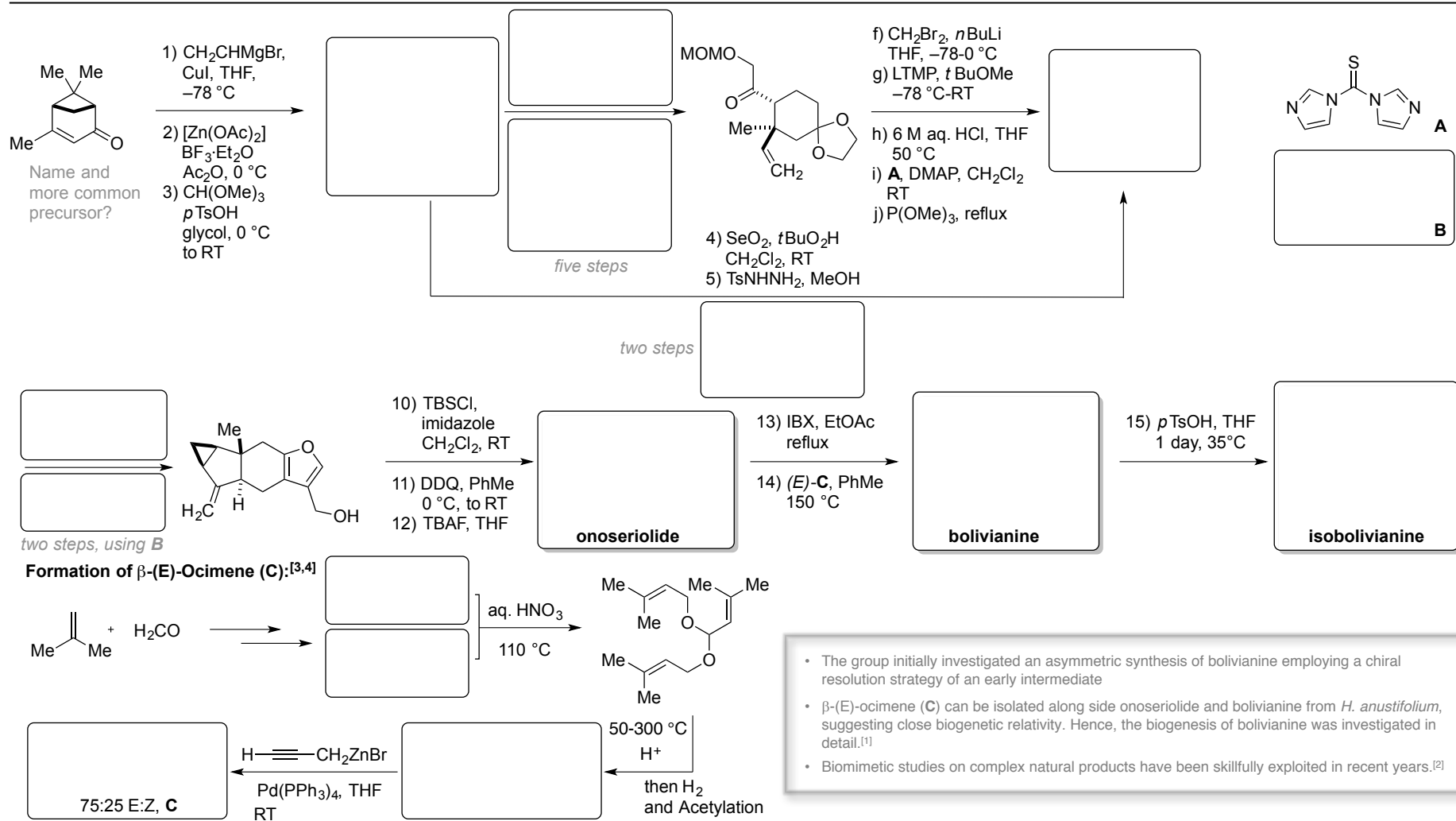


# E49: The Asymmetric Total Synthesis of Onoseriolide, Bolivianine and Isobolivianine<sup>[1]</sup>



- The group initially investigated an asymmetric synthesis of bolivianine employing a chiral resolution strategy of an early intermediate
- β-(E)-ocimene (C) can be isolated along side onoseriolide and bolivianine from *H. anustifolium*, suggesting close biogenetic relatedity. Hence, the biogenesis of bolivianine was investigated in detail.<sup>[1]</sup>
- Biomimetic studies on complex natural products have been skillfully exploited in recent years.<sup>[2]</sup>

<sup>[1]</sup> B. Du, C. Yuan, T. Yu, L. Yang, Y. Yang, B. Liu, S. Qin, *Chem. Eur. J.* **2014**, *20*, 2613. <sup>[2]</sup> Lessons and Revelations from Biomimetic Syntheses: Razzak, J. K. Brabander, *Nat. Chem. Biol.* **2011**, *7*, 865.

<sup>[3]</sup> J. Therre, G. Kaibel, W. Aquila, G. Wegner, H. Fuchs, *EP1186589B1*, **2001**; A. Nissen, W. Rebafka, W. Aquila, *US Patent 4288636*, **1981**. <sup>[4]</sup> H. Matsushita, E. Negishi, *J. Org. Chem.* **1982**, *47*, 4161.

