

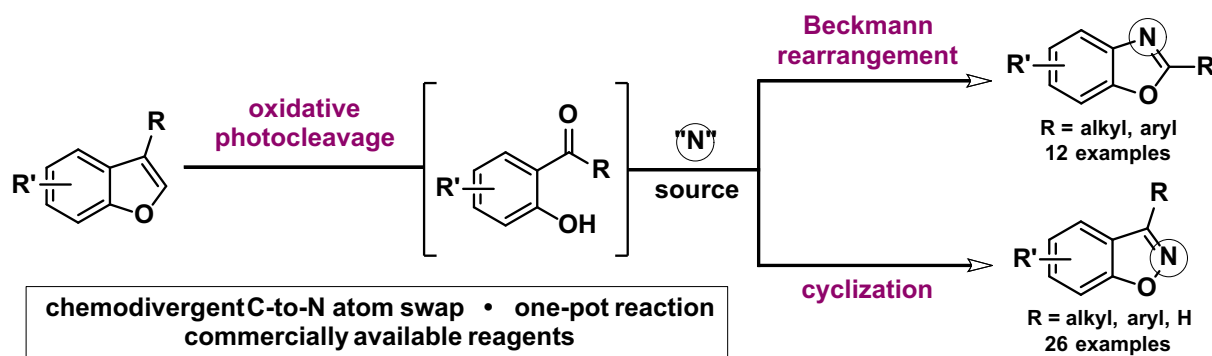
Chemodivergent C-to-N atom swap from benzofurans to benzisoxazoles and benzoxazoles

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Facile derivatization of biologically active compounds without prefunctionalization expands the chemical space and accelerates the discovery of new molecules. Atom swap reactions have recently emerged as powerful molecular editing tools,^[1-3] yet such reactions remain rare. Herein, we describe a convenient, chemodivergent protocol to perform a net C-to-N atom swap in benzofurans, affording benzisoxazoles or benzoxazoles *via* a cascade of oxidative cleavage, oxime formation, and cyclization using commercially available reagents. Given the user-friendly nature and broad range of tolerated functional groups, we believe that this reaction will find immediate utility in both academic and industrial settings.



- [1] T. J. Pearson, R. Shimazumi, J. L. Driscoll, B. D. Dherange, D.-I. Park and M. D. Levin, *Science*, **2023**, *381*, 1474–1479.
- [2] J. Woo, C. Stein, A. H. Christian and M. D. Levin, *Nature*, **2023**, *623*, 77–82.
- [3] A.-S. K. Paschke, Y. Brägger, B. Botlik, E. Staudinger, O. Green and B. Morandi, *Nature Chemistry*, **2025**, *17*, 1750-1756.