

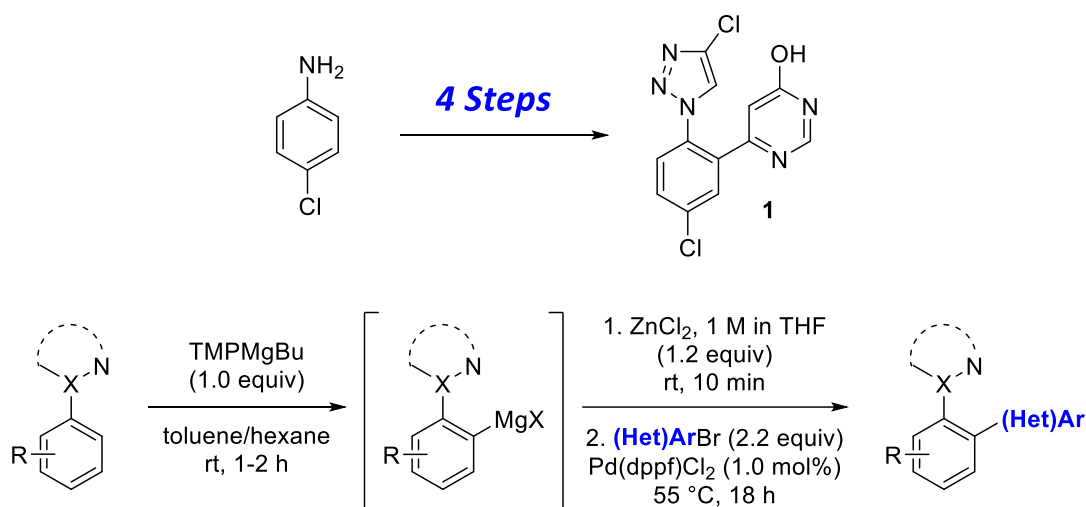
Regioselective Preparation and Functionalization of Azoles for the Synthesis of Active Pharmaceutical Ingredients

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Beyond the incredible challenge of inventing any new medicine, Process Chemists are tasked with designing the best chemical process for every product in the pipeline. Chemistry alone can make all the difference between an unviable product and a drug that is affordable and accessible to every patient that needs it. In many cases, a completely redesigned novel synthetic route is needed to meet this objective. Chemists at Janssen working on the development of the novel antithrombotic agent Milvexian¹ discovered a 4-step process to intermediate **1**, drastically simplifying the synthesis of this compound. New chemistry developed to enable the preparation of differently substituted triazoles found application in Discovery chemistry to expand the understanding of this chemical space.²



[1] A. K. Dilger *et al.* *J. Med. Chem.* **2021**, *in press*.

[2] a) F. H. Lutter, L. Grokenberger, L. A. Perego, D. Broggin, S. Lemaire, S. Wagschal, P. Knochel, *Nature Comm.* **2020**, *11*, 4443. b) A. Hess, S. B. Doerrich, F. Trauner, F. H. Lutter, S. Lemaire, S. Wagschal, K. Karaghiosoff, P. Knochel *Chem. Sci.* **2021**, *12*, 8424.