Reviewer's report

Title: Thrombospondin-1 Null Mice are Resistant to Hypoxia-induced Pulmonary Hypertension

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Reviewer: Weidong li

Reviewer's report:

The research about TSP-1 and HP is very interesting. As we know in the most previous studies, TSP-1 play a role in inhibiting vascular smooth muscle cell growth and angiogenesis. Likewise, TSP-1 has been found up-regulated in intrapulmonary arteries in hypoxia-induced pulmonary hypertension and inhibited pulmonary smooth muscle growth.

However in this study, the author showed us the different function of TSP-1. When TSP-1 gene was knockout, the TSP-1(-/-) mice were less responsive to the development of PH when exposed to chronic hypoxia. What's more TSP-1(-/-) mice had less acute pulmonary vasoconstriction than WT controls in response to both a acute hypoxia and a thromboxane mimetic agent.

So it suggested that TSP-1 -/- mice may be resistant to the development of hypoxia-induced pulmonary hypertension. It also helped us to comprehend the pathogenetic processes that control pulmonary vascular remodeling and PH.

comments about methods:

The number of experimental animal in the group and sub-group is not clear, please describe it in detail. If the number is too small, any definitive conclusions could not clarified. More data should be needed to get this conclusion.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests