

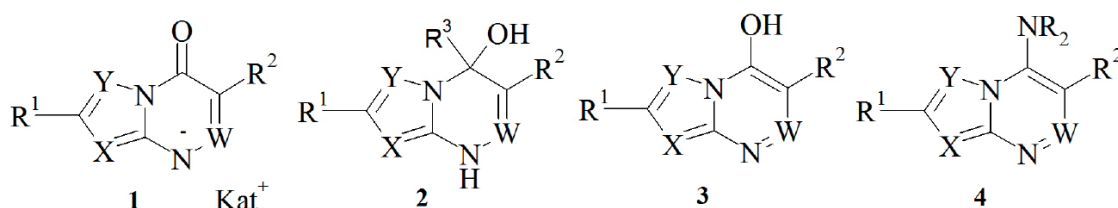
## A NEW CLASS OF ANTIVIRALS OF THE AZOLOAZINE FAMILY. TRIAZAVIRINE

Rusinov V.L.<sup>1,2</sup>, Charushin V.N.<sup>1,2</sup>, Chupakhin O.N.<sup>1,2</sup>

<sup>1</sup>Ural Federal University, 620002, Russian Federation, Ekaterinburg, Mira st., 19

<sup>2</sup>Postovsky Institute of organic synthesis, 620137, Russian Federation, Ekaterinburg, S. Kovalevskaya st. 20,  
E-mail: v.l.rusinov@urfu.ru

Design of new effective drugs for prevention and treatment of viral diseases is an actual task of medicinal chemistry due to a high danger of viral infections, variability of viruses, and the emergence of highly dangerous strains. A new class of non-nucleoside family of etiotropic antivirals, azolo[5,1-c]-1,2,4-triazines and azolo[1,5-a]pyrimidines, proved to be effective against diseases caused by influenza, herpes, tick-borne encephalitis, and hemorrhagic fevers.



The key approach to construct these bicyclic systems is based on annelation of an azine ring to the azole moiety, that allows to obtain a wide range of aminoazoles from readily available synthons, such as derivatives of acetic acid or acetonitrile [1].

The data obtained provide a real basis to obtain a series of effective antiviral drugs. Triazavirine (dihydrate of the sodium salt of 2-methylthio-6-nitro-1,2,4-triazolo[5,1-c]-1,2,4-triazin-7-one) is the first representative of the drug family on the basis of this class of compounds. It was included in the register of drugs of the Russian Federation on 08.28.2014, number LP-002604. Clinical trials of Triazavirine have shown that its administration in etiotropic therapy of influenza and acute respiratory infections is rather effective to reduce main symptoms of the disease including fever and the level of re-isolation of influenza viruses in patients, thus demonstrating superiority over Tamiflu [2-4]. Administration of Triazavirin in the complex therapy of tick-borne encephalitis, including patients with a severe meningeal form, has shown a considerable reduction of all clinical manifestations [5].

### References

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