Synthesis of *s*-Triazine-Based Thiazolidinones as Antimicrobial Agents

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A novel series of thiazolidinone derivatives, namely 4-{4-dimethylamino-6-[4-oxo-2-phenyl-5-(4-pyridin-2-yl-piperazin-1-ylmethyl)-thiazolidin-3-yl]-[1,3,5]-triazin-2-yloxy}-1-methyl-1*H*-quinolin-2-ones, have been synthesized from the key intermediate 4-(4-amino-6-dimethylamino-[1,3,5]-triazin-2-yloxy)-1-methyl-1*H*-quinolin-2-one (**5**). Compound **5** was condensed with various aldehydes to give Schiff base derivatives, which after cyclization gave thiazolidinones that were linked with 1-pyridin-2-yl-piperazine to obtain the target compounds. The newly synthesized compounds were evaluated for their antimicrobial activity against eight bacteria (*Staphylococcus aureus*, *Bacillus cereus*, *Escherichia coli*, *Pseudomonas aeruginosa*, *Klebsiella pneumoniae*, *Salmonella typhi*, *Proteus vulgaris, Shigella flexneri*) and four fungi (*Aspergillus niger*, *Candida albicans*, *Aspergillus fumigatus*, *Aspergillus clavatus*).

Key words: 4-Hydroxy-1-methyl-1*H*-quinolin-2-one, Thiazolidinone, 1-Pyridin-2-yl-piperazine, Antimicrobial Activity