Author's response to reviews

Title: Carica papaya induces in vitro thrombopoietic cytokine secretion by mesenchymal stem cells and haematopoietic cells

Authors:

Jazli Aziz (jazliaziz87@gmail.com)
Noor L Abu Kassim (noorlide@iium.edu.my)
Noor H Abu Kasim (nhayaty@um.edu.my)
Mohammad T Rahman (m.tariqu.rahman@gmail.com)

Version: 3
Date: 1 June 2015

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MS ID: 1833446196157283
Authors: Jazli Aziz, Noor L Abu Kassim, Noor H Abu Kasim and Mohammad T Rahman
Journal: BMC Complementary and Alternative Medicine

Dear Editor:

Thank you for giving us the opportunity to revise our manuscript. We have made some changes in based on the referee’s comments. Below are our responses.

Referee’s Comment 1: Authors shows only the induction of cytokine expression and cell motility of SHED and hematopoietic cells after treatment with Carica papaya. Additional experiments, for example co culture of treated MSCs with liver cells, are required to make any conclusions like that in figure 4.

Author’s response: While empirical evidence provided by co-cultures as suggested by the reviewer would further strengthen the model proposed in the manuscript, the authors feel that sufficient support has already been provided by previous publications (as referenced) to at least propose such changes as shown in the model.

Referee’s Comment 2: Author should explain, why they have used SHED? Why are dental stem cells important for this topic?

Author’s response: SHED are of mesenchymal stem cell type which are present in different parts of the body including bone marrow, liver and kidney, some of which play vital role in maintaining and influencing haematopoiesis in the bone marrow. Thus, thrombopoietic cytokine secretion by SHED supports the notion that papaya extract might induce thrombopoietic cytokine synthesis not only hematopoietic origing but also of other types of stem cells. This is highlighted in
the last paragraph of the introduction.

Referee's Comment 3: Author must correct the discussion.
Author's response: The discussion has been modified to include more references and elaboration to emphasise this link between mesenchymal stem cells derived from dental pulp and haematopoiesis in bone marrow.