Reviewer's report

Title: Expression of TLR3 and its correlation with apoptosis, proliferation, angiogenesis and prognostic in HCC

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Reviewer: Kin wah Kin Lee

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In this study, Yuan et al. studied the significance of Toll-like receptor-3 (TLR3) in hepatocellular carcinoma. This study is based on IHC study to correlate expression TLR3, with NF-KB, TRIF, IRF3, PCNA, MMP-2 and CD34. Firstly, they found that TLR3 was downregulated in a cohort of HCC patient specimens when compared to the adjacent non-tumor counterparts. Activation of TLR3 was correlated with NF-KB, TRIF and IRF3. Further analysis showed that TLR3 is negatively correlated with MMP2, CD34, and PCNA. Coupled with these analyses, they found that TLR3 is a good prognostic marker for HCC patients. This study highlights the clinical significance of TLR3 signaling in HCC. However, the mechanistic insight for this study is lacking. This manuscript needs major revision. Below are some comments for this study:

1. This manuscript is not well written and the authors need to amend their grammatical mistakes.

2. How many HCC cases are HBV-related? Any correlation between HBV status with the TLR3 signaling?

3. Survivin and Bcl-2 are known to be direct transcriptional targets of NF-kB. However, Survivin and Bcl-2 was found to be negatively correlated to the expression of NF-kB. Similar case for MMP-2. Can author explain this discrepancy?

Level of interest: An article of limited interest

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

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests