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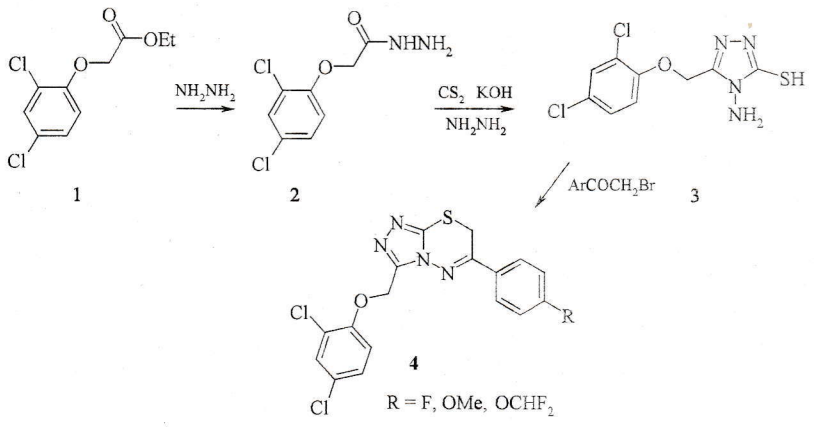
SYNTHESIS AND ANTICANCER ACTIVITY OF 3-(2,4-DICHLOROPHENOXYMETHYL)-6-ARYL-7*H*-[1,2,4] TRIAZOLO[3,4-*B*][1,3,4]THIADIAZINES DERIVATIVES

Demchenko D.A., Yanchenko V.A., Grynevych A.I.

State Centre of Innovation Biotechnologies. 30 Donetska str., Kyiv, Ukraine
diana_demch@ukr.net

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



1 2 3 **4**

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 = $OCHF_2$) - to 80.29%, and **4** (R = OCH_3) - to 90.79%, respectively. This trend is observed in all 8 varieties of cancerous melanoma cells.