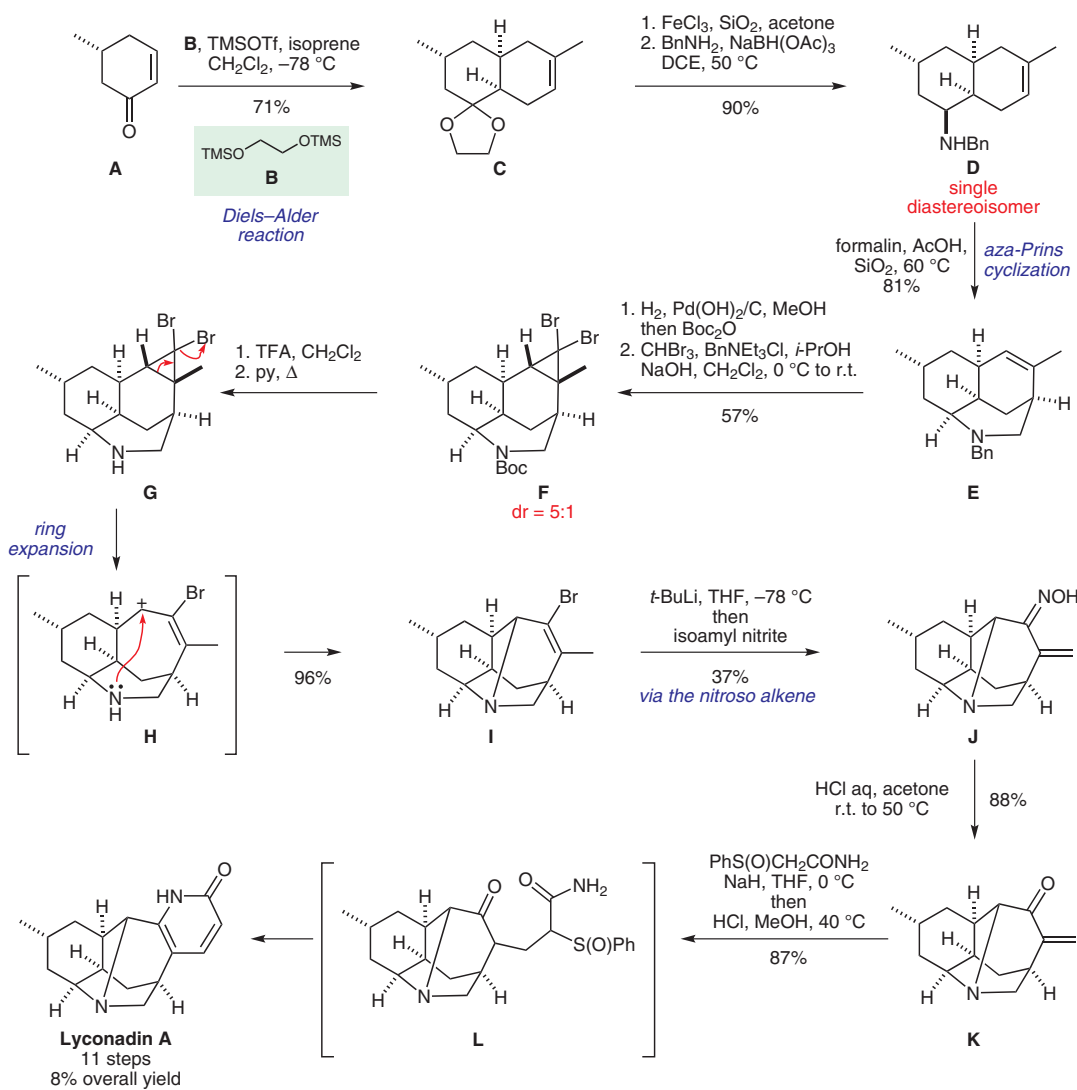


Synthesis of (+)-Lyconadin A



Significance: Lyconadin A was isolated in 2001 from the club moss *Lycopodium complanatum* and found to exhibit modest biological activity against some cancer cell lines. To date, two total syntheses have been reported by Smith and Sarpong, in 2007 and 2010, respectively.

Comment: This highly efficient synthesis contains many notable steps. One particularly interesting transformation is the formation of tetracycle **I** by ring expansion of the cyclopropane present in **G**, followed by nucleophilic attack of the secondary amine to quench the allyl cation.