Reviewer’s report

Title: Admission of advanced lung cancer patients to intensive care unit: should we temper recent optimism? A retrospective study about 76 cases

Version: 1 Date: 17 November 2010

Reviewer: Lisa Barbera

Reviewer’s report:

Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

Page 7, para 2, MICU management: are the authors able to describe how many patients of the patients who died in the MICU, died in spite of all attempts to ‘save’ them (e.g. including cardioversion) versus a planned withdrawal of services.

Page 14 para 4, discussion on EGF and TKI is very tangential to the main point of the paper and could be easily omitted.

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

Page 3, para 1, line 9 there are 2 periods.

Page 5, para 2, line 5, this sentence is unclear. I think the authors mean that patients who were admitted to make a diagnosis or for staging were not eligible.

Page 11, line 1, I think there is a typo, it should be thirty six (not twenty six).

Page 13, line 5, there are 2 periods.

Page 13, para 2, line 5, is the ECOG performance status? Please define.

Page 13, para 2, line 7: I think the authors mean “Thirdly, although we have checked for a ...”

Page 13, para 3, line 1: although the other studies listed in Table 4 include earlier stages of disease, in fact many of them have a larger sample size than the present study with the majority of cases being advance stage.

Page 14, para 3, line 4: “this prompts us to suggest that prior radiotherapy favors acute respiratory failure...” , the meaning is not clear and should be re-worded

Page 15, para 3, line 1: statement that SAPSII and APACHEII were not predictors in other studies should be referenced.

Table 2. some non-significant p values are highlighted.

Table 3. Missing column titles.

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

I don’t feel the title (Tempering recent optimism) really fits with the tone of the paper.

The authors make an attempt to frame the paper in terms of the ethics of ICU admission for these patients, but this is not an ethics paper. It is a paper about appropriate patient selection for a scarce resource. There are ethical implications to this issue, but I don’t think this paper is poised to make definitive statements about them. I think this is a point for the discussion.

It is not clear to me if the main unique thing about this paper is the exclusive focus on advanced lung cancer patients with a comparison to existing literature versus the finding that admission for treatment complications is associated with better outcomes. Has this been assessed in the other studies and not significant or never assessed as a prognostic variable?

A description of any relevant hospital policies for admitting cancer patients to the MICU should be described in the methods.

Page 5, para 2, line 11: the sentence starting “Indeed, patient who stay less than 24 hours…” is confusing, I am unclear of the meaning.

Page 8: the methods are not explicitly clear enough about which variables were considered for inclusion in the model and how the decision was made to choose one variable over another in the case of collinearity (was this formally tested or based on clinical judgement). For backwards selection, usually all variables would be included at the beginning, not just the ones significant on univariate (a variable not significant on univariate, may be significant on multivariate). I think there is a power issue here and the methods used should be justified in that respect.

Page 10, indications for admission: one of the main findings of the paper is that patients admitted for complications of cancer management do better. It would be helpful to have more details about the kinds of complications for which patients were being admitted and their frequency.

Page 11, para 1, final line: this line (and the one in the abstract) is contradictory to line 3 on page 12 which states no one went on to receive chemotherapy.

Page 11, para 2, line 7: this is the first and only mention of analysis by cycle of chemotherapy, I think this could be omitted

Page 15, para 3, final sentence: this seems to be an overstatement based on results of this paper

Page 16, para 2: it is reasonable to discuss the need for data on alternative outcomes such as QoL. I don’t think this data would address or resolve ethical issues as suggested in second last statement. I think this paragraph and the following paragraph could be combined and tightened up.

Table 1: please include other usual demographic data like age, sex and period in this table. Explain what non-pulmonary neoplasm means. In the staging section the number of NSCLC and SCLC patients adds up to 78, not 76. Needs correction. Describe what the category metastasis means (if it is stage IV NSCLC
and extensive stage SCLC this adds up to 47 not 44)

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**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.