Current Pharmaceutical Analysis

Manuscript Evaluation Form

Editor-in-Chief: Anastasios Economou, Department of Chemistry, Laboratory of Analytical Chemistry, University of Athens, Athens, Greece

PAPER TITLE	The Metabolisms of Tanshinone IIA, Protocatechuic aldehyde, Danshensu, Salvianolic acid B and Hydroxysafflor yellow A in Zebrafish
AUTHOR(S) NAME	Ya-Li Wang, Shi-Jun Yin, Feng-Qing Yang, Guang Hu, Guo-Can Zheng, Hua Chen

Sec. A: REFEREE'S ASSESSMENT (cross as appropriate) Criterion Excellent Good Fair Poor Originality of the topic X **Technical Quality** Х Importance in its Field Х Style & Overall Representation X Readily Understandable Х Suitability for the Journal Х Adequate Illustrations or Drawings \mathbf{X} English language **Description** Yes No **Comments/ Suggestions** Does the title represent manuscript's contents? X Is the Abstract accurate and concise? Х Are the approach/ methods properly described? Х Are the conclusions and interpretations sound? X Are the references properly cited? Х Is this a new/ original/ contribution? X Is it within the scope of the journal? X (Excellent ---- Poor) **Overall the Paper is Rated:** 10 8 7 6 5 3 2

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

BENTHAM SCIENCE PUBLISHERS:

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

The Metabolisms of Tanshinone IIA, Protocatechuic aldehyde, Danshensu, Salvianolic acid B and Hydroxysafflor yellow A in Zebrafish, by Ya-Li Wang, Shi-Jun Yin, Feng-Qing Yang, Guang Hu, Guo-Can Zheng, Hua Chen

In this study, the metabolites of TIIA, PA, DSS, SAB and HSYA in zebrafish were identified by HPLC-MS/MS analysis. Furthermore, the influence of HSYA on the metabolisms of TIIA, PA, DSS and SAB was studied. The promotion or inhibition effect between components was determined by comparing the peak areas of metabolites and the possible metabolic pathways of these components were hypothesized. In addition, the zebrafish model which required much fewer amounts of test samples, compared to regular mammal models had higher efficiency in predicting *in vivo* metabolism of compounds.

The article is within the scope of the journal and suitable for publication after some revision.

The English language, grammar and spelling have to be improved at some places.

In the abstract, method, line 39, as well as in keywords, line 49 and in the rest of the manuscript, on page 5, line 100, the abbreviation HPLC-MS/MS can be used for high-performance liquid chromatography/tandem mass spectrometry

Line 46, place comma before compared to regular mammal models, line 47, divide into two words in predicting

Delete empty page 3

On page 4, use two words for anti-fibrosis

Lines 74 and 80, put comma before such as

On page 5, line 87, the correct spelling is glycosylation, sulfating, as well as on page 11

Lines 92, 96 and 97, italic can be used for et al.

Move heading 2 and subheading 2.1 to the next page

On page 6, line 108, state: Monomer compounds including, instead of include

Line 133, state either which was equipped with a or equipped with a

On page 7, line 134, two words can be used for auto-sampler, line 151, de-solvation, as well as on page 9, line 199, de-methylation

Line 139, state either which was programmed as follows or programmed as follows

Provide full explanations of the figures, legends within the text of the manuscript the same way as stated in the supplemental material.

For example, on page 10, lines 221 and 222

Total ion chromatogram and extracted ion chromatograms of TIIA and its metabolites after exposure to zebrafish are shown in Figure 2S (supplemental material), and the MS² product ions spectra of the protonated molecules of TIIA are shown in Figure 3S (supplemental material).

State similarly for DSS, lines 232 and 233, as well as on page 11, lines 252 and 253, for PA and on page 12, lines 272 and 273, for SAB.

Line 226, use the present tense for the metabolic pathway of TIIA is shown in Figure 1A, instead of was, as well as similarly for other compounds, Figure 1B, line 248, Figure 1C, line 264, Figure 1D, line 287 and Figure 1E, line 298

Use one space between the numbers and units of measure in the entire manuscript.

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.

Place the numbers and the units of measure in the same row.

For example, on page 2, lines 34, 35 and 36, 1.83 µg/mL, page 7, lines 136 and 137, 5 µm, page 8, lines 160 and $161, \pm 5$ ppm, lines 169 and 170, 1 mL, lines 174 and 175, 1.18 µg/mL, lines 175 and 176, 24 h

In the captions of Tables, specify the names of the compounds in the order in which they appear in the tables and in the text of the manuscript.

Delete the points after the captions of Tables 1 and 2.

The quality of Figure 1 can be improved.

Place the figures with their legends and tables with the captions at the first place where they are mentioned in the manuscript and format the entire manuscript according to the style of the journal.

In supplemental material, place the legend of Figure 9 below this figure.

FIELD OF EXPERTISE OF REFEREE: Materials and chemical technologies, nanotechnologies, biomedical engineering, chemistry, medicinal and pharmaceutical 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 / April 11, 2019

SIGNATURE OF REFEREE / DATE