

REPLY: I thank Drs. Basu and Abhyankar for their letter and excellent comments on the use of preablation radioiodine scintigraphy for the management of thyroid cancer patients. As outlined in their letter, a classic teaching in nuclear medicine was that preablation radioiodine planar scans provide important information that may influence ^{131}I therapeutic decisions. The findings on preablation scans defined the target of radioiodine therapy (remnant ablation, nodal metastases, or distant metastases), directly affecting the selection of prescribed ^{131}I activity for ablative or tumoricidal treatment. Despite these advantages, over the years—as the controversy over stunning developed—the field evolved toward fixed-dose ^{131}I ablation of residual thyroid tissue after thyroidectomy, because posttherapy ^{131}I scans with better count density appeared to provide more diagnostic information than preablation scans. In this process, the contribution of preablation scans to therapeutic decisions was minimized, and staging, risk stratification, and management decisions became increasingly predicated by clinical–pathologic criteria (i.e., age of patient and results of surgical pathology) as reflected in several guidelines (1–4). Advancing imaging technology with SPECT/CT facilitates accurate interpretation of classic planar scintigraphy, validating the classic teaching that the decision to use or omit radioiodine therapy should not be based solely on clinical and histopathologic criteria but should include specific thyroid cancer imaging to evaluate for the presence of regional and distant metastases. The contribution of fusion radioiodine SPECT/CT for characterization of focal central neck and distant activity in patients with thyroid cancer has been increasingly recognized, as summarized in 2 recent review articles (5,6), bringing into focus the use of preablation SPECT/CT for completion of staging and risk stratification before ^{131}I therapy. The current SNMMI Practice Guideline for Therapy of Thyroid Disease with ^{131}I support the view that routine preablation scintigraphy can be useful in guiding ^{131}I therapy and discusses the selection of prescribed ^{131}I activity for treatment (7). This recently updated guideline reflects the evolution toward

a treatment approach that integrates the elements of clinical and histopathologic risk stratification with imaging information for arriving at an individualized therapeutic decision. And this precisely addresses the excellent points made by Drs. Basu and Abhyankar in their letter to the editor, which I very much welcomed.

REFERENCES

1. Cooper DS, Doherty GM, Haugen BR, et al. Revised American Thyroid Association management guidelines for patients with thyroid nodules and differentiated thyroid cancer. *Thyroid*. 2009;19:1167–1214.
2. Pacini F, Schlumberger M, Dralle H, et al. European consensus for the management of patients with differentiated thyroid carcinoma of the follicular epithelium. *Eur J Endocrinol*. 2006;154:787–803.
3. NCCN clinical practice guidelines in oncology: thyroid carcinoma (version 3.2012)—follicular thyroid carcinoma. National Comprehensive Cancer Network Web site. Available at: http://www.nccn.org/professionals/physician_gls/pdf/thyroid.pdf. Accessed September 27, 2012.
4. Guidelines for the management of thyroid cancer. 2nd ed. British Thyroid Association Web site. Available at: http://www.british-thyroid-association.org/news/Docs/Thyroid_cancer_guidelines_2007.pdf. Accessed September 27, 2012.
5. Avram AM. Radioiodine scintigraphy with SPECT/CT: an important diagnostic tool for staging and risk stratification. *J Nucl Med*. 2012;53:754–764.
6. Barwick TD, Dhawan RT, Lewington V. Role of SPECT/CT in differentiated thyroid cancer. *Nucl Med Commun*. 2012;33:787–798.
7. Silberstein EB, Alavi A, Balon HR, et al. The SNMMI practice guideline for therapy of thyroid disease with ^{131}I 3.0. *J Nucl Med*. 2012;53:1633–1651.

Anca M. Avram

University of Michigan
 BIG505G University Hospital
 1500 E. Medical Center Dr.,
 Ann Arbor, MI 48109
 E-mail: ancaa@umich.edu

Published online ■■■■.
 DOI: 10.2967/jnumed.112.110668