Synthesis of Aminoindanes via a Novel C–H Activation–[3+2]-Annulation Strategy

Overall transformation:

Selected substrate scope:

Proposed catalytic cycle:

Significance: Directed *ortho* C–H functionalization has become a hot topic in organic synthesis in recent years. A novel extension is reported by Nishimura and co-workers, who accomplished an iridium-catalyzed annulation of *N*-sulfonyl ketimines with 1,3-dienes to provide complex aminoindane derivatives.

Comment: This transformation tolerates a wide variety of 1,3-diene substrates, and products are afforded in good to excellent yields and high regio- and stereoselectivity. Key to the proposed mechanism is the intramolecular aryl–iridium– π -allyl intermediate **D**.

SYNFACTS Contributors: Mark Lautens, David A. Petrone
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