Reviewer's report

Title: Heparanase activity in alveolar and embryonal rhabdomyosarcoma: implications for tumor invasion.

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Reviewer: Xiaochun Xu

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In the ms of “HEPARANASE ACTIVITY IN ALVEOLAR AND EMBRYONAL RHABDOMYOSARCOMA: IMPLICATIONS FOR TUMOR INVASION”, Masola et al investigated the role of heparanase in rhabdomyosarcoma. They found heparanase is highly expressed and its activity is also high in rhabdomyosarcoma. Knockdown of heparanase expression in two rhabdomyosarcoma cell lines suppressed heparanase expression and consequently, the tumor cell invasiveness is also reduced. The authors concluded that heparanase expression and activity in rhabdomyosarcoma is significantly higher compared to healthy subjects. Further studies are warranted to assess possible relationships between heparanase and clinical behavior in rhabdomyosarcoma.

Comments

It is a straightforward study design and the methods used are standard and reliable. However, the data are preliminary and more data may be needed, such as the siRNA data. It is usually required to put a nonspecific siRNA as the control for whether nonspecific effect of your siRNA is obtained. In addition, the readers like to know how knockdown of heparanase expression reduced tumor cell growth and invasion, so some levels of gene expression data should be added to increase the ms quality. Lastly, the authors may also add more heparanase expression or activity data from the patients’ samples.

Level of interest: An article of outstanding merit and interest in its field

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