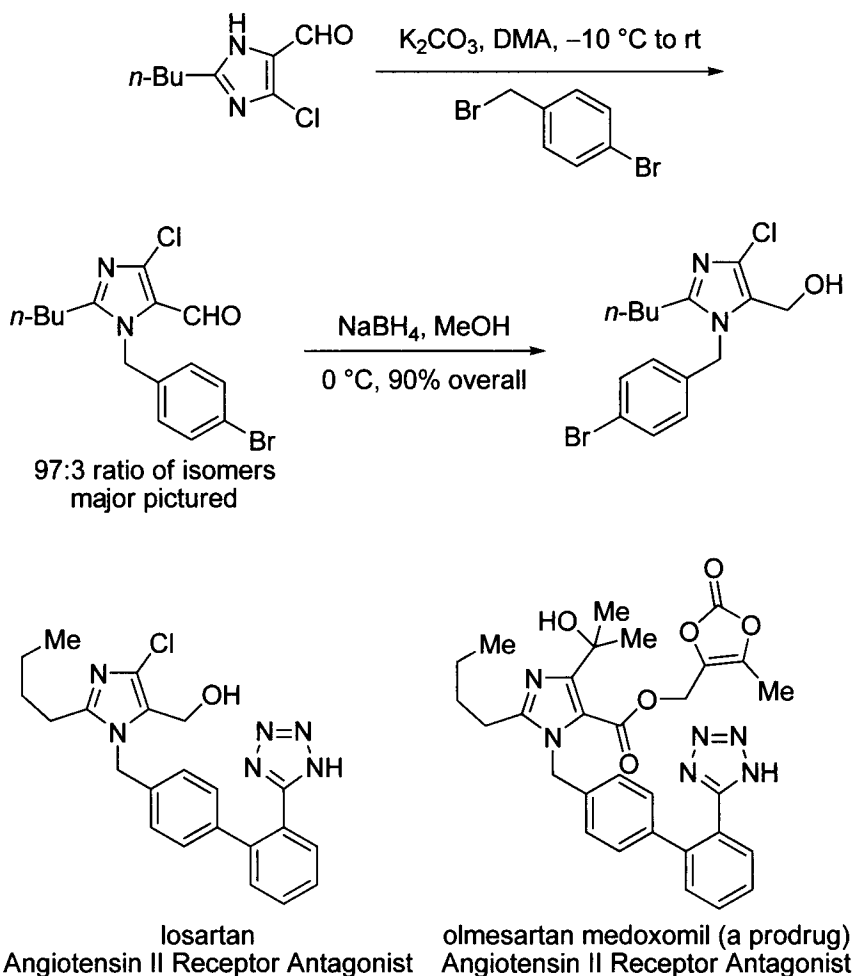


angiotensin II receptor antagonist used to treat hypertension and coronary heart disease.



Over-halogenation is a common theme in functionalization of unsubstituted imidazoles and often leads chemists to install functionality early if possible. The Wallach synthesis of imidazoles allows for the installation of a chlorine atom at the 5 position. Such chemistry provides an intermediate that is useful in the synthesis of the immunosuppressant, azathioprine. The Wallach reaction is the treatment of oxalylamides with PCl_5 or POCl_3 to yield the corresponding *N*-methyl-5-chloroimidazole.¹³ Nitration is selective at the 4-position¹⁴ to provide the imidazole properly functionalized to provide azathioprine.¹⁵