Author's response to reviews

Title: Kinetics of cancer: a method to test hypotheses of genetic causation

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We have not yet received the second round of editorial comments on our manuscript. However, we have improved our discussion of the GI carcinoma observations raised as an issue by Dr. Shibata in his review, we have improved the presentation of our analytical methods, and we discuss and present the data more clearly. For these reasons, we have decided to submit a revision at this time.

In particular, in our revision:

1. We deal explicitly with the seven GI carcinomas observed among the 135 mice in the data set. We present three different ways of dealing with these observations, and then do the analyses under each of the three methods. We show that the results do not change qualitatively and that the quantitative changes are very small. There is no overall change in the outcome of our analyses or conclusions under any of the methods. To present these extra analyses on carcinomas, we have expanded the figures.

2. We now use a standard statistical method to estimate survival curves based on survival analysis. This method causes only very slight quantitative changes and no qualitative changes. But the improved approach is important, because we want our style of analysis to be used by others. So we also explain more clearly how we handle our data and proceed with the analysis.

3. We explain more fully the details of the data we used, in part because that is always a good idea and in part to provide a clearer explanation of the analytical technique. We have significantly improved the spreadsheet that presents the data, so that others can use these data to learn our method or to test alternative approaches.

On the whole, the paper has changed very little in structure or outcome. Mainly, we have provided clearer explanations and minor technical improvements that will allow our method to be used more widely.