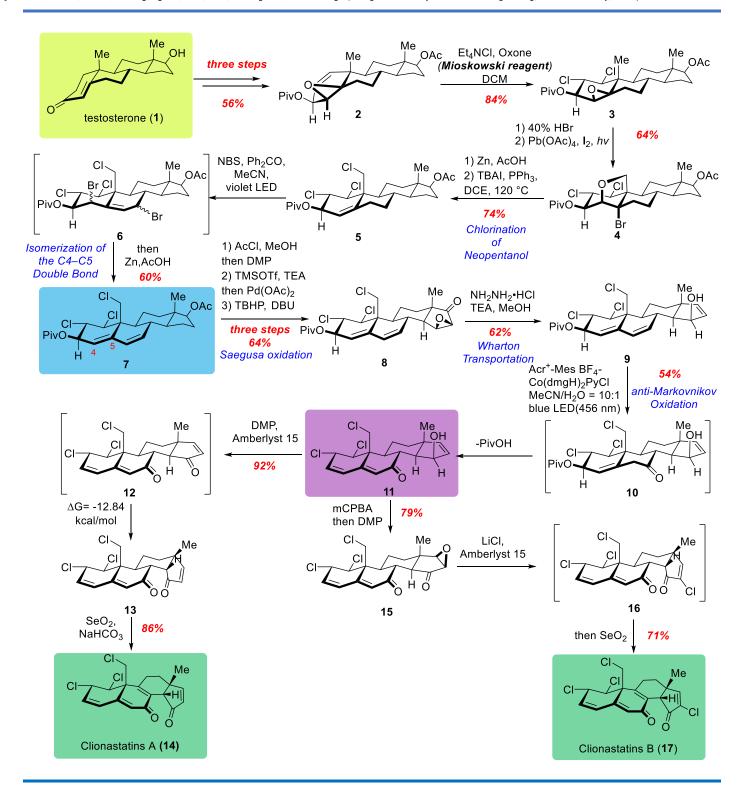
Two-Stage Syntheses of Clionastatins A and B. J. Am. Chem. Soc. 2022, 144, 8938. DOI: doi.org/10.1021/jacs.2c03872 H Cui, Y Shen, Y Chen, R Wang, Hg Wei, P Fu, X Lei, H Wang, R Bi, and Y Zhang*. (College of Chemistry and Chemical Engineering, Xiamen University, China)



Significance:

Zhang and coworkers have achieved a concise and divergent synthesis of polychlorinated marine steroids clionastatins A and B from inexpensive testosterone through a unique two-stage chlorination-oxidation strategy..

Comment:

- Highly stereoselective dichlorination at C1 and C2 and C4–OH-directed C19 oxygenation.
- Desaturation through one-pot photo-chemical dibromination-reductive debromination and anti-Markovnikov olefin oxidation.