

Synthesis and Biological Evaluation of Nitrate Derivatives of Thiocolchicine as Potential Anticancer Drugs

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SUMMARY. To search for more potent antitumor agent, a series of novel nitric oxide-releasing thiocolchicine derivatives (**6a-f** and **8a-b**) were synthesized by coupling nitrates with thiocolchicine. Their cytotoxicity against four human cancer cell lines (A2780, A549, BEL7402, and MCF7) *in vitro* were evaluated by MTT assay. Preliminary results indicated that many of the derivatives displayed significant anticancer activities, particularly, compound **8a** showed more potent cytotoxic activities than colchicine and thiocolchicine.

KEY WORDS: Colchicine, Thiocolchicine, Nitrates, Cytotoxicity.

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