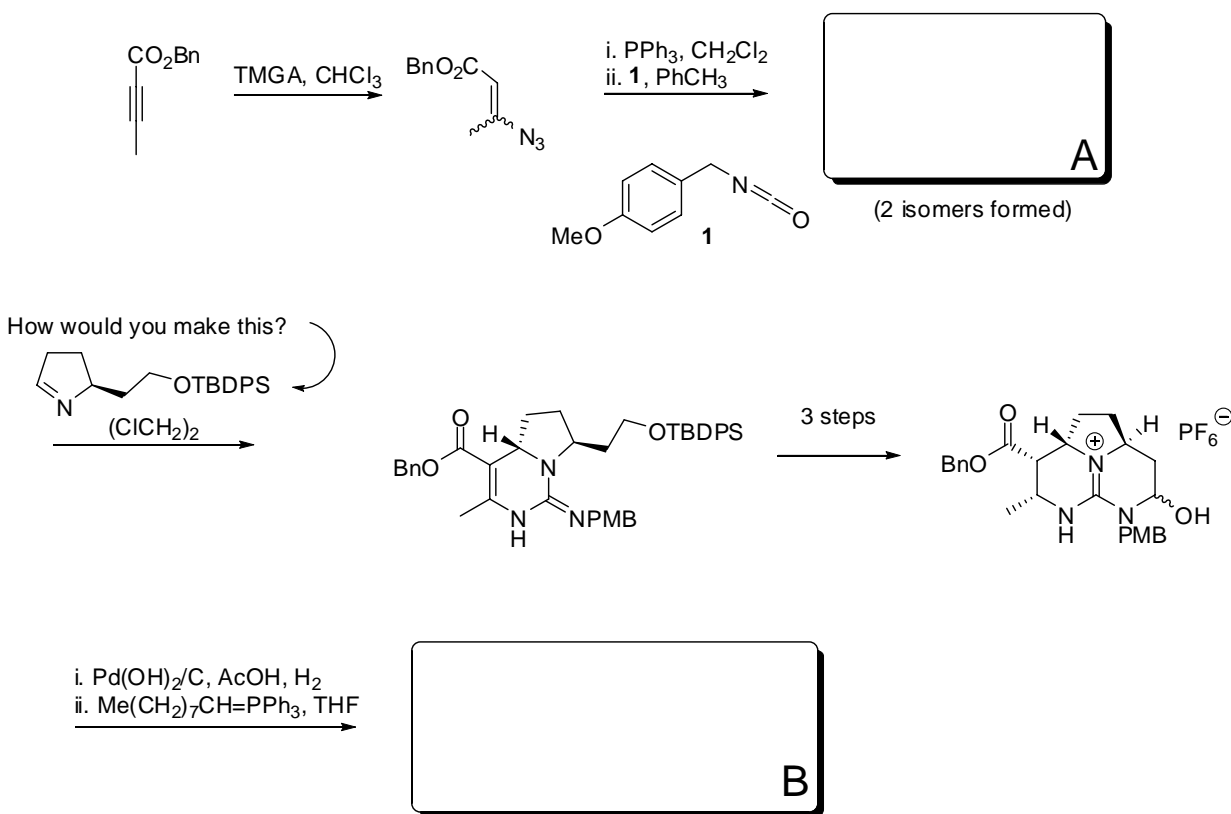
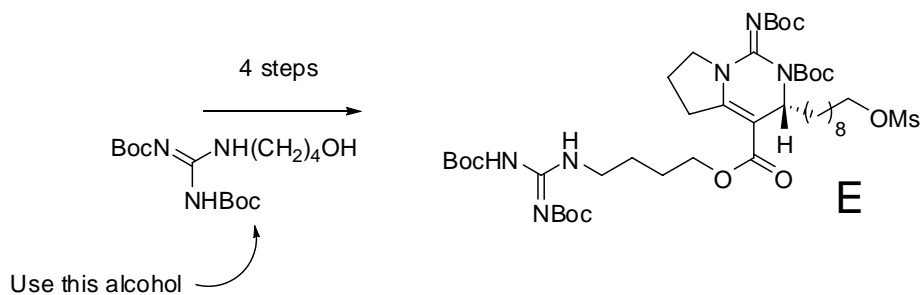
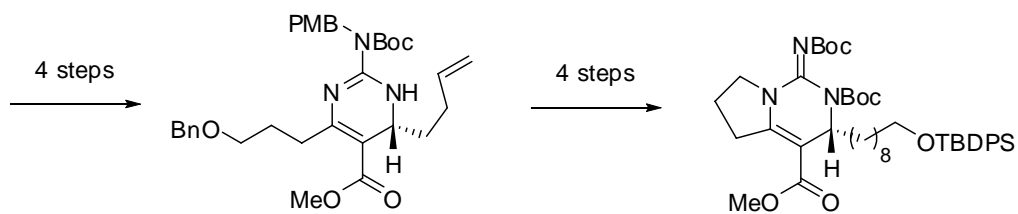
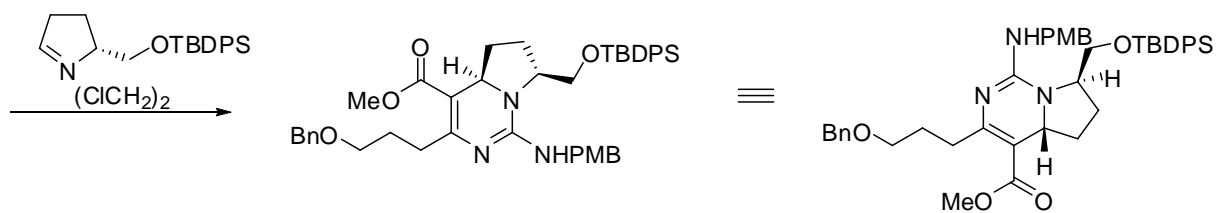
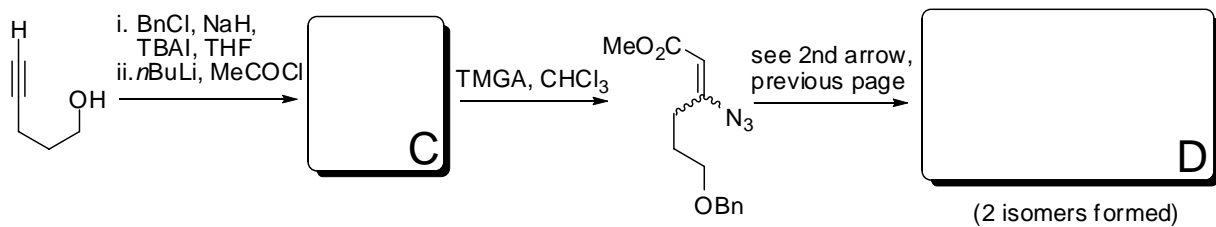


## Total Synthesis of (+)-Batzelladine A

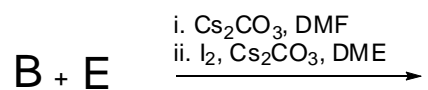
Polycyclic guanidine natural products are interesting and unusual targets for total synthesis. Members of the batzelladine alkaloids, in particular, have exhibited potential antiviral and immunosuppressive activity. The following total synthesis has some very interesting chemistry and a novel approach to the key tricyclic tetrahydropyrimidine core. As usual, provide mechanisms, reagents, missing structures and be prepared to discuss stereochemistry.



TMGA = *N, N, N', N'* Tetramethylguanidinium azide



And finally, the coupling step:



Provide a rationale for the selectivity of the 2nd step



i. 10% Pd/C, TEA, H<sub>2</sub>

ii. TFA

