Author's response to reviews

Title: Genistein inhibits tumor invasion by suppressing multiple signal transduction pathways in human hepatocellular carcinoma cells

Authors:

Shulhn-Der Wang (wsd917@ms42.hinet.net)
Shung-Te Kao (stkao@mail.cmu.edu.tw)
Ching-Ju Liu (chingiu2006@gmail.com)
Chia-Chou Yeh (yehcc0530@gmail.com)

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Cover letter

Dear Editor and reviewers

I am submitting the manuscript by Wang et al., titled “Genistein inhibits tumor invasion by suppressing multiple signal transduction pathways in human hepatocellular carcinoma cells”, which is being submitted for possible publication in the BMC Complementary and Alternative Medicine.

We first demonstrated that Gen reduced TPA-induced cell invasion and inhibited the secreted and cytosolic MMP-9 forms in HepG2 cells. Gen suppressed MMP-9 transcription by inhibiting Activator protein (AP)-1 and nuclear factor-kappaB activity. Gen suppressed TPA-induced AP-1 activity by the inhibitory phosphorylation of ERK kinase and c-Jun N-terminal kinase (JNK) signaling pathways, and TPA-stimulated inhibition of NF-kappaB translocation into the nucleus through IkB inhibitory signaling pathways. Moreover, Gen suppressed TPA-induced activation of extracellular signal-regulated kinase phosphatidylinositol 3-kinase/Akt that is upstream of NF-kappaB and AP-1. In conclusion, we conclude that Gen and its inhibition of multiple signal transduction pathways have a controlling invasiveness and metastasis of HCC.

This submitted work is not currently under consideration elsewhere. All authors have been seen and approved of the submission of the manuscript for consideration of publication in BMC Complementary and Alternative Medicine. The manuscript has edited the spelling and grammar by a professional editor who is an English native speaker and a member of American Medical Writers Association. Please handle our manuscript at your convenience. Thank you very much for your kindly help.

Sincerely yours,

Chia-Chou Yeh