**Stereoselective Synthesis of syn-Homoallylic Alcohols**

**Significance:** The authors established a new synthetic method for the synthesis of syn-homoallylic alcohols from terminal alkynes and aldehydes. As this transformation utilizes easily accessible starting materials, this practical method should find many applications.

**Comment:** A cationic rhodium(I) catalyst turns 2-silyl-1-alkenylboronates, which can be easily prepared from a terminal alkyne, into the corresponding allylboronate, that directly undergoes nucleophilic addition to an aldehyde to afford the corresponding syn-homoallylic alcohol in excellent stereoselectivity.

**Selected examples:**

1. PhMe₂Si-Bpin (0.7 equiv), Pd(OAc)₂ (2.0 mol %), t-OcNC (30 mol %), PhMe, 50 °C
2. R²CHO (0.7 equiv), [Rh(nbd)(MeCN)₂]SbF₆/dppm (7 mol %), DCE, 90 °C

**R¹, R² = Alk, various substituted Ar**

**Steps:**
1. **R₁PhMe₂Si-Bpin (0.7 equiv), Pd(OAc)₂ (2.0 mol %), t-OcNC (30 mol %), PhMe, 50 °C**
2. **R²CHO (0.7 equiv), [Rh(nbd)(MeCN)₂]SbF₆/dppm (7 mol %), DCE, 90 °C**

**Yields and Stereoselectivities:**

- **96% yield**
- **syn/anti > 98:2**
- **95% yield**
- **syn/anti > 98:2**
- **96% yield**
- **syn/anti > 98:2**
- **99% yield**
- **syn/anti > 98:2**
- **80% yield**
- **syn/anti > 98:2**
- **79% yield**
- **syn/anti > 98:2**