MEDICINAL CHEMISTRY

Manuscript Evaluation Form

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

PAPER TITLE	Matrine-Family Alkaloids: Versatile Precursors for Bioactive Modifications
AUTHOR(S) NAME	Xiao-hua CAI, Hongyan ZHANG, Bing XIE

Sec. A: REFEREE'S ASSESSMENT (cross as appropriate)

Criterion	Excellent			Good			<u>Fair</u>			Poor	
Originality of the topic	X										
Technical Quality					X						
Importance in its Field	Х										
Style & Overall Representation					X						
Readily Understandable	Х										
Suitability for the Journal	ity for the Journal x										
Adequate Illustrations or Drawings	х										
English language					X						
Description			Yes	No	Com	ments	/ Sugge	estions			
Does the title represent manuscript's contents?		\neg	X								
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?			X								
Overall the Paper is Rated:	(Exce	elle:	nt -8 8	7	6	5	4	3	Po	oor) 1	

Sec. B: REFEREE'S RECOMMENDATIONS		OTHER SPECIFIC CRITICISMS						
Accept with minor changes	x	Imperfect style	x					
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	X					
PAPER TYPE: Research article	Review article	Letter article						

BENTHAM SCIENCE PUBLISHERS:

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

This manuscript is within the scope of the journal, the references are properly cited and new.

I recommend publication in the journal Medicinal Chemistry after some revision that I send in the comments for the authors.

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

Review of the article entitled

Matrine-Family Alkaloids: Versatile Precursors for Bioactive Modifications, by Xiao-hua CAI, Hongyan ZHANG, Bing XIE

This review mainly introduces recent advances on the bioactive modifications of matrine-family alkaloids from derivatization at the C-13, C-14, C-15 position, opening D ring and derivatization, fusing D ring and derivatization, structural simplification based on matrine-family alkaloids. These studies are important for development of more potent candidates or therapeutic agents and disclosure of their molecular targets and mechanisms.

The manuscript is within the scope of the journal, the references are properly cited and new. I recommend publication in the journal Medicinal Chemistry after some revision.

The English language has to be improved. All the spelling and grammatical errors should be checked and corrected.

For example, the correct spelling is plenty, achieved, Oceanic, displayed, bioactivities, semisynthetic, confirmed, lepidopteron, pesticide, activities, epidermis, position, conditions etc.

On page 3, replace matrine derivatives with various amino groups instead of various amino group On page 5, replace a broad spectrum of fungicidal activities, instead of a broad spectrum fungicidal activities On page 8, replace

The IC₅₀ values of positive drug cisplatin were 6.08, 8.56 and 3.89 µmol/L, instead of was In Conclusion, replace modification strategies instead of modificatory strategies Replace is also quite urgent instead of are is also quite urgent Some words can be divided into two parts.

The entire manuscript should be formatted according to the style of the journal.

Put the point after the numbers of headings, as follows

- 4. Derivatization of C-15 position
- 7. Structural simplification

In Scheme 1, replace Leontalbinine with the capital letter instead of leontalbinine

All the Scheme legends should end with the point and the point should be added after the number of scheme. Place the legend below Scheme 5 and Scheme 27.

Schemes 5, 10, 11, 14, 18, 20 and 36 can be divided in the separate Schemes and Tables, with the adequate Scheme legends and Table captions (optional).

In all the Table captions, put the point after the number of Table.

The complete caption of Table 1 should be

Table 1. Antiviral activity of matrine analogues against TMV in vitro and in vivo, instead of

Table 1 Antiviral activities ofmatrine analogues against TMV and in Vivo

Delete the point at the end of Table 2 caption.

Move to the next page caption of Table 3.

Use either the entire word Compound or the abbreviation Compd. in all the tables.

Put the numbers and the units of measure in the same row, in the entire manuscript For example, on page 4, 0.8 μ g/ml, on page 5, 1 μ g/mL, on page 8, 3.42 μ mol/L, on page 11, 14.21 μ mol/L, on page 15, 14.21 μ mol/L, on page 21, 8.5 μ M

Put the abbreviation after the complete term, at the first place where it appears in the manuscript, in the rest of the manuscript use either the abbreviation or complete term.

For example, on page 20, replace anti-EBOV instead of anti-ebolavirus (EBOV)

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 / January 14, 2019

SIGNATURE OF REFEREE / DATE