**Pd-Catalyzed Pyridine-Directed Aerobic Olefination of Unactivated sp^3 C–H Sites**

Significance: A new palladium/polyoxometalate-catalyzed aerobic olefination of unactivated sp^3 C–H bonds has been developed. Nitrogen-containing heterocycles act as directing groups and the products undergo reversible intramolecular Michael addition to form bicyclic nitrogen-containing scaffolds.

Comment: The cationic bicyclic products undergo further synthetic transformations. For example, PtO_2-catalyzed hydrogenation yields piperidines, and reduction with NaBH_4 gives 1,2,3,6-tetrahydropyridines. The pyridinium products can also be converted into the corresponding alkenes under basic conditions.

**Selected examples:**

- **EtO_2C**
  - 89% yield

- **EtO_2C**
  - 71% yield

- **EtO_2C**
  - 75% yield

- **EtO_2C**
  - 69% yield

**SYNFACTS Contributors:** Paul Knochel, Andreas K. Steib

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