

Correction to Carbon–Heteroatom Coupling Using Pd-PEPPSI Complexes

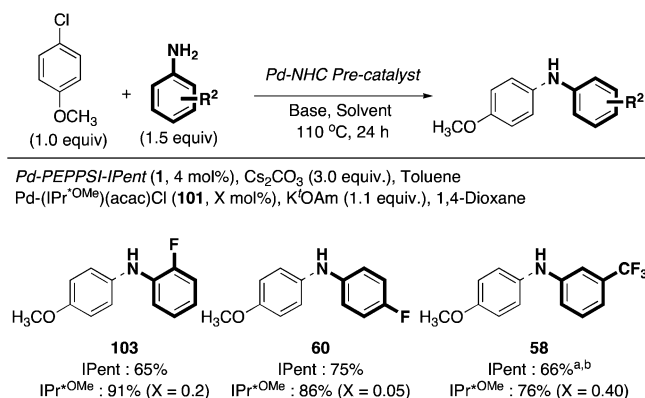
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1. On page 188, in the paragraph starting in the first column at the bottom of page 188, the catalyst name “Pd-PEPPSI-IPr*OMe (101)” should be replaced by [Pd(IPr*OMe)(acac)Cl] (101) so that it reads as follows:

In a related study, the same group reported the couplings of chloroanisole to a selection of aniline derivatives (leading to 58, 60 and 103) using modified IPr ligands, and comparisons were made to the performance of Pd-PEPPSI-IPent (1) in the same couplings but using different reaction conditions (Table 12).⁴⁰

Table 12. Published comparison of Pd-PEPPSI-IPent (1) with [Pd(IPr*OMe)(acac)Cl] (101) under different reaction conditions



^aWhen the same reaction was conducted in DME at 80 °C, 62% yield was obtained. ^bWhen the same reaction was conducted in DME at 80 °C using 85, 62% yield was obtained.

The reactivity of [Pd(IPr*OMe)(acac)Cl] (101) was reported by the authors as high and on par with that of Pd-PEPPSI-IPent (1) using the comparatively low catalyst loading as their justification. Given that different reaction conditions were used, comparisons in reactivity cannot be based on TON. Aryl amination reaction conditions employing soluble, highly aggressive *tert*-butoxide and its derivatives cannot be drawn into comparisons with reactions performed using mild, insoluble carbonate base. For example, the reaction in Scheme 4 requires approximately 24 h using Pd-PEPPSI-IPr (2) to complete using carbonate base at 80 °C; the same reaction using KO^tBu completes in just 15 s at RT!²¹ If the same catalyst performs vastly different under different reaction conditions, any attempted comparison between catalysts under different reactions conditions holds little value.

2. Related to this, Figure 3 on page 188 in the manuscript should be replaced by the corrected Figure below:

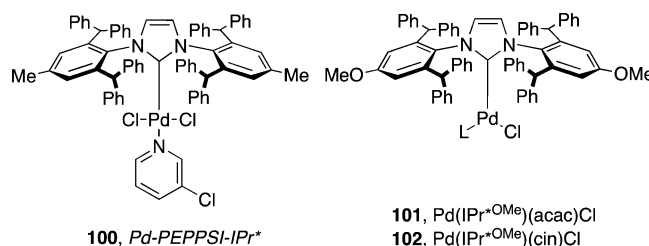


Figure 3. Pd–NHC precatalysts reported by Nolan and co-workers.

3. Also related to this, Table 12 on page 188 in the manuscript should be replaced by the corrected table and the table title above.

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