

Radioiodine Theranostics: Increasing Dialogue and Collaboration

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SNMMI has been increasing dialogue and collaboration with other societies with similar interests over the last several years. One important area is in diagnosis and management of differentiated thyroid cancer (DTC)—radioiodine theranostics. With the efforts of multiple individuals and committees, we have significantly increased our dialogue with SNMMI members as well as collaboration with other medical societies and organizations in the United States, Europe, and other countries. Active groups within SNMMI include the Therapy Center of Excellence (TCoE), the Committee on Radioiodine Theranostics (CORT), and the Appropriate Use Committee. Following is a status report on our collective efforts in advancing radioiodine theranostics.

Multilateral Meeting

In June 2016, Ciprian Draganescu, MD, from Fort-de-France, Martinique, suggested a multilateral meeting of the American Thyroid Association (ATA), the European Thyroid Association (ETA), the European Association of Nuclear Medicine (EANM), and SNMMI to discuss the 2015 ATA guidelines for differentiated thyroid cancer. Representatives from the ATA, EANM, and SNMMI met in July during the World Congress on Thyroid Cancer in Boston, MA. The meeting was positive, collegial, and productive. Plans were made for a meeting in January 2018 in Martinique to address some of the controversies in the 2015 ATA guidelines. The objectives of this meeting are to begin a dialogue among the 4 societies, lay the foundation to expand that dialogue and collaboration in the future, and initially address 3 specific controversies in the ATA guidelines. The topics for discussion are: (1) approaches to expand and formalize a process that enhances dialogue among the societies (focusing on controversies, education, research, appropriate use, white papers, guidelines, etc.); (2) indications and administration of ¹³¹I adjuvant therapy (including risk stratification); (3) optimal prescribed activity for ¹³¹I adjuvant therapy; and (4) classifications of iodine refractory disease. One individual will represent the ATA and ETA and 1 individual will represent SNMMI and EANM in performing a comprehensive literature search for each of the topics, write a summary statement, and present that information and summary at the multilateral meeting in Martinique. These presentations will be followed by a discussion, with the goal of producing a white paper to be published in the participating societies' journals. It is important to note that the following will not be objectives: the meeting will not address all potential controversies in radioiodine theranostics, and participants will not rewrite guidelines or necessarily reach consensus opinions. Instead the primary objectives are to develop the foundation for expanding future dialogue

among the societies (and possibly other societies), initially addressing a few topics and articulating the spectrum of viewpoints and supporting peer-reviewed literature.

The meeting will include 4 individuals representing each society, along with key administrators and individuals in leadership positions from each society. In addition, we will invite an external facilitator who is knowledgeable in evaluation of scientific literature and thyroid disease but without a personal or professional interest in DTC. This meeting will be a 2-day conference, with 4 sessions addressing the target topics.

Additional ATA and SNMMI Collaboration

Through the efforts of Saima Hedrick, MPH, and Virginia Pappas, CAE, from SNMMI, and Bobbi Smith, CAE, and Adonia Calhoun Coates, CMP, of the ATA, we have expanded our collaboration through cosponsored meetings. ATA and SNMMI cosponsored a session on radioiodine theranostics with a speaker from each society at the SNMMI Annual Meeting in Denver, CO, in June. These same speakers will present as part of an ATA- and SNMMI-cosponsored session at the annual ATA meeting in Victoria, Canada, in October.

A nuclear medicine physician serves as an associate editor of the official ATA journal, *Thyroid*, and other nuclear medicine physicians are reviewers for the same journal. ATA has also included nuclear medicine physicians on committees, such as the association's nominating committee and planning committees for the ATA annual meeting. These are all excellent examples of expanding collaboration, and I encourage SNMMI members interested in radioiodine theranostics to become members of ATA. This organization is not only for endocrinologists but for anyone interested in thyroid disease, including ultrasonographers, pathologists, endocrine surgeons, otorhinolaryngology surgeons, nuclear medicine physicians, and more. With more nuclear medicine physicians as members of ATA, we will not only expand our collaboration but will also be able to communicate the value of radioiodine theranostics in the management of thyroid diseases.

EANM and SNMMI Collaboration

Another important area of expanded collaboration is the SNMMI relationship with EANM. EANM has been active in radioiodine theranostics, and I applaud the efforts of many of its members, including Markus Luster, MD, Elif



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Hindié, MD, PhD, Frederik Verburg, MD, PhD, David Täieb, MD, Glenn Flux, PhD, and many others. Dr. Luster was the keynote speaker for the categorical session on radioiodine theranostics at the 2017 SNMMI Annual Meeting, where he also participated in multiple other SNMMI committee meetings and offered support for our own SNMMI outreach program. He also helped to lead EANM participation in the multilateral meeting in Boston.

