

SYNTHESIS OF NEW POLYCYCLIC SYSTEMS CONTAINING FLUOROQUINOLONE FRAGMENTS ASSOCIATED WITH THE 1,3-THIAZOLE OR 1,2,4-OXADIAZOLE CYCLE

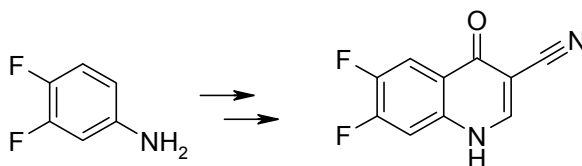
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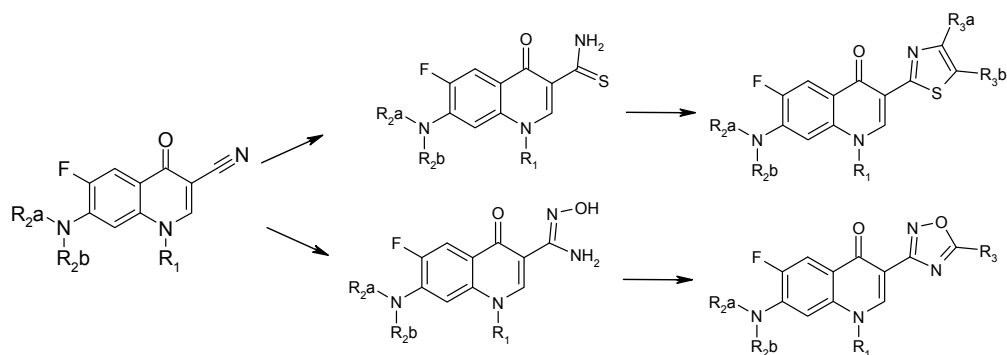
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The work is focused on the development of new and effective antimicrobial substances quinolone series. The use of heterocyclic bioisosteres carboxyl group or its derivatives in the 3rd position of the fluoroquinolone core is of interest to improve the pharmacological properties of perspective drugs.

We have synthesized two new classes of heterocyclic systems containing the 3rd position fluoroquinolone 1,3-thiazol-2-yl or 1,2,4-oxadiazol-3-yl fragments. The work is based on the use of the synthetic potential of the 3-cyano-6,7-difluorquinolin-4-one, obtained by the reaction of the Gold Jacobs:



Has been designed and optimized for the path leading to the target poliheterocyclic classes as follows:



The structure of the synthesized compounds was confirmed by NMR, IR and UV spectroscopy and mass spectroscopy.