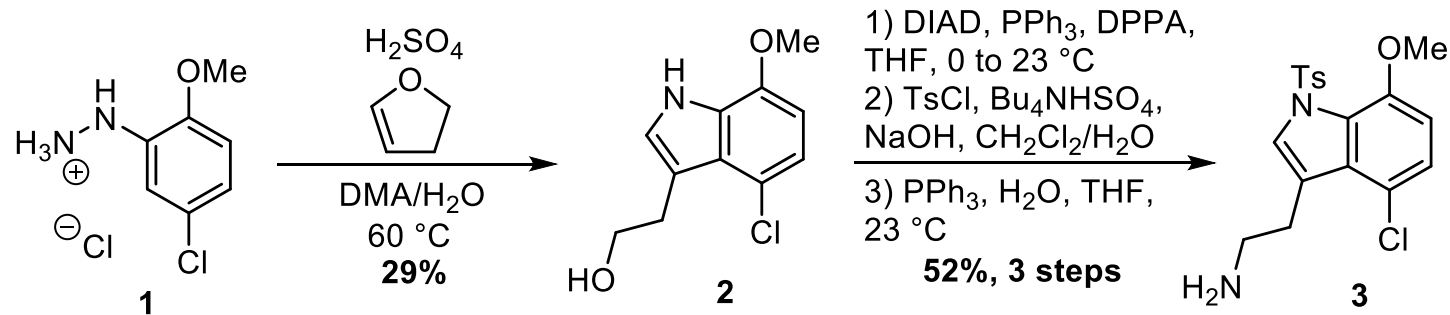






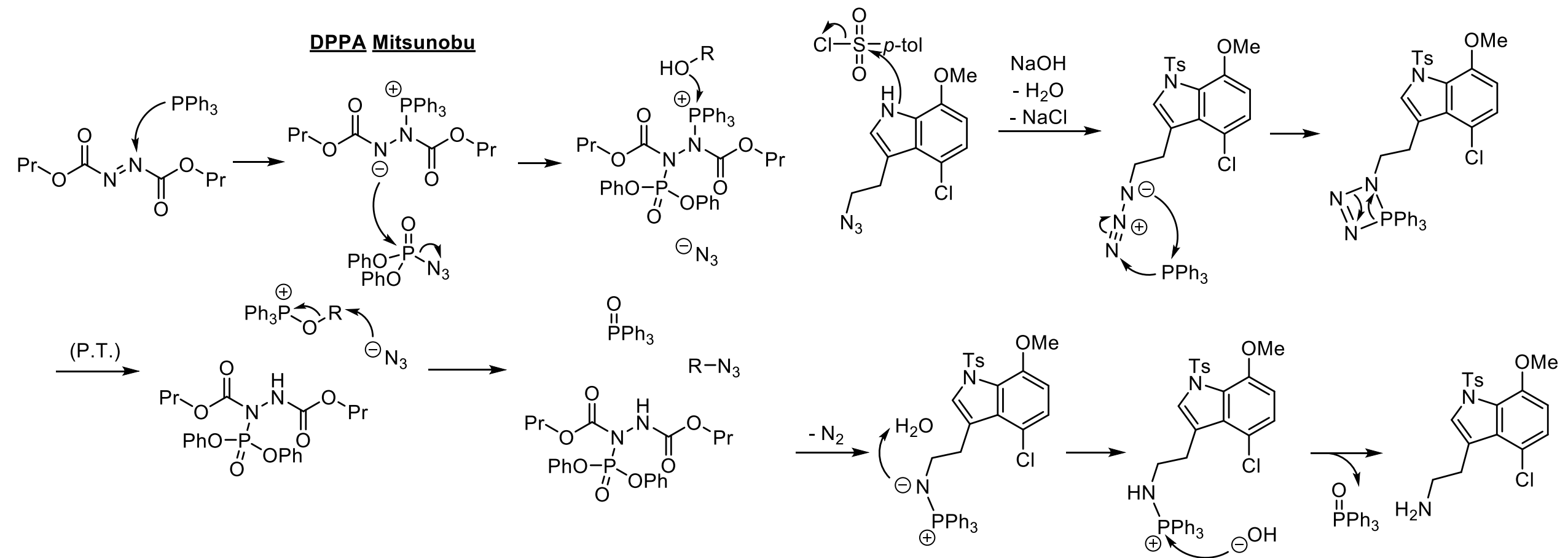
### Fisher-type Indole Synthesis

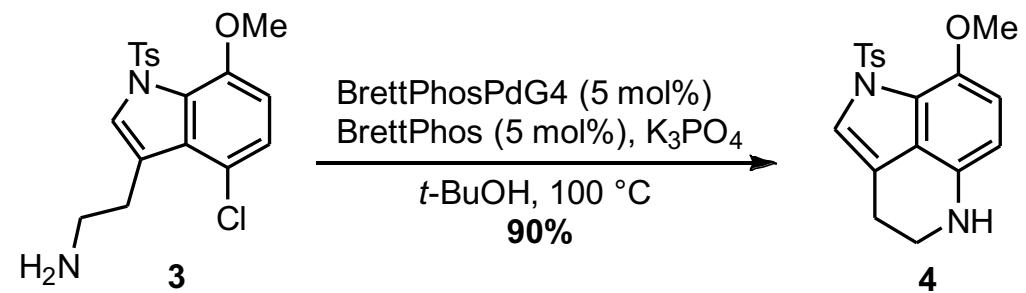




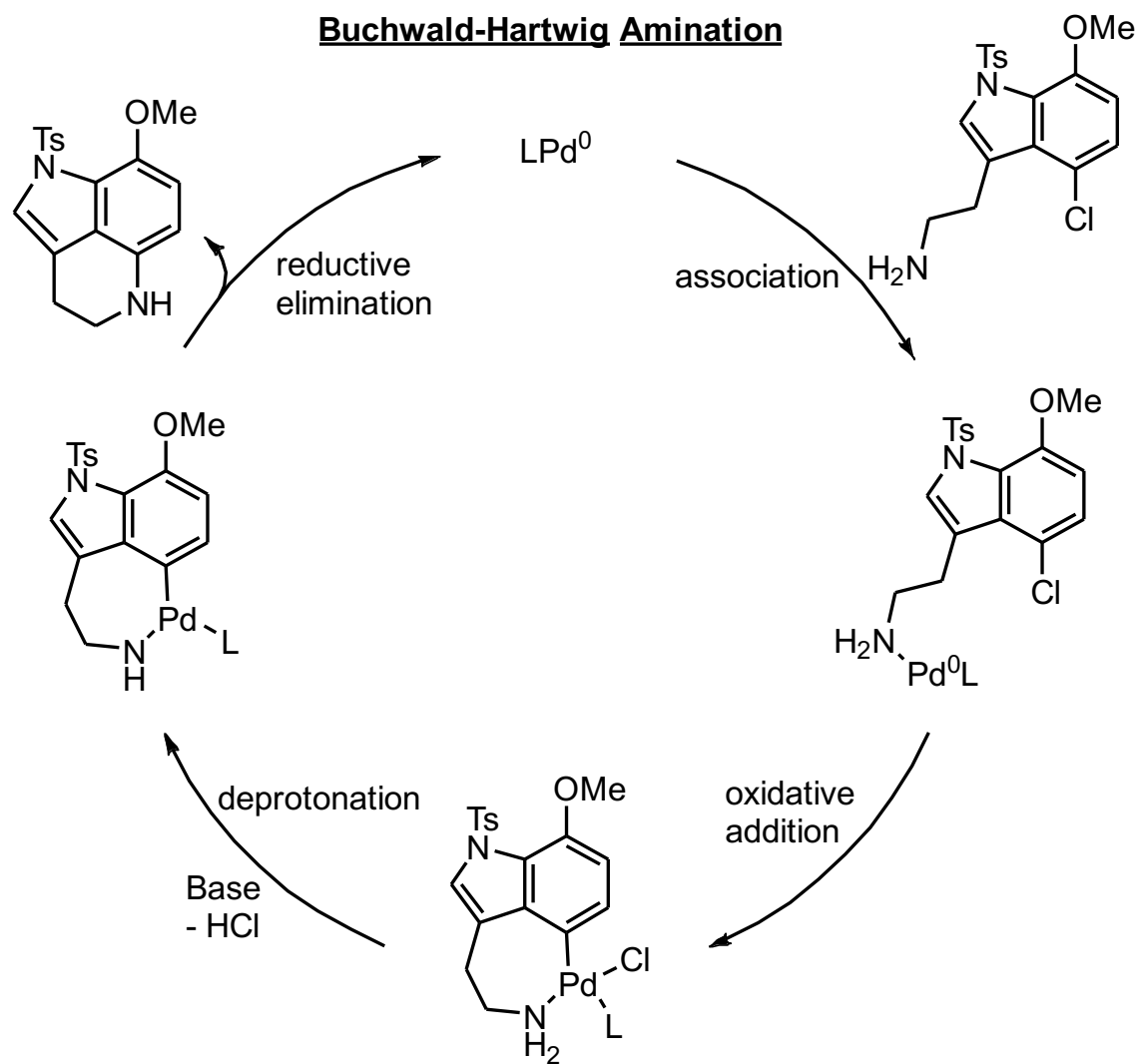
**Tosyl protection/Staudinger reaction and hydrolysis**

