

1) EtMgBr, CuI (cat.)
THF, 0 °C to rt, 51%

2) MeC(OEt)₃, AcOH (cat.)
175 °C; aq. KOH, rt, 81%

3) tetracyanoethylene oxide, Me₂S
1,4-dioxane, 90 °C, 63%

4) Boc₂O, Et₃N, DMAP (cat.)
CH₂Cl₂, rt, 82%

5) Pd/chiral ligand (cat.), BEt₃ (cat.)
m-xylene, 130 °C, 71%, 82:18 er

6) neat, 180 °C
then POCl₃, MeCN, 110 °C
then NaBF₄, 74%

(+)-eburnamone

1), AcCl, Py, CH₂Cl₂, rt, 86%
 2) **1**, dioxane, reflux, 88%
 3) NaNO₂, HOAc, 0 °C, 100%
 4) **2**, Et₃N/MeCN, 80 °C, 63%
A
 5) LiAlH₄, THF, rt, 100%
 6) PPh₃, NBS, Et₃N, CH₂Cl₂, rt, 85%
A
 7) NaH, THF, rt;
 allyl bromide, rt, 72%

1 **2**