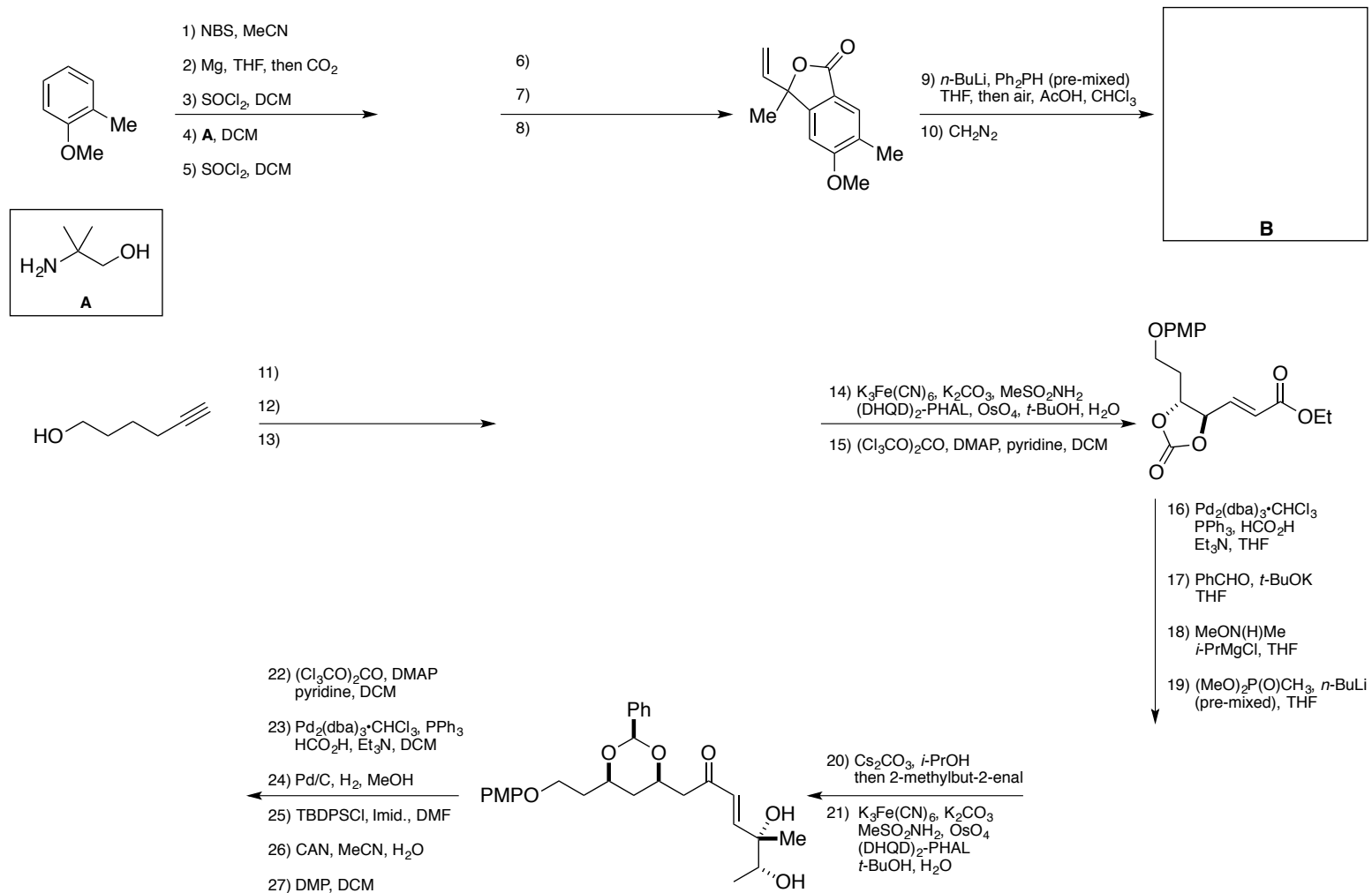


E41: Total Synthesis of Milbemycin β_3

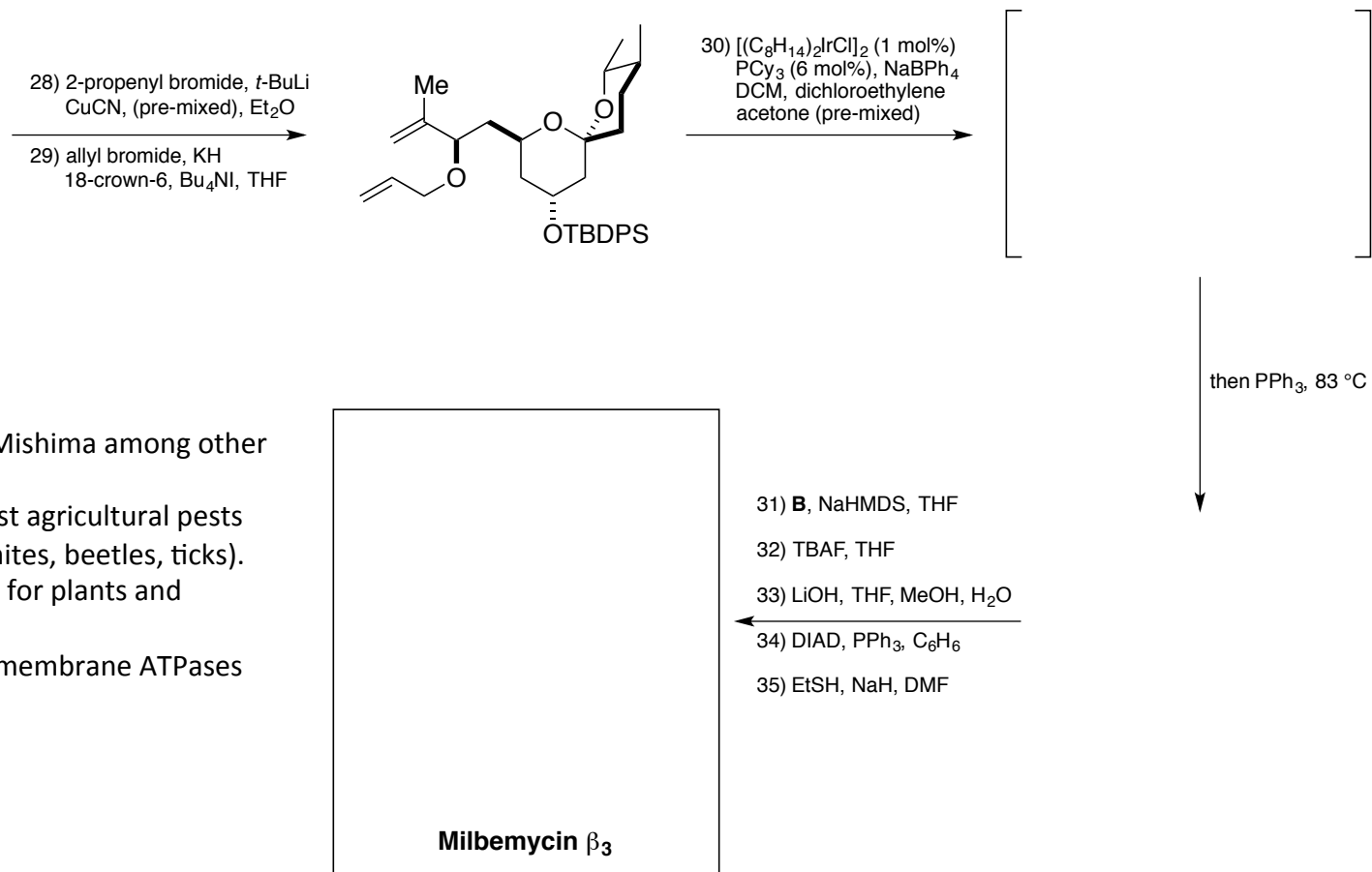


M. Li, G. A. O'Doherty, *Org. Lett.* **2006**, *18*, 3987–3990;
 S. R. Schow., J. D. Bloom, A. S. Thompson, K. N. Winzenberg, A. B. Smith III, *J. Am. Chem. Soc.* **1986**, *108*, 2662–2674.



Sparr Group Seminar
 06.04.2017
 Dominik Lotter

E41: Total Synthesis of Milbemycin β_3



- Isolated in 1975 by Mishima among other milbemycin.
- Shows activity against agricultural pests and parasites (e.g. mites, beetles, ticks).
- Minimal cytotoxicity for plants and animals.
- Potent inhibitor for membrane ATPases

M. Li, G. A. O'Doherty, *Org. Lett.* **2006**, *18*, 3987–3990;
S. R. Schow., J. D. Bloom, A. S. Thompson, K. N. Winzenberg, A. B. Smith III, *J. Am. Chem. Soc.* **1986**, *108*, 2662–2674.



Sparr Group Seminar
06.04.2017
Dominik Lotter