Review of the article Structure Analysis of Unsaturated Polymyxin E Components Based on High Performance Liquid Chromatography – Quadrupole/ Time of Flight Tandem Mass Spectrometry and Photochemical Reaction, by Hanzhi Zhang, Zhenhua Tian, Hao Liu

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

On page 1, in the title, line 3, correct spelling is quadruple, as well as in the rest of the article.

State the abbreviation after the appropriate term in the first place in the text where it appears, in the rest of the text either the entire term or the abbreviation can be used

The last sentence beginning on page 1, lines 24 – 26, can be improved, for example as follows

Besides the main components PME1 and PME2, polymyxin contains unsaturated fatty acid (FA) group with lower contents, and its structure can hardly be determine without chromatographic preparations and NMR.

On page 2, paragraph 3, lines 35 and 36, 20 % acetonitrile (ACN) aqueous solution can be stated
Line 38, de-hydro can be divided

Use one space between the corresponding number and the unit of measure in the entire manuscript.

On page 3, paragraph 1, line 59, singular can be used for the structure of each component

On page 4, paragraph 2, line 82, use the past tense for HPLC-Q/TOF-MS/MS was used
Lines 88 and 89, dehydro-PMB1 and dehydro-PMB2 can be connected
The fifth sentence of this paragraph, lines 89 – 91, can be improved, as follows
But, those components with lower contents (<0.1 %) are hard to purify and their structures can easily be determined wrongly without NMR [9, 15].
Line 95, state that reacted with acetone
Line 98, state
ions containing oxetane groups or that contain oxetane groups

On page 5, paragraph 3, line 117, use the first capital letter for Agilent MassHunter Workstation software
Paragraph 5, Line 130, Dual Jet ESI source can be divided

On page 6, paragraph 2, line 142, correct spelling is fluorinated phosphazene HP-921
Paragraph 3, line 145, use comma before, such as
Line 151 – 153, the fourth sentence of this paragraph can be revised, as follows
Fragmentation pathways for PME with two series of characteristic ions were summarized by Govaerts et al. [8] and with three series by Zhang et al., in our lab [15].

On page 7, paragraph 1, line 160, use the past tense for were obtained by PB reaction

Paragraph 3, lines 177 and 188, use singular for was not detected
Line 180, use plural for conditions

On page 8, paragraph 1, lines 184 and 185, use the past tense for were not indicated
Paragraph 2, lines 189 – 191, place in the same row 2', 3'-dehydro PME1, preferably
Line 199, γ-di-amino-butyric acid can be divided
Line 203, correct spelling is loss of ring
Paragraph 3, line 208, use the present tense for Fig. 5 shows

On page 9, paragraph 1, line 217, state in the present Series II ions are marked in Fig. 6B
Line 218, is shown in Fig. 7
Line 219, use the past tense for were formed
Lines 235 and 236, place in the same row 2', 3'-dehydro PME2

On page 10, paragraph 1, line 241, put comma before, which
Paragraph 2, lines 248 and 249, place in the same row 2', 3'-dihydroxy PME1
Lines 250 and 25, place in the same row 2', 3'-dihydroxy PME2
Paragraph 3, lines 254 and 255, the sentence can be revised, as follows
Through the above experiments, we indicated the structure of unsaturated PME to be 2', 3'-dehydro PME1/2, instead of the previously reported 7', 8'-dehydro PME1/2 [16].

Add volume and the last page to reference 1
Add the last page to reference 17.

Place all the figures with their legends after the first place in the manuscript where they are mentioned.
The quality of Figures 2,5,7 and 9 can be improved, resolution, structural formulas and font of letters can be enlarged
The English language should be improved at some places and the entire manuscript formatted according to the style of the journal.

Reviewer comments submitted to the website of the journal Current Pharmaceutical Analysis

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