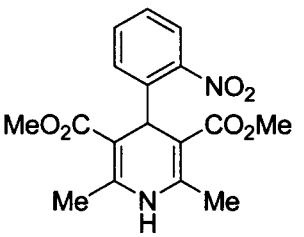
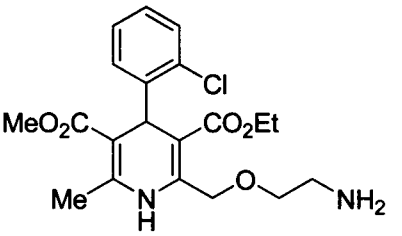
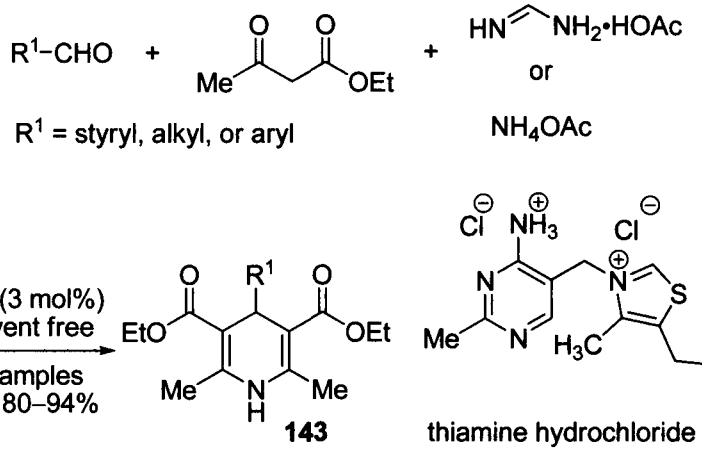


141, nifedipine



142, amlodipine (Norvasc)

Several reagents and reaction conditions such as TMSI (generated *in situ* from TMSCl and NaI),[91] magnesium nitride (Mg_3N_2),[92] triphenylphosphine (PPh_3),[93] thiamine hydrochloride (vitamin B_1),[94] grinding under solvent-free conditions,[95] PTSA with ultrasonic irradiation[96] were recently reported to mediate efficiently the Hantzsch dihydropyridine synthesis. For instance, 1,4-dihydropyridines **143** were obtained in good yields using thiamine hydrochloride (vitamin B_1) as the catalyst under solvent-free conditions at room temperature.[94]



A one-pot, three-component synthesis was reported to give the 2-aryl-pyridines **144** in good to excellent yields under solvent-, catalyst-, and heat-free conditions.[97] The authors reinvestigated the classic Hantzsch reaction under different reaction conditions, analyzed by-products, and further elucidated the mechanism.