Author’s response to reviews

Title: Integrated microarray and multiplex cytokine analyses of Kaposi’s Sarcoma Associated Herpesvirus viral FLICE Inhibitory Protein K13 affected genes and cytokines in human blood vascular endothelial cells

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Version: 2 Date: 30 November 2008

Author’s response to reviews:

Dear Editor:

I would like to submit the enclosed manuscript on “Integrated microarray and multiplex cytokine analyses of Kaposi’s Sarcoma Associated Herpesvirus viral FLICE Inhibitory Protein K13-affected genes in human vascular endothelial cells” by Punj et al for consideration of publication in BMC Genomics. Kaposi’s sarcoma (KS) associated herpesvirus (KSHV) infected KS lesions are characterized by proliferating spindle cells, extensive neoangiogenesis and a prominent inflammatory infiltrate. In a previous study (Matta et al, Oncogen, 26, 1656, 2007), we showed that expression of KSHV-encoded vFLIP K13 is sufficient to induce spindle transformation of vascular endothelial cells, thereby mimicking the effect of viral infection. In this study, we have used gene array analysis combined with multiplex cytokine assay to determine change in global gene expression induced by K13 in vascular endothelial cells. We report that K13 induces the expression of several chemokines, cytokines, and genes involved in immune and inflammatory responses, anti-apoptosis, stress response, and angiogenesis that have been previously implicated in the pathogenesis of KS. However, K13 fails to mimic the effect of KSHV on lymphatic reprogramming of vascular endothelial cells. We also identify NF-κB as the main signaling pathway affected by K13. We believe that our results will be of interest to the readers of BMC Genomics from diverse fields such as KSHV biology, virus-host interactions, and viral oncogenesis. I will like to suggest Dr. Roger Bumgarner as the editor for this manuscript.

Sincerely,

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