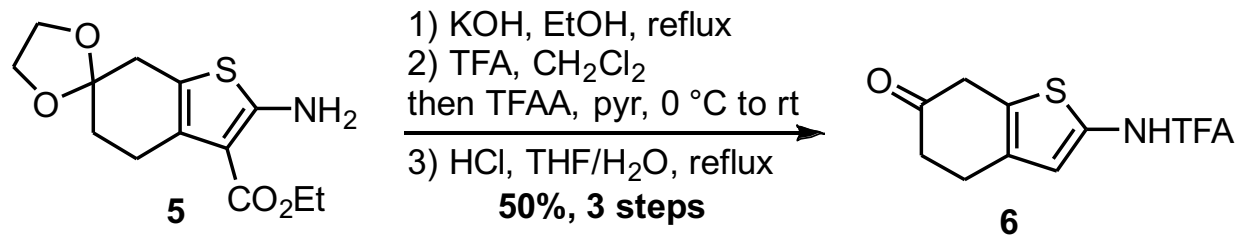
**DPPA Mitsunobu**



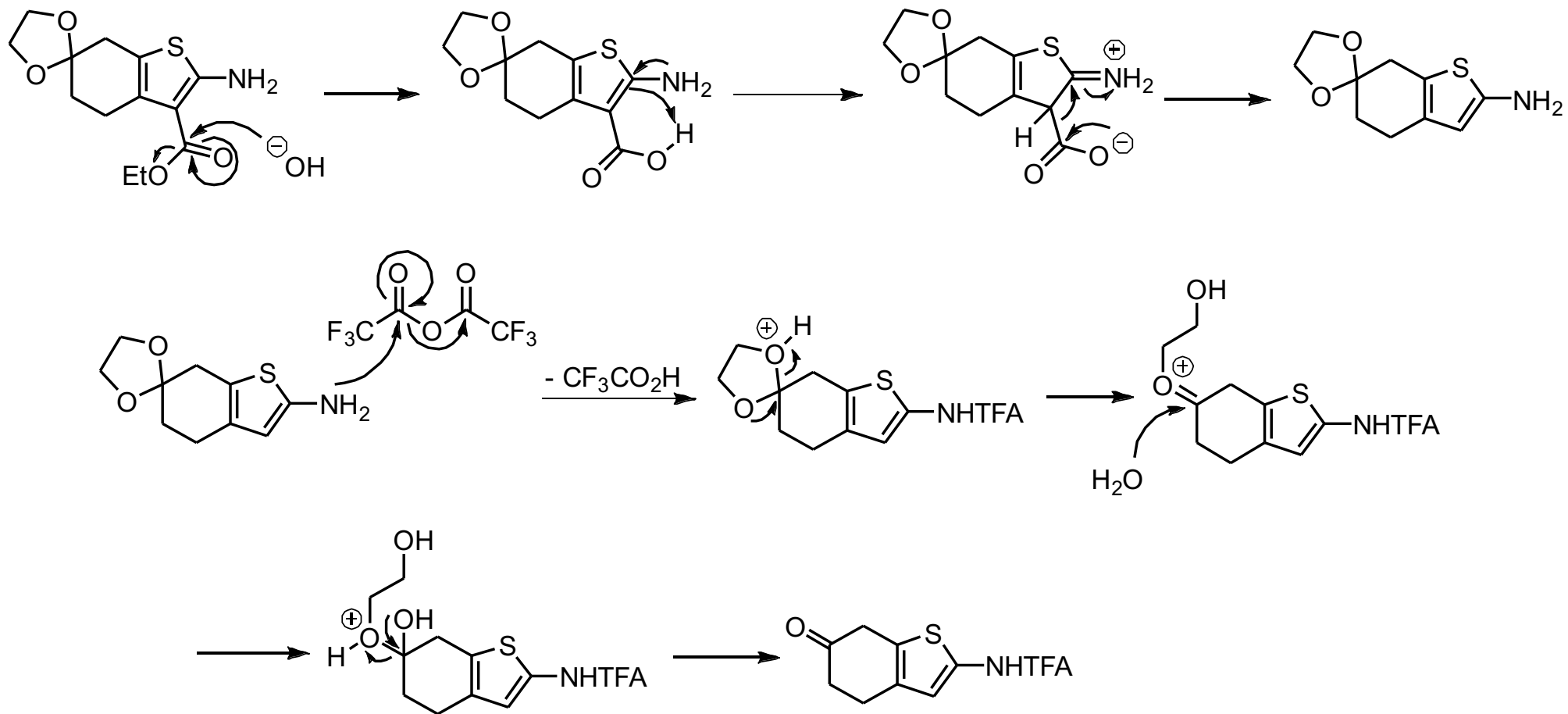


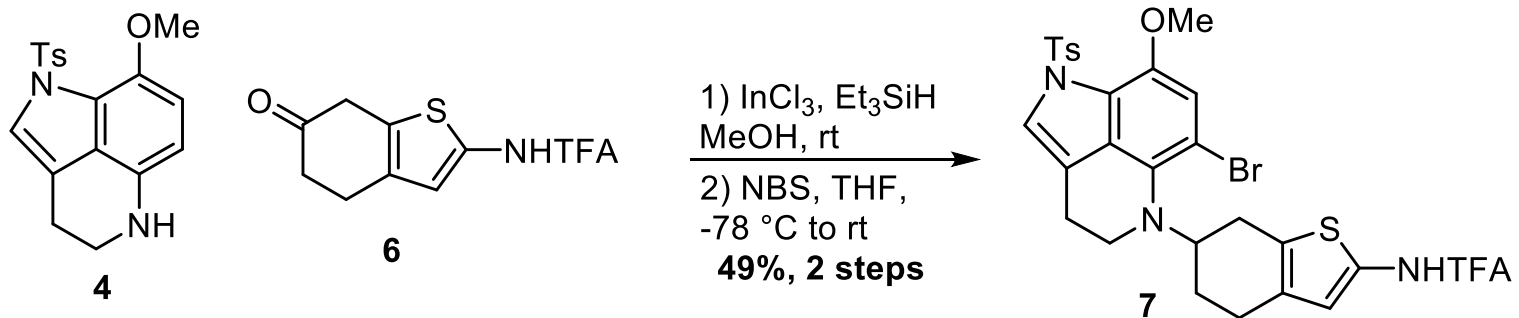
**Buchwald-Hartwig Amination**



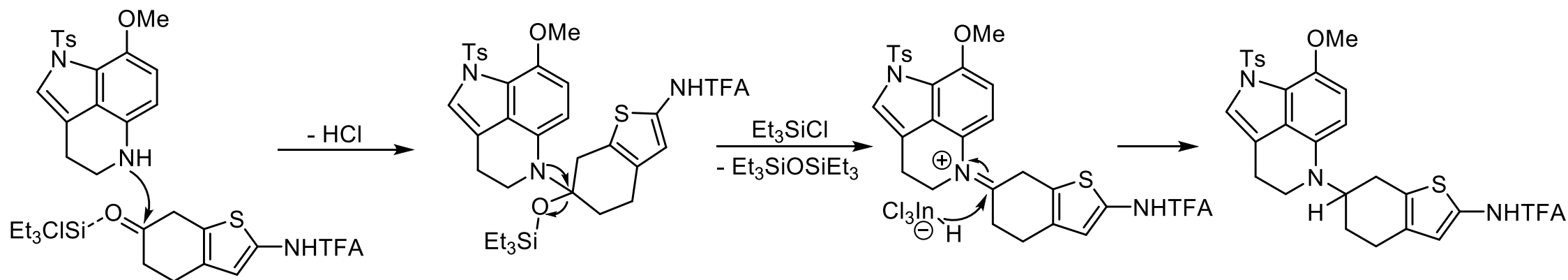
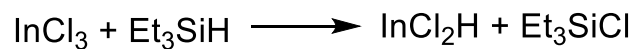


