Reviewer’s report

Title: 14-3-3sigma Induces Heat Shock Protein 70 Expression in Hepatocellular Carcinoma

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Reviewer: Luca Di Tommaso

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I read with interest the paper by C.C. Liu and colleagues.

They authors first demonstrated the expression of 14-3-3sigma in HCC; then they were able to correlate this expression to a molecular pathway (β-catenin/HSF-1a/HSP70); finally they did correlate these molecular aspects to a clinical parameter which is vascular invasion. They conclude to use this as a diagnostic marker.

I think the research has been well designed and the paper is well written. However I have some concerns (Major compulsory revisions) about the practical conclusions:

- If the final goal of the authors is to suggests the use of 14-3-3gamma as a diagnostic marker, which is not supported by their data, they need to compare its expression in a (large) cohort of pre-malignant hepatocellular nodules (mainly high grade dysplastic nodules);

- If the authors are suggesting to use this marker as a prognostic one, which indeed seems strongly supported by the study, they need, in keeping with international guidelines, to validate its expression in a completely different series of patients;

- If the authors are simply reporting a novel (and interesting) molecular link in HCC, they can avoid to suggest any clinical 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