

SYNTHESIS AND ANTICONVULSANT ACTIVITY OF AMINO DERIVATIVES OF CYCLOPENTA[4',5']PYRIMIDO[3',2':4,5]THIENO[3,2-d]PYRIMIDINES

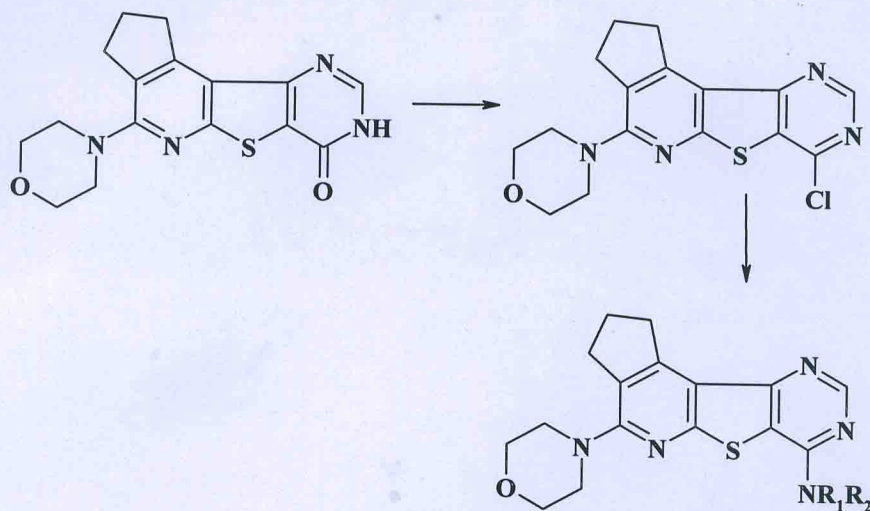
Sh. Sh Dashyan, E. G. Paronikyan, A. S. Noravyan, I. A. Dzhagatspanyan, I. M. Nazaryan, A. G. Akopyan

*Scientific and Technological centre of Organic and Pharmaceutical chemistry of National Academy of Sciences of the Republic of Armenia, A. L. Mnjoyan Institute of Fine Organic Chemistry, Armenia, Yerevan 0014, 26 Azatutyun Ave., tel. (37410)287789
E-mail: Shdashyan@gmail.com*

Derivatives of thieno[3,2-d]pyrimidines are interesting not only as heterocyclic systems, but also as compound with high biological activity [1-3].

We have developed methods for obtaining amino derivatives of cyclopenta[4',5'] pyrimido [3',2':4,5]thieno[3,2-d]pyrimidines these compounds were synthesized starting with 4-morpholino-2,3,7,8-tetrahydro-1H-cyclopenta[4',5']pyrimido[3',2':4,5]thieno[3,2-d]pyrimidin-7-ones [4]. By reacting the latter with phosphorous oxychloride was synthesized corresponding chloro derivatives which, under the action of various of amines conversion into the amino derivatives of cyclopenta[4',5'] pyrimido[3',2':4,5] thieno[3,2-d]pyrimidines.

The anticonvulsant and prognostic anxiolytic activities of the new amino derivatives cyclopenta[4',5']pyrimido[3',2':4,5]thieno[3,2-d]pyrimidines are investigated. In the latter are discovered the mean anticorazole properties which are not accompanied by the sedative and myorelaxatives phenomena. The comprehensive research of this compounds it was desirable.



R₁ = R₂ = H, alk, cycloalk.

1. Е. Г. Пароникян, А. С. Норавян, Ш. Ф. Акопян, и др., Хим.-фарм. ж., 41(9), 14, 2007.
2. J. Taltavull, J. Serrat, J. Gracia, et all., Eur. J. Med. Chem. 46, 4946, 2011.
3. C. Reichelt, A. Ludwig, A. Schulz, et all., US Pat. 0094987, 2012.
4. Е. Г. Пароникян, А. С. Норавян, Ш. Ш. Дашян, Н. С. Минасян, Хим. ж. Арм., 65(3), 326, 2012.