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

Response to reviewer 1

Estrogen plays an important role in reducing the portal pressure in cirrhotic rats, mainly by the modulation of endothelial NO synthase and NO production, oxidative stress and Rho/ROCK pathway, either in sinusoidal endothelial cells or extrahepatic arteries. Further investigations are underway and will be disclosed in future articles.

Response to reviewer 2

1. Dose-response curves were explained with more detailed information.
2. The curve shift to the right means contractility of the blood vessels to the vasoconstrictor is weakened, shift to the left means the contractility is enhanced.
3. There is a feeble difference between the black and the blue curves in Figure 3, with E_{max} ($78.71 \pm 4.80\%$ vs. $80.95 \pm 6.18\%$, $P > 0.05$), EC_{50} ($4.17 \pm 2.45 \times 10^{-6}$ mol/L vs. $2.51 \pm 0.63 \times 10^{-6}$ mol/L, $P > 0.05$). However, the statistical difference is not significant.
3. ICI 182.780 is an estrogen receptor antagonist.

Response to editors

1. The manuscript has been improved according to the suggestions of reviewers:
2. Revision has been made according to the Format for Manuscript Revision for 'Basic Study'.
3. References and typesetting were corrected.

Sincerely yours,

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