Author’s response to reviews

Title: Polymorphisms in MMP-1, MMP-2, MMP-7, MMP-13 and MT2A do not contribute to breast, lung and colon cancer risk in Polish population.

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Version: 1 Date: 23 Jun 2020

Author’s response to reviews:
Dear Editor,

we would like to thank reviewers for comments on our article "Polymorphisms in MMP-1, MMP-2, MMP-7, MMP-13 and MT2A do not contribute to breast, lung and colon cancer risk in Polish population" (MS-HCCP-D-20-00017). Please find our responses below and corresponding revisions in the manuscript that are highlighted in yellow. We also carefully read the manuscript and made some language corrections. We hope that the revisions are satisfactory and fulfil the requirements for publication in Hereditary Cancer in Clinical Practice.

Reviewer 1:
Metalloproteinases and metallothioneins are, as described in the paper, important in many biological pathways both for sustaining normal activities and detoxification of carcinogens like cadmium, as described in the intro. Thus, variation in these are obvious candidates to be examined for interrelation between environmental factors and cancer. The results seems valid, and should be known to be added to public knowledge on this topic.

Response:
Thank you for this statement.

Reviewer 2:
An interesting paper about SNPs in Zn-related proteins, even though an association to cancer was not seen (important to publish negative results). Meta analysis have been performed for most of the SNPs involved as conflicting results have been published regarding the studies SNPs and their association to cancer.

What makes this study different is that Zn serum levels were measured and adjusted for in the multi variable analysis. An interesting paper for those with closely related research interests.

Minor revisions:
When reading through the discussion I questioned why do this study if meta-analysis studies have been performed on these SNPs before, would be good to highlight earlier how this study is different from them others (Zn serum levels) and introduce the meta-analysis in the introduction.

Response:
We thank for this suggestion and fully agree with it. We mentioned in introduction the results of performed meta-analyses and highlighted the difference between our study and previous analyses (lines 94-102).