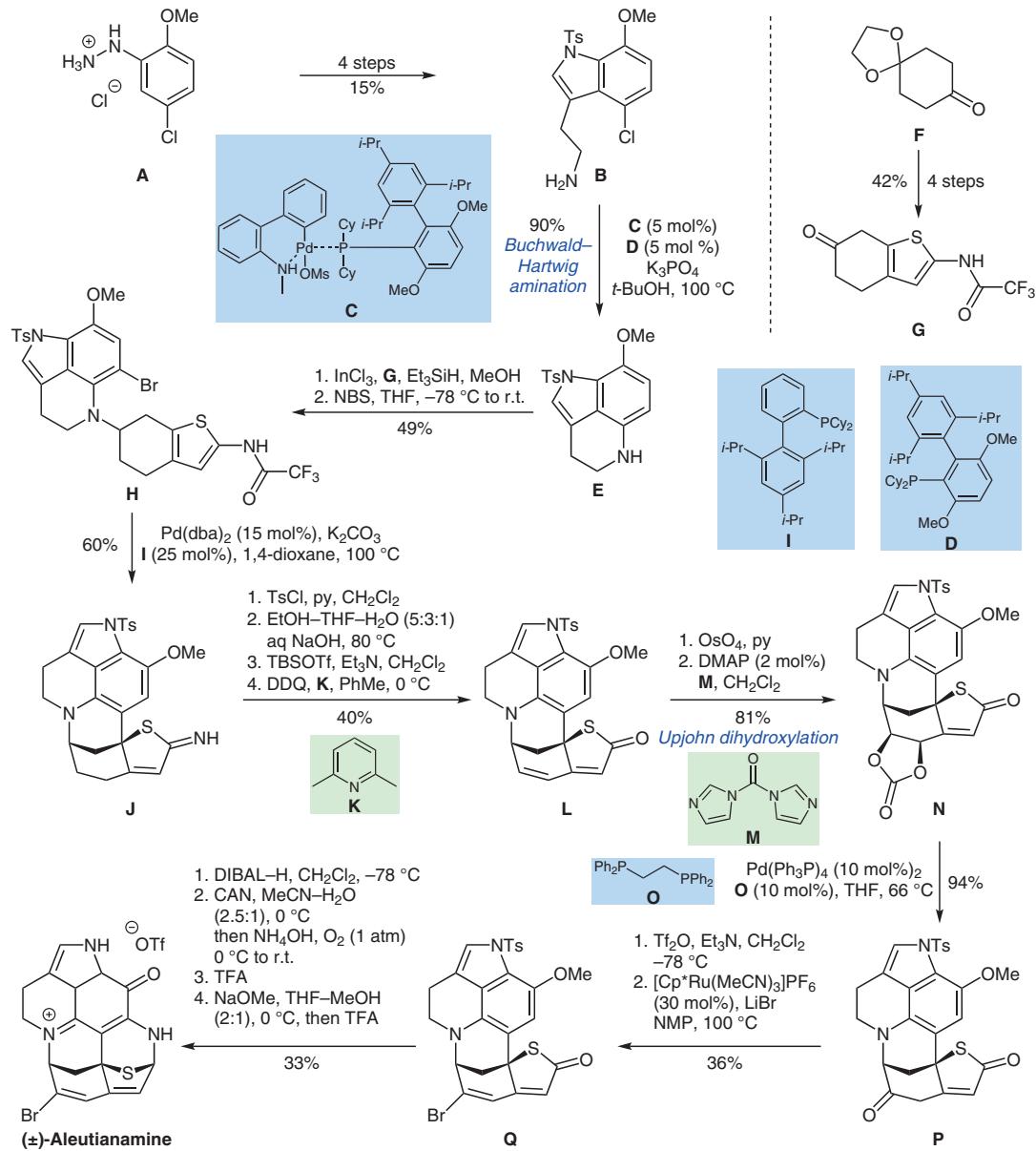


Synthesis of (\pm)-Aleutianamine



Significance: Stoltz and co-workers report the total synthesis of the recently isolated pyrroloiminoquinone alkaloid (\pm)-aleutianamine. Key to their approach is a palladium-catalyzed dearomatic thiophene functionalization to construct the [3.3.1]ring system and the thioimidate.

Comment: Tricycle E was accessed from hydrazine A in five steps. Reductive amination of amidothiophene G and subsequent bromination yielded tertiary amine H. Treatment with $\text{Pd}(\text{dba})_2$ and XPhos in the presence of a base led to dearomatic cyclization and acetamide cleavage, resulting in thioimidate J.