

# Thienopyridone Antibacterials V [1]. Synthesis of Some *N*(7)-Azacyclohexyl-4-oxothieno[2,3-*b*]pyridine-5-carboxylic Acids and Related Congeners

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A series of *N*(7)-azacyclohexyl-4-oxo-4,7-dihydrothieno[2,3-*b*]-pyridine-5-carboxylic acids **9a–c**, related congeners **9d–g** and their methyl esters **8a–g** were prepared by cyclization of the respective 2-[(2,5-dichlorothien-3-yl)carbonyl]-3-[(*N*(7)-azacycyl/acyclic)amino]acrylates **7a–g**. The latter intermediates are accessible from methyl 2-[(2,5-dichlorothien-3-yl)carbonyl]-3-ethoxyacrylate (**6**). Of the present series, the 7-(*N,N*-dimethylamino) derivative **9d** exhibited good activity, especially against *Klebsiella pneumoniae* and *Salmonella paratyphi A* (MIC = 0.5 and 1.0  $\mu\text{g mL}^{-1}$ , respectively).

*Key words:* 4-Oxothieno[2,3-*b*]pyridines, 7-(*N,N*-Dimethylamino), 7-Azacyclohexyl Derivatives, 7-Chiral Alaninol / Phenylethylamine Moieties, Antibacterial Activity