



Reply to: Differences in cutaneous melanoma outcomes with changes in lymphoscintigraphy timings?



Dear Editor

We would like to thank the Cambridge group for their interest in our paper, and for evaluating their data set regarding timing of lymphoscintigraphy and melanoma specific survival following sentinel node biopsy for malignant melanoma [1]. We acknowledge that the findings we have identified in the Norwich group [2] are concerning and difficult to explain, although they may represent possible migration of tracer beyond the true sentinel node.

There is a difficulty in avoiding bias in any cohort study, which the Cambridge authors acknowledge. In particular, there may be biases which are either not easily corrected or are unrecognized. We had an increased rate of late (>12 hours) lymphoscintigraphy in the more recent half of our group, therefore it seems unlikely that the improved survival in early lymphoscintigraphy can be simply explained by recent advances in the multidisciplinary management of melanoma, as these were a greater proportion in earlier years. However, clearly there may be other factors at play, particularly relating to patient selection that changed with experience gained by the centre.

There are several differences between the Norwich and Cambridge data sets, most importantly study size. The Cambridge study evaluated survival data on 386 patients and follow up for late lymphoscintigraphy is relatively short (less than 5 years) compared to our study with 1015 patients over a longer follow up. Indeed, Kretschmer et al. demonstrated disease recurrence following a negative sentinel node biopsy occurred late, with most recurrence occurring between 5 years (8.7%) and 10 years (12.6%) in a study of over 2000 patients [3].

We did not examine whether patients were prioritized for surgery and lymphoscintigraphy specifically according to age, gender or Breslow's thickness at time of presentation, rather patients were scheduled onto dedicated operating lists in accordance with cancer pathway targets.

We did not specifically analyse the radiation counts of the clinically "hot" lymph nodes identified at surgery, however we have noted that higher numbers of sentinel nodes were removed at surgery (2.66) compared to those identified on lymphoscintigraphy (1.99). As we stated in our original paper, our protocol was to inject higher doses of radiotracer according to the time of surgery.

The differences between the two data sets highlight the need for further evaluation in other (preferably multicentre) cohort studies to assess whether our findings truly represent a difference or an unrecognized bias or chance finding.

Disclosures

There are no conflicts of interest to declare.

References

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- [2] O'Leary FM, Beadsmoore C, Pawaroo D, et al. Survival outcomes and interval between lymphoscintigraphy and SLNB in cutaneous melanoma- findings of a large prospective cohort study. *Eur J Surg Onc. Nov 2018;44(11):1768–72.*
- [3] Kretschmer L, Bertsch P, Zapf A, et al. Nodal basin recurrence after sentinel lymph node biopsy for melanoma; a retrospective multicenter study in 2653 patients. *Medicine September 2015;94(36):e1433.*

Fionnuala M. O'Leary*

Department of Plastic & Reconstructive Surgery, Norfolk and Norwich University Hospitals NHS Foundation Trust, Colney Lane, Norwich, Norfolk, NR4 7UY, UK

Clare J. Beadsmoore, Davina Pawaroo, John Skrypnik

Department of Nuclear Medicine, Norfolk and Norwich University Hospitals NHS Foundation Trust, Colney Lane, Norwich, Norfolk, NR4 7UY, UK

Martin J. Heaton

Department of Plastic & Reconstructive Surgery, Norfolk and Norwich University Hospitals NHS Foundation Trust, Colney Lane, Norwich, Norfolk, NR4 7UY, UK

Marc D. Moncrieff

Department of Plastic & Reconstructive Surgery, Norfolk and Norwich University Hospitals NHS Foundation Trust, Colney Lane, Norwich, Norfolk, NR4 7UY, UK

Norwich Medical School, University of East Anglia Norwich Research Park, Norwich, NR4 7TJ, UK

* Corresponding author. Department of Plastic and Reconstructive Surgery, Norfolk and Norwich University Hospital, Colney Lane, Norwich, NR4 7UY, United Kingdom.

E-mail address: fionnuala.o'leary@nhs.net (F.M. O'Leary).

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