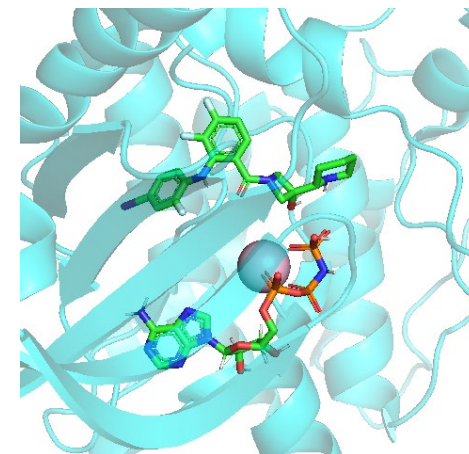
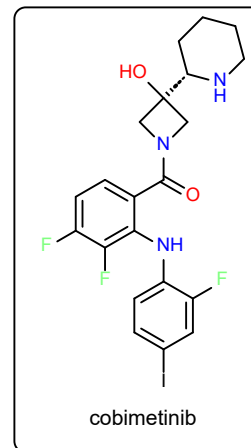
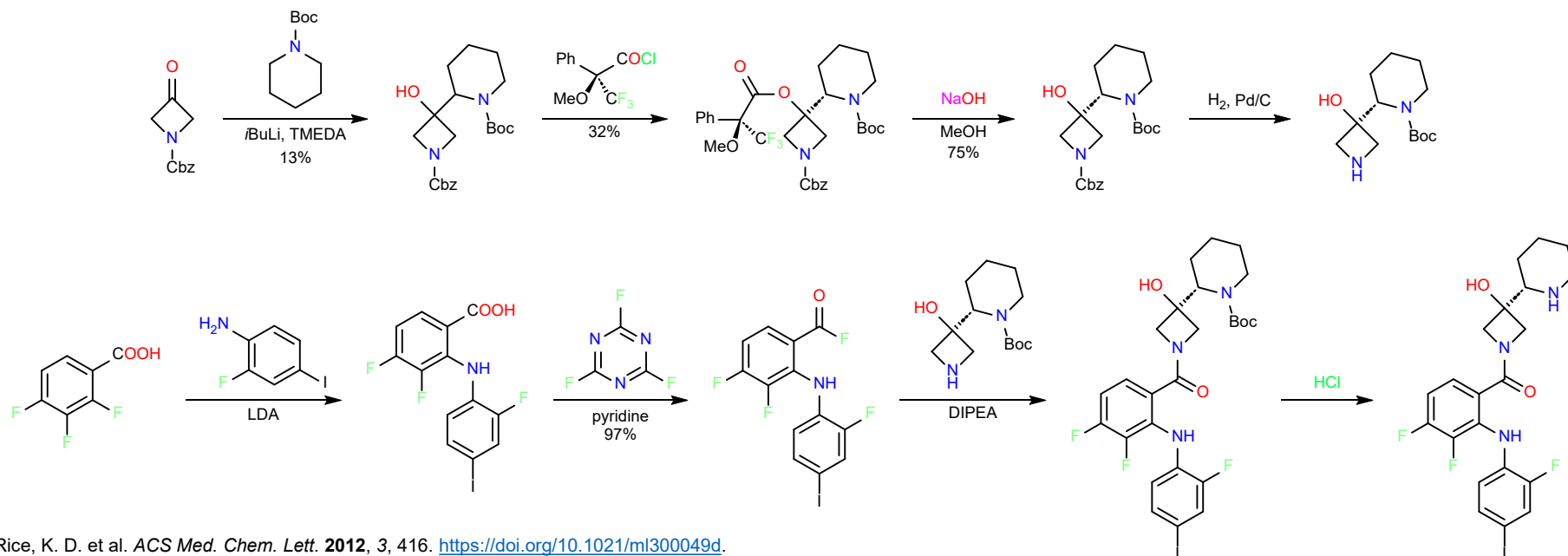


- Cobimetinib is a mitogen-activated protein kinase (MEK) inhibitor discovered by Exelixis in 2012 and developed in conjunction with Genentech.
- It shows superior activity against B-RAF-mutation by binding to activate site of MEK-1/2.
- Pre-clinical investigation suggests that combined use of cobimetinib with PI3K inhibition could boost the anti-cancer effects of the drug
- Approved by FDA in 2015 for treating melanoma in combination with vemurafenib.



