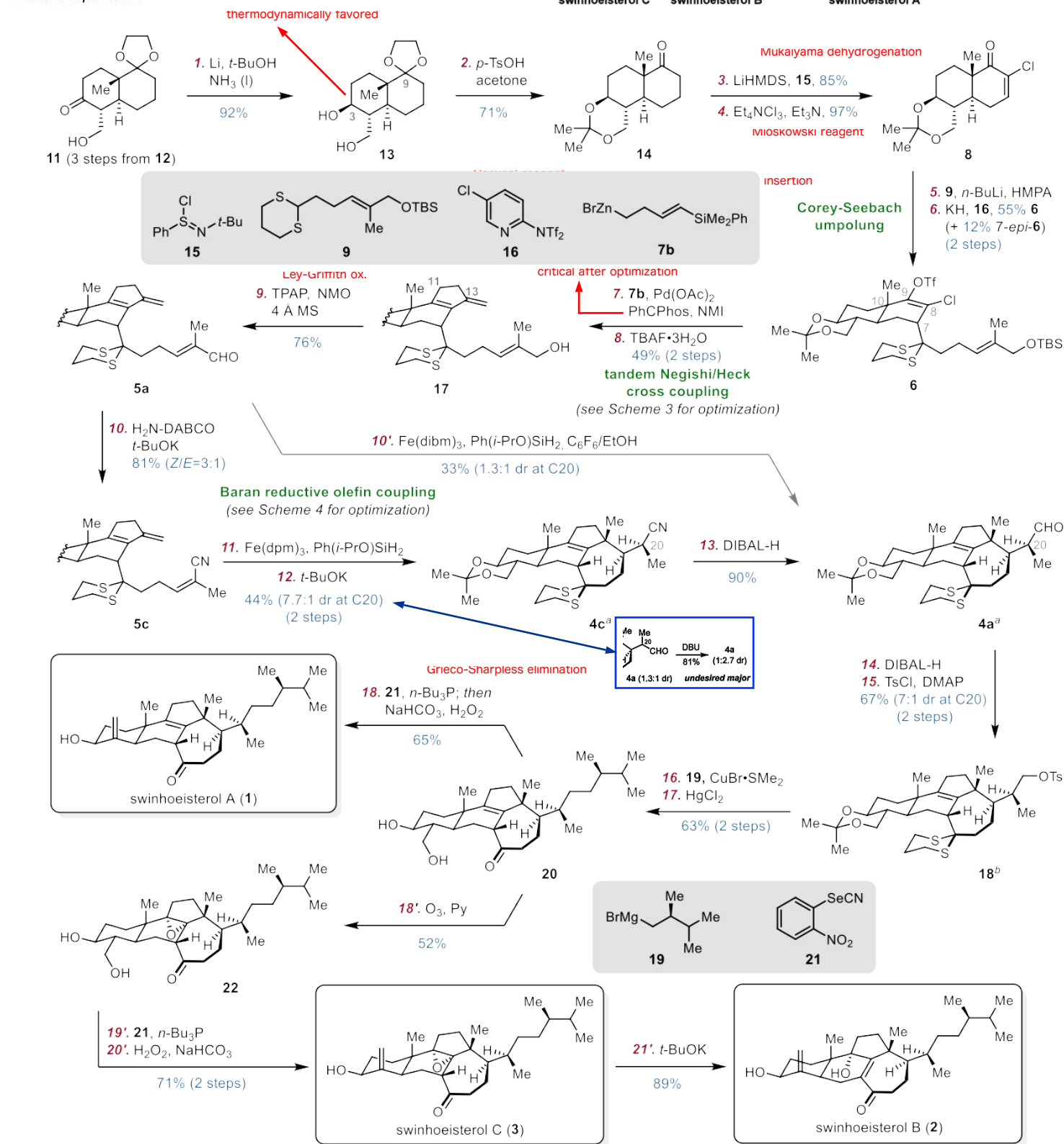




5 $\xrightarrow{\text{conditions}}$ 29 (undesired) 4 (20S: desired)

3 contiguous stereocenters, including 1 quaternary carbon
 29a, 4a: R = CHO
 29b, 4b: R = CO₂Me
 29c, 4c: R = CN

configuration of $\Delta^{17,20}$	R	conditions ^a	isolated yields (%)	
			29 (dn) ^b	4 (dn) ^c
E only	CHO (5a)	Fe(dibm) ₃ , Ph(Pr)OSiH ₂ , EtOH/EG/DCE (3:1:1)	27 (1.7:1)	25 (1.5:1)
E only	CO ₂ Me (5b)	Fe(dibm) ₃ , Ph(Pr)OSiH ₂ , EtOH/EG/DCE (3:1:1)	51 (2.5:1)	trace
Z/E = 3:1	CN (5c)	Fe(dpm) ₃ , Ph(Pr)OSiH ₂ , EtOH/EG/DCE (3:1:1) ^{de}	19 ^f (4:1:1)	44 ^f (7.7:1)

