Reviewer's report

Title: Small lytic peptides escape the inhibitory effect of heparan sulfate on the surface of cancer cells

Version: 2 Date: 6 December 2010

Reviewer: David Bedell B. Alexander

Reviewer's report:

I find that the manuscript is much more understandable to a general reader, such as myself, however, some revision still needs to be done.

Major revision

1. My previous comment "An experiment which delineates the cytotoxic effect of these peptides against cancer cells at concentrations at which normal-like cells are mostly unaffected needs to be performed" was not answered in the revised manuscript. Presentation of IC50 values is not sufficient. For example, how many cancer cells are killed at concentrations of the peptides which kill 10% of the normal cells? This data could be presented in a table or a figure such as Fig. 2, comparing the survival curves of cancer and normal cells exposed to the 9mers.

2. I don't understand the meaning of the following sentence: "However, given that HS was not detected on the cell surface of the Ramos cells displaying the highest amount of cell-associated CS, there is likely to be very little, if any, CS present on the cell surface."

Minor revisions

1. Fig 2 does not correlate to the text.

2. There remain minor errors in the writing. For example in the legend to Table 4, "aThe peptide concentration killing 50% of the cells..Data are means of three independent experiments performed in triplicate": note the two periods after the first sentence. Another example is that primarily is misspelled in the following sentence: "By examining the expression pattern of GAGs on the cell surface of the CHO-K1 cells, we found that the cell surface PGs primarily contained HS chains."

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

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.