Reviewer's report

Title: The prognostic role of Lung Cancer Symptom Scale (LCSS) and pulse oximetry data in patients with lung cancer.

Version: 1 Date: 15 September 2004

Reviewer: victor chang

Reviewer's report:

General
The role of the Lung Cancer Symptom Scale as a predictor of survival is explored in this prospective study. These researchers found that certain symptoms in the LCSS were predictive of survival.

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

1) It is important to demonstrate that the Lung Cancer Symptom Scale symptoms or summary scores have a contribution independent of the Karnofsky Performance Status. This is not clear from the description of the analyses or from Table 4. Perhaps the authors could list the initial set of variables they used for the step-wise Cox model.

2) The Discussion is disjointed and should be reorganized and rewritten. I would start the Discussion with “Despite significant advances……and the FACT Lung Questionnaire”. The next paragraph might be “in our cohort study of lung cancer patients, we found that SpO2, appetite and fatigue were associated with an increased hazard of death. [Then review the literature on these symptoms as predictors]. Generalization of this model is limited by….The next paragraph on bias and underestimation of fatigue (and other symptoms, symptom burden index) by health care professionals. Conclusion that further research should be performed with the LCSS and pulse oximetry as prognostic guides. .

3) More of the data on the SpO2 should be summarized? What percentage of patients had SpO2 less than 90%, and were they placed on oxygen? To what extent is the SpO2 a measure of COPD as well as lung cancer severity?

4) A model with 14 variables has been tested on a sample of 41 patients. I am not sure if this is valid, or how this will limit the value of the results.

5) The LCSS was designed in English. Presumably these patients were asked to use a Portuguese version. Can the authors provide a reference for their version, or describe how it was translated?

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

6) In the design section, “A convenience sample of ambulatory patients with lung cancer….. New patients admitted for lung cancer therapy were deemed eligible…” How the cohort was developed should be clarified. “It might be simplest to say that consecutive patients with advanced or metastatic lung cancer seen from October 2000 to April 2001 were recruited to participate. Outpatients who attended the Pulmonary Division and inpatients admitted for lung cancer therapy were asked to participate.”

7) In the Discussion… A SpO2 bellow (below)

8) In Discussion “Notwithstanding measurement of pulse oximetry and LCSS administration were fast and did not burdened health care staff, generalization of our model should await may be hampered by limitations of our study” could be changed to “Measurement of pulse oximetry and completion of the LCSS form were fast and were not burdensome for the health care staff. Generalization of our model is limited by the small sample size, heterogeneity of therapeutic
approaches, and absence of comorbidity data.”

Discretionary Revisions (which the author can choose to ignore)

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

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: Yes

Declaration of competing interests:

None