Reviewer’s report

Title: beta2-microglobulin induce epithelial-mesenchymal transition in human renal proximal tubule epithelial cells

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Reviewer: Mi-Kyoung K Kwak

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This manuscript demonstrates that #2-microglobulin (#2-M) induced epithelial-mesenchymal transition (EMT) in human renal proximal tubular HK-2 cells. In particular, the authors showed that #2-M reduced cellular iron contents via interaction with hemochromatosis, and thereby activated Hif-1# to promote EMT process. Several comments can be suggested.

1) Fig. 6. Can DES treatment modulate cellular iron level to a similar level of #2-M group? Iron level can be quantified following DES treatment, which is used in Fig. 6.

2) To strengthen the linkage between Hif-1# and EMT, levels of EMT genes can be determined in Hif-1#-knockdown HK-2 following #2-M or DES treatment.

3) Fig. 3C. Nuclear staining and bright field images are required.

4) Fig. 5B. The quality of Hif-1# blot is too poor to be recognized

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 that I have no competing interests.