Reviewer's report

Title: Gene Expression Changes Associated with Barretts Esophagus and Barretts-Associated Adenocarcinoma Cell Lines After Acid or Bile Salt Exposure

Version: 1 Date: 13 February 2007

Reviewer: Alan Casson

Reviewer's report:

General
This study addresses an important area related to esophageal carcinogenesis, and further clarifies a number of issues regarding in vitro models. However, the following minor revisions would enhance this work.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1) Regarding the cell lines used, especially Seg-1, it is possible that with increasing numbers of passages, response to exogenous stimuli and gene expression changes with time. The authors should document (esp. for Seg-1) what passage number (if known) these cell lines were used, and whether any temporal changes were noted.

2) Regarding the six patients and respective tissues, it would be clearer to include this number at the outset (under Tissue samples). Were there any unique characteristics related to this patient group in light of these results. ie. did these patients have a history of GERD (and if so, how severe, duration etc) and did any have objective measures of acid/ and or bile exposure by 24hr pH/Bilitec

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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