Reviewer's report

Title: MMP28 (epilysin) as a novel promoter of invasion and metastasis in gastric cancer

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Reviewer: Keishi Yamashita

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In this present study, the author identified differential expression of MMP-28 in invasive cancer cells as compared to non-invasive cancer cells. They investigated clinical relevance of MMP-28 in primary gastric cancer, and made transfectants to reveal the functional role in gastric cancer.

Comments

1. Q-RT-PCR should be done for mRNA expression analysis.

2. Full image is needed for Western blotting of MMP28.

3. Detailed description is needed for localization of MMP28. It seems to be localized to nucleus, which is strange among MMP family. Fluorescent staining of cancer cells transfected for MMP28 can confirm it.

4. Scoring method is not as usual. German score is recommended.

5. In survival curve, how many cases for each group? Prognosis is too bad, when it include considerable cases with stage I/II patients (5-year survival rate of 70 to 99%). The author should explain such bad clinical outcome. Moreover, multivariate prognostic analysis is needed.

6. RNA interference is the most optimal assay to elucidate MMP-28 functional role in cancer invasion and metastasis.