# GUEST <u>EDITORIAL</u>



# Nutrition and exercise interventions for patients with lung cancer appear beneficial, but more studies are required

N. Kiss MND AdvAPD\* and

E. Isenring BHSc(Nutr&Diet) AdvAPD PhD<sup>†</sup>

Patients with lung cancer have a symptom burden—including fatigue, anorexia, and weight loss—that is among the highest for all types of cancer<sup>1</sup>. These symptoms have the potential to result in malnutrition and subsequent poorer patient and clinical outcomes, such as reduced quality of life, reduced tolerance to treatment, and increased health care costs<sup>2</sup>. Interventions that improve fatigue and maintain or improve nutrition status are therefore of great importance.

The systematic review by Payne  $et al.^{\frac{3}{2}}$  of exercise and nutrition interventions in patients with advanced lung cancer in this issue of *Current Oncology* highlights the limited high-quality research that has been conducted in this area. The authors conclude that, although there appears to be some benefit from exercise and nutrition interventions, further research is required.

One of the reasons a larger body of evidence is not available on this topic may relate to the characteristics of the lung cancer population. As the authors note, recruitment and attrition were problematic in all the included studies. The challenges of studying supportive care interventions in advanced lung cancer patients has previously been discussed. It has been suggested that poor performance status, poor ability to communicate in English, and rapidly changing health status may all contribute to low recruitment and high attrition<sup>4</sup>. Future intervention research in this group needs to account for those factors in the study planning stages.

The authors also observe that nutrition counselling as an intervention was not tested in any of the studies. Intensive individualized nutrition counselling has previously been demonstrated to be effective in achieving improvements in patient and clinical outcomes in both head-and-neck and gastrointestinal cancers<sup>5,6</sup>. This area warrants further exploration in patients with lung cancer.

Clinical practice guidelines have recently been developed for the medical and supportive care management of patients with non-small-cell and small-cell lung cancer<sup>7</sup>. The paucity of research on exercise

and nutrition interventions is reflected in the lack of related recommendations in the guidelines. The systematic review by Payne *et al.* raises awareness of this under-researched area and provides suggestions for future research.

### **CONFLICT OF INTEREST DISCLOSURES**

The authors have no financial conflicts of interest to declare. NK is a PhD student on a scholarship from the Victorian Cancer Agency.

## **REFERENCES**

- Cooley M. Symptoms in adults with lung cancer. A systematic research review. J Pain Symptom Manage 2000;19:137–53.
- 2. Bozzetti F, Arends J, Lundholm K, Micklewright A, Zurcher G, Muscaritoli M. ESPEN guidelines on parenteral nutrition: non-surgical oncology. *Clin Nutr* 2009;28:445–54.
- 3. Payne C, Larkin P, McIlfatrick S, Dunwoody L, Gracey J. Exercise and nutrition interventions in advanced lung cancer: a systematic review. *Curr Oncol* 2013;20:e321-37.
- Schofield P, Ugalde A, Carey M, et al. Lung cancer: challenges and solutions for supportive care intervention research. Palliat Support Care 2008;6:281–7.
- 5. Findlay M, Bauer J, Brown T, et al. on behalf of the Clinical Oncological Society of Australia. Evidence based practice guidelines for the nutritional management of adult patients with head and neck cancer [Web page]. Sydney, Australia: Cancer Council Australia (wiki platform); 2011. [Updated version available online at: http://wiki.cancer.org.au/australia/COSA:Head\_and\_neck\_cancer\_nutrition\_guidelines; cited March 18, 2013]
- Isenring E, Zabel R, Bannister M, et al. Updated evidencebased practice guidelines for the nutritional management of patients receiving radiation therapy and/or chemotherapy. Nutr Diet 2013;;[Epub before print].
- Cancer Council Australia, Lung Cancer Guidelines Working Party. Clinical practice guidelines for the treatment of lung cancer [Web page]. Sydney, Australia: Cancer Council Australia (wiki platform); 2012. [Updated version available online at: http://wiki.cancer.org. au/australia/Guidelines:Lung cancer; cited March 18, 2013]

### KISS and ISENRING

Correspondence to: Nicole Kiss, Nutrition and Dietetics, Peter MacCallum Cancer Care Centre, Melbourne, Victoria, Australia. *E-mail:* nicole.kiss@petermac.org

- Peter MacCallum Cancer Care Centre, Melbourne,
- Princess Alexandra Hospital and University of Queensland, Brisbane, Australia.