**Saponification, decarboxylation, amine protection, ketal hydrolysis**

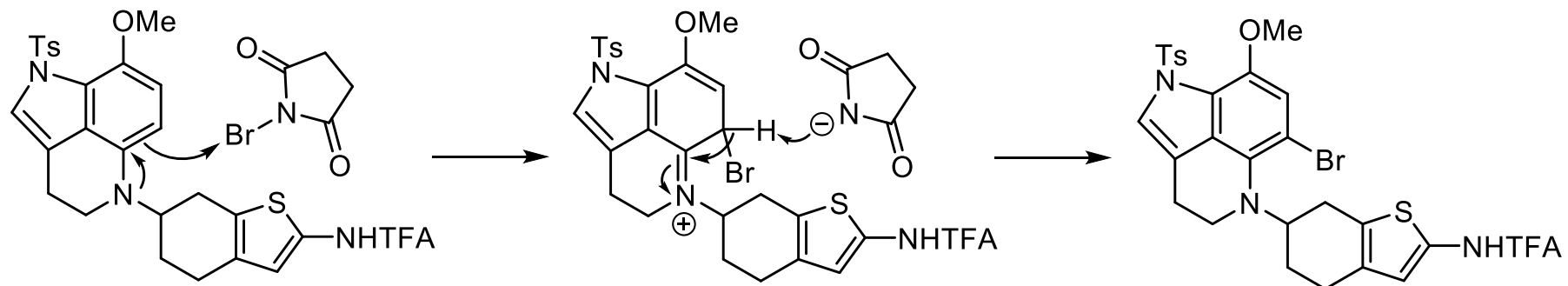


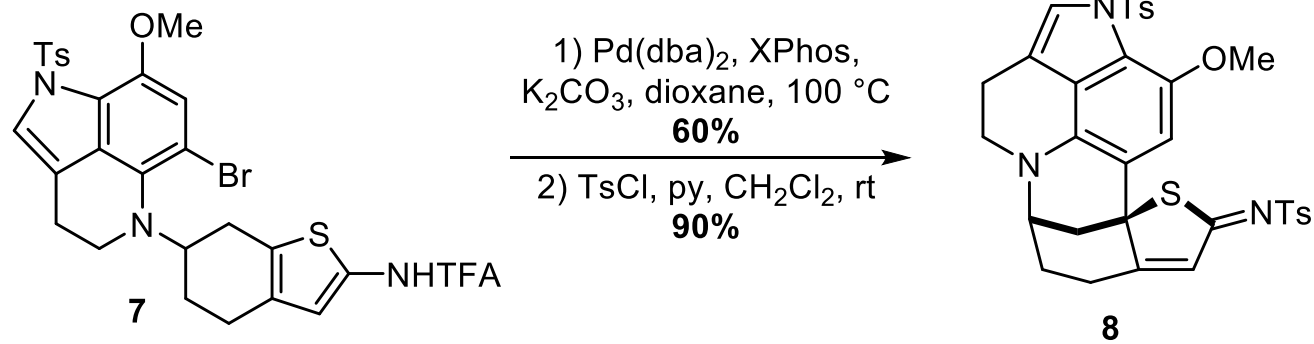


**Indium hydride-mediated reductive amination**

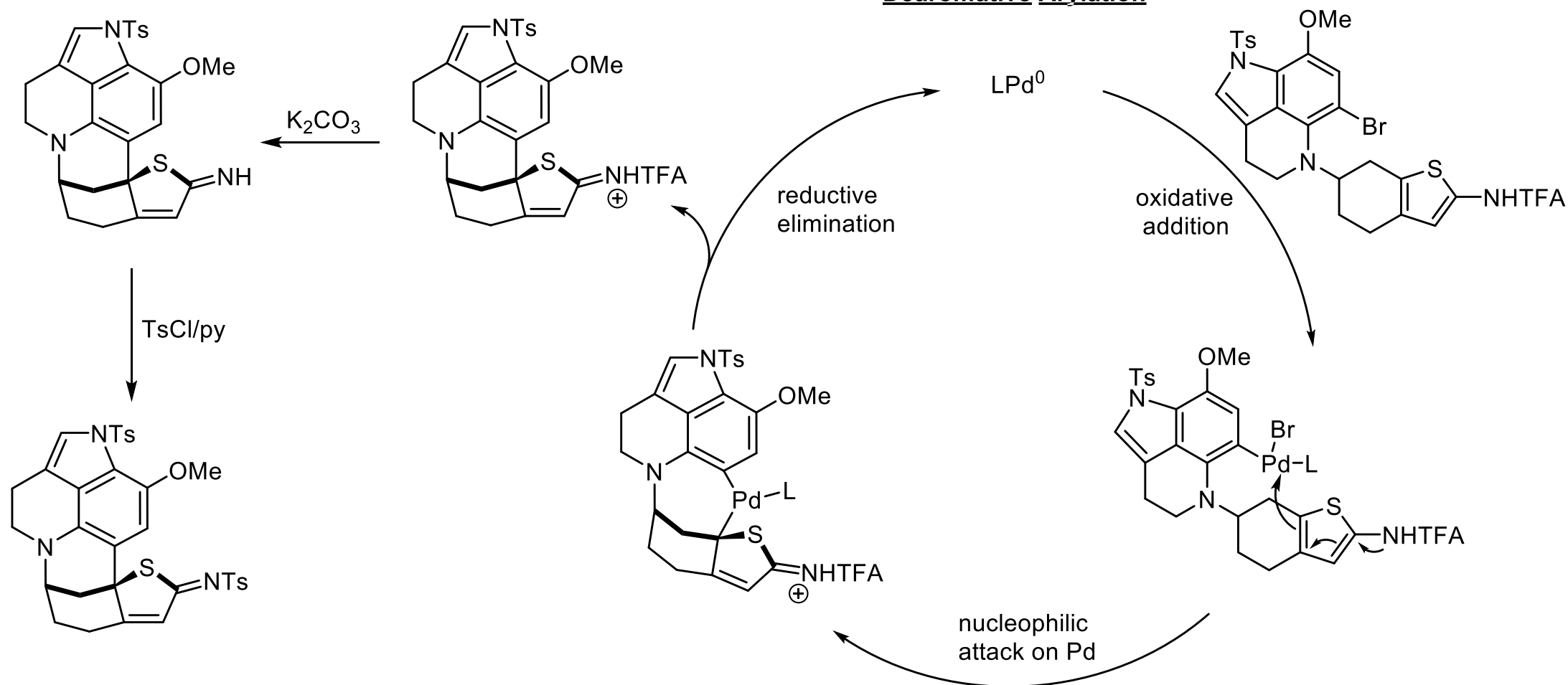


