

NRC FORM 313M (9-81) 10 CFR 35	U.S. NUCLEAR REGULATORY COMMISSION APPLICATION FOR MATERIALS LICENSE – MEDICAL	Approved by OMB 3150-0041 Expires 9-30-83
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INSTRUCTIONS – Complete Items 1 through 26 if this is an initial application or an application for renewal of a license. Use supplemental sheets where necessary. Item 26 must be completed on all applications and signed. Retain one copy. Submit original and one copy of entire application to: Director, Office of Nuclear Materials Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Upon approval of this application, the applicant will receive a Materials License. An NRC Materials License is issued in accordance with the general requirements contained in Title 10, Code of Federal Regulations, Part 30, and the Licensee is subject to Title 10, Code of Federal Regulations, Parts 19, 20 and 35 and the license fee provision of Title 10, Code of Federal Regulations, Part 170. The license fee category should be stated in Item 26 and the appropriate fee enclosed.

1.a. NAME AND MAILING ADDRESS OF APPLICANT (institution, firm, clinic, physician, etc.) INCLUDE ZIP CODE Doctors Hospital of Nelsonville West Franklin Street Nelsonville, Ohio 45764 TELEPHONE NO.: AREA CODE (614) 753 1931	1.b. STREET ADDRESS(ES) AT WHICH RADIOACTIVE MATERIAL WILL BE USED (If different from 1.a.) INCLUDE ZIP CODE SAME Check No. 020980-6120 Amount/Fee Category Type of Fee Date Check Rec'd
2. PERSON TO CONTACT REGARDING THIS APPLICATION W. Christopher Wagner, Consultant Nuclear Medicine Associates TELEPHONE NO.: AREA CODE (216) 641 5799	3. THIS IS AN APPLICATION FOR: (Check appropriate item) a. <input type="checkbox"/> NEW LICENSE b. <input checked="" type="checkbox"/> AMENDMENT TO LICENSE NO. 34-18980-01 c. <input type="checkbox"/> RENEWAL OF LICENSE NO. Received By
4. INDIVIDUAL USERS (Name individuals who will use or directly supervise use of radioactive material. Complete Supplements A and B for each individual.) Refer to Item #8	5. RADIATION SAFETY OFFICER (RSO) (Name of person designated as radiation safety officer. If other than individual user, complete resume of training and experience as in Supplement A.) George O. Faerber, D.O. with consultation from Nuclear Medicine Associates, Cleveland, Ohio 44125

6.a. RADIOACTIVE MATERIAL FOR MEDICAL USE

RADIOACTIVE MATERIAL LISTED IN:	ITEMS DESIRED "X"	MAXIMUM POSSESSION LIMITS (In millicuries)	ADDITIONAL ITEMS:	MARK ITEMS DESIRED "X"	MAXIMUM POSSESSION LIMITS (In millicuries)
10 CFR 31.11 FOR IN VITRO STUDIES			IODINE-131 AS IODIDE FOR TREATMENT OF HYPERTHYROIDISM		
10 CFR 35.100, SCHEDULE A, GROUP I		AS NEEDED	PHOSPHORUS-32 AS SOLUBLE PHOSPHATE FOR TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA AND BONE METASTASES		
10 CFR 35.100, SCHEDULE A, GROUP II		AS NEEDED	PHOSPHORUS-32 AS COLLOIDAL CHROMIC PHOSPHATE FOR INTRACAVITARY TREATMENT OF MALIGNANT EFFUSIONS.		
10 CFR 35.100, SCHEDULE A, GROUP III			GOLD-198 AS COLLOID FOR INTRACAVITARY TREATMENT OF MALIGNANT EFFUSIONS.		
10 CFR 35.100, SCHEDULE A, GROUP IV		AS NEEDED	IODINE-131 AS IODIDE FOR TREATMENT OF THYROID CARCINOMA		
10 CFR 35.100, SCHEDULE A, GROUP V		AS NEEDED	XENON-133 AS GAS OR GAS IN SALINE FOR BLOOD FLOW STUDIES AND PULMONARY FUNCTION STUDIES		
10 CFR 35.100, SCHEDULE A, GROUP VI					

6.b. RADIOACTIVE MATERIAL FOR USES NOT LISTED IN ITEM 6.a. (Sealed sources up to 3 mCi used for calibration and reference standards are authorized under Section 35.14(d), 10 CFR Part 35, and NEED NOT BE LISTED.)

