**Reviewer's report**

**Title:** Sustained serological and complete responses in HBeAg-Positive Patients treated with Peginterferon alfa-2b: a 6-Year Long-Term Follow-Up of a Multicenter, Randomized, Controlled Trial in China

**Version:** 1  **Date:** 25 Feb 2018

**Reviewer:** Andreas Maieron

**Reviewer's report:**

I read with interest the report of Jian Sun et al. I believe the paper can give some important insight in our current understanding of who will profit from Peg IFN treatment on the long run and therefore this paper represents an important work. However, there are some major criticism:

I believe there is a great bias on the cohort as stated by the authors - up to one third refused to participate in the study - this might be due to fact that they obtained medical treatment elsewhere.

*Page 11 lines 25 - 26: For long-term follow-up (LTFU), all subjects were contacted by telephone and their continued eligibility was assessed onsite at their local participating centers. The subject was included in the LTFU group if he or she was treated in the original study and gave informed consent, and had no significant medical conditions precluding the study inclusion.*

The authors must stat the exactly criteria for inclusion and exclusion for this study. E.g. how they dealt with patients who where on NA treatment - I guess they have been excluded for LTFU as stated on page 21 line 9 - 15. Please provide the exact numbers on how many patients entered the LTFU analyses in the flow chart.

*Page 11 line 39 - 47: The investigator assessed clinical signs and symptoms, and complications of liver disease (i.e. hepatocellular carcinoma, ascites, variceal bleeding, encephalopathy, jaundice, or liver transplant), and administration of (other) antiviral therapy after the end of the initial study.*
Please provide the numbers of the clinical events that happened - so the reader can learn about the complication rate after PEG - IGN treatment after a mean follow up of up to six years

* At the end of the long-term follow-up the percentage of patients across treatment groups with ALT normalization and who were negative for HBe were 40.7% and 41.3%, respectively, and 44.4% of patients were receiving HBV antiviral therapy

Please provide information on the patients who were HBe Ag negative and had ALT normalisation: how many did receive NA therapy at LTFU and even more important how many did not - where there any cases who developed HBe Ag negativity or even seroconversion that did not receive NA treatment or had a SR or CR at EOS. Was there any HBs Ag decline in the patients treated with NA´s

* The authors should include a analyse of those receiving NA treatment vs those who don't at LTFU at least giving us the numbers and indicating the rate of liver related events.

* How many of the pat. who experienced relapse either in the SR or the CR group would qualify for treatment

* Please indicate how many of those not getting NA treatment should have gotten one according to current e.g. APASL guidelines at LTFU

* Can the authors mention early on treatment predictors of sustainability; please include a analysis. So, we could learn whom to get through a PEG IFN treatment
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.

No

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

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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