Significance: The target telithromycin analogue was under development as an oral antibiotic for the treatment of respiratory infections. The route depicted delivered kilogram quantities of API starting with clarithromycin (A).

Comment: Note the use of a large-scale Corey–Kim oxidation for the synthesis of the ketolide E. An efficient large-scale synthesis of 3-hydroxy-1,5-naphthyridine-4-carbaldehyde (G) was developed using a Skraup reaction.