



NAVANMP

National Association of VA Nuclear Medicine Physicians

The ASTRO 2023 Winter Newsletter¹ has been brought to the attention of the National Association of VA Nuclear Medicine Physicians (NAVANMP) with request for comment and response. The NAVANMP includes several members active in Radiopharmaceutical Therapy/Theranostics for many years, and the Veterans Health Administration (VHA) includes >110 Nuclear Medicine Departments across the country with 15 Nuclear Medicine Services actively involved in Lu177-based Theranostics and associated phase I-III clinical trials.

Historically, Theranostics is a Nuclear Medicine discipline that combines diagnostic and targeted radiopharmaceuticals for the treatment of disease conditions, such as cancer, for which image-based patient management is inherent. Nuclear Medicine Physicians have been the founders, innovators, developers, and driving force behind radiopharmaceutical therapy, here and abroad with generations of Nuclear Medicine Physicians having spent their professional lives delivering radiopharmaceutical therapies to patients. From the first use of P-32 for the treatment of leukemia and polycythemia in California by John H. Lawrence who identified the therapeutic potential of artificial radioisotopes in 1938²⁻³ Nuclear Medicine Physicians have engaged in patient care and management in the United States. Recently developed Theranostic agents have been in use for many years by Nuclear Medicine Physicians in Europe and Australia. In other parts of the world Nuclear Medicine practice, including Theranostics, is limited to dedicated Nuclear Medicine clinical specialists; however, our regulatory environment related to radioactive materials medical use has allowed pathways for other clinical specialties to provide Nuclear Medicine patient care in the United States. One such instance is the use of unsealed sources of radioactive material for clinical care by Radiation Oncologists who are typically Authorized Users of therapeutic sealed radiation sources. This most often occurs in the private practice setting driven by factors, such as Cancer Center referral pattern and economics, while Nuclear Medicine Physicians primarily provide this care in large tertiary medical centers, the academic setting, and large health systems like the Veterans Health Administration.

We appreciate the intent of ASTRO to encourage its members to explore an expansion of scope and practice into Radiopharmaceutical Therapy, as covered in the Winter 2023 Newsletter; however, NAVANMP encourages a strategy and messaging by the society that emphasizes partnership rather than competition amongst specialties for the safe and effective delivery of radionuclide therapies. Nuclear Medicine specialists are an integral part of Theranostics care, are involved in multidisciplinary tumor boards and are equal partners in the decision making for the treatment planning of oncology patients. We directly assess, treat, and manage disease conditions such as prostate, neuroendocrine, and thyroid cancers and have taken ownership of oncology patient care from treatment start through survivorship with the increasing utilization of multi-cyclic radionuclide therapies.

The newsletter mentions that “there are... limited numbers of Nuclear Medicine Physicians considering the upcoming demand to use these therapies as a standard treatment for significant numbers of patients.” Across the United States, there are areas with a similar shortage of Radiation Oncologists, and there will be a learning curve to enter the Radiopharmaceutical Therapy space. With several new Theranostic agents in the clinical trials pipeline, we anticipate it will take a collaborative and coordinated effort to best provide needed access to care across the country. Combined training pathways that confer additional certification upon those non-Nuclear Medicine providers able to safely deliver Theranostics/Radiopharmaceutical Therapy should be considered. Existing resources and infrastructure should be maximized so that Nuclear Medicine Physicians, equipment, and clinical expertise is supplemented with the clinical expertise that Radiation Oncology can provide. Importantly, this should facilitate workflow standardization that ensures dose administration by Nuclear Medicine Technologists who are trained, experienced, and highly skilled in the delivery of unsealed radioactive materials/radiopharmaceuticals to ensure patient and radiation safety.

We are hopeful that the ASTRO Winter 2023 Newsletter will serve not to divide, but instead accelerate conversations between an engaged Nuclear Medicine community and Radiation Oncology. We in the Veterans Health Administration have encountered great success through collegial interaction and collaboration between Nuclear Medicine and Radiation Oncology, and hope that our experience might serve to better the broader practice model in the United States.

Irfan Farukhi, MD
Chief, Nuclear Medicine
Dallas VA Medical Center

Nicholas Friedman, MD
Chief, Nuclear Medicine
West Chicago VA Medical Center

Anil Ramachandran, MD
Chief, Diagnostic Imaging Services
Shreveport VA Medical Center

Meena Kumar, MD
Chief, Nuclear Medicine
Seattle VA Medical Center

Ed Goldstein, MD
Chief, Nuclear Medicine
Phoenix VA Medical Center

David Brandon, MD
Nuclear Medicine Program Director
Atlanta VA Medical Center

Erica Major, DO
Asst Chief, Nuclear Medicine
Hines VA Medical Center

Ronnie D. Derrwaldt, DO
Chief, Nuclear Medicine
Cleveland VA Medical Center

Daniel Kahn, MD
Chief, Nuclear Medicine
Iowa City VA Medical Center

Barbara Sterkel, MD
Associate Chief of Staff, Diagnostic Imaging
St. Louis VA Medical Center

References:

1) *ASTRONews Winter 2023 Vol. 26, Issue 1*

2) Lawrence JH. Nuclear physics and therapy: preliminary report on a new method for the treatment of leukemia and polycythemia. *Radiology*. 1940;35(1):51-60

3) Bashir H. Letter to Editor for “European Association of Nuclear Medicine (EANM) response to the proposed ASTRO’s framework for radiopharmaceutical therapy curriculum development for trainees. *European Journal of Nuclear Medicine and Molecular Imaging* (2023) 50:648-649