Author's response to reviews

Title: A Kallikrein 15 (KLK15) single nucleotide polymorphism located close to a novel exon is associated with poor ovarian cancer survival

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Dear Editor

I hereby submit the manuscript entitled "A Kallikrein (KLK) 15 single nucleotide polymorphism located close to a novel exon B is associated with poor ovarian cancer survival" by Batra et al, for publication as a research article in BMC cancer. Our findings highlight the potential for KLK15 to be considered as a biomarker for ovarian cancer survival.

The rationale for and results of our comprehensive bioinformatic and genetic analysis are summarised as follows:

Several reports indicate that the KLK gene family is a possible source of new prognostic biomarkers for this disease. The differential splicing mechanisms exhibited within the KLK genes and the effect of these splice variants on the aetiology or progression of disease has been of interest for researchers and clinicians dealing with various malignancies. In the current study, we demonstrated the significance of KLK15 gene in ovarian cancer by providing evidence for an association of the rs266851 SNP with ovarian cancer survival and replicating our results in two independent datasets. Interestingly, rs266851 was found to be associated with an increased risk of breast cancer in the Cancer
Genetics Markers of Susceptibility (CGEMS) project Breast Cancer GWAS, demonstrating applicability of our results to studies investigating the role of KLK15 in other hormone-related cancers. The location of this SNP adjacent to a novel exon B and in putative HSF2 and SRp binding sites should provide impetus for downstream functional assays and additional independent validation studies to assess the role of KLK15 regulatory SNPs and KLK15 isoforms with alternative intracellular functional role in ovarian cancer survival and its suitability as clinical biomarker.

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