Reviewer’s report

Title: Desmoglein 2 is a novel substrate of kallikrein 7 in pancreatic cancer

Version: 2 Date: 31 July 2008

Reviewer: Martyn Chidgey

Reviewer’s report:

Minor essential revisions
1. Figure 3. I now accept that suitable control experiments have been carried out. I think that it is important that a sentence or two is placed in the results section explaining that negative controls with laminin and other potential substrates have been performed to make this point clear to readers of the paper. I leave it for the authors to decide whether or not to include the relevant data or leave it as ‘not shown’.

2. I may be mistaken but it looks to me as if the immunohistochemical analysis of human skin with the anti-Dsg1 antibody does show staining of basal cells. The argument about the specificity of the antibody (as demonstrated in Figure 4A) would be strengthened by testing the antibody on recombinant Dsg proteins (i.e. presence of a band in the Dsg1 lane, absence in other Dsg lanes). A statement to the effect that the antibodies have been tested for specificity should be added to the text.

Discretionary Revisions
1. I would like to see the responses to Comment 2 (Reviewer #1) and Comment 6 (Reviewer #2) put together in a short paragraph, perhaps at the end of the discussion. This paragraph should explain that KLK7-transfected BxPC-3 cells do undergo changes in morphology and that these changes are likely to be due to loss of multiple substrates including E-cadherin (as previously published) and Dsg2 (current paper). If such a paragraph is not included it seems to me that readers of the paper will be left with unanswered questions (as were both reviewers) that will lessen the impact of the paper.

2. Discussion. Paragraph 3. Sentence beginning ‘Initial studies....’ should be rewritten as it currently does not make sense?

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