Archives of Clinical Infectious Diseases
Volume 19 · Issue 3 · e138247

OPEN PEER REVIEW

# Comparable Antibacterial Effects of Silver and Iron Oxide Nanoparticles on Urinary Calculi Obtained After Percutaneous Nephrolithotomy

Dariush Rabbani, Zeinab Piravar, Mehrdad Jafari Fesharaki, Amir Hossein Kashi, Mazyar Salimi

| SUBMITTED | REVISED | ACCEPTED | DOI |
| --- | --- | --- | --- |
| 2 Aug 2023 | 29 May 2024 | 5 Jun 2024 | 10.5812/archcid-138247 |

**About this report**

This open peer review (OPR) report shows the public comments made on this article during peer review, by the reviewers, the associate editor and the editor-in-chief, for every revision round, together with the authors' replies. Comments appear only with the consent of the people who wrote them. Reviewers who chose to sign their report are named; the others are shown as "Referee". Comments are edited for language only, and confidential remarks to the editors are not included.

More about open peer review: brieflands.com/knowledgebase/opr

**Contents**

1 Original submission Referee 1, Referee 2 ..... 2
2 Revision 1 ..... 3
Authors' reply to reviewers ..... 4
Reviewer and editor comments ..... 6

## 1 Original submission

2 comments · 19 Feb 2024 – 26 Feb 2024

### Referee 1 Reviewer

MAJOR REVISION 19 Feb 2024

Dear authors,
I appreciate your time and effort in conducting this study. You investigated the effects of silver and iron oxide nanoparticles on bacteria within the nephrolithes. The topic of the study is novel, practical, and within the journal's scope. However, I have some concerns regarding your study design and data presentation, which are mentioned below. In my opinion, your manuscript may be considered for publication after you provide clarification:
1-The method of the study is vague. In my opinion, you should use a randomized controlled trial to investigate the effects of medications on bacteria. However, it seems that you did not perform a randomized controlled trial. Please clarify your study design and revise your manuscript based on the study design.
2-You should follow the journal's guideline to prepare the manuscript. There are some missing data in the method section, including the sampling method, how the sample size was estimated, the study design, the time and place of the study, and so on.
3-You mentioned that data were analyzed using the ANOVA test. However, based on your variables and tables, ANOVA was not used for data analysis.
4-The manuscript has some language errors and should be reviewed by an English editor to improve its grammar, punctuation, fluency, and style.
Bests,

### Referee 2 Reviewer

REJECT 26 Feb 2024

Dear author
I carefully reviewed your article titled "Comparable Antibacterial Effects of Silver and Iron Oxide Nanoparticles on Urinary Calculi obtained after Percutaneous Nephrolithotomy".
My point of view is as follows:
- Given the study's method and the fact that it was not conducted clinically in patients with urinary tract infections, the conclusions of the respected authors are not acceptable.
- To support this conclusion, these substances should be used clinically in treating these patients to compare their effectiveness with antibiotics.
Therefore, unfortunately, I inform you that this article is not suitable for publication in this journal.

2

# Revision 1

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Reply to reviewer comments:

***Reviewer 1***

1- *The method of the study is vague. In my opinion, you should use randomized controlled trial to investigate the effects of medications on bacteria. However, as it seems, you did not perform a randomized controlled trial. Please clarify your study design and revise your manuscript based on the study design.*

Since the project is part of a general clinical plan, in the first step of this study, the microbiological experiments of the synthesized nanoparticles on bacteria were investigated in vitro, and in the next step, animal experiments will be carried out. If the results are acceptable, the step of clinical studies will begin. Due to randomized controlled trial is related to the phase of clinical trial, we hope will be carried out in the continuation of the study.

*2-You should follow journal's guideline to prepare the manuscript. There are some missing data in the method section, including sampling method, how to estimate sample size, study design, time and place of the study,*

In this hospital study, the urinary stones of 45 patients in Shahid Labbafinejad Hospital were removed during Percutaneous Nephrolithotomy (PCNL).

*3-You mentioned that data were analyzed using ANOVA test. However, based on your variables and tables, ANOVA did not used for data analysis.*

According to these articles below, for analysis of MBC and MIC we have used ANOVA test.

1- The minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC) of silver nanoparticles against Staphylococcus aureus.

Prashik Parvekara , Jayant Palaskarb , Sandeep Metgudc , Rahul Mariad and Smita Duttae

2- Antimicrobial Efficacy of Biogenic Cobalt and Copper Nanoparticles against Pathogenic Isolates

Iram Liaqat1 *, Rabbia Ali1 , Uzma Hanif2 , Asma Latif3 , Asia Bibi4 , Sadiah Saleem5 , Sajida Naseem6 , Mobina Ulfat7 , Muhammad Mubin8 , and Farzana Rashid

3- Silver nanoparticles produced from Cedecea sp. exhibit antibioflm activity and remarkable stability

Priyanka Singh1 , Santosh Pandit2 , Carsten Jers1 , Abhayraj S. Joshi1 , JørgenGarnæs3 & Ivan Mijakovic1,2*

*4-The manuscript has some language errors, which should be reviewed by an English editor to improve in terms of grammar, punctuation, fluency, and style.*

dear reviewer, the manuscript edited and rechecked the grammar by native english

***Reviewer 2:***

Dear reviewer, since the project is part of a general clinical plan, in the first step of this study, the microbiological experiments of the synthesized nanoparticles on bacteria were investigated in vitro, and in the next step, animal experiments will be carried out. If the results are acceptable, the step of clinical studies will begin.

## 2 Revision 1

0 comments

*No public comments in this round.*