

5th International Conference on

Organic and Inorganic Chemistry

July 12-13, 2018 | Paris, France

New six member ring azaheterocycles with antileishmania activity

Violeta Mangalagiu

Stefan cel Mare University of Suceava, Romania

In recent years, six membered ring azaheterocycles have demonstrated extremely interesting potential applications in medicinal chemistry, such as anticancer, antibacterial, antituberculosis, antimicrobials, etc. Leishmaniasis is a growing health problem worldwide, cutaneous leishmaniasis being the most common form of leishmaniasis. Conventional treatments for cutaneous leishmaniasis are using classical drugs such as pentamidine and imidazoquinolines. However, because of drug resistance, toxicity, side effects, relatively high cost, their use has become quite limited. As a result, the demands of pharmaceutical industry for new drug candidates with antileishmania activity is high. As part of our ongoing research in the area of azaheterocycles derivative with biological activity, we report here the design, synthesis, structure and *in vitro* antileishmania activity of new six membered ring azaheterocycles. In this respect our efforts were focused in the area of fused and non-fused azine, new compounds being designed, synthesized, characterized and tested *in vitro* for their antileishmania activity. Some of the compounds were also tested for antimalarial activity. The structures of the compounds were proved by elemental and spectral analysis: IR, MS, ¹H-NMR, ¹³C-NMR, two-dimensional experiments 2D-COSY, HMQC, HMBC. The antileishmanial assay was performed against *Leishmania donovani* intramacrophage amastigotes. The obtained results showed us that some compounds have a very good and promising activity, some of the compounds being at least 10 times more active comparative with the witness, miltefosine. The results against *Plasmodium falciparum* are modest.

Biography

Violeta Mangalagiu has completed her PhD at the University of Suceava (Romania), and Post-doctoral studies at the same university. Presently, she is a senior Researcher at Alexandru Ioan Cuza University of Iasi and Lecturer at University of Suceava. She has published more than 25 papers in reputed journals and has been serving as an Editorial Board Member of reputed.

violetaren@yahoo.com

Notes: