

Sites Performing Dosimetry for Selection of Activity for ^{131}I Therapy for Differentiated Thyroid Cancer

No publicly available database (to my knowledge) provides information on facilities and individuals performing some form of dosimetry to help in selection of activity for ^{131}I therapy for differentiated thyroid cancer (DTC). With the initial support of the SNMMI Committee on Radioiodine Theranostics, the Therapy Center of Excellence, and the Quality and Safety Committee of the SNMMI Value Initiative, a multiphase survey project was initiated with the following objectives: (1) To establish a database of facilities and individuals in the United States and foreign countries that perform dosimetry. (Note that for the purpose of this survey and report, the term “dosimetry” refers to any form of quantitation used in helping to select activity for ^{131}I therapy for DTC.); (2) To disseminate these data to patients and physicians who may be interested in referring patients with DTC to facilities that perform and use dosimetrically guided activities of ^{131}I for treatment; (3) To determine the various practice patterns for dosimetry, such as indications, methods for performing dosimetry, and factors that may modify dosimetrically determined activities of ^{131}I ; (4) To promote quality of care in dosimetry, such as improving identification of appropriate patients and assessing and potentially standardizing facilities’ quality assurance and performance improvement programs; (5) To develop collaboration between facilities and individuals performing dosimetry; (6) To promote further research involving dosimetry for helping to select ^{131}I activities for treating patients with DTC; and (7) To develop a model for subsequent development of additional databases of facilities and individuals performing dosimetry for other radioisotope therapies.

To date, 2 surveys have been developed, distributed, and tallied. The first survey was to establish a database of facilities and individuals who perform some form of dosimetry to help select activity for ^{131}I therapy for DTC. The results are listed in Table 1. If any facility: (1) performs some form

of dosimetry and wishes to be listed; (2) wishes correction(s) to their listing; (3) is listed but would like to be removed; and/or (4) would like additional information, please email Sheila Beaman, Research Assistant, MedStar Health Research Institute, at Sheila.t.beaman@medstar.net.

Initial results of the second survey, covering various practice patterns for dosimetry (such as indications, methods for performing dosimetry, and factors that may modify dosimetrically determined activities of ^{131}I therapies), will be presented as a poster at the SNMMI Annual meeting this month in Anaheim, CA.

The third survey is under development and will focus on specifics of individual protocols and additional factors that modify the dosimetrically guided activities of ^{131}I therapies. Subsequent surveys are planned to continue with the objectives listed above. Please send suggestions and comments on this broad survey effort to Ms. Beaman, who will aggregate these for review.

Radioiodine imaging and ^{131}I therapy remain the premier, oldest, and most frequently performed complementary radiotheranostic activities in nuclear medicine. The development of a national and international database of facilities and individuals who perform dosimetry to help guide the selection of activities for ^{131}I therapy is long overdue. This is even more timely with promising and exciting developments like: (1) ^{124}I PET imaging and dosimetry; (2) the use of radiosensitizing agents that may redifferentiate non-radioiodine-avid DTC; and (3) the use of radiosensitizing agents that may increase the absorbed dose delivered per activity administered in patients whose metastases are already radioiodine avid.

*Douglas Van Nostrand, MD
MedStar Health Research Institute
and Washington Hospital Center
Washington, DC*

TABLE 1
Sites Performing Dosimetry for Selection of Activity for ^{131}I Therapy for Differentiated Thyroid Cancer

United States		
Alabama	University of Alabama Hospital (UAB) Molecular Imaging and Therapeutics 7th Floor Jefferson Tower 619 19th Street South Birmingham, AL 35249	Daniel Yoder, CNMT Chief NM Technologist 205-975-8325 dyoder@uabmc.edu
California	Stanford University 300 Pasteur Drive Stanford, CA 94305	Andrei Iagaru, MD 650-723-6855 aiagaru@stanford.edu

TABLE 1 (Continued)