ELEMENT AND MASS NUMBER	CHEMICAL AND/OR PHYSICAL FORM	MAXIMUM NUMBER OF MILLICURIES OF EACH FORM	DESCRIBE PURPOSE OF USE
<p>The purpose of this amendment application is to amend the authorized users of byproduct material to include Richard W. Adams, D.O. and R.E. Farneman, D.O.</p> <p>CONTROL NO. 80479</p> <p>8604070029 860124</p> <p>REG3 LIC30</p> <p>34-18980-01 PDR</p> <p>RECEIVED JAN 13 1986 REGION III JAN 13 1986</p>			

INFORMATION REQUIRED FOR ITEMS 7 THROUGH 23

For Items 7 through 23, check the appropriate box(es) and submit a detailed description of all the requested information. Begin each item on a separate sheet. Identify the item number and the date of the application in the lower right corner of each page. If you indicate that an appendix to the medical licensing guide will be followed, do not submit the pages, but specify the revision number and date of the referenced guide: Regulatory Guide 10.8, Rev. _____ Date: 10/13/88

7. MEDICAL ISOTOPES COMMITTEE		15. GENERAL RULES FOR THE SAFE USE OF RADIOACTIVE MATERIAL (Check One)	
Names and Specialties Attached; and		Appendix G Rules Followed; or	
Duties as in Appendix B; or (Check One)		Equivalent Rules Attached	
Equivalent Duties Attached		16. EMERGENCY PROCEDURES (Check One)	
3. TRAINING AND EXPERIENCE		Appendix H Procedures Followed; or	
X	Supplements A & B Attached for Richard W. Adams, D.O. & letters dated 10/15/85 & 11/22/85.	Equivalent Procedures Attached	
X	See Item #8 for R.E. Farneman, D.O.	17. AREA SURVEY PROCEDURES (Check One)	
9. INSTRUMENTATION (Check One)		Appendix I Procedures Followed; or	
Appendix C Form Attached; or		Equivalent Procedures Attached	
List by Name and Model Number		18. WASTE DISPOSAL (Check One)	
10. CALIBRATION OF INSTRUMENTS		Appendix J Form Attached; or	
Appendix D Procedures Followed for Survey Instruments; or (Check One)		Equivalent Information Attached	
Equivalent Procedures Attached; and		19. THERAPEUTIC USE OF RADIOPHARMACEUTICALS (Check One)	
Appendix D Procedures Followed for Dose Calibrator; or (Check One)		Appendix K Procedures Followed; or	
Equivalent Procedures Attached		Equivalent Procedures Attached	
11. FACILITIES AND EQUIPMENT		20. THERAPEUTIC USE OF SEALED SOURCES	
Description and Diagram Attached		Detailed Information Attached; and	
12. PERSONNEL TRAINING PROGRAM		Appendix L Procedures Followed; or (Check One)	
Description of Training Attached		Equivalent Procedures Attached	
13. PROCEDURES FOR ORDERING AND RECEIVING RADIOACTIVE MATERIAL		21. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE GASES (e.g., Xenon - 133)	
Detailed Information Attached		Detailed Information Attached	
14. PROCEDURES FOR SAFELY OPENING PACKAGES CONTAINING RADIOACTIVE MATERIALS (Check One)		22. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE MATERIAL IN ANIMALS	
Appendix F Procedures Followed; or		Detailed Information Attached	
Equivalent Procedures Attached		23. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE MATERIAL SPECIFIED IN ITEM 6.b	
		Detailed Information Attached	

