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SYNTHESIS AND ANTIMICROBIAL ACTIVITY OF NOVEL OXAZOLIDINONES HAVING BENZO THIAZINE DERIVATIVES

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In order to develop relatively small molecules as pharmacologically active molecules, a series of novel oxazolidinones having benzothiazine and their derivatives were synthesized and characterized by IR, ¹H NMR and Mass spectral studies. Various substituted oxazolidinone benzothiazines were prepared by simple refluxing in the presence of acetonitrile. Treatment of these oxazolidinone benzothiazine derivatives with methanesulfonyl chloride gives its sulphonate derivatives which on further treatment with sodium azide and triphenyl phosphine in acetic anhydride gave acetamide derivatives. Further the synthesized compounds were evaluated for antibacterial activity against *Bacillus subtilis, Staphylococcus aureus, Escherichia coli, Pseudomonas aeruginosa* and antifungal activity against *Candida albicans* and *Aspergillus niger*.