United States		
District of Columbia	MedStar Washington Hospital Center 110 Irving Street NW, Suite GB1 Washington, DC 20010	Kanchan Kulkarni, MD 202-877-0731, 202-877-3532 kanchan.kulkarni@medstar.net
Indiana	Methodist Hospital Department of Nuclear Medicine 1701 N. Senate Blvd. Indianapolis, Indiana 46202	Mark Estrada, MD 317-962-8361 mestrada@iuhealth.org
Iowa	University of Iowa Hospitals and Clinics 200 Hawkins Drive Iowa City, IA 52242	Yusuf Menda, MD 319-356-1911 yusuf-menda@uiowa.edu
Maryland	Walter Reed National Military Medical Center Radiology Department Nuclear Medicine, Building 9A 8901 Rockville Pike Bethesda, MD 20889	Eiping Quang, PhD Nuclear Medicine Physicist 301-319-2714 Eiping.quang.civ@mail.mil
Michigan	Beaumont Hospital Royal Oak 3601 W 13 Mile Road Royal Oak, MI 48073	Janice Campbell, PhD 248-898-4100 (inpatient), 248-898-4138 (outpatient) janice.campbell@beaumont.edu
	University of Michigan Nuclear Therapy Clinic 1500 E. Medical Center Drive Ann Arbor, MI 48109-5028	Anca M. Avram, MD Professor of Radiology ancaa@umich.edu
New Mexico	University of New Mexico Hospital 2211 Lomas Blvd. NE Albuquerque, NM 87106	Saeed Elojeimy, MD 505-272-2421 selojeimy@salud.unm.edu
New York	Memorial Sloan Kettering Cancer Center 1275 York Avenue New York, NY 10065	Neeta D. Pandit-Taskar, MD Attending Physician Panpandit-n@mskcc.org Sonia Mahajan 212-639-7377 mahajans@mskcc.org
Ohio	Cincinnati Children's Hospital 3333 Burnet Avenue, 5031 Cincinnati, OH 45229	Joseph (Joby) MacLean, MHA, CNMT, Manager, Nuclear Medicine 513-636-7420 joseph.maclean@cchmc.org
Oregon	Oregon Health & Science University 3181 SW Sam Jackson Park Road Portland, OR 97239 [Mail Code: L340]	Erik Mittra, MD, PhD Section Chief, Nuclear Medicine 503-494-4524 mittra@ohsu.edu
	Sacred Heart Medical Center at Riverbend 3333 Riverbend Drive Springfield, OR 97477	John Dohrman, MD 541-222-7010 jpd@rapc.com
Pennsylvania	Abington Jefferson Health Nuclear Medicine Department 1200 Old York Road Abington, PA 19001	Rajan Agarwal, MD Medical Director Nuclear Medicine rajan.agarwal@jefferson.edu
	Milton S. Hershey Medical Center Penn State University M.C. H066 500 University Drive Hershey, PA 17033	Mark Tulchinsky, MD, FACNM, CCD, Associate Director of Nuclear Medicine 717-531-4799 Mark.Tulchinsky@gmail.com

TABLE 1 (Continued)

United States		
	Hospital of the University of Pennsylvania 3400 Spruce Street Philadelphia, PA 19104	Valerie Kenner 215-349-5953 Valerie.kenner@uphs.upenn.edu Daniel Pryma, MD daniel.pryma@uphs.upenn.edu
	Hospital of the University of Pennsylvania 1 Donner Building 3400 Spruce Street Philadelphia, PA 19104-4283	David Mankoff, MD, PhD 215-746-4062, 215-662-3091 david.mankoff@uphs.upenn.edu
	Fox Chase Cancer Center 333 Cottman Avenue Philadelphia, PA 19111	Michael Yu, MD Director of Nuclear Medicine Michael.Yu@fccc.edu mohan.doss@fccc.edu
Virginia	University of Virginia 1215 Lee Street, Suite 1702 Charlottesville, VA 22908	Patrice K Rehm, MD 434-243-0211 pkr3b@virginia.edu
Washington	University of Washington Medical Center 1959 NE Pacific Street Seattle, WA 98195	Jeremy Iman 206-598-3300 jiman@uw.edu
International		
Brazil	Hospital Alvorada Taguatinga Hospital Albert Einstein Hospital UNIMED RIO Rio de Janeiro	Tadeu Takao Almodovar Kubo, MD tadeukubo@gmail.com
South Africa	Charlotte Maxeke Johannesburg Academic Hospital Chris Hani Baragwanath Academic Hospital Soweto South Africa	Evbuomwan Osayande, MD moreli14@yahoo.com
Germany	Hospital of the Philipps-University Marburg Department of Nuclear Medicine Baldingerstrasse 35043 Marburg, Germany	Markus Luster, MD +49-6421-58-62815, fax +49-6421-58-67025 luster@med.uni-marburg.de, Admin: nukmed@med.uni-marburg.de,
	University Hospital Regensburg Regensburg, Germany	Dirk Hellwig, MD +49941-944-7501 Dirk.Hellwig@ukr.de Secretariat.nuklearmedizin@ukr.de

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- The ACMUI strongly supports the current AU pathways for 35.390, which protect the public's health and safety;
- No objective data support the existence of an AU shortage;
- The ACMUI does not recommend a limited-scope AU pathway for unsealed byproduct material for which a written directive is required; and
- The ACMUI unanimously agrees that if the NRC pursues a limited-scope AU pathway, the AU candidate must attest to the acquisition of 35.390 topics and skills by successfully completing a formal competency assessment with continued formal periodic reassessment to maintain his or her limited-scope AU status.

In a statement released on April 25, the SNMMI noted agreement with the ACMUI on the importance of patient and public safety but also emphasized the need to ensure access to quality care. SNMMI has provided feedback to NRC and the ACMUI on this topic. The most recent comments were submitted in January 2019. The next ACMUI public meeting will be held in fall 2019.

Caitlin Kubler
Health Policy and Regulatory Affairs
SNMMI
Reston, VA