

Format for ANSWERING REVIEWERS



January 03, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 6493-review.doc).

Title: Knee osteoarthritis. New perspectives for articular cartilage repair treatment through tissue engineering. A contemporary review.

Author: Giuseppe Musumeci, Paola Castrogiovanni, Rosalia Leonardi, Francesca Maria Trovato, Angelo Di Giunta, Carla Loreto, Sergio Castorina.

Name of Journal: *World Journal of Orthopedics*

ESPS Manuscript NO: 6493

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

We acknowledge the editor and reviewers for their suggestions whereby the paper has improved considerably thanks to their interesting suggestions and advice. All the suggested editor and referee corrections have been marked in the text in yellow.

- (1) This is a nice description of the subject but unfortunately it is not appropriate for publication. This is not a review article and it is actually not structured as an article for publication in such a journal- it lacks the usual structure with abstract method results and conclusion. Almost all the information which is summarized here is already known so this paper does not give any new aspects for this issue. Unfortunately I cannot recommend this paper for publication.
 - *As kindly suggested we changed largely the text, whereby the paper has improved considerably adding more new information on the topic studied. This is a review article, not an original article, and it is normal that some information are well known.*
- (2) It is a well written overview of knee cartilage repair. The anatomy part, and some other parts, are less relevant for the readers. I am not a knee surgeon and I read nothing new in these parts. I think the authors should focus of the content of 2 paragraphs (tissue engineering and biomaterials) and elaborate on this. Also describe some results of different types of treatment. Please advise the reader how to treat cartilage lesions. Which type needs what type of treatment?
 - *As kindly suggested we modified all the manuscript, some less relevant parts were removed*

or reduced, for eg. cartilage and osteoarthritis paragraphs were eliminated. In addition other paragraphs were increased and improved such as tissue engineering, biomaterials and rehabilitation. Three new tables were also added, about the methodology of the tissue engineering, such as source of cells, type of materials of the scaffold and limitations.

- (3) Dear Editor, The review article is a comprehensive one, but should add some more information as follows: 1. one more table which summarises and focuses on the methodology of the tissue engineering including comparison such as source of cells, type of materials of the scaffold (should refer to the digested collagen, gelatin, as well) and limitations. 2. the review article should discuss on the method of monitoring and prognosis after surgery or transplantation like bio-markers, x-ray and MRI.
- *As kindly suggested we modified all the manuscript, some less relevant parts were removed or reduced, for eg. cartilage and osteoarthritis paragraphs were eliminated. In addition other paragraphs were increased and improved such as tissue engineering, biomaterials and rehabilitation. Three new tables were also added, about the methodology of the tissue engineering, such as source of cells, type of materials of the scaffold and limitations.*
- (4) The authors present an interesting contemporary review on the topic of knee osteoarthritis and treatment options by tissue engineering. The topic has clinical relevance and the manuscript is written quite well. However, there are several aspects which have to be revised: 1. Line-numbers are not provided, which makes reviewing the manuscripts not easier! 2. Page 3: “intercondiloidee”? “Semimbranosus”? No points after “cruciate ligament”! 3. Page 6: “... early diagnosis and treatment may help to ...” 4. Page 6: “... can be caused by: previous knee injury like fractures, ligament tears and meniscal injuries, or repetitive strain on the knee, which can affect ..” 5. Page 8: “...marrow stimulation such as autologous chondrocyte implantation ...”?! This seems not to be correct. “Today none of the ...”: OATS of course can provide hyaline cartilage! What about MACI and the great amount of growth factors currently discussed? Authors should provide or at least follow a reasonable classification of the different methods such as marrow stimulating techniques, cell based methods etc. 6. Page 9: “...clinical outcome deteriorates over time...” Here some current studies should be cited additionally to the old one of Steadman! 7. Pages 7-11: what about growth factors like BMPs? They should be mentioned in such a kind of review. 8. Page 11: Rehabilitation protocols should be discussed more concretely, i.e. continuous passive motion? Primary immobilization vs. early mobilization? 9. Pages 12-16: it is striking that Musumeci G is cited 18 times, which seems to be a kind of over-representation!? 10. Page 17: this figure is unnecessary as every reader of the journal knows how healthy hyaline cartilage looks like. 11. Pages 23-26: the function of Tables 1-4 is not really clear, to the reviewer they seem to be unimportant.

- *As kindly suggested we modified all the manuscript, some less relevant parts were removed or reduced, for eg. cartilage and osteoarthritis paragraphs were eliminated. In addition other paragraphs were increased and improved such as tissue engineering, biomaterials and rehabilitation. Three new tables were also added, about the methodology of the tissue engineering, such as source of cells, type of materials of the scaffold and limitations. Some suggested distraction mistake were revised and corrected (points 1-5). Point 6, another recent reference was added. Point 7, we report some information about BMPs in different part of the text. Point 8, rehabilitation protocols were discussed more concretely. Point 9, some our references were removed. Points 10 and 11, some unnecessary figures and tables were removed.*

3 References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Orthopedics*.
Sincerely yours,

Giuseppe Musumeci

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