Reviewer's report

Title: Bladder inflammatory transcriptome in response to tachykinins: Neurokinin 1 receptor-dependent genes and transcription regulatory elements.

Version: 1 Date: 2 March 2007

Reviewer: Anthony Atala

Reviewer's report:

General
This is an interesting manuscript by one of the leaders in the field. The molecular studies and analysis are described in great detail, and are on the whole well done and correctly interpreted. My specific comments are as follows:
1. This is an excellent molecular investigation, but I doubt there are many (if any) individuals in the general urologic community, especially clinical urologists, who will understand the manuscript.
2. The Introduction and Discussion sections are much too long and reflective of a review type article. Both sections could easily be cut in half and focused largely on the urologic importance of performing the study and the translational nature of the findings.
3. The study would have been greatly strengthened if there were some information concerning the status of the bladder(s) from these animals. Histological or physiological data from the same bladders on which the molecular studies were performed would have been very helpful in understanding the importance of the findings.
4. What experimentally testable hypothesis results from this study? The authors have already nicely demonstrated the role of the NK1 receptor to antigen induced cystitis, so how does this new level of molecular analysis further impact mechanistic understanding of the disease process? That is, are any of the identified targets subject to pharmacological modulation in vivo or in vitro to establish their importance? That is, what is the therapeutic target that would result from this work. How would this information transfer to the clinic?

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

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

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Discretionary Revisions (which the author can choose to ignore)

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What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of limited interest

Quality of written English: Acceptable

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