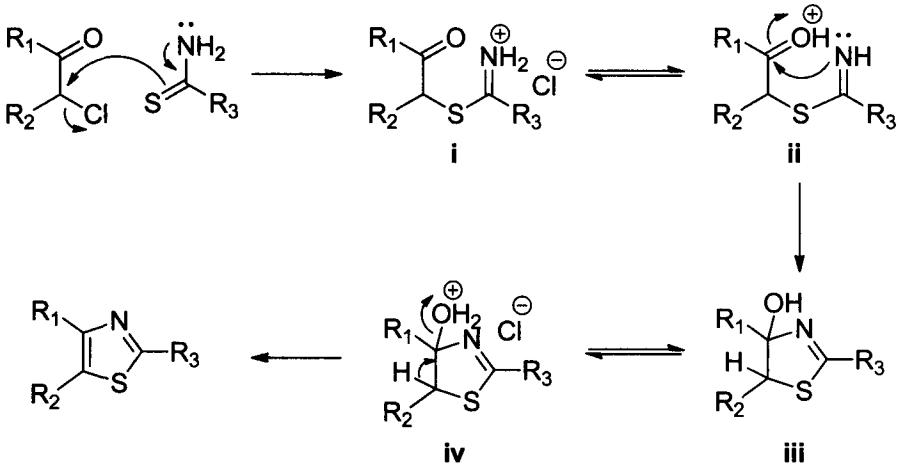
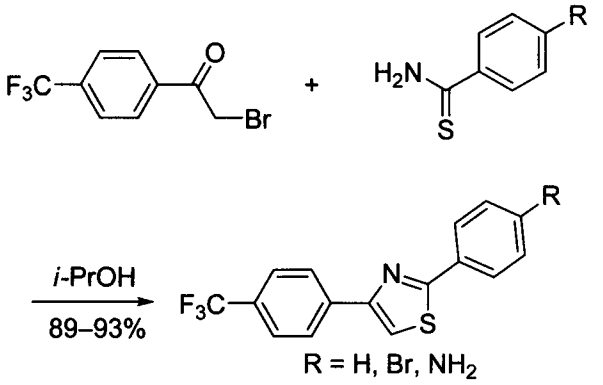
across the activated carbonyl to form hydroxy intermediate **iii**. Dehydration of **iv** yields the thiazole.[74]



The reaction has been employed in several molecules in drug discovery and development. For example, Ikemoto et al. have developed a practical route to a thiazole as part of their efforts toward a kilogram-scale synthesis of a β-adrenergic receptor agonist as a candidate for the treatment of obesity. The thiazole ring was assembled by allowing the haloketone and thioamide to react.[75]



Sodelglitazar is a Phase II clinical candidate for the treatment of type 2 diabetes. It is a panagonist active toward all three peroxisome proliferators-activated receptors (PPAR). Scientists in the Chemical Development Laboratories at GlaxoSmithKline developed a robust, efficient process for its synthesis. The thiazole-containing starting material was built from the readily available benzonitrile *via* its reaction with thioacetic acid as the thionation agent chosen after considerable screening to yield the corresponding