# **MEDICINAL CHEMISTRY**

### **Manuscript Evaluation Form**

Editor-in-Chief: Dr. Dimitra Hadjipavlou-Litina, Aristotle University of Thessaloniki, Thessaloniki, Greece

PAPER TITLE	POM Analyses of Carbacylamidophosphates and Sulfanylamidophosphates Tested as New Carbonic Anhydrase Inhibitors
AUTHOR(S) NAME	Vladimir Amirkhanov, Vladimir Ovchynnikov, Viktor Trush, Abdur Rauf, Taibi Ben Hadda, Muhammad Saleem, Muslam Raza, Tayyeba Rehman, Hsaine Zgou, Faisal A. Almalki, Yahia N. Mabkhot, Thoraya A. Farghaly

Sec. A: REFEREE'S ASSESSMENT	(cross as appropriate)
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Criterion	Excellent		Good		<u>Fair</u>	Poor
Originality of the topic	X					
Technical Quality	X					
Importance in its Field	X					
Style & Overall Representation				X		
Readily Understandable	Х					
Suitability for the Journal	X					
Adequate Illustrations or Drawings	X					
English language				X		
Description		Yes	No Comments/ Suggestions			
Does the title represent manuscript's contents?		Х				
Is the Abstract accurate and concise?		X				
Are the approach/ methods properly described?		X				
Are the conclusions and interpretations sound?	)	X				
Are the references properly cited?		X				
Is this a new/ original/ contribution?		X				
Is it within the scope of the journal?		Х				
Overall the Paper is Rated:	<b>(Excell</b> 10 9		 7		5 4 3	<b>Poor)</b> 2 1

Sec. B: REFEREE'S RECOMMENDATIONS		OTHER SPECIFIC CRITICISMS				
Accept with minor changes	x	Imperfect style	х			
Accept with major changes		Too long				
Reject in current form, but may be resubmitted		References incorrectly presented				
Reject, with no resubmission		Typographical and Grammatical errors				
PAPER TYPE: Research article	Review article	Letter article				

#### **BENTHAM SCIENCE PUBLISHERS:**

## Confidential Comments to the Editor (not for Transmission to Authors):

This is a significant contribution, within the scope of the journal and suitable for publication after some revision.

### Comments for the Authors (continue on another sheet, if necessary):

Review of the article entitled

POM Analyses of Carbacylamidophosphates and Sulfanylamidophosphates Tested as New Carbonic Anhydrase Inhibitors, by Vladimir Amirkhanov, Vladimir Ovchynnikov, Viktor Trush, Abdur Rauf, Taibi Ben Hadda, Muhammad Saleem, Muslam Raza, Tayyeba Rehman, Hsaine Zgou, Faisal A. Almalki, Yahia N. Mabkhot, Thoraya A. Farghaly

In this study, a series of the six representatives of the amidophosphate derivatives was synthetized and evaluated for the first time for their biological activities against carbonic anhydrase enzyme (BCA-II). Two of the derivatives showed a potential activity against

BCA-II. All the physic-chemical parameters were derived from the computational Petra/Osiris/Molinspiration/DFT (POM/DFT) model.

This is a significant contribution, within the scope of the journal and suitable for publication after some revision.

The English language has to be improved.

For example, add the missing letter I in the first heading 1. INTRODUCTION

Replace that is found, instead of that found

In the abstract, replace  $\mu M$ , instead of italic  $\mu M$ 

In the paragraph 2.2, use either singular or plural in the entire sentence, for: Evaluation of the biological activity of all the derivatives [11] against bovine carbonic anhydrase was carried out

State the complete term and the abbreviation at the first place where it appears in the manuscript, in the rest of the text use either the abbreviation or full term.

Use comma before, such as: as well as

Add or delete spaces between some words or numbers at the adequate places in the manuscript

On page 5, in the third paragraph, replace Table 2, instead of Table 1

On page 8, in the first sentence, state: theoretical toxicity risks for the series of compounds ( $L^1$ - $L^6$ ); compound  $L^6$  can be used as antibiotic, instead of antibiotics, the correct spelling is depicted

On page 10, state: , which is illustrated in Table 5

On page 15, in the caption of Table 6, replace (OCNHPO) and (OSNHPO), instead of (OCNHCO) and (OCNHSO)

On page 16, in conclusion state: interaction with the enzyme

In the experimental section: All the reagents for the syntheses of compounds (L¹-L6) were purchased from commercial sources

#### **BENTHAM SCIENCE PUBLISHERS:**

Elemental analysis (C, H, N, S) was performed

Move subheading 4.2 to the next page

On page 17, place in the same row 20  $\mu$ L

The last sentence of the section 4.2. should be modified: The result was obtained by the Equation 1.

Place number (1) beside the adequate equation

On page 18, paragraph 4.5.2., in this publication the structure of the named compound is also described In the acknowledgments, for the funding of this prolific research

Put the Figures and Tables at the first place where they are mentioned in the manuscript.

Place the adequate legend below Figure 9.

Delete the points after the captions of Tables 1-6

**FIELD OF EXPERTISE OF REFEREE:** Materials and chemical technologies, nanotechnologies, biomedical engineering, chemistry, medicinal chemistry

Name & Affiliation of referee: Tamara Jovanovic, Department of Biomedical Engineering, Faculty of Mechanical Engineering, University of Belgrade, Kraljice Marije 16, 11120 Belgrade, Serbia

Dr Tamara Jovanovic / March 3, 2019

SIGNATURE OF REFEREE / DATE