Reviewer's report

Title: Lung ultrasound: a useful tool to differentiate acute cardiogenic pulmonary edema and acute respiratory distress syndrome

Version: 1 Date: 4 March 2008

Reviewer: Michele Masini

Reviewer's report:

A very important, novel, and beautifully illustrated study showing the capability of lung ultrasound to differentiate cardiogenic pulmonary edema from acute respiratory distress syndrome.

I have only minor comments which the Authors might wish to address:

1. In the title and throughout the manuscript, lung ultrasound might be replaced by chest sonography (there is more in the image, and in the chest, than just lung).

2. â##Comet-tail artifactsâ## and â##B-linesâ## might be replaced everywhere with â##ultrasound lung cometsâ##. They are not artifacts, since the first echo is a true reflection.

3. In the abstract, please be more quantitative: in the Results add percentages, and p value, for each sign in the two groups.

4. Introduction is far too long. Please, delete figures from this section, and try to limit to no more than 1 page.

5. Results. Figures are very nice, but a bit redundant and confusing. Please, show 5 figures, each one describing a sign in ARDS and in CPE. For instance, Figure 1, pleural line: altered in ARDS (left panel), normal in CPT (right panel). Fig. 2, spared areas: present in ARDS (left panel); absent in CPE (right panel), and so on. Do not use for every patient the figure with the 2 transducers.

6. Please, add an histogram showing the % value, for each sign, in the 2 groups: empty bar ARDS; full bar, CPE.


8. Ref 29 must be updated.

9. Some minor typos must be corrected. For instance, on page 3 of the discussion, â##everything or nothingâ## phenomenon is â##all or noneâ## phenomenon.

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field
Quality of written English: Needs some language corrections before being published

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