**Bromination (electrophilic aromatic substitution)**

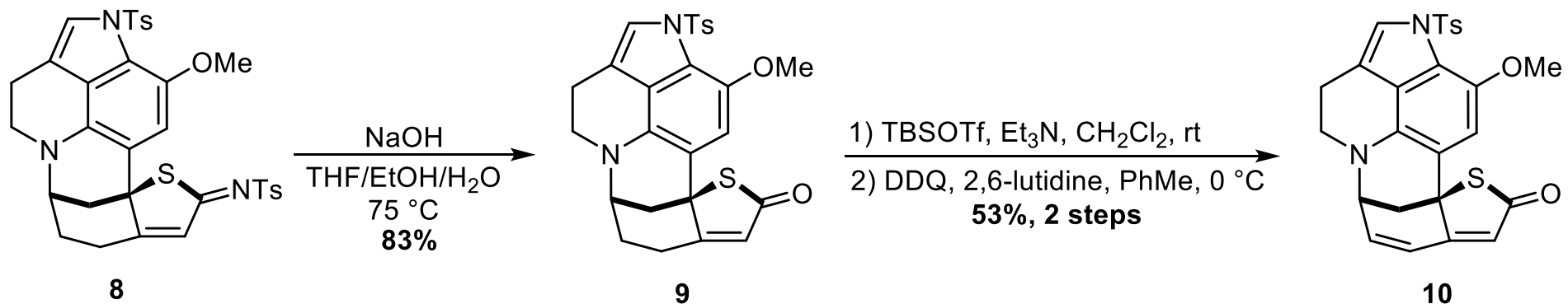




**Dearomative Arylation**

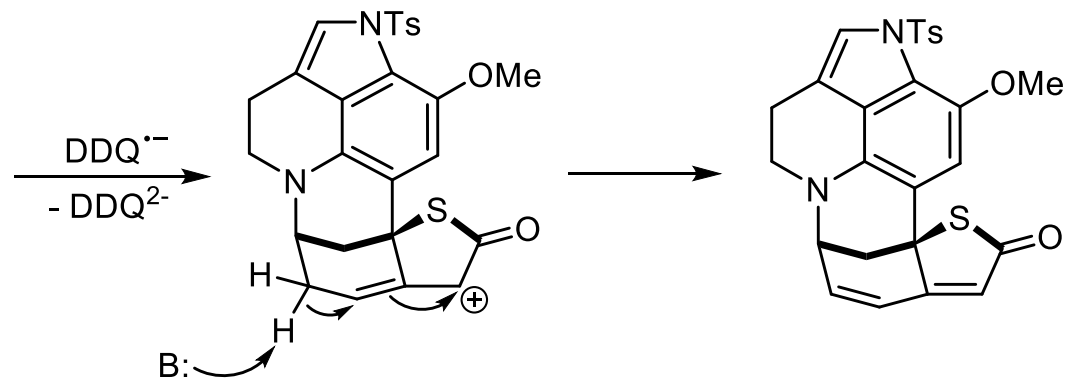
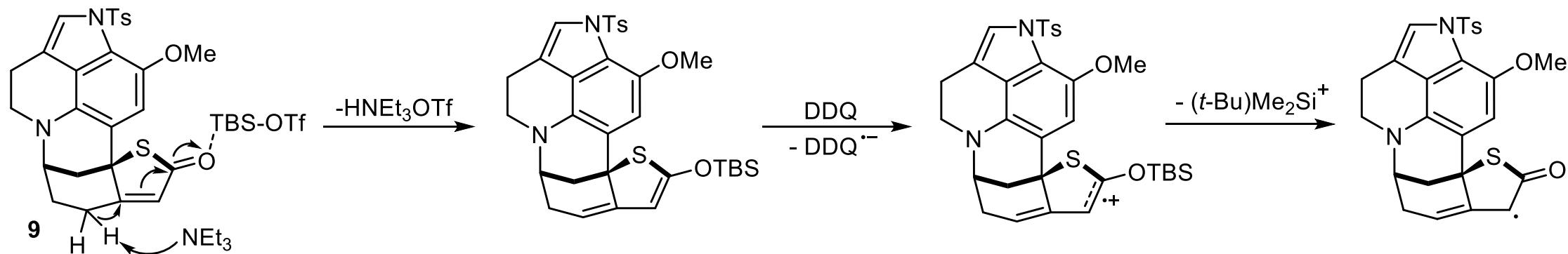


