

Dear Editor,

We thank the reviewers and editorial team for taking their efforts to improve the article to increase its value for publication. Herewith we submit the revised version of the article addressing the reviewer's comments and the action taken for their valuable suggestions have been mentioned below.

Reviewer 1 comments	Authors Reply	Action Taken
The first two paragraphs in the section "TOXICITY OF AGNP" do not have even a single citation. As mentioned in my previous comments, every argument or information provided should be backed up by some references. To be more clear, please add citation to the relevant references after each group of sentences which point out an argument or refer to the literature information.	Thanks for the comment	References added
Reviewer 2 comments	Authors Reply	Action Taken
The sections "Silver (Ag) Nanoparticles (NP) technology" and "AgNP in orthopaedic infections" lack enough references. The arguments should be backed up by providing relevant references for each argument.	Thanks for the comment	References added
The sentence "Recent technologies use NP to load Ag ions which may be used as an antimicrobial agent in a target-specific manner" should be followed by further clarification and/or some examples of how target-specific antimicrobial activity is achieved.	Thanks for the comment Exact target is not mentioned in the literature	None
Regarding the mechanism of action of Ag nanoparticles in infections, it is not clarified if all the named mechanisms happen sequentially or if these are independent of each other and could happen in different types of bacteria. Also, no references are cited in this section.	Thanks for the comment	References added
There are some grammatical mistakes throughout the manuscript such as switching between the present and past tense within the same sentence or paragraph.	Thanks for the comment	Corrections done
Some formatting is required e.g., in vitro should be italicized.	Thanks for the comment	Corrections done
There is a lack of sufficient recent literature and almost 50% of the references are older than 10 years. The manuscript should be updated by adding more recent literature.	Thanks for the comment	Appropriate references added
Reviewer 2 comments	Authors Reply	Action Taken

Well written article	Thanks for the comment	None
Reviewer 3 comments	Authors Reply	Action Taken
Check the entire manuscript to avoid typo mistakes. I found three in text and two in Figure 2	Thanks for the comment	Corrected
Enrich the mechanisms of action. For example, check the figure 4 at (jnanobiotechnology.biomedcentral.com/articles/10.1186/s12951-017-0308-z)	Thanks for the comment	Corrected and highlighted in page 5
I suggest the addition of a figure showing biomaterial using AgNP (as those described in section "AgNP in orthopaedic infections")	Thanks for the comment	Corrected
Enrich the content of the results in patients whose use devices with NPs. There are some recent reports in this field. Please improve the originality of your work. Several other recent reviews are in the field Sakthi Devi, R., Girigoswami, A., Siddharth, M., & Girigoswami, K. (2022). Applications of gold and silver nanoparticles in theranostics. Applied Biochemistry and Biotechnology, 194(9), 4187-4219. Damle, A., Sundaresan, R., Rajwade, J. M., Srivastava, P., & Naik, A. (2022). A concise review on implications of silver nanoparticles in bone tissue engineering. Biomaterials Advances, 213099. Wang, N., Fuh, J. Y. H., Dheen, S. T., & Senthil Kumar, A. (2021). Functions and applications of metallic and metallic oxide nanoparticles in orthopedic implants and scaffolds. Journal of Biomedical Materials Research Part B: Applied Biomaterials, 109(2), 160-179. Joshi, M. U., Kulkarni, S. P., Choppadandi, M., Keerthana, M., & Kapusetti, G. (2023). Current state of art smart coatings for orthopedic implants: A comprehensive review. Smart Materials in Medicine.)	Thanks for the comment	Added and highlighted in appropriate places