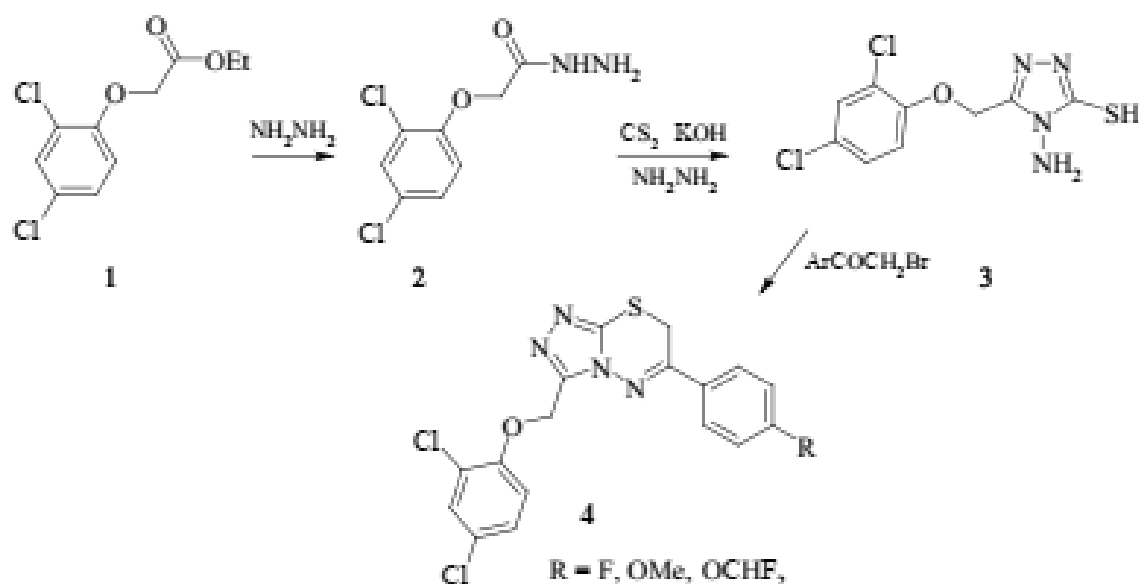


SYNTHESIS AND ANTICANCER ACTIVITY OF 3-(2,4-DICHLOROPHENOXYMETHYL)-6-ARYL-7H-[1,2,4] TRIAZOLO[3,4-B][1,3,4]THIADIAZINES DERIVATIVES

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It is known that condensed 4-aminotriazoles exhibit a wide spectrum of biological activity. A range of 7H-[1,2,4]triazolo[3,4-b][1,3,4]thiadiazines **4** was obtained in high overall yields.



Anticancer activity for these compounds was studied at the United States National Cancer Institute (NCI, Bethesda, Maryland, USA). Results obtained show that these compounds are promising for creating of a new drug for the treatment of melanoma on their basis. It was found that anticancer properties of compounds **4** increase with increasing of electron-donor properties of the substituent in the para position. Thus, compound **4** (R = F) inhibits the development of melanoma cells LOX IMVI to 36.73% better than 5-fluorouracil, **4** (R = OCHF₂) - to 80.29%, and **4** (R = OCH₃) - to 90.79%, respectively. This trend is observed in all 8 varieties of cancerous melanoma cells.