Poor

## **Manuscript Evaluation Form**

PAPER TITLE	Method Development and Validation of a Novel UHPLC Coupled with MS/MS Method for the Estimation of Brivaracetam in Human (K <sub>2</sub> EDTA) Plasma Samples and its Application to Pharmacokinetic Study
AUTHOR(S) NAME	Kiran Kumar Aalapati, Amit Singh and Ranjana S. Patnaik

Good

Fair

Excellent

X

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

Originality of the topic

Technical Quality				X					
Importance in its Field	Х	[							
Style & Overall Representation x		[							
Readily Understandable	X	[							
Suitability for the Journal	X	[							
Adequate Illustrations or Drawings	X								
English language				X					
Overall the Paper is Rated:	(Exc 10	<b>ellent</b> 9 <b>8</b>	7	6 5	4	3	Po	or) 1	
	10	, ,	,	0 5	•	_	_	-	
Criterion	10	Yes	No	Comment				1	
Criterion  Does the title represent manuscript's contents?	10		No				_		
		Yes	No					1	
Does the title represent manuscript's contents?		Yes	No						
Does the title represent manuscript's contents?  Is the Abstract accurate and concise?		Yes x	No						
Does the title represent manuscript's contents?  Is the Abstract accurate and concise?  Are the approach/ methods properly described?		Yes  x  x	No						
Does the title represent manuscript's contents?  Is the Abstract accurate and concise?  Are the approach/ methods properly described?  Are the conclusions and interpretations sound?	,	X X X X	No						

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

Confidential Comments to the Editor (not for Transmission to Authors):			
This article is within the scope of the journal and suitable for publication after some minor revision.			
1			

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

Review of the article "Method Development and Validation of a Novel UHPLC Coupled with MS/MS Method for the Estimation of Brivaracetam in Human (K<sub>2</sub>EDTA) Plasma Samples and its Application to Pharmacokinetic Study", by Kiran Kumar Aalapati, Amit Singh and Ranjana S. Patnaik

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

The English language has to be improved.

On page 1, the word method is not necessary at the beginning of the title

On page 2, in the Abstract, Methods, place the number and the unite of measure 50  $\mu$ L in the same row Use the same labeling, for example Brivaracetam-D<sub>7</sub> in the entire manuscript, capital letter can be used at the beginning of the sentence

Replace water/acetonitrile (20:80, v/v), instead of water/acetonitrile (20/80 V/V)

Replace in healthy male adult, instead of in healthy, male, adult

In Keywords, use UHPLC-MS/MS, instead of UHPLC, MS/MS

On page 3, in the Introduction, paragraph 1, line 1, use singular for a new antiepileptic drug

Line 9, use the past tense preferably in the next sentences

The studies indicated that there was a food effect on pharmacokinetic of BRV. High fat food decreased the concentration maxima ( $C_{max}$ ) and delayed it  $t_{max}$  (3 hours).

Paragraph 2, lines 1 and 2, use plural at the adequate places in the first sentence

As per the available literature, a very few LC-MS/MS based methods were available for estimating BRV in biological samples

Line 9, state The above reported method [11]

Line 12, state the correct unit of measure 0.10-10 mg/mL instead of 0.10-10 mg/mL

Lines 14 and 15, and employment of non-deuterated compounds

Use comma before, which may result in poor precision and accuracy values

Lines 15 and 16, An efficient bio-analytical method should be rapid

Paragraph 3, line 1, after a simple, state either fast or rapid, instead of fast(rapid)

Line 3, use one space between the number and the unite of measure,  $50 \mu L$ 

Use small latter for ethyl acetate, as well as for other solvents within the text of the manuscript, except at the beginning of the sentence

Line 3, use the first small letter for analytical grade

Line 4, LC-MS grade

Paragraph 3, lines 2 and 9, use small letters and delete one space, as follows, for

water: methanol (50:50, v/v)

Place in the same row 200.0 ng/mL

In paragraph 4, grammar can be improved and the order of words, for example in

line 3, then 50 µL aliquot of IS dilution (200 ng/mL) was added

On page 5, paragraph 2, line 6, These tubes were centrifuged at an rpm (rotation per minute) of 3500 for 10 minutes

Lines 7 and 8, storage of the samples at  $-70 \pm 10$  °C

Paragraph 3, line 1, state either simple or easy, as well as either fast or rapid, instead of fast(rapid), preferably

Line 4, use comma before, including optimization of MS parameters/conditions

Line 6, The infusion solution of brivaracetam and internal standard was prepared

Line 8, use one space between the number and the unite of measure for 5 µL/min

Lines 15 and 17, small letters can be used for methanol and acetonitrile, within the sentence

On page 6, paragraph 1, line 6, acetonitrile: 0.05 % formic acid solution in milli-Q/HPLC grade water (85:15, v/v)

Paragraph 2, lines 3, 4 and 6, use complete term and the adequate abbreviation in brackets at the first place where it appears in the manuscript, in the rest of the text use either the abbreviation or full term, for example for

Partitioning liquid extraction, liquid-liquid extraction (LLE), use the first capital letter at the beginning of the sentence

Line 7, use small letters for, ethyl acetate, hexane and diethyl ether

Paragraphs 2 and 3, line 8, ethyl acetate

On page 7, paragraph 1, line 1, use the first small letters for intra-day and inter-day accuracy

Lines 12 and 13, state % CV

Paragraph 3, line 1, use one space between the number and unite of measure for 8 h

Paragraph 4, end the first sentence with the point, after (n=14)

Paragraph 5, line 2, UHPLC-MS/MS method of estimating BRV in human (K2EDTA) plasma

Format the entire manuscript according to the style of the journal and insert Figures and Tables within the text of the manuscript

Add the number of issue to references 1, 10, 12, 13, 16 and 17.

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

Tamara Jovanovic / January 02, 2021

SIGNATURE OF REFEREE / DATE