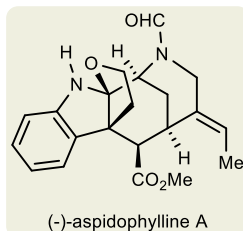
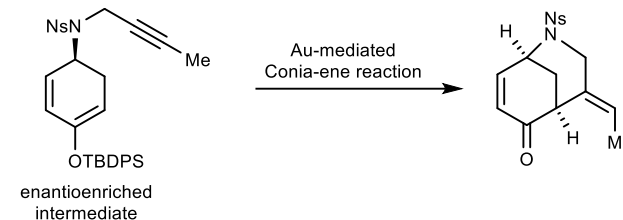


- Isolated in 2007 from *K. singapurensis* by the Kam group
- Ability to reverse drug resistance in resistant KB cells
- First racemically synthesized by the Garg group at UCLA in 2011
- Enantioselectively synthesized in 2016
- Key steps are a gold-mediated cyclization via enantioenriched material to form the [3.3.1]-azabicyclic core and an interrupted Fischer indolization

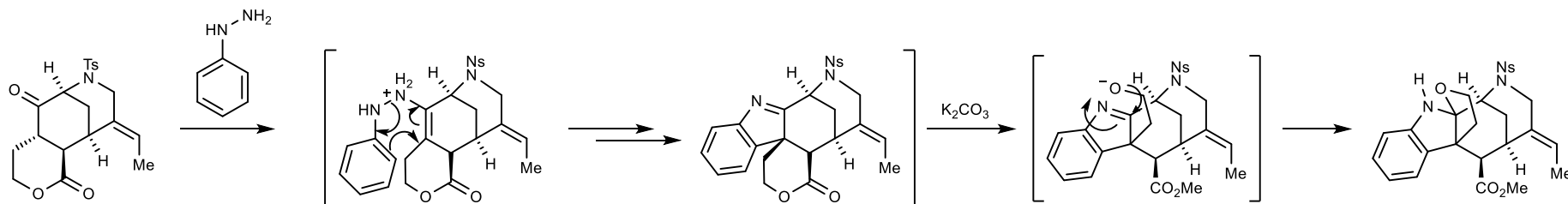


Key Step for Enantioselective Synthesis

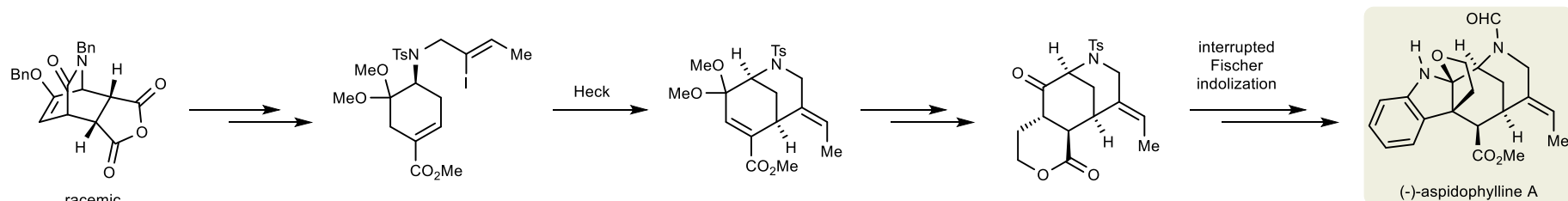


Kam, T.-S. *J. Nat. Prod.* **2007**, *70*, 1783. <https://doi.org/10.1021/mp070374f>

Interrupted Fischer Indolization



Racemic Synthesis by Garg (2011)



Garg, N.K. *J. Am. Chem.* **2011**, *133*, 8877. <https://doi.org/10.1021/ja203227q>

