Synthesis of azomethines of anthrones and 10-arylidene anthrones and testing for anticancer and anti-AIDS activity

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A new series of azomethines of anthrones have been prepared by condensing anthrones with different primary amines, O-aminophenol and P-aminobenzoic acid. Similarly 10-arylidene anthrones with different functional groups were synthesized using acetic anhydrite as well as ethanol as solvent. It is found that azomethines of anthrones prepared by condensing primary amines with nitro group in p-position of aromatic ring indicate intense anticancer activity in situ as compared to other azomethines of anthrones. It is also proved that azomethine group stabilized by aromatic ring shows anticancer activity, but nitro group in p-position of aromatic ring can be considered for further investigation for development of anticancer drug, after doing detailed toxicity studies. Similarly 10-arylidene anthrones with nitro group in p-position of aromatic ring shows anti-AIDS activity in situ. However detailed studies of toxicity should be done before considering for further development of anti-AIDS drugs.

Biography

Mahesh N Sanzgiri had pursued his MSc and PhD in Organic Chemistry from Bombay University, India. His research is dedicated to the study of few derivatives of anthrone and pheromones. His research work for application of derivatives of anthrone in anticancer and anti-AIDS activity is a new approach with synthesizing organic compounds using functional groups for trapping active cancer cells and removing aids activity on isolating and synthesizing tiger pheromones from tiger urine and preparing same molecule in lab synthetically by using chemical method. Presently he is working as a Freelance Scientist and Consultant of Research & Development and also Consultant for cGMP, WHO, USFDA, ISO, etc. with various well-known Indian and multinational companies.

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