**Reviewer's report**

**Title:** The identification of H3F3A mutation in Giant Cell Tumour of the Clivus and the histological diagnostic algorithm of other clival lesions permit the differential diagnosis in this location.

**Version:** 2  **Date:** 25 Feb 2018

**Reviewer:** Thomas Barth

**Reviewer's report:**

The MS by Federica Scotto di Carlo has significantly improved. The points of criticism raised have been addressed. I can recommend the MS for publication.

However, THERE ARE SOME MAJOR MISTAKES IN TABEL 1 which have to be corrected. Lymphomas (B or T) are NEGATIVE for S100 protein, EMA and Keratins! T cell lymphomas are per definition CD20-NEGATIVE. You should at least define T from B cell lymphomas by CD3 staining. Therefore, CD3 is a essential marker in your algorithm and should be added. Besides T cell lymphoma all other entities listed are CD3-negative.

Plasmocytoma may be EMA and Keratin POSITIVE and are positive for Vimentin: https://app.immunoquery.com/view/panel/dx?dxgroups=692&sensitivity=1&minrefs=gt1&panel type=comprehensive

Please correct this accordingly since is a major FAUX PAS. This should be done very easily.

**Are the methods appropriate and well described?**

If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**

If not, please specify which controls are required in your comments to the authors.

Yes
Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.
I am able to assess the statistics

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