Reviewer’s report

Title: Chronic BCG treatment of mouse bladder selectively stimulates small GTPases and HLA antigens and inhibits single-spanning uroplakins

Version: 1 Date: 20 October 2007

Reviewer: Dah-Shyong S Yu

Reviewer’s report:

General

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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)

This is a well organized and structured study with focusing in linking a putative theory on new regulatory genes related to BCG-induced immune response and anticancer effects. Using used a combination of SSH, differential display, and Virtual Northern and discovered three major groups of genes: members of the small GTPase signaling molecules; those involved in antigen presentation (HLAs); and genes down-regulated by BCG, including uroplakin 3a and uroplakin 2. The authors proposed that BCG induces both host adaptive immune response (HLA) and host mediated pathogen destruction (GTPases) with a down-regulation of uroplakins.

In general, this manuscript in good writing and format. One concern is on the representative of using 4 weeks subsequent instillations as “chronic BCG treatment”. In clinical viewpoint, induction therapy with 6-weekly BCG instillations is not equal to maintenance therapy for longterm chronic inflammation process and therapeautic efficacy. So it is better to replace the term: “chronic BCG treatment” in text by “repeated BCG treatment” to avoid the confusion.

What next?: Accept after discretionary revisions

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Acceptable

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.