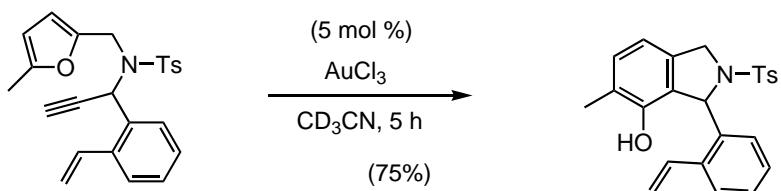


Q1: Propose a reasonable mechanism for each transformation.

Q2: Propose a synthesis plan for SM1 starting from methyl acetoacetate.

Jae Youp Cheong and Young Ho Rhee

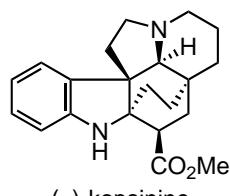
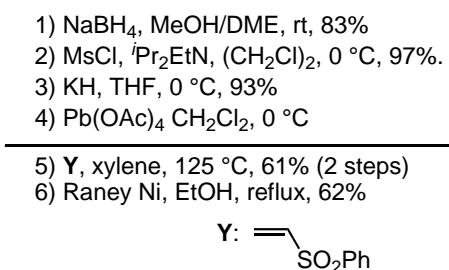
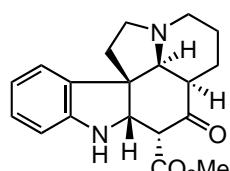
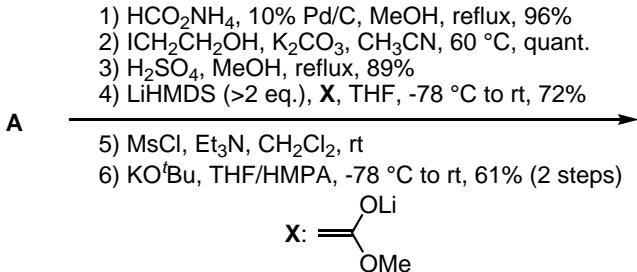
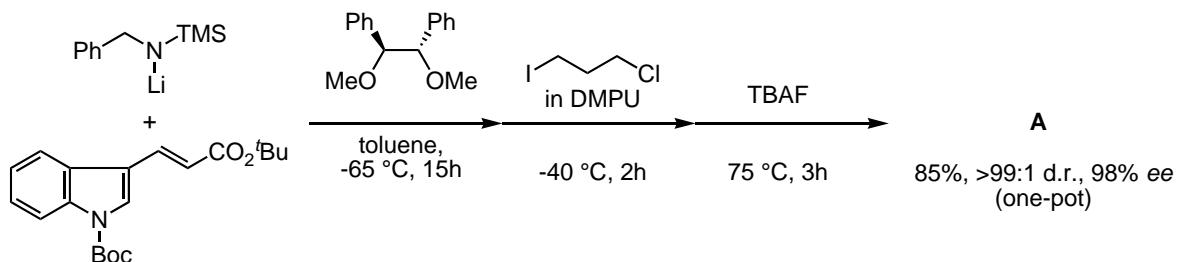
Beilstein J. Org. Chem. **2011**, *7*, 740.



Q3: Propose a possible mechanism.

A. Stephen K. Hashim *et al.*

Beilstein J. Org. Chem. **2011**, *7*, 794.



DMPU: *N,N'*-dimethylpropyleneurea
HMPA: hexamethylphosphoric triamide

S. Harada, T. Sakai, K. Takasu, K. Yamada, K. Tomioka
Chem. Asian. J. Early View DOI: 10.1002/asia.201200575