Author's response to reviews

Title: Deregulation of microRNAs Let-7a and miR-21 mediate aberrant STAT3 signaling during Human Papillomavirus-induced Cervical Carcinogenesis: Role of E6 Oncoprotein

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Author's response to reviews: see over
Dear Dr. Solera,

Greetings of the day!

I am pleased to submit the enclosed manuscript entitled “Deregulation of microRNAs Let-7a and miR-21 mediate aberrant STAT3 signaling during Human Papillomavirus-induced Cervical Carcinogenesis: Role of E6 Oncoprotein” for its publication in your esteemed journal “BMC Cancer”.

We demonstrate for the first time, an existence of miRNA-mediated loop involving miR-21 and Let-7a, which are positively fed by viral oncoprotein E6 and responsible for aberrant STAT3 signaling during HPV-induced cervical carcinogenesis. In addition, targeting STAT3 with curcumin or stattic has similar anti-miR-21 effect and the loss of miR-21 promote gain in PTEN expression that can reversibly inhibit STAT3 activity. Similarly we demonstrate that Let-7a overexpression can effectively suppress STAT3 expression and activation. Collectively, silencing STAT3 by siRNA, curcumin and Stattic, and targeting miR-21 by antisense or small-molecule compounds may represent new therapeutic strategies for targeted treatment of cervical and other cancers which invariably overexpress STAT3.

I am sure the manuscript will be interest to you and the readers of this esteemed journal. I also assure that none of the authors have any competing interest.

We look forward to your early favorable decision on it.

With best regards,

Yours sincerely,

Alok C. Bharti, Ph.D.