Reviewer's report

Title: Therapy with un-engineered naive rat umbilical cord matrix stem cells markedly inhibits growth of murine lung adenocarcinoma

Version: 3 Date: 27 April 2010

Reviewer: Joanna Stewart

Reviewer's report:

Major
1. The statistical methods need to be more explicit. The details of the overall analysis method should be described, not just the method used to adjust for multiple comparisons. The methods imply that the experiments were all conducted in duplicate and measures taken usually in triplicate. The statistical methods need to describe how this was handled in the analysis (eg means of triplicates used or raw values? What about the duplicate experiments? Was a variable included in the analysis representing the replicate experiments or were they analysed separately?)
2. The results of each overall analysis should be reported, at least as a footnote in the graphs.
3. The actual p values should be quoted – not simply <.05, ns etc. – These could be inserted on the graphs instead of ns or *. This is particularly important in the case of ns where no order of magnitude can be inferred except >=.05
4. Standard deviation should be used to describe the variation, not SE, to give a representation of the spread of the data and also for use by other researchers wishing to use this study to power future research.

Minor
1. There is a typo for the p value after ** on the last line of the methods – however this will be removed if you quote actual p values rather than use * etc

Discretionary
1. It is not appropriate to use bar graphs for this sort of data. It would be more correct to represent the means by points. More informative still would be to use box plots.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interests