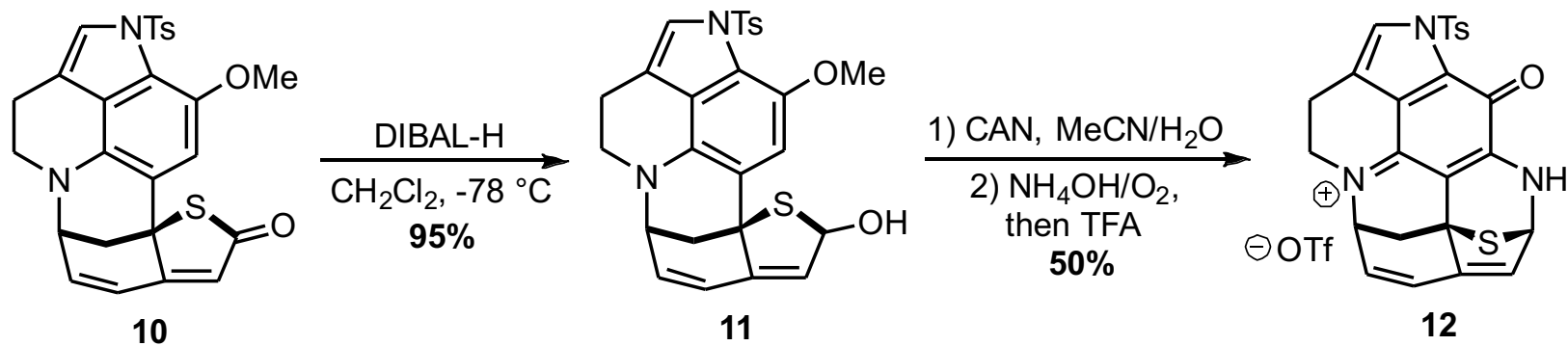




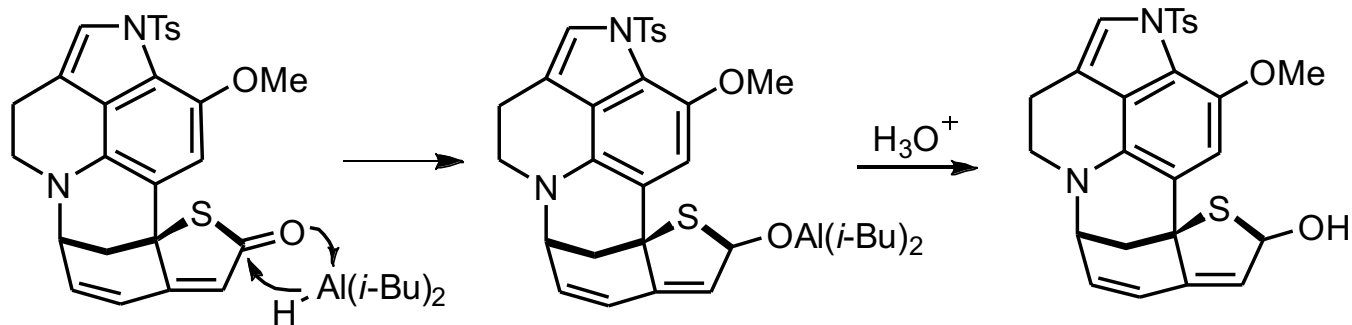
**Silyl enol ether formation**

**DDQ oxidation**

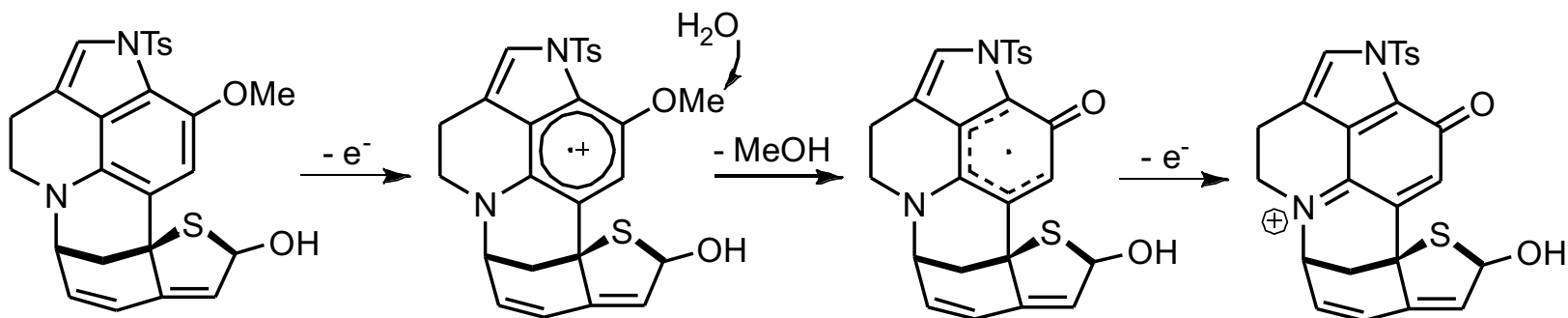


