

Dear Editor,

Below we respond to the various questions you raised in your email of 16 January 2024

### **3 SCIENTIFIC QUALITY**

We have resolved all the issues in the manuscript based on the peer review report and have provided point-by-point answers to each of the questions raised there. We have highlighted the revised/added contents in yellow in the revised manuscript.

#### **Reviewer #1:**

We thank Reviewer 1 for their comments and suggestions regarding possible improvements. The changes made in response to these suggestions are shaded in yellow in the revised manuscript.

#### **Language Quality: Grade B (Minor language polishing):**

The manuscript has been revised by a native English-speaking expert.

We attach a new language certificate along with the manuscript to verify that the language of the manuscript has reached grade A.

**However, observe the wording for Table 1 (is not Tabla).**

We have corrected this typo.

### **4 LANGUAGE POLISHING REQUIREMENTS FOR REVISED MANUSCRIPTS SUBMITTED BY AUTHORS WHO ARE NON-NATIVE SPEAKERS OF ENGLISH**

As the revision process results in changes to the content of the manuscript, language problems may exist in the revised manuscript. Thus, it is necessary to perform further language polishing that will ensure all grammatical, syntactical, formatting and other related errors be resolved, so that the revised manuscript will meet the publication requirement (Grade A).

**Authors are requested to send their revised manuscript to a professional English language editing company or a native English-speaking expert to polish the manuscript further. When the authors submit the subsequent polished manuscript to us, they must provide a new language certificate along with the manuscript.**

The manuscript has been revised by a native English-speaking expert to ensure that all the grammatical, syntactic, formatting and other errors related to the text have been resolved and that the revised manuscript meets the publication requirement (Grade A). A new language certificate is provided along with the manuscript.

## **6. MODIFICATIONS IN RESPONSE TO THE EDITORIAL OFFICE'S COMMENTS**

We thank the reviewer for their comments which have helped us to introduce important improvements in the manuscript.

**2. (3) Table(s) and figure(s): There is 1 Figure and 5 Tables should be improved.**

**Detailed suggestions for each are listed in the specific comments section.**

Changes have been made in all five tables and in the figure.

**3. Language evaluation:** The manuscript has been revised by a professional English language editing company. We attach an English Language Certificate.

### **4 Specific comments:**

**(1) Please list all author and institutional information in order.**

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**(2) Please provide the Figures cited in the original manuscript in the form of PPT:**

Done.

**(3) Please obtain permission for the use of picture(s).**

The only figure is our own original work.

**(4) Please add the author's contribution section:**

This section has been added.

**(5) Please add the Core tip section.**

In fact the Core tip section was already included in the original submission:

*“This review shows that the QALYs lost on surgical waiting lists have not been evaluated in the literature. The relationship between QALYs and surgical waiting lists has been described mainly in organ transplantation and in experimental models. The willingness-to-pay per QALY gained ranged from \$100,000 in the US to €20,000 in Spain. Future research should address this question, as the information recorded is likely to be of value to health systems that are planning investments aimed at reducing surgical waiting lists and cutting costs”.*

**(6) Please provide 4-10 keywords.**

The keywords were also included:

*Quality-adjusted life year; QALY; Waitlist; Quality of Life; Surgery; Systematic Review.*

**(7) Please add an Abstract.**

The Abstract was included in the original submission:

**BACKGROUND**

*The Quality-Adjusted Life Year (QALY) is a metric that is increasingly used today in the field of health economics to evaluate the value of different medical treatments and procedures. Surgical waiting lists (SWLs) represent a pressing problem in public healthcare. The QALY measure has rarely been used in the context of surgery. It would be interesting to know how many QALYs are lost by patients on SWLs.*

**AIM**

*To investigate the relationship between QALYs and SWLs in a systematic review of the scientific literature.*

## METHODS

*The study was conducted in accordance with the PRISMA Statement. An unlimited search was carried out in PubMed, updated on March 30, 2023. Data on the following variables were investigated and analysed: specialty, country of study, procedure under study, scale used to measure QALYs, the use of a theoretical or real-life model, objectives of the study and items measured, the economic value assigned to the QALY in the country in question, and the results and conclusions published.*

## RESULTS

*Forty-eight articles were selected for the study. No data were found regarding QALYs lost on SWLs. The specialties in which QALYs were studied the most in relation to the waiting list were urology and general surgery, with 15 articles each. The country in which the most studies of QALYs were carried out was the US (n=21), followed by the UK (n=9) and Canada (n=7). The most studied procedure was organ transplantation (n=39): 15 kidney, 14 liver, five heart, four lung, and one intestinal. Arthroplasty (n=4), cataract surgery (n=2), bariatric surgery (n=1), mosaicplasty (n=1), and septoplasty (n=1) completed the surgical interventions included. Thirty-nine of the models used were theoretical (the most frequently applied being the Markov Model, n=34) and nine were real-life. The survey used to measure quality of life in 11 articles was the EuroQol-5D, but in 32 the survey was not specified. The willingness-to-pay per QALY gained ranged from \$100000 in the US to €20000 in Spain.*

## CONCLUSION

*The relationship between QALYs and SWLs has only rarely been studied in the literature. The rate of QALYs lost on SWLs has not been determined. Future research is warranted to address this issue.*

**(8) Please provide the filled conflict-of-interest disclosure form.**

Added.

**(9) Please provide the PRISMA 2009 Checklist**

This was included in the original submission, but we have attached it again.

**(10) Please provide the Biostatistics Review Certificate.**

The paper does not include a statistical study.

**(11) The article type has been changed to Systematic review.**

Initially the article was sent as a Systematic review.

**(12) The “Article Highlights” section is missing. Please add the “Article Highlights” section at the end of the main text (and directly before the References).**

We have added the “Article Highlights” section at the end of the main text (and directly before the References).

**(2) MODIFICATIONS IN RESPONSE TO REQUESTS FROM THE EDITOR-IN-CHIEF COMPANY:**

*I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office’s comments and the Criteria for Manuscript Revision by Authors.*

First of all, the authors thank the editor-in-chief for their comments and suggestions, which will undoubtedly improve the quality of the manuscript.

We have revised the paper in accordance with the Peer-Review Report, Editorial Office’s comments and the Criteria for Manuscript Revision by Authors.

*When revising the manuscript, it is recommended that the author supplement and improve the highlights of the latest cutting-edge research results, thereby further improving the content of the manuscript. To this end, authors are advised to apply PubMed, or a new tool, the RCA, of which data source is PubMed.*

Since the revision submitted for assessment was performed using PubMed, we have decided to update it using the same database. In future work we will use the RCA. An unlimited search was carried out in PubMed, updated on January 19, 2024, with the

following search terms: ("Quality-Adjusted Life Year" OR (QALY)) AND (Surgery) AND ((Waiting list) OR (Waitlist)).

Compared with the previous search updated on March 30, 2023, two new articles were found, but neither met the inclusion criteria in the study.

The data have been modified in the revised manuscript and in Figure 1 describing PRISMA flow diagram.

## **7 STEPS FOR SUBMITTING THE REVISED MANUSCRIPT**

We have carried out all the steps indicated in this section.

We hope that the corrections made respond satisfactorily to your requests.

Best regards

Roberto de la Plaza Llamas, MD, PhD, MSc, FACS