Author's response to reviews

Title: Epidermal growth factor mediates detachment from and invasion through collagen I and Matrigel in Capan-1 pancreatic cancer cells

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Author's response to reviews: see over
March 11, 2005

Dear Dr. Shaw:

We are submitting a revised version of this manuscript for publication in BMC Gastroenterology. We have performed additional experiments to address the issues raised by one of the reviewers, and have revised the manuscript according to the suggestions given. These are discussed in a point-by-point fashion below:

1. We have performed immunoblotting for EGFR, erbB2, erbB3 and erbB4 in the Capan-1 and MIA PaCa-2 cells. These experiments, using commercially available antibodies, showed no bands at the expected molecular weights for these receptors. Whether this represents technical issues regarding the performance of the immunoblotting, non-specificity of the antibodies, or true lack of expression of these receptors in these cells is not clear. We doubt the latter possibility due to the fact that the immunofluorescence experiments for EGFR were positive, and other groups, using other antibodies, have shown expression of EGFR, erbB2 and erbB3 in Capan-1 cells (e.g. for protein expression by Thybusch-Bernhardt A, et al, Eur J Cancer 37:1688-1694; 2001; for mRNA expression by Oikawa et al, Int J Pancreatology 18:15-23; 1995). Expression levels and functional activation of these receptors are not synonymous, and showing one does not necessarily prove the other. Our functional studies with respect to adhesion and invasion clearly show differential effects following treatment with ligands or inhibitors of these receptors.

2. As suggested by the reviewer, we have combined the invasion data for the two cell lines (now incorporated into Figure 4). We did not combine the adhesion data for the two cell lines (Figure 2 with Figure 10 in the previous submission), because this would lead to an unnecessarily confusing figure. Rather, we have moved the adhesion data for the MIA PaCa-2 cells to a position following the adhesion data for the Capan-1 cells (i.e. Figure 10 from the previous version is now Figure 3). This makes for a more coherent and logical presentation, as the results for the MIA PaCa-2 cells are now integrated with the results of the Capan-1 cells, as suggested.

3. We have made the nomenclature consistent.

Finally, we have made the formatting changes as directed. With these changes, we believe that the manuscript has been strengthened, and we look forward to its publication in BMC Gastroenterology.

Sincerely,
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