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Article type : Correspondence

Re: In response to HEP-20-1785.R1 Letter to the Editors: Growth Hormone Stops Excessive Inflammation After Partial Hepatectomy Allowing Liver Regeneration and Survival by Induction of H2-BI/HLA-G

Title:

Reply to Letter to the Editors: Growth Hormone Stops Excessive Inflammation After Partial Hepatectomy Allowing Liver Regeneration and Survival by Induction of H2-BI/HLA-G

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Disclosure of Potential Conflicts of Interest: The authors declare that they have no conflict of interest.

We would like to provide information that address the Letter to Editors submitted on 17 July 2020 by Lin and Yan regarding our publication.(1) We have provided a response to each point raised by the authors below.

In response to “receptor PIR-B and ILT expression on murine and human NK/NKT cells and macrophages should be analyzed respectively with methods such as flow cytometry.” PIR-B expression on murine cells has been previously characterised.(2-4) Expression of ILT2 and ILT4 in different immune cell types has been characterised, eg as reviewed by Amiot et al (5) which was our reference 9.

In response to “Second, expression, refolding, and functional verification of HLA-G should be performed.” Methods for HLA-G production clearly are stated in supplementary information with appropriate referencing that clearly describe the expression and refolding. In addition, we demonstrate functional validation in a cell-based assay shown in Figure 5H.

In response to “However, HLA-G protein produced by eukaryotic expression would be better for functional assay.” This is mere speculation. Refolded HLA class I molecules, including HLA-G is well established (as per our cited references).

The lack of antibodies available for H2-B1 is acknowledged.

References:

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1. **Ishikawa M, Brooks AJ, Fernandez-Rojo MA**, Medina J, Chhabra Y, Minami S, Tunny KA, et al. Growth hormone stops excessive inflammation after partial hepatectomy allowing liver regeneration and survival via induction of H2-BI/HLA-G. *Hepatology* 2020.
2. Kubagawa H, Burrows PD, Cooper MD. A novel pair of immunoglobulin-like receptors expressed by B cells and myeloid cells. *Proc Natl Acad Sci U S A* 1997;94:5261-5266.
3. Kubagawa H, Chen CC, Ho LH, Shimada TS, Gartland L, Mashburn C, Uehara T, et al. Biochemical nature and cellular distribution of the paired immunoglobulin-like receptors, PIR-A and PIR-B. *J Exp Med* 1999;189:309-318.
4. Mori Y, Tsuji S, Inui M, Sakamoto Y, Endo S, Ito Y, Fujimura S, et al. Inhibitory immunoglobulin-like receptors LILRB and PIR-B negatively regulate osteoclast development. *J Immunol* 2008;181:4742-4751.
5. Amiot L, Vu N, Samson M. Biology of the immunomodulatory molecule HLA-G in human liver diseases. *J Hepatol* 2015;62:1430-1437.



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Letter to the Editor: Growth Hormone Stops Excessive Inflammation After Partial Hepatectomy, Allowing Liver Regeneration and Survival by Induction of H2-BI/HLA-G REPLY

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