

Abstract

The group of 79 compounds ((4-alkylphenyl)salicylanilides, *N*-heteroarylsalicylamides, 3-(4-alkylphenyl)-2*H*-1,3-benzoxazine-2,4(3*H*)-diones, 3-(4-alkylphenyl)-2*H*-1,3-benzoxazine-4(3*H*)thioxo-2-ones, 3-(4-alkylphenyl)-2*H*-1,3-benzoxazin-2,4(3*H*)-dithiones, 3-heteroaryl-2*H*-1,3-benzoxazine-2,4(3*H*)-diones) was described in the PhD thesis. The compounds were tested for antimycobacterial, antifungal, antibacterial activity. Selected compounds were investigated on cytotoxicity.

The derivatives of (4-alkylphenyl)salicylanilides were analyzed by QSAR (Quantitative structure – Activity Relationships), specifically the Free-Wilson method.

The structures of the prepared compounds were confirmed by ¹H NMR and IR spectroscopy and their purity by elemental analysis.

The Derivates of (4-alkylphenyl)salicylanilides, 3-(4-alkylphenyl)-2*H*-1,3-benzoxazine-2,4(3*H*)-diones, 3-(4-alkylphenyl)-2*H*-1,3-benzoxazine-4(3*H*)thioxo-2-one and 3-(4-alkylphenyl)-2*H*-1,3-benzoxazin-2,4(3*H*)-dithione show high activity against *Mycobacterium tuberculosis* and atypical strains of mycobacteria (*M. avium*, *M. kansasii*).