24. PERSONNEL MONITORING DEVICES

TYPE <small>(Check appropriate box)</small>		SUPPLIER	EXCHANGE FREQUENCY
a. WHOLE BODY	<input type="checkbox"/> FILM		
	<input type="checkbox"/> TLD		
	<input type="checkbox"/> OTHER <i>(Specify)</i>		
b. FINGER	<input type="checkbox"/> FILM		
	<input type="checkbox"/> TLD		
	<input type="checkbox"/> OTHER <i>(Specify)</i>		
c. WRIST	<input type="checkbox"/> FILM		
	<input type="checkbox"/> TLD		
	<input type="checkbox"/> OTHER <i>(Specify)</i>		

d. OTHER *(Specify)*

25. FOR PRIVATE PRACTICE APPLICANTS ONLY

a. HOSPITAL AGREEING TO ACCEPT PATIENTS CONTAINING RADIOACTIVE MATERIAL

NAME OF HOSPITAL

MAILING ADDRESS

CITY

STATE

ZIP CODE

b. ATTACH A COPY OF THE AGREEMENT LETTER SIGNED BY THE HOSPITAL ADMINISTRATOR.

c. WHEN REQUESTING THERAPY PROCEDURES, ATTACH A COPY OF RADIATION SAFETY PRECAUTIONS TO BE TAKEN AND LIST AVAILABLE RADIATION DETECTION INSTRUMENTS.

26. CERTIFICATE

(This item must be completed by applicant)

The applicant and any official executing this certificate on behalf of the applicant named in Item 1a certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, Parts 30 and 35, and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

a. LICENSE FEE REQUIRED
(See Section 170.31, 10 CFR 170)

(1) LICENSE FEE CATEGORY:

7C

(2) LICENSE FEE ENCLOSED: \$ 120.00

APPLICANT OR CERTIFYING OFFICIAL *(Signature)*

X

(1) NAME *(Type of Print)*

X

Mark Seckinger

(2) TITLE

X

Administrator

DATE

X

1-9-86

PRIVACY ACT STATEMENT

Pursuant to 5 U.S.C. 552a(e)(3), enacted into law by section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the Nuclear Regulatory Commission on NRC Form 313M. This information is maintained in a system of records designated as NRC-3 and described at 40 Federal Register 45334 (October 1, 1975).

1. **AUTHORITY** Sections 81 and 161(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2111 and 2201(b)).
2. **PRINCIPAL PURPOSE(S)** The information is evaluated by the NRC staff pursuant to the criteria set forth in 10 CFR Parts 30-36 to determine whether the application meets the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations, for the issuance of a radioactive material license or amendment thereof.
3. **ROUTINE USES** The information may be used: (a) to provide records to State health departments for their information and use; and (b) to provide information to Federal, State, and local health officials and other persons in the event of incident or exposure, for their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, and local agencies in the event that the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for a NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you. A copy of the license issued will routinely be placed in the NRC's Public Document Room, 1717 H Street, N.W., Washington, D.C.
4. **WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION** Disclosure of the requested information is voluntary. If the requested information is not furnished, however, the application for radioactive material license, or amendment thereof, will not be processed.
5. **SYSTEM MANAGER(S) AND ADDRESS** Director, Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

NAME OF AUTHORIZED USER

AUTHORIZATION

Amend to Include:

Richard W. Adams, D.O.

Groups I, II & III.
Iodine-131 for treatment
of hyperthyroidism and
cardiac dysfunction.
Phosphorus-32 (soluble) for
treatment of polychythemia
vera, leukemia, and bone
metastases.
In-vitro Studies.

For physician training and experience, please refer to attached
Supplements A (2) and B, as well as preceptor letters dated
October 15, 1985 and November 22, 1985.

R.E. Farneman, D.O.

Groups I, II, II, IV and
VI.

For physican training and experience, please refer to NRC license
#34-05488-01.

Amend to delete Philip Golding, D. O.

Item #8
1 of 1 page
Prepared: 12/2/85
Lic. # 34-18980-01

TRAINING AND EXPERIENCE
AUTHORIZED USER OR RADIATION SAFETY OFFICER

1 NAME OF AUTHORIZED USER OR RADIATION SAFETY OFFICER

Richard W. Adams, D. O.