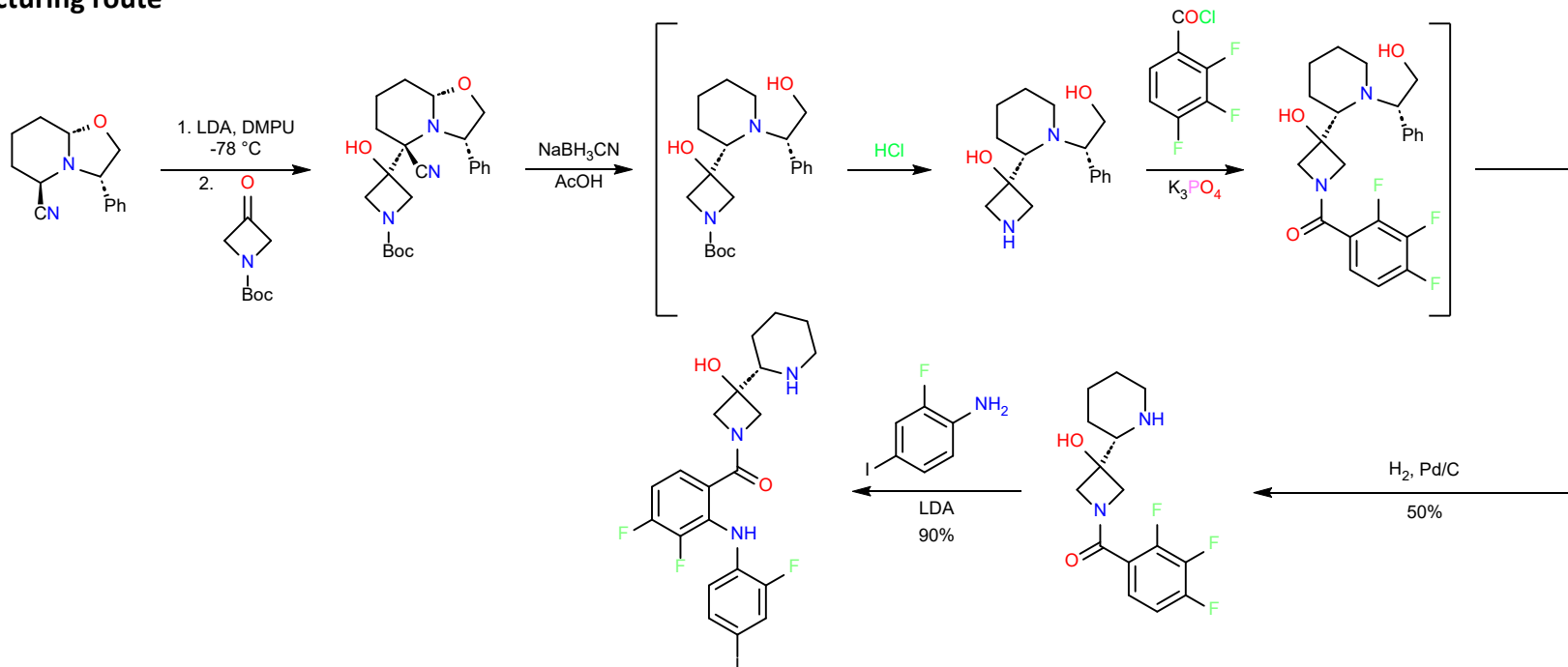
Hughes, D. L. *Org. Process Res. Dev.* **2016**, *20*, 1855. <https://doi.org/10.1021/acs.oprd.6b00304>.
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Medicinal chemistry route



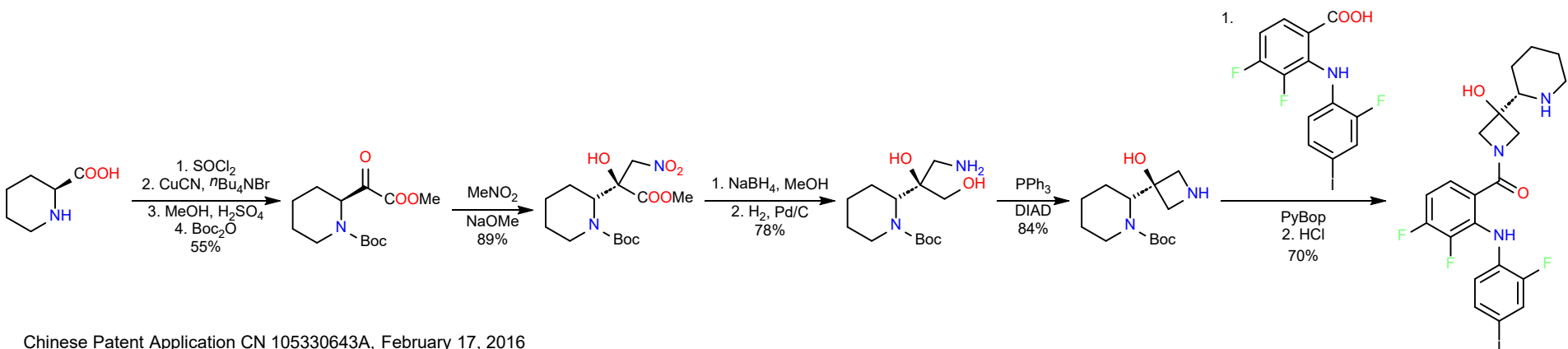
Rice, K. D. et al. *ACS Med. Chem. Lett.* **2012**, *3*, 416. <https://doi.org/10.1021/ml300049d>.

Manufacturing route



PCT Int. Patent Application WO 2014/059422 A1, April 17, 2014

An alternative route



Chinese Patent Application CN 105330643A, February 17, 2016