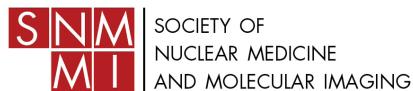




An initiative of the ABIM Foundation

Society of Nuclear Medicine and Molecular Imaging



Five Things Physicians and Patients Should Question

1 Don't use PET/CT for cancer screening in healthy individuals.

- The likelihood of finding cancer in healthy adults is extremely low (around 1%), based on studies using PET/CT for screening.
- Imaging without clear clinical indication is likely to identify harmless findings that lead to more tests, biopsy or unnecessary surgery.

2 Don't perform routine annual stress testing after coronary artery revascularization.

- Routine annual stress testing in patients without symptoms does not usually change management.
- This practice may lead to unnecessary testing without any proven impact on patient management.

3 Don't use nuclear medicine thyroid scans to evaluate thyroid nodules in patients with normal thyroid gland function.

- Nuclear medicine thyroid scanning does not conclusively determine whether thyroid nodules are benign or malignant.
- Cold nodules on thyroid scans will still require biopsy.
- Nuclear medicine thyroid scans are useful to evaluate the functional status of thyroid nodules in patients who are hyperthyroid.

4 Avoid using a computed tomography angiogram to diagnose pulmonary embolism in young women with a normal chest radiograph; consider a radionuclide lung study ("V/Q study") instead.

- When the clinical question is whether or not pulmonary emboli are present, a V/Q study can provide the answer with lower overall radiation dose to the breast than can CTA, even when performed with a breast shield.

5 Don't use PET imaging in the evaluation of patients with dementia unless the patient has been assessed by a specialist in this field.

- Without objective evidence of dementia, the potential benefit of PET is unlikely to justify the cost or radiation risk.
- Dementia subtypes have overlapping patterns in PET imaging. Clinical evaluation and imaging often provide additive information and should be assessed together to make a reliable diagnosis and to plan care.
- For β -amyloid PET imaging, it is not currently known what a positive PET result in a cognitively normal person means; this method is not established for an individual prediction.

How This List Was Created

The president of the Society of Nuclear Medicine and Molecular Imaging (SNMMI) appointed a Steering Committee, led by the president-elect, to develop the “Top 5” list. This committee solicited input from five SNMMI clinical specialty councils (cardiovascular, brain, nuclear oncology, general nuclear medicine, pediatric) and our PET Center of Excellence. A task force made up of the Steering Committee and specialty council/center leadership convened, and its members also provided recommendations. The Steering Committee reviewed and ranked the submissions and presented the five highest-ranked statements to the SNMMI Board of Directors and House of Delegates.

SNMMI's disclosure and conflict of interest policy can be obtained by contacting the organization (email@snmmi.org).

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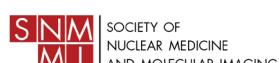
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About the Society of Nuclear Medicine and Molecular Imaging

The Society of Nuclear Medicine and Molecular Imaging (SNMMI) is a nonprofit scientific and professional organization dedicated to the science, technology and practical application of nuclear medicine and molecular imaging, with the ultimate goal of improving human health. Founded in 1960, SNMMI represents more than 19,000 nuclear medicine and molecular imaging professionals worldwide.



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