2 STATE OR TERRITORY IN
WHICH LICENSED TO
PRACTICE MEDICINE

3 CERTIFICATION

SPECIALTY BOARD
ACATEGORY
BMONTH AND YEAR CERTIFIED
CAmerican Osteopathic
Board of Radiology

Radiology

Eligible 1985

4 TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES

FIELD OF TRAINING
ALOCATION AND DATE(S) OF TRAINING
B

TYPE AND LENGTH OF TRAINING

LECTURE
LABORATORY
COURSES
(Hours)
CSUPERVISED
LABORATORY
EXPERIENCE
(Hours)
Da RADIATION PHYSICS AND
INSTRUMENTATIONAO CR COURSES 96 hours
1983, 1984, 1985

25

25

b RADIATION PROTECTION

OSU LECTURES
Sept., Oct. & Nov. 1984
Radiotherapy & Physics

10

5

c MATHEMATICS PERTAINING TO
THE USE AND MEASUREMENT
OF RADIOACTIVITY

Same

10

10

d RADIATION BIOLOGY

Same

24

-

e RADIOPHARMACEUTICAL
CHEMISTRY

Same

3

-

5. EXPERIENCE WITH RADIATION. (Actual use of Radioisotopes or Equivalent Experience)

ISOTOPE

MAXIMUM AMOUNT

WHERE EXPERIENCE WAS GAINED

DURATION OF EXPERIENCE

TYPE OF USE

See other supplement A

TRAINING AND EXPERIENCE
AUTHORIZED USER OR RADIATION SAFETY OFFICER

1 NAME OF AUTHORIZED USER OR RADIATION SAFETY OFFICER

Richard W. Adams, D. O.

2 STATE OR TERRITORY IN
WHICH LICENSED TO
PRACTICE MEDICINE
Ohio

3 CERTIFICATION

SPECIALTY BOARD
ACATEGORY
BMONTH AND YEAR CERTIFIED
CAmerican Osteopathic
Board of Radiology

Radiology

Eligible 1985

4. TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES

FIELD OF TRAINING A	LOCATION AND DATE (S) OF TRAINING B	TYPE AND LENGTH OF TRAINING	
		LECTURE LABORATORY COURSES (Hours) C	SUPERVISED LABORATORY EXPERIENCE (Hours) D
a RADIATION PHYSICS AND INSTRUMENTATION	Doctors Hospital Columbus OH 8-1-82 to 7-31-85	80	20
b RADIATION PROTECTION	Same	28	2
c MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY	Same	10	4
d RADIATION BIOLOGY	Same	14	
e RADIOPHARMACEUTICAL CHEMISTRY	Same	21	5

5. EXPERIENCE WITH RADIATION. (Actual use of Radioisotopes or Equivalent Experience)

ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
Cs-137	100 mg. Eq. radium	Doctors Hospital	81-82 to 7-31-85 3 months	Intracavitary therapy
Co-60	4770 curie	Doctors Hospital Columbus, Ohio	3 months	Teletherapy

PRECEPTOR STATEMENT

Supplement B must be completed by the applicant physician's preceptor. If more than one preceptor is necessary to document experience, obtain a separate statement from each.

1. APPLICANT PHYSICIAN'S NAME AND ADDRESS			KEY TO COLUMN C PERSONAL PARTICIPATION SHOULD CONSIST OF: 1-Supervised examination of patients to determine the suitability for radioisotope diagnosis and/or treatment and recommendation for prescribed dosage. 2-Collaboration in dose calibration and actual administration of dose to the patient including calculation of the radiation dose, related measurements and plotting of data. 3-Adequate period of training to enable physician to manage radioactive patients and follow patients through diagnosis and/or course of treatment.
FULL NAME			
Richard W. Adams, D. O.			
STREET ADDRESS			
1087 Dennison Avenue			
CITY	STATE	ZIP CODE	
Columbus	OH	43201	

