

ANTICANCER ACTIVITY OF 1-R-2-([1,2,4]TRIAZOLO[1,5-c]-QUINAZOLINE-2-YLSULFANYL)ETANON(OL)S

Yakymenko M.O., Antypenko L.M.

Scientific supervisor – Dr., prof. Kovalenko S.I.

Zaporizhzhia State Medical University

Organic and Bioorganic Chemistry Department

Lately 2-thio-[1,2,4]triazolo[1,5-a]quinazolines were evaluated for *in vitro* anticancer activity against medulloblastoma (Daoy), hepatocellular carcinoma (HepG2) and melanoma (SK-MEL28) cell lines, whereas 3-(4-bromophenyl)-7-methyl-2-(2-(methylthio)-[1,2,4]triazolo[1,5-a]quinazolin-5-ylthio)quinazolin-4(3*H*)-one, 2-(methylthio)-[1,2,4]triazolo[1,5-a]quinazoline-5(4*H*)-thione and 5-chloro-2-(methylthio)-[1,2,4]triazolo[1,5-a]quinazoline and showed more potent activity than Dasatinib against Daoy cell [1]. That's why, investigation of anticancer properties 1-R-2-([1,2,4]triazolo[1,5-c]quinazoline-2-ylsulfanyl)-etanon(ol)s is promising too. And to study the triazole ring impact for anticancer activity of [1,2,4]triazolo[1,5-c]quinazolines, it was decided compare their anticancer data with 2-R-(quinazolin-4-ylthio)-R-ethanones. Thus, according to NCI data, 1-(3-methoxyphenyl)-2-(quinazolin-4-ylthio)ethanone had the strongest lethal effect and 1-(2,5-dimethoxyphenyl)-2-(2-morpholinoquinazolin-4-ylthio)ethanone had the widest range of anticancer properties. Renal cancer appeared to be the most sensitive one. And, surprisingly, 1-(2,4-dimethylphenyl)-2-(2-(trifluoromethyl)quinazolin-4-ylthio)ethanone was practically nontoxic substance among all. Also there were no cancer line preferences - each compound had the best result against different cancer cell lines. Hence, introduction of methoxy groups into the phenyl substituent and morpholyl fragment into the 2 position of the quinazoline ring amplified its anticancer properties and condensation with 1,2,4-triazole highly lessened it. Moreover, it should be mentioned, that synthesized compounds promoted growth of several cancer cell lines.

PERSPECTIVES OF PHARMACOECONOMICS DEVELOPMENT IN UKRAINE

Yakovleva O.S.

Zaporizhzhia state medical university

Department of Clinical Pharmacy, Pharmacotherapy and MFE of FPE

One of the ways of decision of the difficult economic situation in the National Health system and pharmacy is implementation of the Health Technology Assessment (HTA). The application of HTA results obtained on the basis of pharmacoeconomic evaluations, particularly important for the development and permanent improvement of the mechanisms for financing hospitals, the development of means against certain diseases and in the planning of their budget. Thus, the aim of this study was in the justification of implementation of pharmacoeconomic analysis perspective methods in the health system and pharmacy. Materials and methods. Official materials for the development of HTA and pharmacoeconomics as well as the following methods: informative, historical, systematic approach and analysis, analytical and synthetic were used in the study. Results. To make informed decisions in the system of HTA the most important is the application of modern scientific and methodological approaches to the assessment of medicines and their improvement. For obtaining more objective and important indicators of economic efficiency of medicines is advisable except the main methods of pharmacoeconomic analysis, apply additional methods such as "risk sharing", "impact on the budget", "willingness to pay", "multicriterial analysis". Nowadays, their further use requires the development of legislative and regulatory frameworks for standardization and implementation of the results of pharmacoeconomic studies; creation a single state agency, which must coordinate the implementation of an independent examination of the results of pharmacoeconomic studies; elaboration of the methodological tools for standardizing parameters used for the calculation of medical expenses. Conclusion. In the conditions of National Health Service and pharmacy the usage of pharmacoeconomics methods of analysis requires the processing and accurate reasoning of their selection.