



ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology
ESPS manuscript NO: 23867
Title: Visceral hypersensitive rats share common dysbiosis features with human irritable bowel syndrome
Reviewer's code: 02441672
Reviewer's country: Brazil
Science editor: Ya-Juan Ma
Date sent for review: 2015-12-22 14:52
Date reviewed: 2016-01-05 23:04

Table with 4 columns: CLASSIFICATION, LANGUAGE EVALUATION, SCIENTIFIC MISCONDUCT, CONCLUSION. It contains checkboxes for various criteria like 'Grade A: Excellent', 'Priority publishing', 'Google Search', etc.

COMMENTS TO AUTHORS

The manuscript is excellent and addresses adequately the relationship between dysbiosis and visceral hypersensitivity in experimental animals. However, I would add a few points regarding the comparison between the findings in humans with IBS and experimental studies. I think that will be necessary to include them in the discussion of results. 1-IBS is a human disease with multifactorial pathophysiology understood through a biopsychosocial model. This concept needs to be emphasized in the discussion. 2-The post-infectious IBS is associated only to a percentage of patients. 3- I consider necessary discussion about the question "hypersensitivity visceral and dysbiosis are a cause or consequence of the symptoms of IBS"? 4-Finally I would like to point out that this study is a consistent contribution regarding IBS dysbiosis and visceral hypersensitivity in experimental models. I suggest reading two articles published by our research group. They provide relevant clinical information about IBS in humans that can be useful in the discussion. Soares, R. L. (2014). Irritable bowel syndrome: A clinical review. World Journal of Gastroenterology: WJG, 20(34), 12144-12160. http://doi.org/10.3748/wjg.v20.i34.12144 Soares RL, dos Santos JM, Rocha VR. Prevalence of



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irritable bowel syndrome in a Brazilian Amazon community. *Neurogastroenterol Motil.* 2005;17:883.



ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

ESPS manuscript NO: 23867

Title: Visceral hypersensitive rats share common dysbiosis features with human irritable bowel syndrome

Reviewer's code: 00036653

Reviewer's country: Italy

Science editor: Ya-Juan Ma

Date sent for review: 2015-12-22 14:52

Date reviewed: 2016-01-07 23:51

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C: Good	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input type="checkbox"/> Plagiarism	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		<input type="checkbox"/> No	<input type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input type="checkbox"/> No	

COMMENTS TO AUTHORS

Specific comments - I suggest in order to reach a better comprehension of the alpha diversity to choose Shannon or Simpson's index and afterward to give a more complete information associating the index differences with a value of community similarity (i.e. Sorenson's Coefficient). - If you use the Simpson's index you should specify which formula you applied (there are two, both accepted, but they give different results). - In the sentence "the 3 groups' distribution in the clusters is significantly different (P = 1.702×10⁻⁴, Fisher's test)" I understand that you used the Fisher test on 3 objects while the Fisher's test can be used only on binary nominal value. Did I misunderstand? Could you clarify this point? - In the paper you constructed the helix grouping the 75% of the samples. In the figure it looks like not follow this rule (for example the helix Mixed Cluster 1 in figure 4C). - In figure 5, I suggest to indicate the complete taxonomy to the unclassified taxa to give at least the family information to the reader. - Spearman results are in table 3 instead of table 2 as reported on the manuscript. - it would be better to use the world "genera" as plural of genus instead of "genuses". - the taxonomic meaning of "Clostridium XI" has to be clearly explained. - a review paper concerning



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microbiota analysis and IBS was published quite recently in the World Journal of Gastroenterology (World J Gastroenterol 2014 July 21; 20(27): 8821-8836); in these study, Porphyromonadaceae and Fusobacterium are mentioned as well: could you please comment possible analogies/discrepancies in the scientific informations between that study and yours?



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ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

ESPS manuscript NO: 23867

Title: Visceral hypersensitive rats share common dysbiosis features with human irritable bowel syndrome

Reviewer's code: 00033010

Reviewer's country: Italy

Science editor: Ya-Juan Ma

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Date reviewed: 2016-01-08 22:09

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C: Good	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		BPG Search:	<input type="checkbox"/> Major revision
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

COMMENTS TO AUTHORS

In the present paper, entitled "Visceral hypersensitive rats share common dysbiosis features with human irritable bowel syndrome", two different mouse models of IBS have been studied, and correlations with alterations in microbiota have been evaluated. This is an excellent paper. The quality of the study design and experimental investigations are very high. Main comments: A minor linguistic revision is needed. Usually, in human beings, the post-inflammatory IBS develops after an infectious disease, such as gastroenteritis. However, in the present study the equivalent animal model was developed by using a pro-inflammatory molecule (TNBS). Therefore, this model is closer to human IBD rather than IBS. This aspect should be discussed, since even IBD shows visceral hypersensitivity.