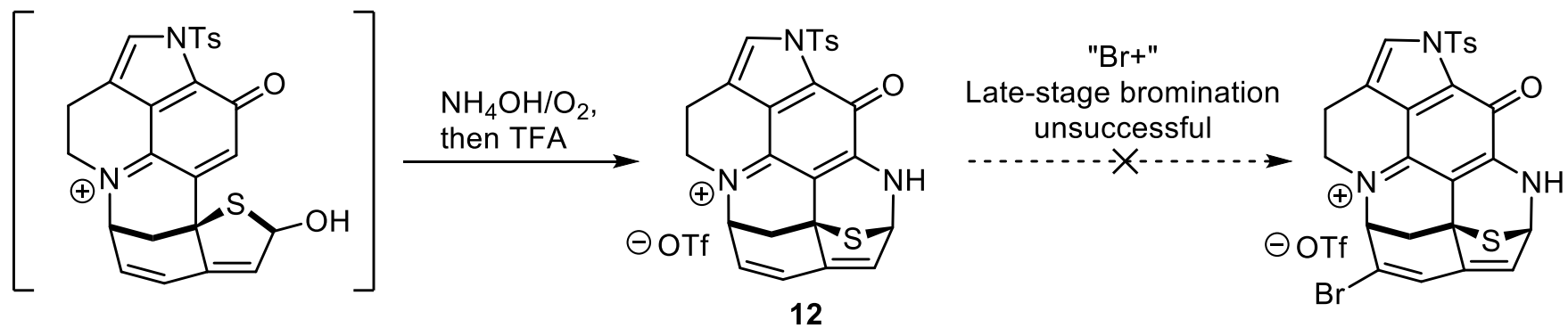


**DIBAL-H Reduction**

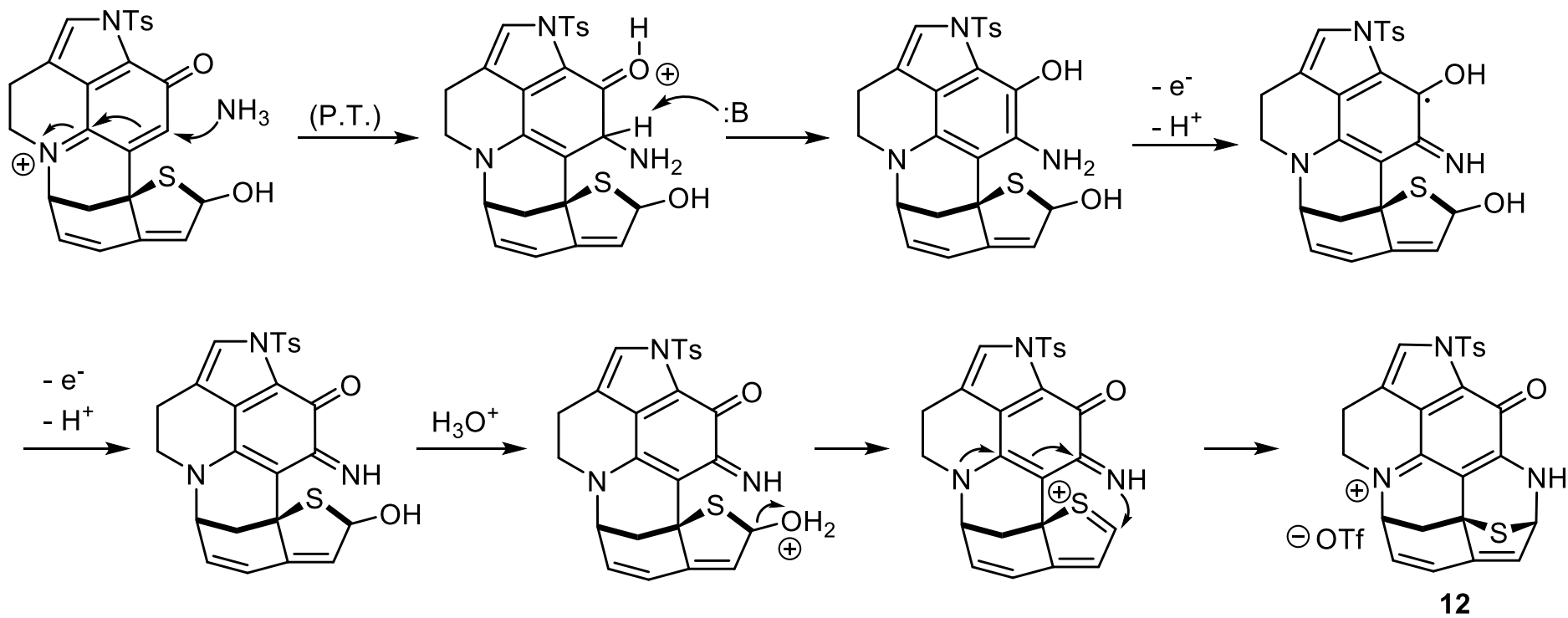


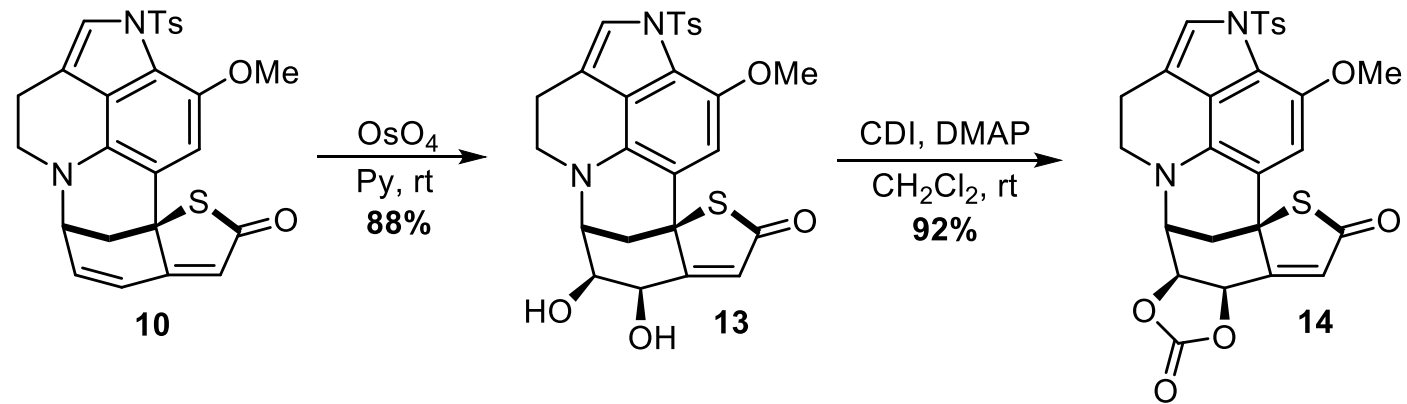
**Arene oxidation**



