4/25/2019

Dr. Jaydev Upponi Science editor 1 Alewife Center, Suite 200 Cambridge, MA 02140

Dear Dr. Upponi:

Thank you for the opportunity to revise our manuscript entitled "A model of self-limited acute lung injury by unilateral intra-bronchial acid instillation" for your consideration as a methods article in the *Journal of Visualized Experiments*.

This manuscript details a pre-clinical model of experimental acute lung injury that reproduces many of the pathogenic features of the Acute Respiratory Distress Syndrome (ARDS), a devastating inflammatory lung disease with substantial morbidity and mortality. The murine model is centered on selective left lung instillation of acid which results in unilateral and self-limited murine acute lung injury,and enables the use of the right lung as an internal control. This model has enables us and others to make important contributions to our understanding of ARDS pathogenesis and resolution which may lead to novel therapies.

We have addressed all editorial and reviewer comments. Please see the attached manuscript with revisions in blue highlight, and the rebuttal letter with answers to specific comments.

We hope you will find the methods described in this manuscript to be of interest to the readers and viewers of the *Journal* and that you will share our interest and enthusiasm for the work.

Sincerely,

Raja-Elie E. Abdulnour on behalf of my co-authors