

PGF<sub>2</sub>α

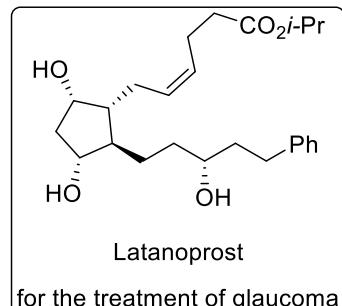
4 contiguous chiral centers  
on the cyclopentene ring

### Total Synthesis of Prostaglandins

first total synthesis by E. J. Corey in 1969,  
then by Woodward, Stork, Noyori, Danishefsky, Baran...

Nat. Chem. **2021** (Gen-Qiang Chen & Xumu Zhang)

Nature **2012**, 278 (Aggarwal)

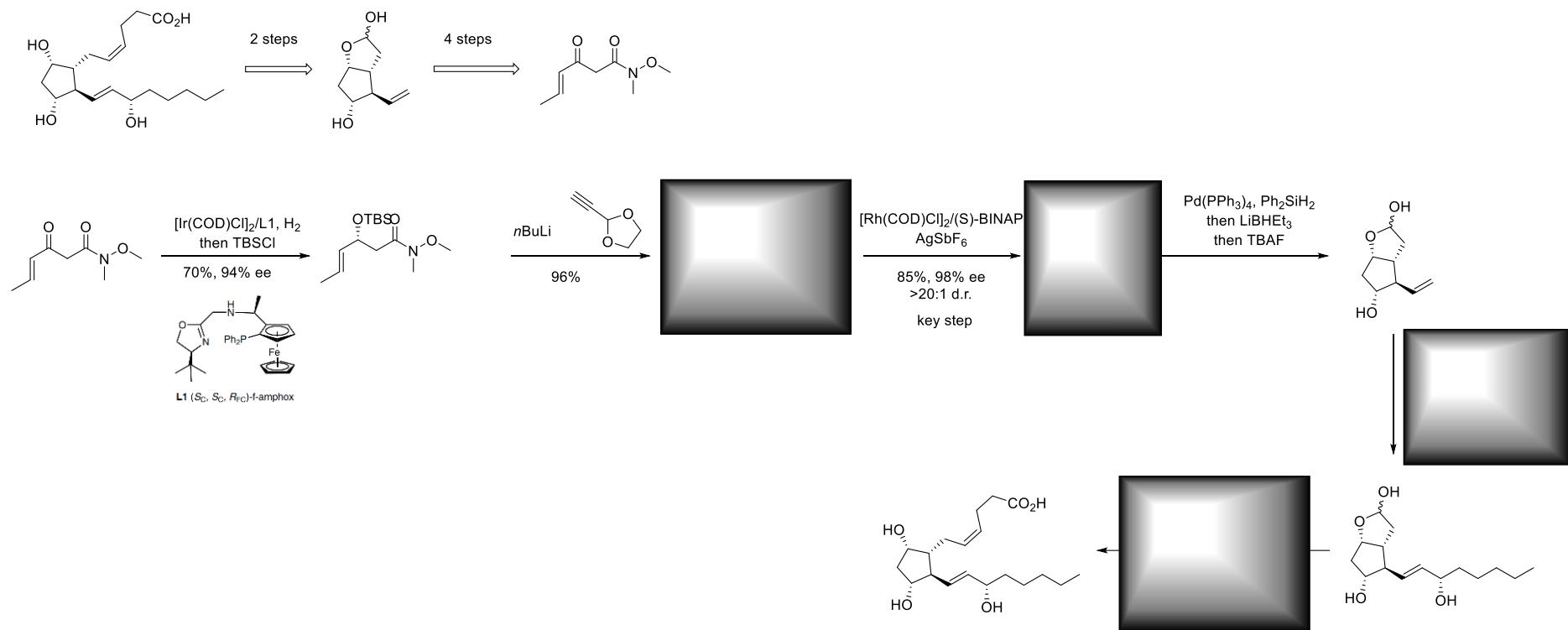


Latanoprost

for the treatment of glaucoma

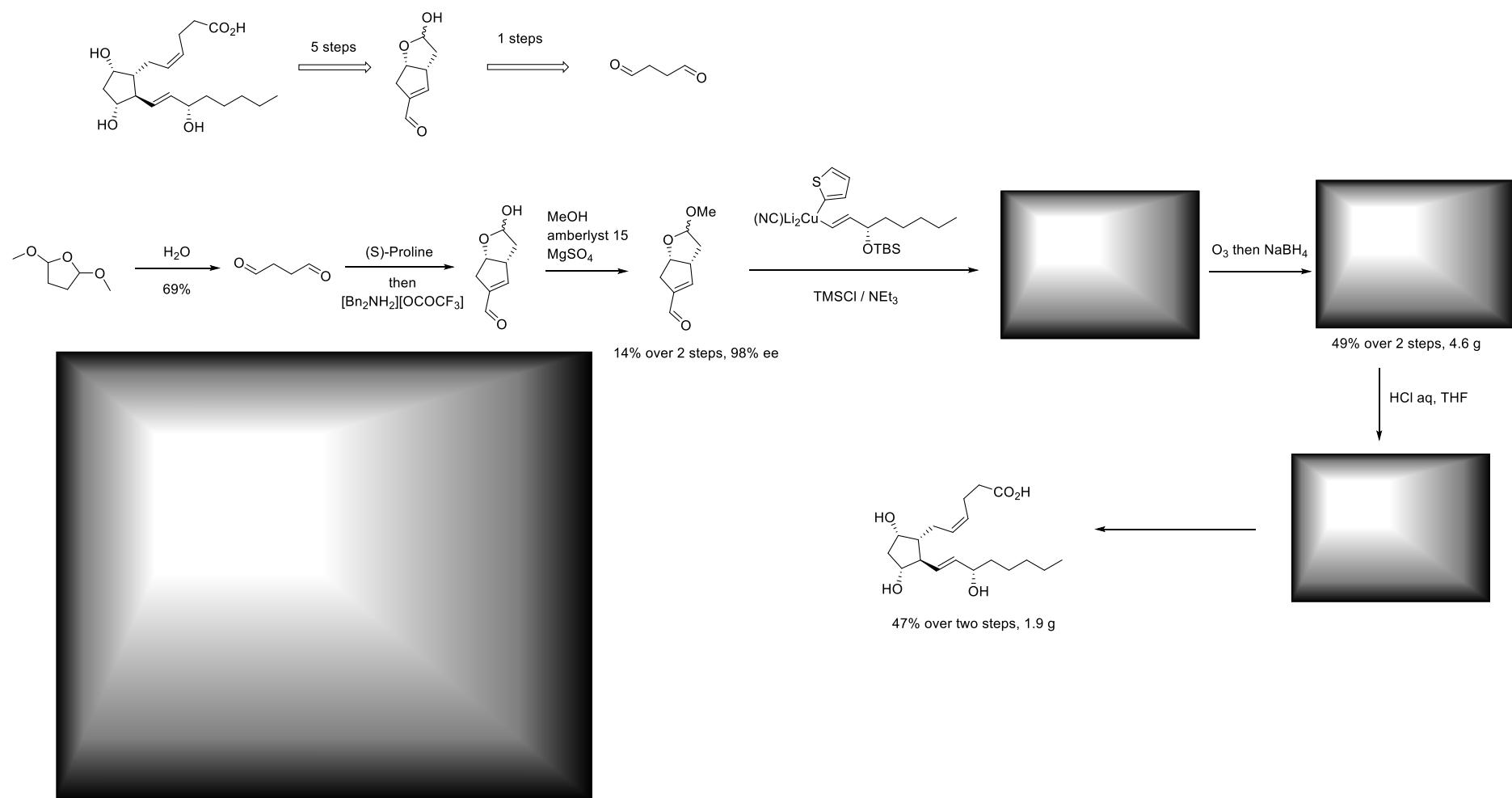
Nat. Chem. 2021 (Gen-Qiang Chen & Xumu Zhang)

