Additions and Corrections

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Catalytic Hydroamination of Alkynes and Norbornene with Neutral and Cationic Tantalum Imido Complexes.

Page 2519. Additional ¹H-¹³C HMBC spectroscopic characterization of the compound originally assigned as having structure **3** showed that the benzyl groups of this complex are inequivalent and that only one of these ligands is correlated to the phenyl-substituted alkene carbon resonances. These spectral characteristics are inconsistent with the metallacyclic structure illustrated in Schemes 1 and 4 of the paper and are consistent with the insertion product **3**′ illustrated below.

$$(PhCH_2)_2Ta-N \\ Ph \\ Ph \\ Ph \\ Ph \\ A$$

$$PhH_2C \\ Ta=NCMe_3$$

$$3'$$

The stoichiometric addition of 2,6-dimethylaniline to 3, which was illustrated in Scheme 4, occurs as described for insertion product 3' to give the coordination product 12' (see Scheme 4). The disappearance of the ¹H NMR resonances

of the N-H bonds of 12′ occurs over 24 h as described for 12; however, protonation cannot take place at a metallacyclic Ta-C bond as proposed in the paper. Instead, protonation most likely occurs at one of the alkyl ligands of 3′. No implications regarding the tantalum-catalyzed hydroamination mechanism can be inferred from this experiment.

Scheme 4. Treatment of 3' with 2,6-Dimethylaniline

Ph Ph Ph Ph Ph Ph
$$H_2$$
C H_2 NAr H_2

Compound 3' also catalyzes the hydroamination of diphenylacetylene with aniline. The efficiency of this reaction is identical to that involving compound 2 as discussed for 3 in the penultimate paragraph of the paper.

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