Thyroid Cancer Survivors' Association and SNMMI Outreach Program

With the help of Ms. Hedrick at SNMMI and Gary Bloom, from the Thyroid Cancer Survivors' Association, Inc. (ThyCa), CORT has brought together ThyCa chapter facilitators and nuclear medicine physicians in the local ThyCa chapter areas to coordinate pro bono presentations by nuclear medicine physicians at chapter meetings. Initial results have been quite good, and I am optimistic that this collaboration will result in many presentations by local nuclear medicine physicians to patients with differentiated thyroid cancer. With the intention of helping to develop core presentation slide decks for these speakers, Ravinder Grewal, MD, is supporting development of the first slide set. In collaboration with EANM and ThyCa, Dr. Luster has offered access to already available EANM webinars that might be used as models for our outreach program slide decks and/or webinars.

Other Societies

SNMMI has also been active through the CORT in building further relationships in radioiodine theranostics with the Indian Thyroid Society and its president, Chandra S. Bal, MBBS, MD. In addition, the SNMMI outreach program for radioiodine theranostics has offered speakers for meetings of the American Association of Clinical Endocrinologists. To date 2 presentations on radioiodine theranostics have been given. With the support of Seza Gulec, MD, the CORT is also exploring reaching out to other surgical societies and their meetings.

Appropriate Use Criteria Committee

An important initiative of SNMMI is developing appropriate use criteria (AUC) for reimbursement from the Center for Medicare & Medicaid Services for various procedures and therapies. Under the leadership of Kevin Donohue, MD, Sukhjeet Ahuja, MD, MPH, and Ms. Pappas, the SNMMI AUC Committee has already developed 3 AUC for ventilation/perfusion, bone, and hepatobiliary scanning. Not only have these been approved and published, but they represent an excellent model of collaboration with other societies. For example, the ventilation/perfusion AUC developed under the leadership of Alan Waxman, MD, with the support of Leonard Freeman, MD, involved the American College of Emergency Physicians, American Society of Hematology, American College of Radiology, Society of Thoracic Surgeons, American College of Chest Physicians, and EANM.

On the agenda for the SNMMI AUC Committee for 2017–2018 is development of AUC for radioiodine thera-

nostics, under the leadership of Dr. Donohue. Because this is such an extensive topic, it is likely that the AUC will focus on a selected aspect of radioiodine theranostics involving DTC scanning and therapy.

Multiple Other Initiatives

SNMMI, through various individuals and committees, has also reached out to increase dialogue and collaboration with other societies, organizations, and industry for radioiodine theranostics. Although beyond the scope of this status report, in brief, they include more than 35 presentations in the last 15 months to other societies, endocrine practices, and patient groups and more than 12 additional hours of presentations on radioiodine theranostics at the recent annual SNMMI Annual Meeting alone. As discussed in SNMMI leadership meetings and in the TCoE and CORT and planning meetings for the multilateral meeting in Martinique, collaboration on research efforts in radioiodine theranostics is important but challenging. I am optimistic that with common interests in the various controversies and with hard work and reasonable compromises we will be able to pursue multi-institutional prospective studies within the United States, as has already occurred in Europe.

Summary

Many individuals, committees, associates of industry, patient societies, and medical societies have contributed to significant progress over the last several years in increasing awareness, dialogue, collaboration, and productivity in radioiodine theranostics. As SNMMI members are aware, radioiodine therapy is the most frequently performed therapeutic procedure in our specialty, exceeding all other radioisotope therapies combined. I encourage the nuclear medicine community to increase dialogue, collaboration, and participation in radioiodine theranostics with other medical societies, organizations, and industry entities with similar interests. This is valuable for our practice, our specialty, and, most important, our patients.

Acknowledgments

I would like to acknowledge the members of the CORT and others who have been valuable over the last 5 years in increasing awareness, dialogue, and collaboration regarding radioiodine theranostics. Five years ago, Anca Avram, MD, Andrei Iagaru, MD, and Mark Tulchinsky, MD, formed the original ad hoc committee in the United States to increase our collaboration with other societies and organizations. In addition, my hat is tipped to the following individuals not already named in this article (apologies to anyone who has been overlooked): Kenneth Ain, MD, Bennett Greenspan, MD, Hossein Jadvar, MD, PhD, MPH, MBA, Steven Larson, MD, Erik Mittra, MD, PhD, Kristoff Muylle, MD, Sonja Niederkofler, Wim Oyen, MD, PhD, Daniel Pryma, MD, M. Sara Rosenthal, PhD, Sally Schwarz, MS, RPh, Henrik Silber, Edward Silberstein, MD, Suresh Srivastava, PhD, Di Wu, MD; Sanofi Genzyme, including Cyril Calles and Michael Schneider; Jubilant Draximage, including Suzanne Bissonette, France Fournier, James Lalli, and Norman LaFrance, MD, ME; and the SNMMI staff.