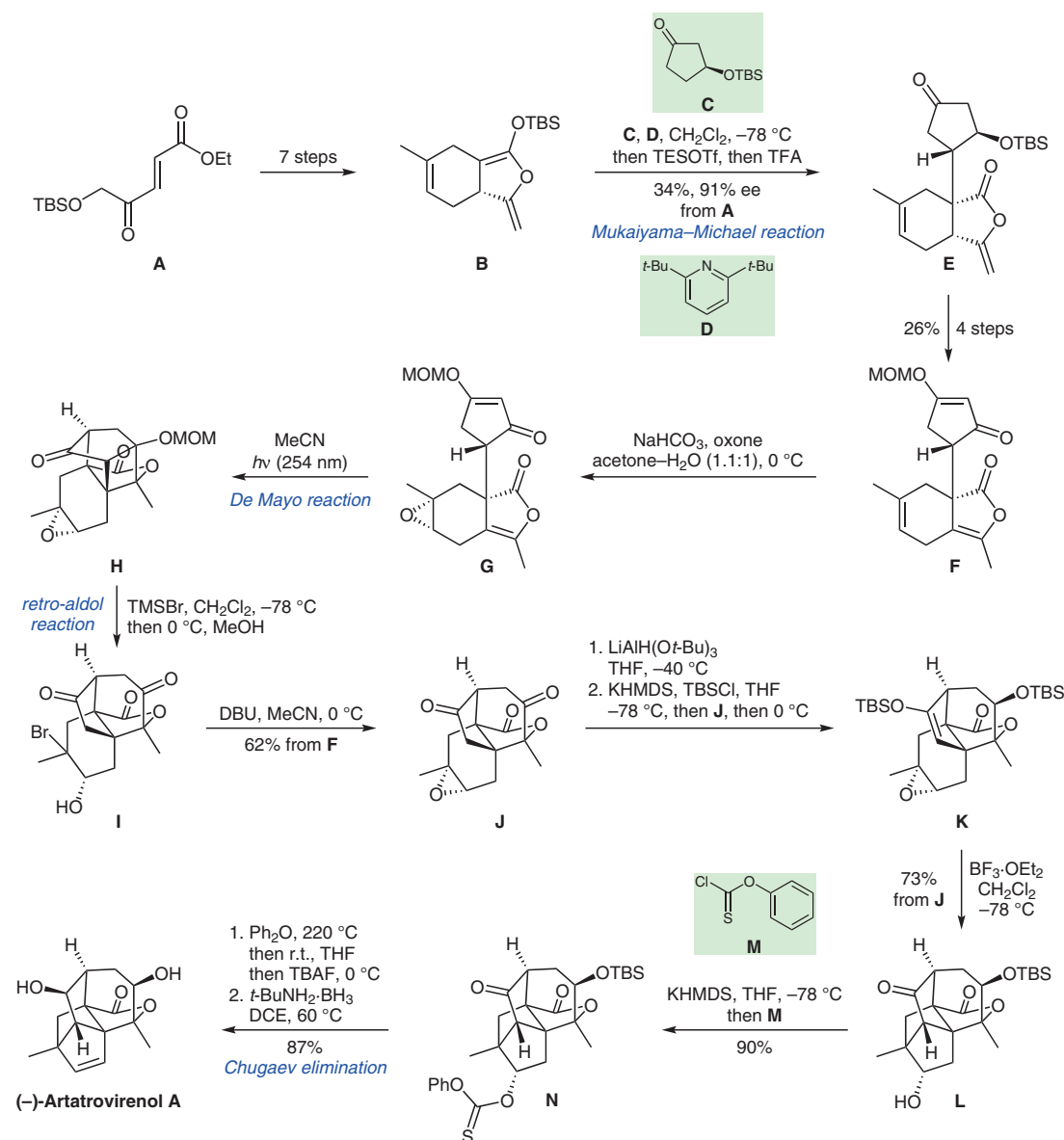


Synthesis of (–)-Artatrovirenol A



Significance: Zhu and co-workers report the enantioselective total synthesis of the structurally unprecedented, caged sesquiterpenoid (–)-artatrovirenol A. Key to their approach is an intramolecular De Mayo cycloaddition/retro-aldol sequence.

Comment: Epoxidation of enone **F** to epoxide **G** enabled the subsequent intramolecular De Mayo reaction, leading to cycloaddition product **H** under UV irradiation. Deprotection initiated a retro-aldol reaction to form bromohydrin **I**, which was then closed to key epoxide **J** upon treatment with DBU.