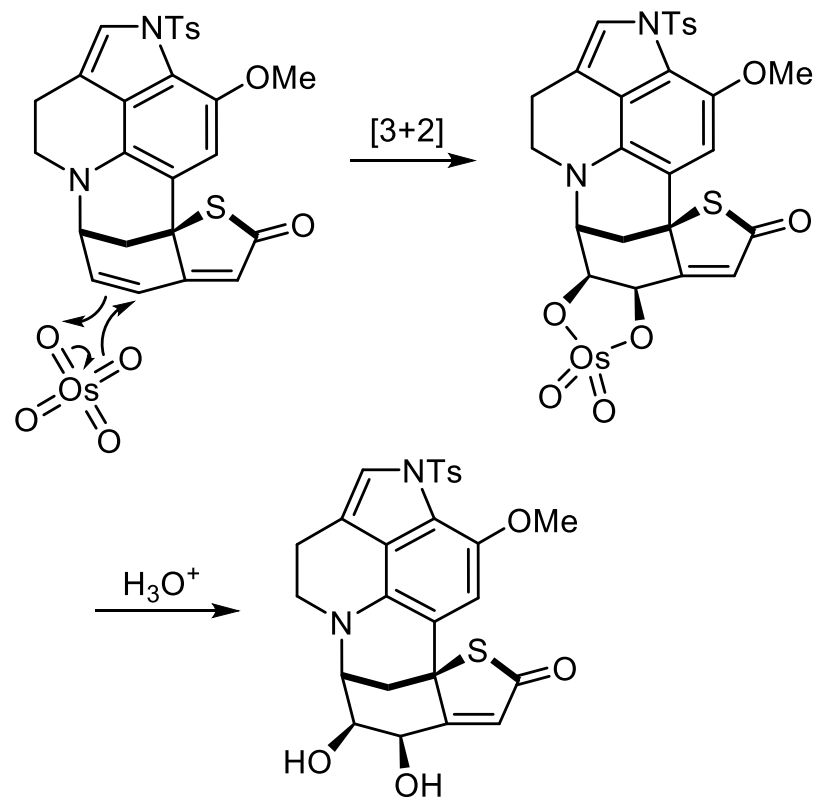


**Amination/arene oxidation, intramolecular S<sub>N</sub>1**

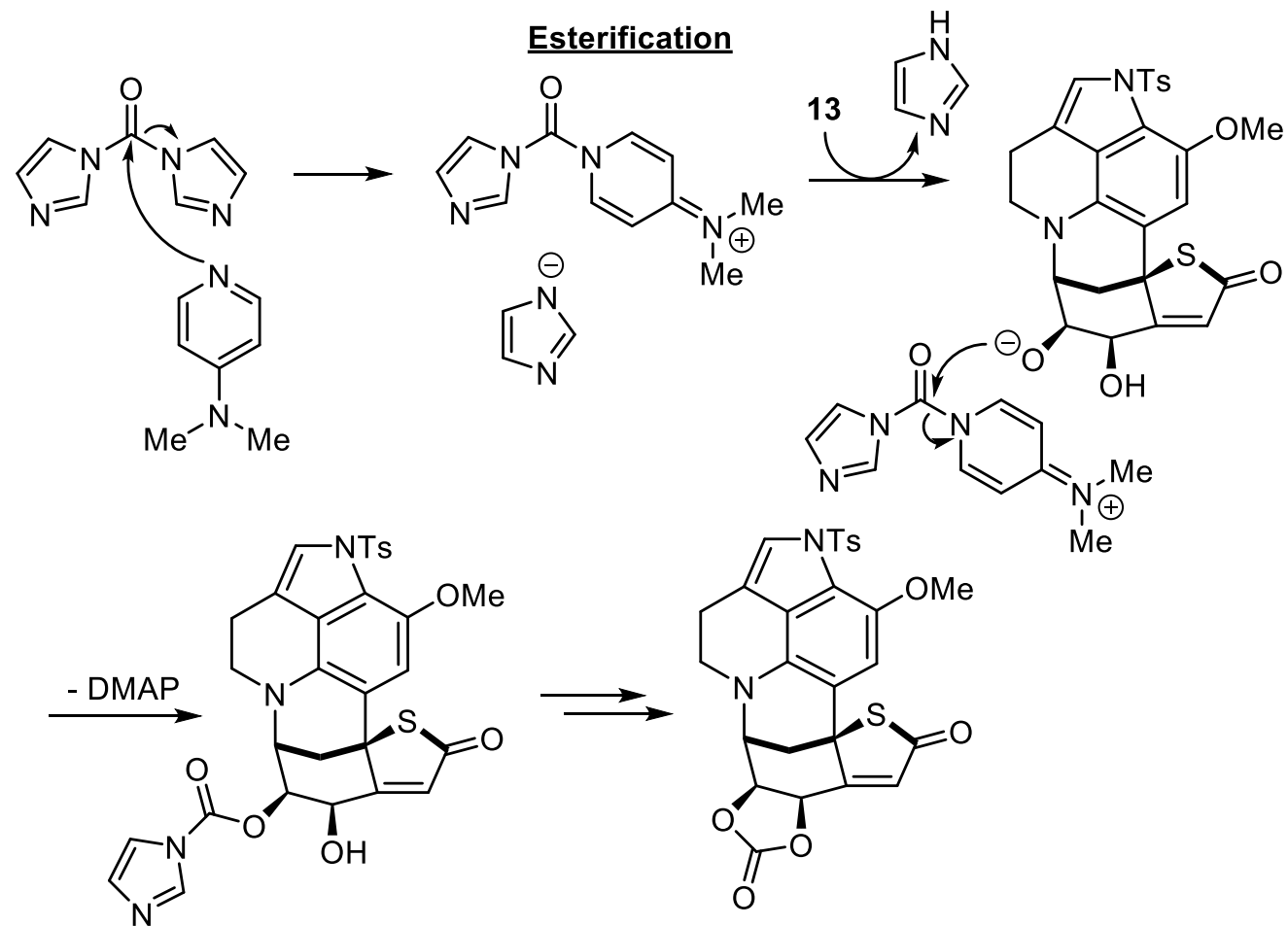


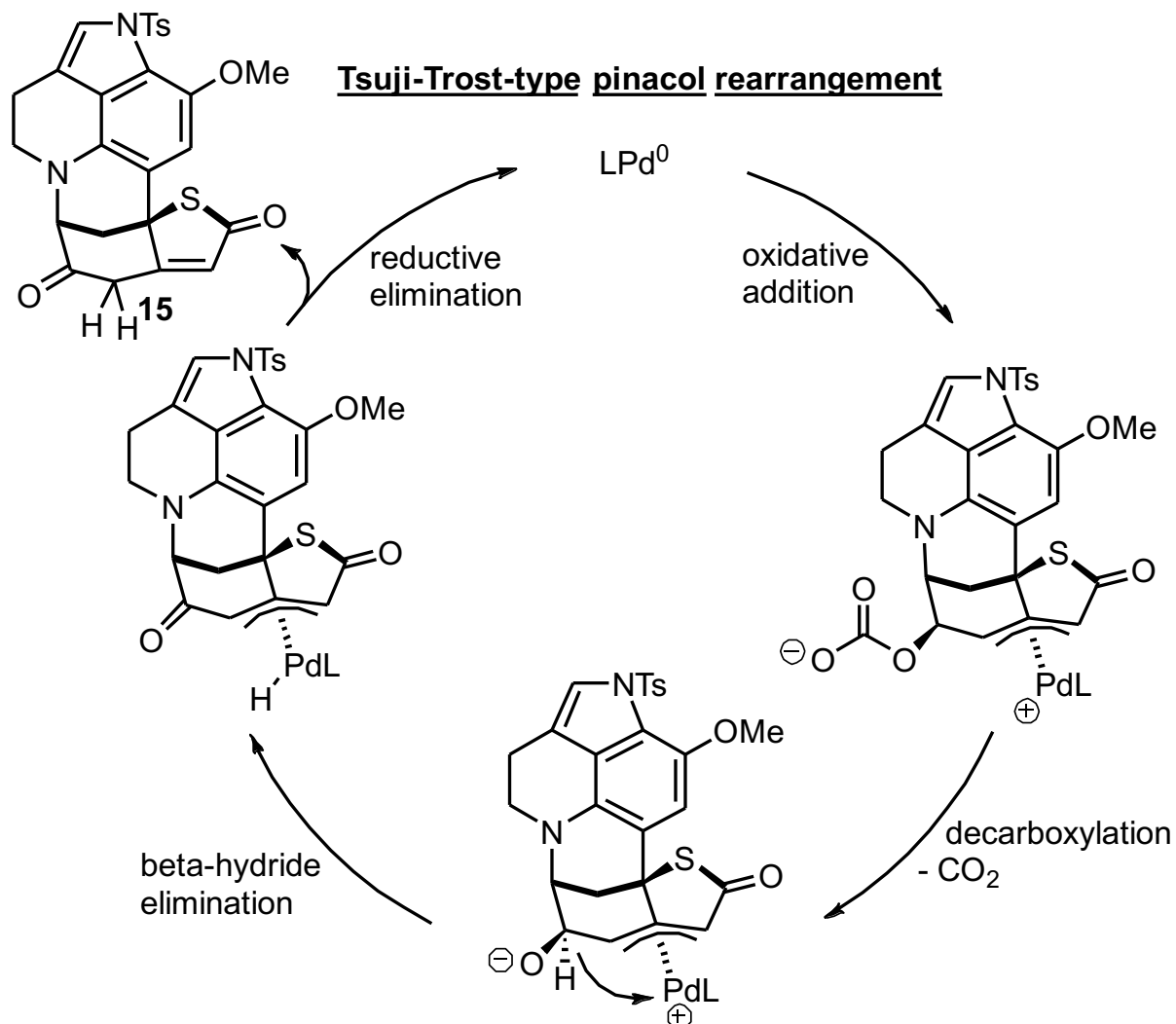
