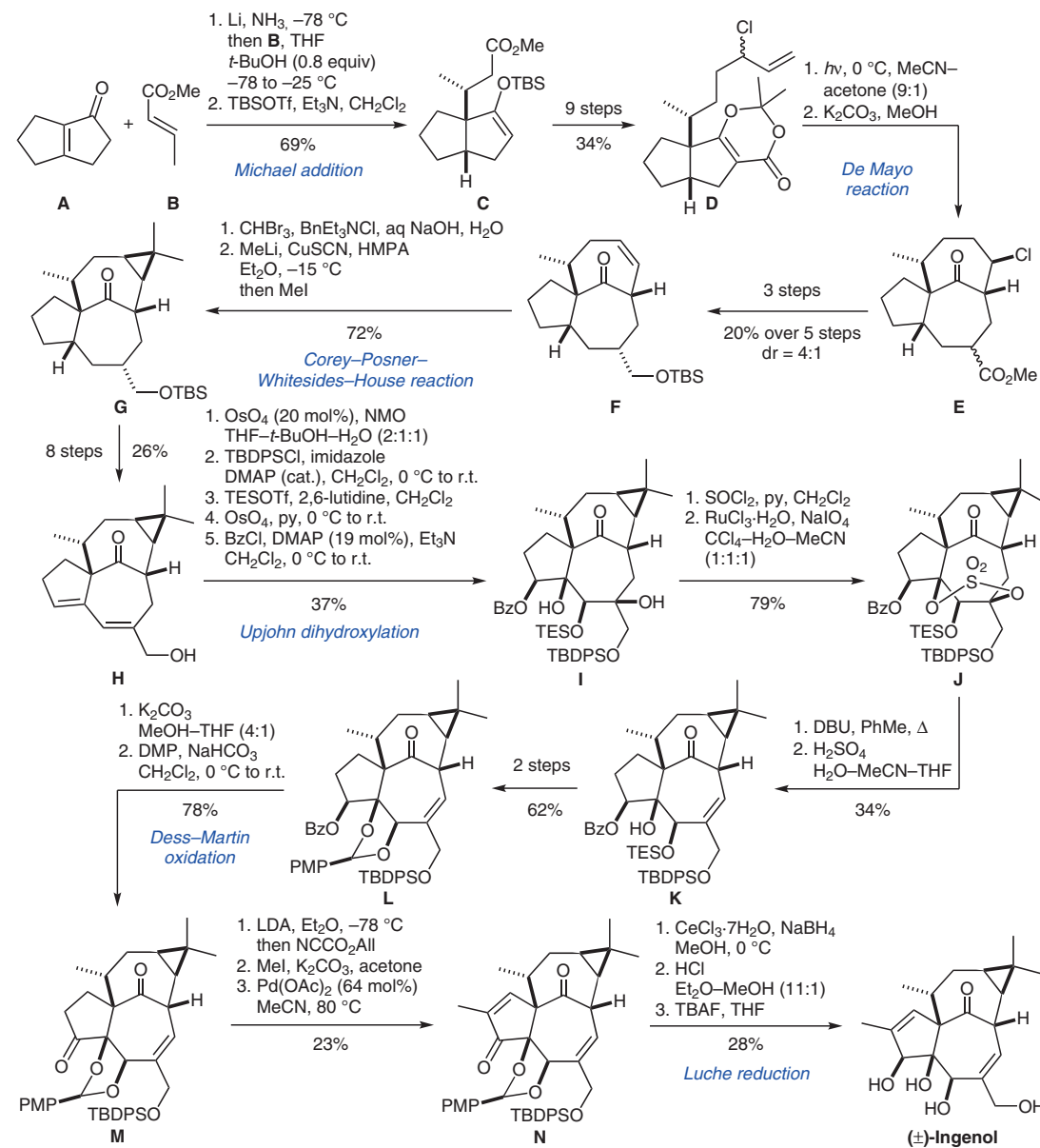


## Synthesis of (±)-Ingenol



**Significance:** Winkler and co-workers report the first total synthesis of (±)-ingenol, a structurally complex and polyoxygenated diterpenoid. Ingenol and its derivatives represent a vital class of natural products which found application in myriads of therapeutic areas *inter alia* oncology and immunology.

**Comment:** Synthetic endeavors started from enone **A** and methyl crotonate. The tricyclic core was rapidly assembled in a De Mayo reaction to yield the challenging *trans*-intrabridgehead stereochemistry. A series of oxidations furnished the desired natural product.