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 2 comments	Authors Reply	Action Taken
Thanks for inviting me to review this study. Generally, it was acceptable after minor revision. 1. The methodology is written too simply, and it is recommended that the methodological description of the article be improved by referring to the literature (Structure and trends of international sport nutrition research between 2000 and 2018: bibliometric mapping of sport nutrition science.).	Thanks for the comment. We wanted to keep the methodology as simple to be understood by any general orthopaedic surgeon who is not aware of some of these scientometric nuances. However, we have revised the methodology in reference to the cited manuscript as suggested.	Methodology
2. The Figures should be higher resolution many words are not clear.	Thanks for the keen observation. We have improved the resolution of the images in the manuscript. But many of the text in the images are with reference to the node size based on the strength of the citation in them and hence everything on the image could not be made to be clearly visible. However we supplied a separate PPT file with high quality images of all the figures for your reference	Figures PPT File
3. The authors should highlight the main results while appropriately reducing the overall presentation of the content in figures.	Thanks for the valuable comment. We have kept the content legend in such a way that only the significant nodes and the contents are prominently visible to the readers.	Figures
4. Figure legends were too abbreviated, more explanations and details are needed to make it easier for readers.	Thanks for the keen observation. We have expanded all the figure abbreviations to made it easy for the readers to comprehend the images.	Figure legends
5. It would be better to add a perspective section including reasonable expectations and predictions for spine RCT studies	Thanks for the comment. We have added an author's perspective section as suggested.	Author's perspective

Reviewer 4 Comments	Authors Reply	Action Taken
in conjunction with current cutting-edge research.		
This is an investigation on the development of spinal clinical researches in the past 3 decades. The manuscript is relatively well-written and referable results were achieved. There are some issues for the authors to address	Thanks for the encouraging words.	None
. 1. In Figure 1, "timespan" was 1990-2021, which is contradictory to the description of "1990-2019" in other sections. Please explain.	Thanks for the valuable comment. It was a typographical error and it is revised in the current submission.	Figure 1
2. The rationale of database selection in the method and limitation were not convincing, because it is common sense that the combination of databases would result in maximum results of interest. I am afraid the WoS search alone is not enough and this step should be improved in case of missing out potential studies.	Thanks for the comment. Although it is a common sense that combining databases would result in maximum results, CiteSpace or any scientometric software for that matter works with any one of the defined set of meta-data style. For example: If we choose PubMed, the metadata is presented in certain format and sequence developed by PubMed similarly for other databases. If that is the case, the maximum number of such meta-data domains are available in Web of Science since it has the maximum number of article data points compared to other databases.[1] The datapoints not in other domains include Field Topics, Field tags, Author Keywords, Keywords Plus (WoS assigned keywords), Linked references, Citation data, and so on.[2] Hence, we chose WoS as our source of meta-data to have a more detailed and informative analysis on the subject. Moreover, we tried to identify any additional missing data from the merge function of the CiteSpace from the literature search in other database and we found only duplication of the data rather than significant increase in new entries to the original	Methodology

	dataset. However, we mentioned the same in the limitation section also. 1. Falagas ME, Pitsouni EI, Malietzis GA, Pappas G. Comparison of PubMed, Scopus, Web of Science, and Google Scholar: strengths and weaknesses. FASEB J 2008; 22: 338–342. [DOI: 10.1096/fj.07-9492LSF] 2. Martín-Martín A, Orduna-Malea E, Thelwall M, Delgado López-Cózar E. Google Scholar, Web of Science, and Scopus: A systematic comparison of citations in 252 subject categories. J Informetr 2018; 12: 1160–1177. [DOI: 10.1016/j.joi.2018.09.002]	
3. In many parts of the manuscript, South Korean was categorized a developing country. In fact, South Korean is a developed country	Thanks for the keen observation. Sorry for the misinterpretation. Changes made as suggested.	Results
4. Research Topics & Emerging Trends, the pearl of your study, in the discussion is not adequately discussed. I believe the take home message of your article for readers is what specific changes the spine RCTs have experienced in last 30y. It would be better if this is expanded in a PICO (patient, intervention, comparison, outcome) fashion.	Thanks for the comment. The take home points are presented as suggested.	Author's perspective Table 9
Science Editor Comments	**Authors Reply**	**Action Taken**
This manuscript provides a comprehensive and systematic analysis of randomized controlled trials of the spine over the past three decades.	Thanks for the comments.	 Methodology

Please determine whether the time is 1990-2021 or 1990-2019, and the full text is unified;	As suggested by the reviewers, changes have been made to unify the timeline searched.	Methodology
Whether the database only collects WOS;	We gave substantial reasons for using WoS to the reviewers and mentioned our limitations too.	
Improve the quality of Figure, and	We improved the quality of the figures.	Figures
further enrich the discussion, and explain the research topics and emerging trends.	We have also revised the discussion and the emerging trends section of the manuscript.	Author's perspective Table 9
Editor-in-Chief Comments	**Authors Reply**	**Action Taken**
I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Orthopedics, and the manuscript is conditionally accepted.	Thanks for the encouraging words.	None
The title of the manuscript is too long and must be shortened to meet the requirement of the journal (Title: The title should be no more than 18 words).	Title revised as suggested	Title
Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor.	Figures are provided in PowerPoint format	Figure file
Authors are required to provide standard three-line tables, that is, only the top line, bottom line, and column line are displayed, while other table lines are hidden. The contents of each cell in the table should conform to the editing	The table styles have been revised as suggested.	Tables

specifications, and the lines of each row or column of the table should be aligned. Do not use carriage returns or spaces to replace lines or vertical lines and do not segment cell content.		