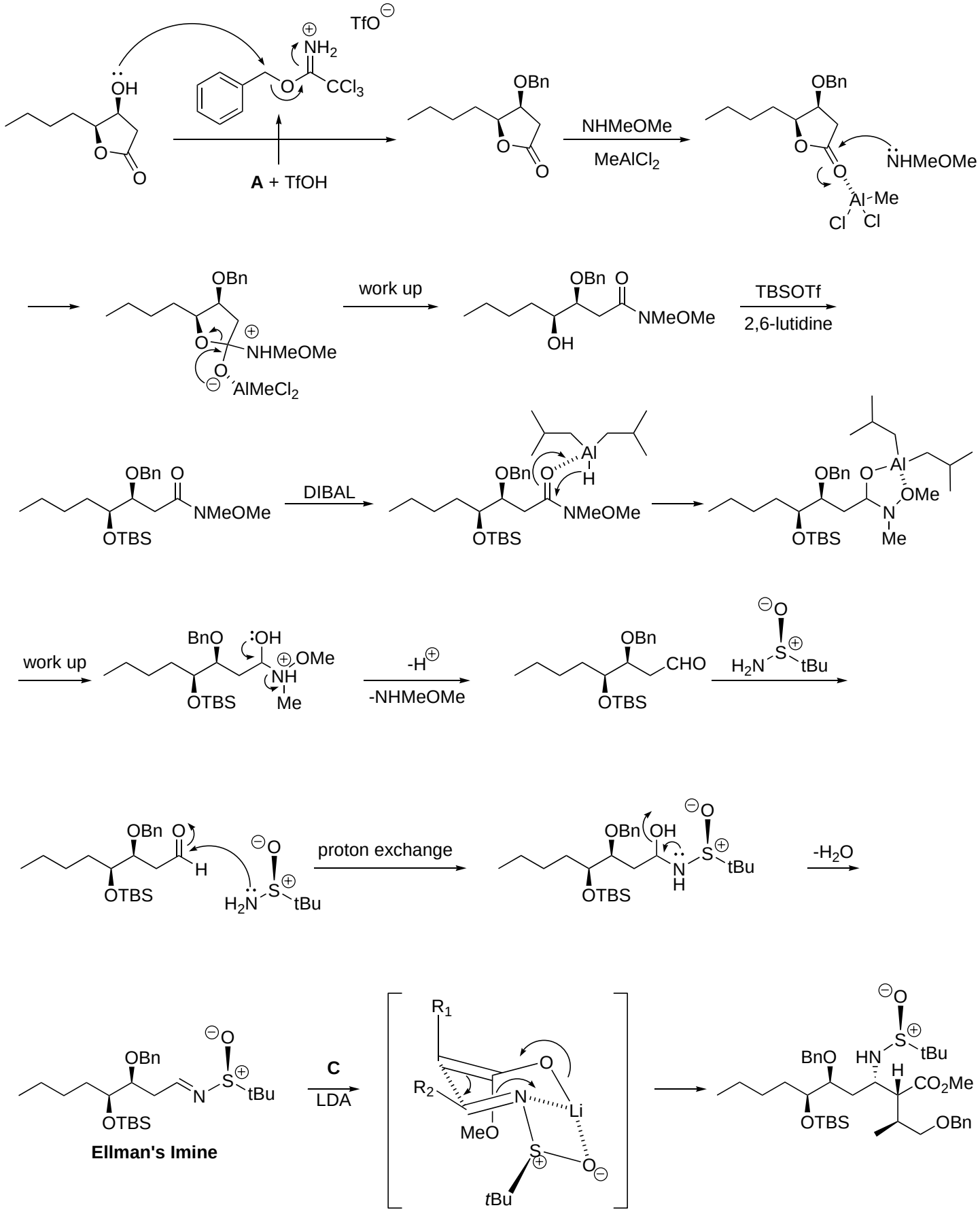
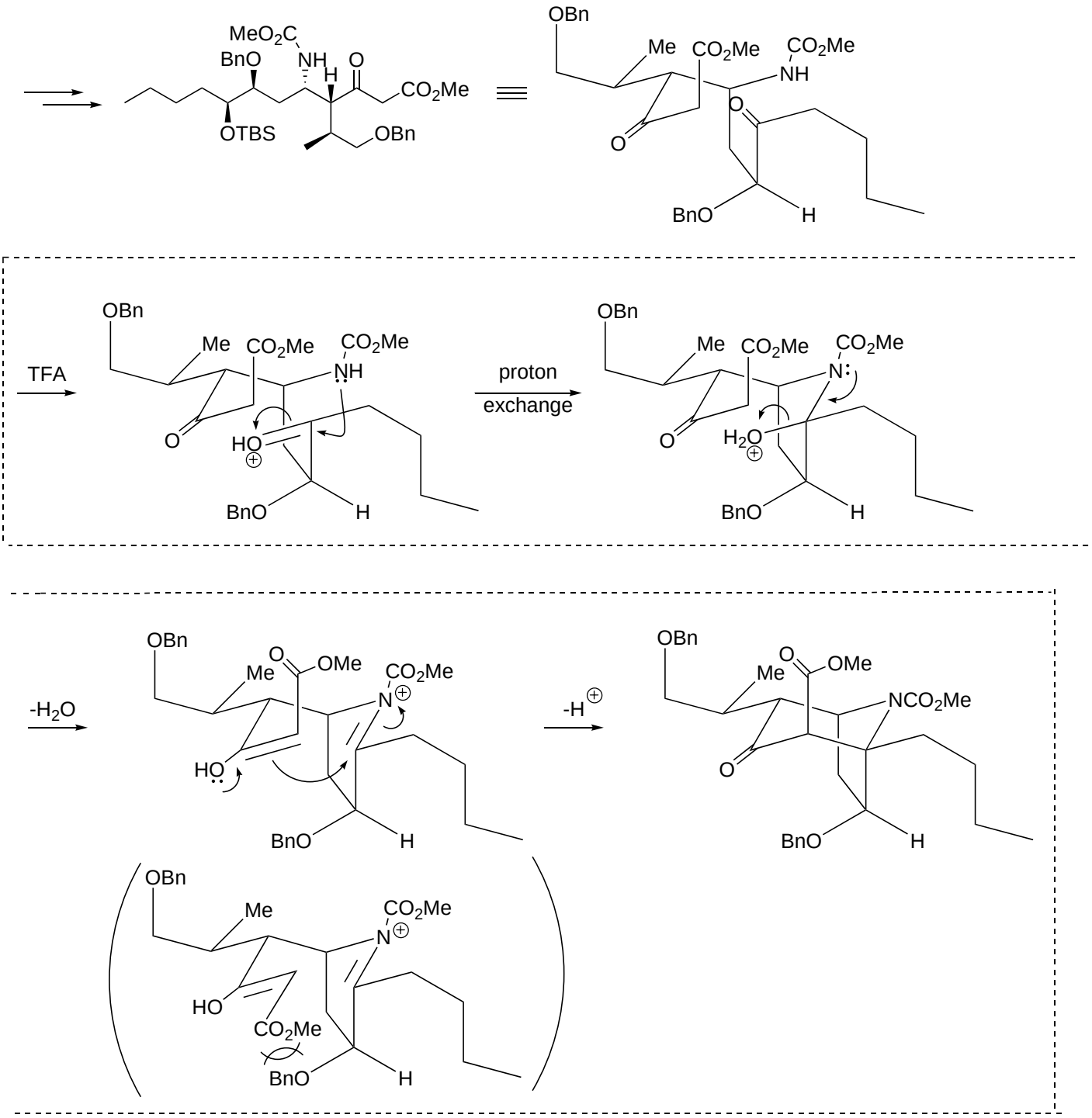
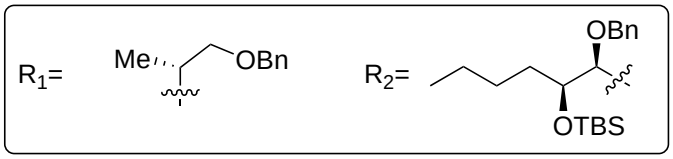
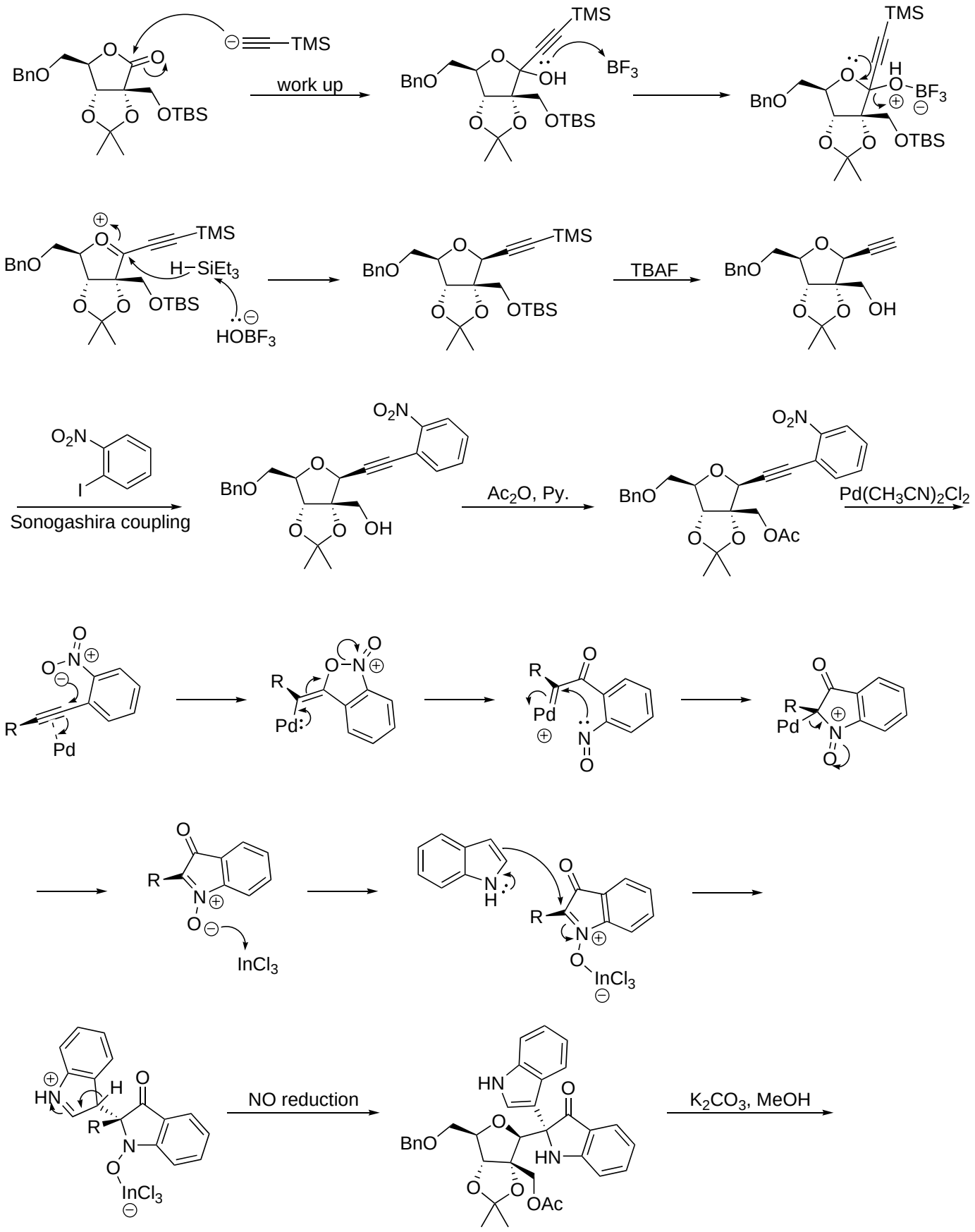
