

radioguided surgery and the possibility for hybrid imaging with SPECT/CT to provide a road map for easier navigation during the surgical procedure, guided both by the γ -probe and by preoperative lymphatic mapping—especially in anatomically complex regions such as the head and neck or the abdomen. Other crucial factors driving further developments are the possibility of tagging lesions with radioactive seeds and the availability of dual-signature imaging agents for lymphatic mapping or tumor-seeking procedures using both radioguidance (by preoperative SPECT/CT or PET/CT imaging and intraoperative γ -probe counting) and fluorescence-based guidance with probes in close surgical environments, such as during laparoscopy with robot-assisted surgery.

REFERENCES

1. Cabañas RM. An approach for the treatment of penile carcinoma. *Cancer*. 1977;39:456–466.
2. Morton DL, Wen DR, Wong JH, et al. Technical details of intraoperative lymphatic mapping for early stage melanoma. *Arch Surg*. 1992;127:392–399.
3. Mariani G, Moresco L, Viale G, et al. Radioguided sentinel lymph node biopsy in breast cancer surgery. *J Nucl Med*. 2001;42:1198–1215.
4. Uren RF, Howman-Giles RB, Thompson JF, et al. Mammary lymphoscintigraphy in breast cancer. *J Nucl Med*. 1995;36:1775–1780.
5. Pijpers R, Meijer S, Hoekstra OS, et al. Impact of lymphoscintigraphy on sentinel node identification with technetium-99m-colloidal albumin in breast cancer. *J Nucl Med*. 1997;38:366–368.
6. Uren RF, Howman-Giles RB, Shaw HM, Thompson JF, McCarthy WH. Lymphoscintigraphy in high-risk melanoma of the trunk: predicting draining node groups, defining lymphatic channels and locating the sentinel node. *J Nucl Med*. 1993;34:1435–1440.
7. De Cicco C, Cremonesi M, Luini A, et al. Lymphoscintigraphy and radioguided biopsy of the sentinel axillary node in breast cancer. *J Nucl Med*. 1998;39:2080–2084.
8. Even-Sapir E, Lerman H, Lievshitz G, et al. Lymphoscintigraphy for sentinel node mapping using a hybrid SPECT/CT system. *J Nucl Med*. 2003;44:1413–1420.
9. Uren RF, Howman-Giles R, Thompson JF. Patterns of lymphatic drainage from the skin in patients with melanoma. *J Nucl Med*. 2003;44:570–582.
10. Vera DR, Wallace AM, Hoh CK, Mattrey RF. A synthetic macromolecule for sentinel node detection: ^{99m}Tc -DTPA-mannosyl-dextran. *J Nucl Med*. 2001;42:951–959.
11. Brouwer OR, Buckle T, Vermeeren L, et al. Comparing the hybrid fluorescent-radioactive tracer indocyanine green- ^{99m}Tc -nanocolloid with ^{99m}Tc -nanocolloid for sentinel node identification: a validation study using lymphoscintigraphy and SPECT/CT. *J Nucl Med*. 2012;53:1034–1040.
12. Bentolila LA, Ebenstein Y, Weiss S. Quantum dots for in vivo small-animal imaging. *J Nucl Med*. 2009;50:493–496.

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Reply: Radioguided Surgery

REPLY: We would like to thank Dr. Mariani et al. (1) for their letter highlighting important papers on sentinel node imaging and intraoperative guidance. These papers are noteworthy scientific contributions that continue to have a significant impact on the clinical practice of nuclear medicine.

Despite their obvious scientific and clinical relevance, these papers were not included in the 60th anniversary supplement because they did not meet our criteria for choosing the limited number of publications that we could highlight in the supplement (see also introduction of the supplement). Since we had to select papers from several thousand publications, we were forced to use simple criteria and decided to choose the 3 most frequently cited original publications per decade plus 1 original publication per decade that was selected by 6 teams of editors (1 team per decade).

Like all approaches to quantifying and ranking “scientific impact,” our criteria for choosing manuscripts were to some extent arbitrary, and the results would have been somewhat different if we would, for example, have selected 2 papers per 5-year interval or the 25 most frequently cited papers for the whole 60-year period, etc. Nevertheless, we believe that our approach was reasonable because the overall number of citations of scientific papers has significantly increased over the years, and selecting the most frequently cited papers published over a period of 60 years would have biased against older publications.

Furthermore, the number of citations is a reasonable indicator of scientific impact but far from perfect. Therefore, we believe that also having the editors select 1 high-impact paper per decade is a reasonable compromise between a completely objective criterion (i.e., select the 4 most frequently cited papers per decade only) and a more subjective selection of 4 papers by the editors.

Since we fully agree with Mariani et al. on the importance of sentinel node imaging, we would like to thank them again for their letter, which nicely complements the papers in the supplement.

REFERENCE

1. Mariani G, Valdés Olmos RA, Vidal-Sicart S, Strauss HW. Radioguided surgery [letter]. *J Nucl Med*. 2021;62:591–592.

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