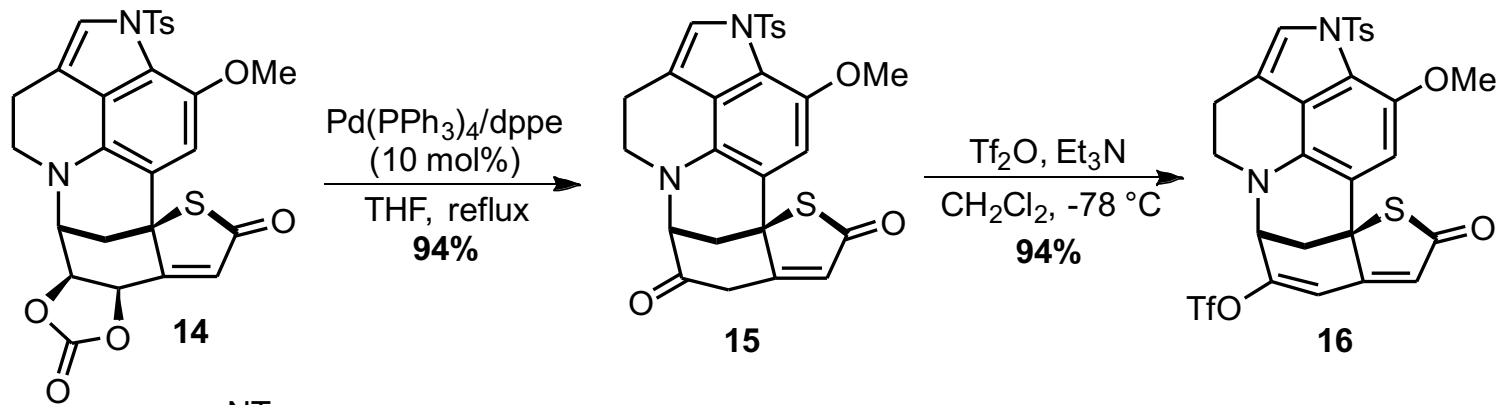


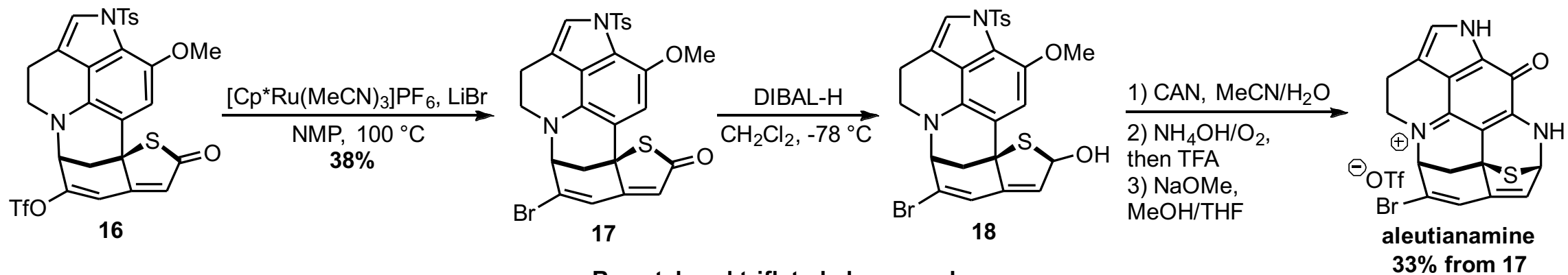
### Dihydroxylation



### Esterification







**Ru-catalyzed triflate-halogen exchange**

