

ANSWERING REVIEWERS RESPONSE LETTER



March 15, 2015

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: Meta-analysis_review.doc).

Title: OUTCOMES OF ROBOTIC VERSUS LAPAROSCOPIC HEPATECTOMY: A SYSTEMATIC REVIEW AND META-ANALYSIS

Author: Roberto Montalti, Giammauro Berardi, Alberto Patrì, Marco Vivarelli, Roberto I. Troisi.

Name of Journal: *World Journal of Gastroenterology*

ESPS Manuscript NO: 16334

The manuscript has been improved according to the suggestions of reviewers:

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

- (1) 02471365
- (2) 02992811
- (3) 02468118

3 References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Gastroenterology*.

Sincerely yours,



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Dear editors, thanks for reviewing our manuscript. We modified our contribution according to the comments you suggested and to the formatting rules you provided. Changes are highlighted in yellow. We also provided you with six additional files as you requested:

- *A conflict of interest statement signed by the corresponding author.*
- *A data sharing statement signed by the corresponding author.*
- *A certificate of statistical review signed by a biostatistician.*
- *A certificate of language review by a professional English language editing company.*
- *A copyright assignment signed by all the authors.*
- *An audio file in which the first author describes the core tip of the study.*

Furthermore, we answered the reviewer's comments as below:

REVIEWERS COMMENT:

Reviewer n° 02471365

This is a well-done, rigorous meta-analysis that is nicely described and the conclusions are carefully balanced. It should make an important contribution to this literature.

R: Thanks for the comment; we believe that carefully balanced conclusions are very important in such topic and we are happy that our meta-analysis was correctly interpreted

Reviewer n° 02992811

There was no problem to publish in this journal

R: We would like to thank the reviewer for considering, reviewing and accepting our paper for publication.

Reviewer n° 02468118

Dear Authors,

I have analysed with interest your manuscript entitled *Robotic vs laparoscopic hepatectomy: a meta-analysis*. The paper adds useful information for practice and research, and probably for policy. I think your negative findings, addressing possible de-implementation of robotic hepatectomy, could be underlined. However, I have some concerns regarding the process of reporting and in my view it needs to be revised.

Major concerns:

- You followed the PRISMA statement. However, PRISMA is not only for reporting meta-analysis data but for the whole systematic review process. Also, the PRISMA checklist could supplement the manuscript. Why did you choose PRISMA, not MOOSE for SRs of observational studies. Please explain.

R: Thanks for giving us the opportunity to explain the statistical methodology of this study. Although we considered the use of MOOSE guidelines for our paper, we decided to follow the PRISMA for the following reasons: first of all we believe that the PRISMA are the guidelines most commonly used to report reviews and meta-analysis among the medical literature. As a confirm we run a search in the Medline database using the keyword "PRISMA" and the publication type as a filter (systematic reviews and meta-analysis); 1185 papers were retrieved from this search. We subsequently run the same search using the keyword "MOOSE" and the same filter; 148 papers were retrieved, giving us the impression that the PRISMA are the most recurrent guidelines used.

As a second issue, PRISMA guidelines were updated in 2009 while the MOOSE were updated in 2000; we decided to choose the most recent guidelines.

Finally, the World Journal of Gastroenterology, does not specify any method or specific guideline for reporting meta-analysis but in the "Instruction for Authors" they use the PRISMA guidelines as an example for reporting these type of papers.

For the above-mentioned reasons, we believe that the PRISMA guidelines are a correct method for reporting our meta-analysis.

As you suggested, PRISMA checklist is now provided as a supplement (Appendix 1).

- For inclusion criteria, it is important to indicate study type / design as well; also, following the PICO(ST) scheme (participants – interventions-outcomes – study types, would clarify reporting of the inclusion criteria; you have registered your SR at JBI, therefore you can follow the same PICO scheme as the one in their registration form. Also, study types / designs are important prerequisites as regards the meta-analysis itself. Can the data be combined?

R: In this study, the PICOS scheme suggested by the PRISMA guidelines was rigorously followed. In order to improve paper's fluency, the requested PICOS items were cited in different sentences and in different order, but they were all mentioned. Despite this we agree with you that some items could be more clearly stated. The PICOS scheme is now reviewed and updated (changes are highlighted in yellow in the "materials and methods" and "results" section). In detail:

P: "...participants of any age and sex who underwent robotic or laparoscopic liver resection for all types of hepatic lesions were considered..."

I: "...robotic liver resections were considered as the Intervention group..."

C: "...laparoscopic resections were considered as the Comparator group..."

O: "...studies reporting at least one perioperative outcome including blood loss, operative timing, conversion, mortality, morbidity, R1 resection rates, hospital stay and rate of major hepatectomies..."

S: "...the search was limited to humans and to articles reported in English language. No restriction was set for type of publication, date, or publication status..."

Study types/design are now more clearly stressed in the "Materials and Methods" section, in the "Results" section and furthermore commented in the "Discussion" section of the manuscript.

The sentence below – please provide more information as regards study types or explain that you were able to conduct a meta-analysis:

"To our knowledge, this is the first systematic review and meta-analysis comparing robotics to laparoscopy for liver resections. In this analysis, it was possible to include only 7 studies containing 694 patients;"

R: The above-mentioned sentence is now completed with types of studies finally included in the meta-analysis (Page 14, line 11-12).

- In my view, you should provide more detail (or put it clearly – preferably in the inclusion criteria and results sections) about the studies you have included. Also, reasons of exclusions (PRISMA flowchart) should be reported (preferably list of excluded studies, with reasons, as well, as an appendix).

R: Thanks for the interesting comment. We now provided more details concerning studies included in the meta-analysis in the "Results" section (Page 10, line 14-15) and in the "Discussion" section of the manuscript (Page 14, line 11-12). Furthermore, in addition to the PRISMA flow diagram already presented (Figure 1) we

now created an appendix in which reference of excluded studies together with the reason for exclusion are listed (Appendix 2).

- NOS scale – you have reported scores (Table 1), but interpretation is lacking. Also, NOS is only mentioned in the text in the “methods (risk of bias assessment)” section, not in “results” or “discussions”. The NOS scale is for retrospective studies. Did you include only retrospective studies?

R: Thanks for the interesting comment. We now added NOS data of the included studies in the “Results” section of the manuscript (Page 10, line 18-21) and further commented in the “Discussion” section (Page 14, line 13-16). Concerning your last question, in the review process, no prospective articles were identified focusing on the topic of interest; therefore only retrospective articles were included.

- “Conclusions” section: I think a sentence addressing further research needs and weaknesses of the available evidence could be added – for me those are your main findings. You are also mentioning costs in the text, not in the conclusions.

R: We agree with the reviewer; the need of future research, the weaknesses of the evidences and the cost analysis issue are now more stressed in the “Discussion” section of the manuscript as well as in the “Conclusions”.

- Minor tips:

Abstract: ..articles dated.. – published would be more clear

“Data extraction” section – reference to Tables (1, 2);

Please check language errors in the disclosure section: have / has; and the sentence below is for me unclear:

However, due to the absence of reported RCTs, in literature are described 16 meta-analysis comparing laparoscopic versus open liver resection utilizing retrospective data

Also – verbs need to be added?

Of these, 196 papers were excluded for the following reasons: 110 were not related to liver resections, 81 did not compare techniques, 3 were? review articles and 2 were? letters.

R: All these minor tips that you suggested are now modified and corrected throughout the manuscript. Furthermore, we agree with the reviewer that the sentence you mentioned is unclear and misunderstanding. We therefore decided to delete that sentence because not focusing on the topic of interest.