## Rhodium(I)-Catalyzed Hydroacylation Promoted by Chelating Amines

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CHO
$$\begin{array}{c}
Rh(I) \text{ catalyst} \\
\hline
45 - 93\% \\
\hline
X = CH, N \\
R = CH_3, \text{ allyl} \\
R' = CH_3, CO_2Er
\end{array}$$

Benzazepines and related nitrogen heterocycles exhibit a broad range of biological activity. Our goal is to develop syntheses of these pharmaceutically relevant compounds that emphasize the efficient use of chemical resources, especially those derived from petroleum. To this end, rhodium-catalyzed hydroacylation is an attractive strategy due to its inherent atom economy and mild reaction conditions. The chemistry developed in our laboratory enables the rapid synthesis of medium-ring nitrogen heterocycles from simple starting materials.