Reviewer's report

**Title:** Genetic Polymorphisms in Osteopontin Promoter Is Associated with the Distant Metastasis of Gastric Cancer and Poor Progress in Chinese Patients

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**Reviewer:** Hong Fan

**Reviewer's report:**

This manuscript by Zhou and colleagues investigates the association between genetic polymorphisms in OPN promoter and the clinical parameters of gastric cancer in Chinese population. The results showed that there was a significant difference between the number of gastric cancer patients with stage IV and those with stage I (IA+IB; P = 0.014) and between those with stage IV and all other stages (IA+IB+II+III). Patients carried C/C genotype has a lower rate of survival than one carried C/T and/or T/T genotype. It is an interesting and attractive finding in the study of cancer susceptibility.

- **Major Compulsory Revisions**
  1. In gastric cancer cells, luciferase activities assay showed that C/C genotype has a significantly higher transcription activity than that of T/T genotype. The author mentioned they found overexpression of OPN in gastric cancer by IHC in previous study. In gastric cancer tissues, whether the polymorphisms of OPN is related to expression of OPN.
  2. In result section, the author mentioned that no association was found between the SNPs in the OPN promoter and lymph node metastasis. However, in the abstract, they made a conclusion which is “The variation at nt -443 in the OPN promoter may be associated with the metastasis of gastric cancer. It sounds a little confusing, please explain why.
  3. SNP should be described as rs. in SNP database instead of nt-443 and so on.

- **Minor Essential Revisions**
  1. The author evaluated the association of OPN SNP with gastric cancer with different TNM stage. So larger population should be investigated the frequency of OPN SNP genotype in order to make a unanimous result.

Specific comments:

1. Title: The title of this manuscript should be considered carefully and reflect the significant of the present study.
2. Key word: The use of comma and semicolon is not uniform.
4. Statistical analysis: the author use Student’s t-test for comparison of age between cases and controls, is the independent t-test or Paired-Samples T test?

5. References: Lacking Comma between Global and cancer in Reference [1]

6. Fig 1: the number of bases in sequences for the same site is not uniform. For example: nt-443TT display AGTTTTCTGAACTCC; nt-443CT display AAGTTTTCTGAACTCC; nt-443CC display GTTTTCTGAAC

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.