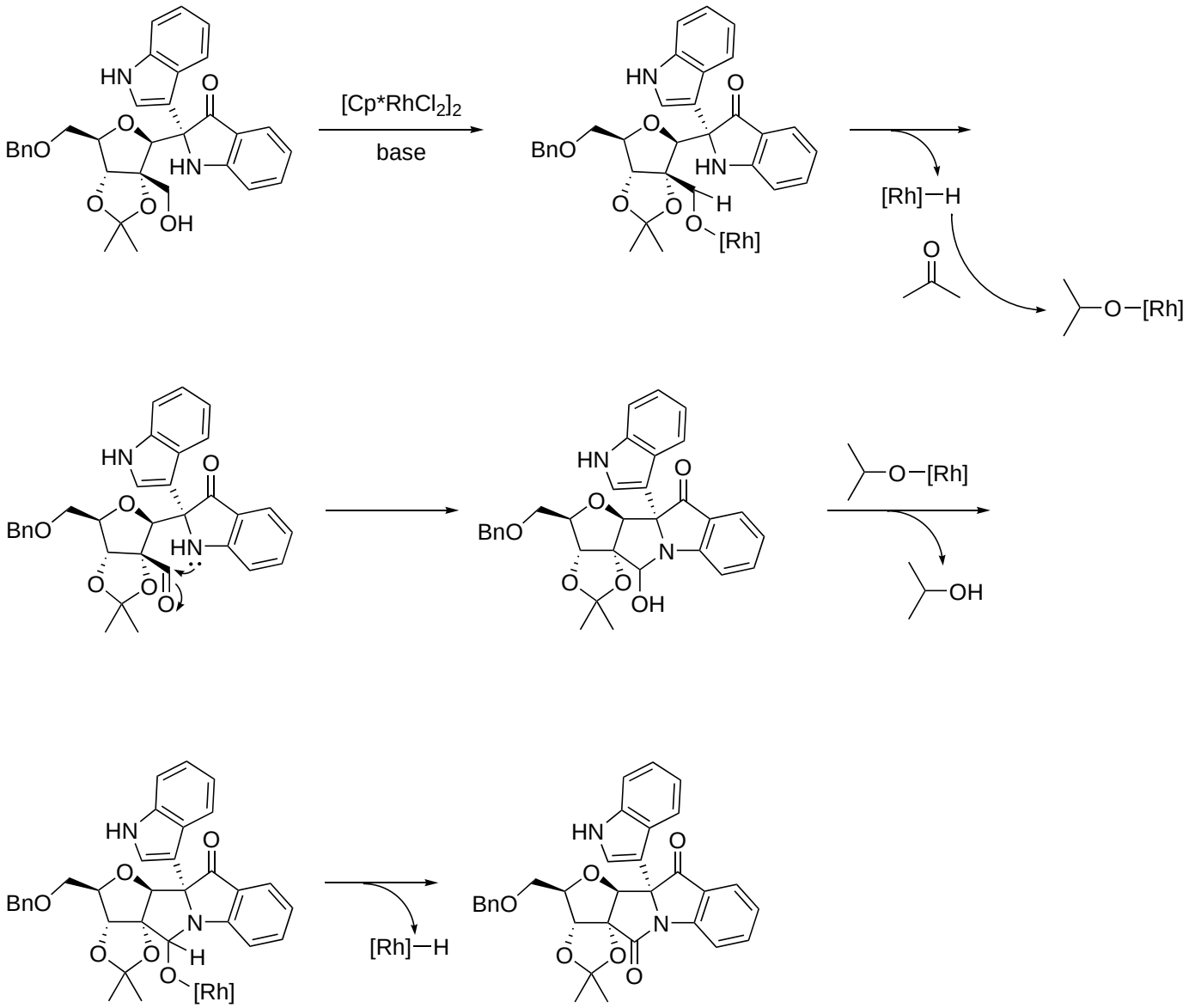

TfO
NH2
CCl3
OH
O
A + TfOH
OBn
NHMeOMe
MeAlCl2
NHMeOMe
Al
Me
Cl
Cl
work up
NHMeOMe
AlMeCl2
TBSOTf
2,6-lutidine
OTBS
DIBAL
Al
H
OMe
N
Me
work up
BnO
OH
OMe
NH
Me
-H
-NHMeOMe
CHO
H2N
S
tBu
proton exchange
-H2O
Ellman's Imine
C
LDA
R1
R2
MeO
Li
tBu
BnO
HN
CO2Me



intramolecular Mannich reaction




TMS
BnO
OTBS
work up
OH
BF3
H
O-BF3
H-SiEt3
HOBF3
TBAF
O2N
I
Sonogashira coupling
Ac2O, Py.
OAc
Pd(CH3CN)2Cl2
Pd
R
InCl3
HN
NO reduction
K2CO3, MeOH


HN
O
BnO
O
HN
O
O
OH
[Cp*RhCl2]2
base
H
[Rh]
[Rh]—H
O—[Rh]
N
OH
OH
[Rh]—H