

Dear Reviewers,

Thank you for the excellent comments and feedback. Please see below bold and highlighted sections for responses.

Sincerely,

Christine J. Wu, MD

1 Title. Does the title reflect the main subject/hypothesis of the manuscript?

Yes.

2 Abstract. Does the abstract summarize and reflect the work described in the manuscript?

Yes.

3 Key Words. Do the key words reflect the focus of the manuscript?

There were no key words in the manuscript.

Response: We have added keywords. Thank you!

4 Background. Does the manuscript adequately describe the background,

present status and significance of the study?

Yes.

5 Methods. Does the manuscript describe methods (*e.g.*, experiments, data analysis, surveys, and clinical trials, *etc.*) in adequate detail?

The exclusion criterion should be set to further remove participants who were already included according to the inclusion criterion. However, for this manuscript, according to the exclusion criterion, the participants to be excluded were not included according to the inclusion criterion. The inclusion criterion and the exclusion criterion shared the same meanings.

For the outcomes of the manuscript, I recommend to add some additional outcomes, such as blood loss of the surgery, peri-operative pain condition of the patients. Those data should be recorded in the medical charts.

Response: Thank you for this feedback. The methods section was reworded to express the process that was used to narrow all primary TJA procedures down to our cohort of interest—that is patients who underwent primary bilateral staged TJA in sequential fashion. This process was used due to the institutional database query function, which is based first on procedure codes, rather than patients.

Excellent point taken regarding blood loss and postoperative pain. In our electronic medical record, blood loss is unable to be retrieved from the record and estimated blood loss is subjectively and reported

at surgeon discretion and thus inaccurate. Therefore we believe it is better not to report blood loss. Thank for the excellent point also regarding pain scores; this is also unfortunately not consistently recorded in the database well. This has been added to limitations. Thank you!

6 Results. Are the research objectives achieved by the experiments used in this study? What are the contributions that the study has made for research progress in this field?

Yes, the research objectives have been achieved. However, it seems that the contributions of the research for medical practice are limited.

7 Discussion. Does the manuscript interpret the findings adequately and appropriately, highlighting the key points concisely, clearly and logically? Are the findings and their applicability/relevance to the literature stated in a clear and definite manner? Is the discussion accurate and does it discuss the paper's scientific significance and/or relevance to clinical practice sufficiently?

It would be better to rewrite the discussion part more logically. One paragraph expressed only one meaning. I recommend to set a separate paragraph to describe the outcome of the research, and to emphasize the

superiority of the second surgeries. The next separate paragraph to explain the possible reasons of the superiority.

Response: Excellent points. Thank you for the feedback. The

Discussion section has been restructured.

8 Illustrations and tables. Are the figures, diagrams, and tables sufficient, good quality and appropriately illustrative, with labeling of figures using arrows, asterisks, etc, and are the legends adequate and accurately reflective of the images/illustrations shown?

Yes.

9 Biostatistics. Does the manuscript meet the requirements of biostatistics?

Since the sample size is very large, it was highly possible the continuous data conforms to normal distribution, and t test was better. Whether the data conforms to normal distribution should be described in the manuscript.

Response: Excellent point. However, the data was not normally

distributed and this is stated in the manuscript. Thank you for this

feedback!

10 Units. Does the manuscript meet the requirements of use of SI units?

Yes.

11 References. Does the manuscript appropriately cite the latest, important and authoritative references in the Introduction and Discussion sections? Does the author self-cite, omit, incorrectly cite and/or over-cite references?

Yes.

12 Quality of manuscript organization and presentation. Is the manuscript well, concisely and coherently organized and presented? Is the style, language and grammar accurate and appropriate?

Yes.

13 Research methods and reporting. Authors should have prepared their manuscripts according to BPG's standards for manuscript type and the appropriate topically-relevant category, as follows: (1) CARE Checklist (2013) - **Case report**; (2) CONSORT 2010 Statement - **Clinical Trials study, Prospective study, Randomized Controlled trial, Randomized Clinical trial**; (3) PRISMA 2009 Checklist - **Evidence-Based Medicine, Systematic review, Meta-Analysis**; (4) STROBE Statement - **Case Control study, Observational study, Retrospective Cohort study**; and (5) The ARRIVE Guidelines - **Basic study**. For (6) **Letters to the Editor**, the author(s) should have prepared the manuscript according to the

appropriate research methods and reporting. Letters to the Editor will be critically evaluated and only letters with new important original or complementary information should be considered for publication. A Letter to the Editor that only recapitulates information published in the article(s) and states that more studies are needed is not acceptable?

Yes.

14 Ethics statements. For all manuscripts involving human studies and/or animal experiments, author(s) must submit the related formal ethics documents that were reviewed and approved by their local ethical review committee. Did the manuscript meet the requirements of ethics?

Yes.