Retro-synthetic analysis



Nature 2012, 278 (Aggarwal)

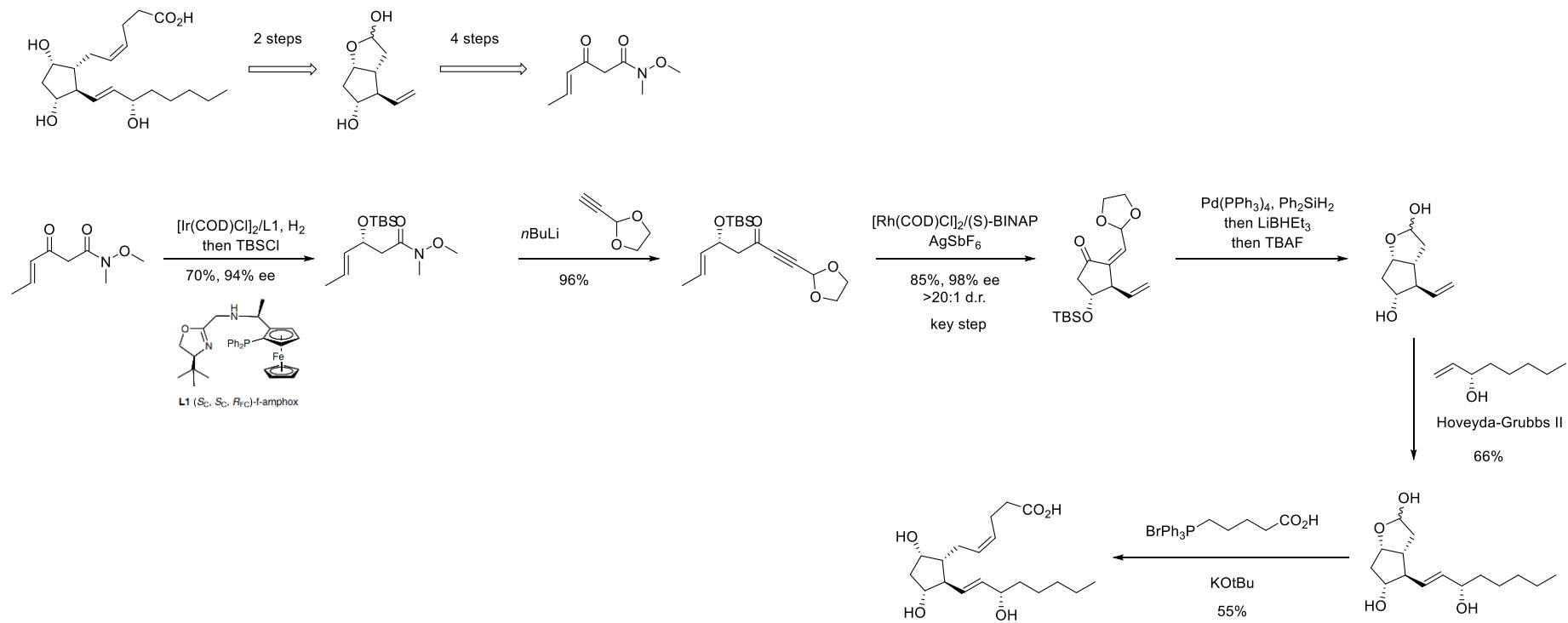
Retro-synthetic analysis



## Solutions

Nat. Chem. 2021 (Gen-Qiang Chen & Xumu Zhang)

Retro-synthetic analysis



Retro-synthetic analysis

