

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 50444

Title: Gender differences in vascular reactivity of mesenteric arterioles in portal hypertensive and non-portal hypertensive rats

Reviewer's code: 03024263

Reviewer's country: Russia

Science editor: Jin-Zhou Tang

Reviewer accepted review: 2019-07-30 06:05

Reviewer performed review: 2019-07-30 13:31

Review time: 7 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input checked="" type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input checked="" type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input type="checkbox"/> Major revision	<input type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input checked="" type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

Indeed, despite the increased level of circulating endogenous vasoconstrictors in portal hypertension, the sensitivity of blood vessels to them is significantly reduced. To date, the pathogenetic mechanisms of this phenomenon have not been fully investigated. The



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authors showed a positive effect of estrogen on the sensitivity of vessels to endogenous vasoconstrictors in portal hypertension. This is well known from previous publications, including the authors themselves. New is the description of gender differences in vascular reactivity of mesenteric arterioles in portal hypertensive and non-portal hypertensive rats. The authors do not explain the mechanism of this event, which in my opinion is very desirable.

INITIAL REVIEW OF THE MANUSCRIPT

Google Search:

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

BPG Search:

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 50444

Title: Gender differences in vascular reactivity of mesenteric arterioles in portal hypertensive and non-portal hypertensive rats

Reviewer's code: 02567669

Reviewer's country: Germany

Science editor: Jin-Zhou Tang

Reviewer accepted review: 2019-08-02 20:02

Reviewer performed review: 2019-08-07 19:48

Review time: 4 Days and 23 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input checked="" type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input checked="" type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input checked="" type="checkbox"/> Major revision	<input checked="" type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The manuscript describes differences in the vascular reactivity to the vasoconstrictor NE in male/female rats and male castrated/female orchidectomized without portal hypertension and their respective counterparts with portal hypertension. The idea that

there are effects of estrogens on vascular reactivity of branches of the mesenteric artery is fine. There could be therapeutic consequences derived from this animal experiments. Generally, the manuscript is difficult to read and understand for a reader, who is not so familiar with the parameters Emax or EC50 or the principles of the dose-response curves used in this study. This must be better explained. What means shift to the right or to the left. In physiological terms? In Figure 3: Is there really a difference between the black and the blue curves? P-value? In the Introduction: The differentiation of the causes of PHT into primary and secondary is not complete correct. The one influences the other one. One should mention the so-called NO-paradox What is ICI 182.780? Sorry, I don't know it. Effect of estrogens: Increased NO production and inhibited activation of stellate cells. Maybe. Other possibility: Decreased inactivation of cGMP due to decreased PDE-5 activity (see Schaffner et al in WJG 2018).

INITIAL REVIEW OF THE MANUSCRIPT

Google Search:

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- ☐ Plagiarism
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BPG Search:

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- ☐ Plagiarism
- ☐ No