



SDI Review Form 1.6

Journal Name:	Journal of Advances in Medical and Pharmaceutical Sciences
Manuscript Number:	Ms_JAMPS_37839
Title of the Manuscript:	Berberine Prevents Bone and Cartilage Destruction and Influences Cell Senescence in Experimental Arthritis
Type of the Article	Short Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	- Please indicate the number of histological slides examined per animal. Please also indicate the number of animals used per study groups in the method section although it has been mentioned in the legend of each figures. - Can the author grade the arthritis using standardized guidelines? - Are there any other parameters that can show the osteoblasts are experiencing senescence? ALP expression is indicative of the activity of osteoblast but it is not a direct measurement of senescence. Can you show that the osteoblasts have less bone forming ability using von-kossa or alizarin red stain? - Did the author examine the subchondral bone to count the osteoclast and osteoblast number? - Please add a limitation paragraph in your discussion. The author implies that the action of berberin was exerted through JAK/STAT pathway but it is not tested in this study.	A. number of slides added on l. 94, l. 96, l. 101 B. number of animals in methods section – l. 170, l. 183, l. 199 Arthritis was graded semi-quantitatively as described on l. 106-111 and a graph was added in Fig. 1 panel C, changed text to Fig. 1 l.164-170 The influence of berberine on osteoblast generation and calcium release was determined in calvarial cell cultures by von Cossa staining – p. 131-139, and added a panel C in Fig. 4, in Results l. 236-239 TRAP staining of joints was performed in previous work (reference 15) mentioned on l. 152-154. Osteoblasts have not been counted. A paragraph was added on l- 240-242
Minor REVISION comments	- Please indicate the source of berberin used. - Please indicate the statistical software used. - Please add scales or magnification factor to all the micrographs. - Can the authors discuss how they expect berberin to be translated to clinical use?	- the source of berberine was added on l. 71-74 Statistical software was added on l. 143-144 Scale bars were added to all micrographs - Text was added on l. 240-246 and references 20 and 21
Optional/General comments		