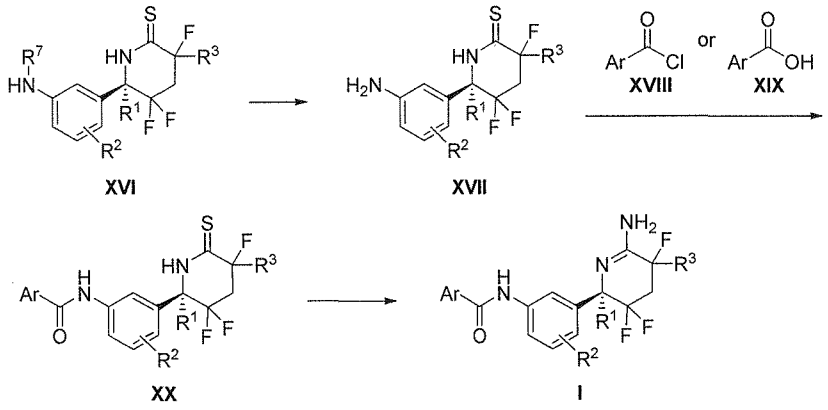
conditions such as ethyl 2-(diethoxyphosphoryl)-2-fluoroacetate in the presence of lithium chloride and a base such as *N,N*-diisopropylethylamine gives compounds of the general formula VIII. Compounds of the general formula IX are obtained by hydrogenation of compounds of the general formula VIII in the presence of a catalyst such as palladium on carbon. Compounds of the general formula X are obtained by treatment of compounds of the general formula IX with an acid such as hydrochloric acid in methanol followed by treatment with potassium carbonate in methanol. Compounds of the general formula XI are obtained by treatment of compounds of the general formula X with di-*tert*-butyl dicarbonate in the presence of a catalytic amount of DMAP (*N,N*-dimethyl-4-amino-pyridine). Compounds of the general formula XII are obtained by treatment of compounds of the general formula XI with a base such as lithium hexamethyldisilazide follow by alkylation with a alkylhalide. Deprotection of compounds of the general formula XII gives compounds of the general formula XIII which can be nitrated using nitric acid to give compounds of the general formula XIV. Reduction of the nitro group of compounds of the general formula XIV followed by protection of the formed aniline moiety gives compounds of the general formula ~~XX~~XV. Treatment of compounds of the general formula XV with a reagent such as Lawesson's reagent (2,4-bis(4-methoxyphenyl)-1,3,2,4-dithiadiphosphetane-2,4-disulfide) follwed by chromatographic separation gives compounds of the general formulae XVIa and XVIb.

Compounds of the general formula I may be prepared as shown in Scheme 2.

Scheme 2



where R^1, R^2, R^3 and Ar are as defined under formula I and R^7 is an amine protection groups such as a *tert*-butoxy carbonyl group.

Compounds of the general formula XVII (Scheme 2) can be obtained by deprotection of compounds of the general formula XVI. Compounds of the general formula XX may be prepared by reacting compounds