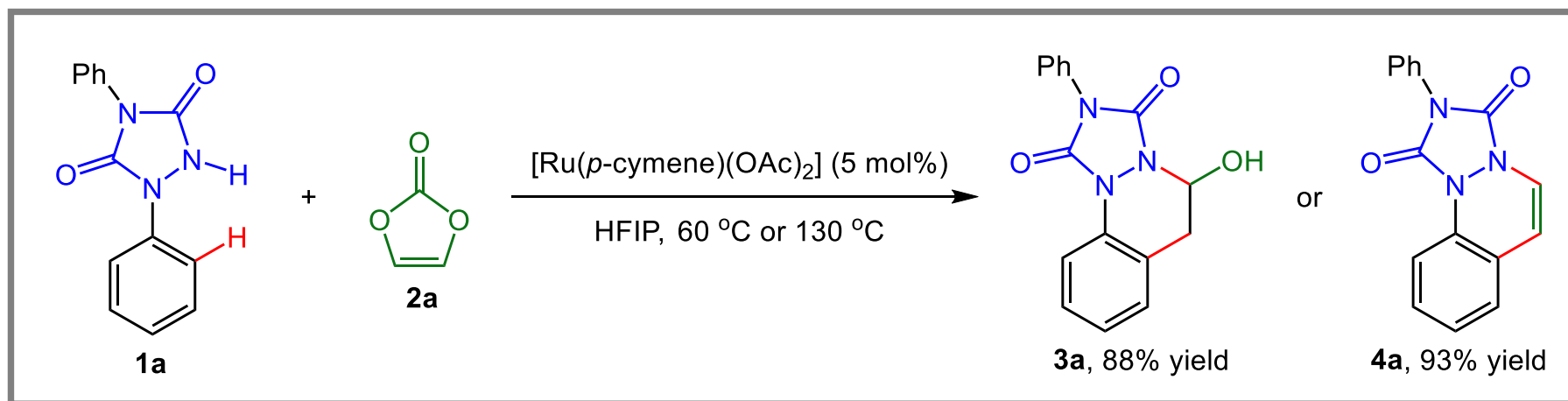


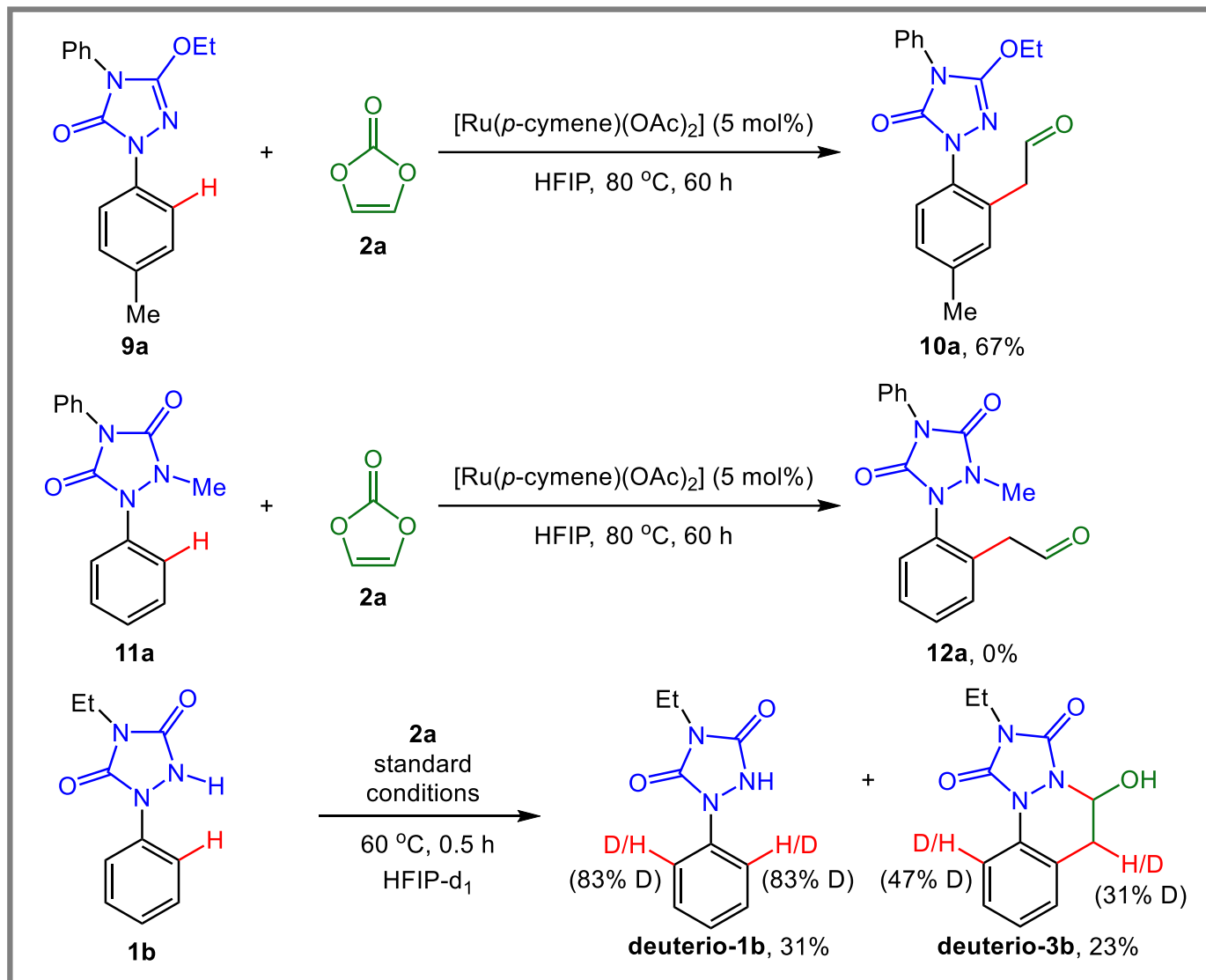
Mechanism Speculation XXXIX Recommended by Yu Yan-Jiang

Urazoles as Heterocyclic Directing Groups in Ru(II)-Catalyzed Annulation of N–H/C–H Bonds with Vinylene Carbonate



Kang, J.; Park, J.; Singh, P.; Jeong, T.; Kim, I, S. *J. Org. Chem.* **2024**, 89, 18188-18198.

Mechanistic Studies



| <div style="border: 1px dashed orange; padding: 5px; display: inline-block;"> 3a $\xrightarrow{\text{conditions}}$ 4a </div> | |
|---|---------------------------|
| conditions (130 °C, 48 h) | yield (%) 3a/4a |
| A: HFIP | 85/10 |
| B: Ru(<i>p</i> -cymene)(OAc) ₂ , HFIP | trace/95 |
| C: Ru(<i>p</i> -cymene)(OAc) ₂ , DCE | 90/trace |

Proposed Mechanism

