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	Analysis of trantinterol enantiomers by pre-column derivatization UPLC-MS/MS and application to enantioselective drug protein binding study in rat plasma
AUTHOR(S) NAME	Jing Tang, Chao Ai

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	х	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 article is generally well written, 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

Analysis of trantinterol enantiomers by pre-column derivatization UPLC-MS/MS and application to enantioselective drug protein binding study in rat plasma, by Jing Tang, Chao Ai

In this study, a reliable, selective and efficient ultra performance liquid chromatography-tandem mass spectrometry (UPLC-MS/MS) method for the quantification of trantinterol enantiomers in rat plasma was developed and applied to study the rat plasma protein binding of (+)-and (-)-trantinterol. The results showed that trantinterol enantiomers had high plasma protein binding in the physiological conditions of rat, and there were no significant enantioselective differences.

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

The English language, spelling and grammar can be improved at several places.

On page 4, in the subheading 2.1 use plural for both Chemicals and Reagents

Line 95, acetonitrile-30 mmol/L and ammonium acetate (32:68, v/v)

Line 100, full terms can be stated for: capillary voltage 1.0 kV, cone voltage 20 V

On page 5, line 119, use conjunction, 1.00, 5.00 and 20.0 ng/mL

Line 126, the correct spelling is centrifugation or centrifuging

On page 7, line 194, the correct spelling is represents

On page 8, use the first capital letter in subheading 3.1 Method development

Place the adequate legends below Figures 1, 2 and 3.

In the legend of Figure 2, as well as 3, lines 246 and 252, the correct spelling is Representative MRM chromatograms, instead of Representive

In line 248, state (A) Blank rat plasma sample. (B) Blank rat plasma sample spiked with trantinterol and IS. (C) The real sample.

Page 11, lines 270 and 271, The limit of quantification for each enantiomer was 0.500 ng/mL with acceptable precision and accuracy in rat plasma and dialysate, which is presented in Tables 1 and 2.

Move subheading 3.2.3 to the next page

Page 12, at 4 °C for 12 h

On page 13, use italic for *in vitro* and *ex vivo*

Line 320, there were no significant differences between (+)-and (-)-trantinterol binding to the rat plasma

BENTHAM SCIENCE PUBLISHERS:

Line 322, phenomenon, instead of phenomenons

In conclusion, line 353, pharmacodynamics properties

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 rest of the text use either the abbreviation or full term.

The quality of Figures 2 and 3 can be improved.

Delete the point after the caption of Table 1 and format the entire manuscript according to the style of the journal.

The numbers of issues should be added to the references.

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 / May 6, 2019 SIGNATURE OF REFEREE / DATE