Reviewer’s report

Title: Microvessel density by automated analysis from regenerative nodule to small hepatocellular carcinoma - approach with CD105 and CD34 immunoexpression.

Version: 1 Date: 4 October 2013

Reviewer: Freda Passam

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Minor essential revisions

In the current study Paschoal and colleagues have measured the microvessel density in regenerative nodules, dysplastic nodules and hepatocellular carcinoma samples and described that CD105 MVD is more expressed in regenerative nodules whereas CD34 MVD higher in hepatocellular carcinoma.

Overall the study is limited in sample numbers as far as the hepatocellular carcinoma samples are concerned. It has been described before by other groups in larger sample sizes that CD105 is useful in assessing MVD of hepatocellular carcinoma, which carries predictive value (Ho, World J Gastroenterol 2005, Yao, Ann Clin Lab Sci, 2007).

The measurement of endoglin in the regenerative and dysplastic hepatic nodules is new. What is unclear is:
1. How could the knowledge of increased endoglin vs CD34 MVD guide the selection of antiangiogenic treatment?
2. Do the authors have information on the outcomes of these patients?
3. Reduced endoglin in the tumour vasculature has been associated with increased metastatic potential (anderberg, J Exp Med 2013). Were the cases of cirrhosis with reduced endoglin MVD related to higher hepatocellular carcinoma transition?

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

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare I have no competing interests