2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN

ISOTOPE A	CONDITIONS DIAGNOSED OR TREATED B	NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION C	COMMENTS (Additional information or comments may be submitted in duplicate on separate sheets.) D
I-131 or I-125	DIAGNOSIS OF THYROID FUNCTION	15	
	DETERMINATION OF BLOOD AND BLOOD PLASMA VOLUME		
	LIVER FUNCTION STUDIES		
	FAT ABSORPTION STUDIES		
	KIDNEY FUNCTION STUDIES	40	
	IN VITRO STUDIES		
OTHER			
I-125	DETECTION OF THROMBOSIS		
I-131	THYROID IMAGING	10	
P-32	EYE TUMOR LOCALIZATION		
Se-75	PANCREAS IMAGING		
Yb-169	CISTERNOGRAPHY	5	
Xe-133	BLOOD FLOW STUDIES AND PULMONARY FUNCTION STUDIES	5	
OTHER	123 Thyroid function	125	
Tc-99m	BRAIN IMAGING	25	
	CARDIAC IMAGING	50	
	THYROID IMAGING	10	
	SALIVARY GLAND IMAGING		
	BLOOD POOL IMAGING	20	
	PLACENTA LOCALIZATION		
	LIVER AND SPLEEN IMAGING	200	
	LUNG IMAGING	200	
	BONE IMAGING	200	
OTHER			

PRECEPTOR STATEMENT (Continued)

2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN (Continued)

ISOTOPE A	CONDITIONS DIAGNOSED OR TREATED B	NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION C	COMMENTS (Additional information or comments may be submitted in duplicate on separate sheets.) D
P-32 (Soluble)	TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA, AND BONE METASTASES	10	
P-32 (Colloidal)	INTRACAVITARY TREATMENT		
I-131	TREATMENT OF THYROID CARCINOMA		
	TREATMENT OF HYPERTHYROIDISM	25	
Au-198	INTRACAVITARY TREATMENT		
Co-60 or Cs-137	INTERSTITIAL TREATMENT		
	INTRACAVITARY TREATMENT	10	
I-125 or Ir-192	INTERSTITIAL TREATMENT		
Co-60 or Cs-137	TELETHERAPY TREATMENT	100	
Sr-90	TREATMENT OF EYE DISEASE		
	RADIOPHARMACEUTICAL PREPARATION	20	
Mo-99/ Tc-99m	GENERATOR	20	
Sn-113/ In-113m	GENERATOR		
Tc-99m	REAGENT KITS	20	
Other			
Tl-201	Myocardial perfusion	50	
GA-67	Tumor & Abscess scan	20	

3. DATES AND TOTAL NUMBER OF HOURS RECEIVED IN CLINICAL RADIOISOTOPE TRAINING

August 1, 1982 through July 31, 1985 1200
hours of clinical radioisotope training.

4. THE TRAINING AND EXPERIENCE INDICATED ABOVE WAS OBTAINED UNDER THE SUPERVISION OF:

a. NAME OF SUPERVISOR

George O. Faerber, D. O.

b. NAME OF INSTITUTION

Doctors Hospital

c. MAILING ADDRESS

1087 Dennison Avenue

d. CITY

Columbus OH 43201

5. MATERIALS LICENSE NUMBER(S)

34-05488-01

6. PRECEPTOR'S SIGNATURE

X *George O. Faerber*

7. PRECEPTOR'S NAME (Please type or print)

George O. Faerber, D. O.

8. DATE

11-22-85



The Ohio State University

University Hospitals

410 West 10th Avenue
Columbus, Ohio 43210-1228

October 15, 1985

George Faerber, D.O.
Doctors Hospital
1087 Dennison Ave.
Columbus, Ohio 43201

Dear Dr. Faerber:

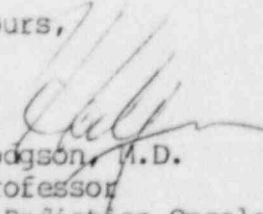
This is to let you know the details of the training program referable to Drs. Richard Adams and Dr. Thomas Anderson.

Dr. Adams spent three months with us from September to November 1984, and Dr. Anderson was here from December 1984 to March 1985 and I believe he will be returning within the next year or two for further training. We certainly look forward to his return since he was an extremely industrious and helpful young man as was Dr. Adams. Both residents had approximately 200 hours of class, conference discussion and clinical application with approximately the following breakdown.

Clinical Radiation Therapy	60 hours
Radiation Biology	25 hours
Radiation Physics	50 hours
(including basic physic instrumentation protection dose determination measurements , etc)	
Clinical Conferences, Patient Management, Decision Making	100 hours

In addition, they had further training in treatment concepts, methodology, treatment planning, patient evaluation and follow ups. They also had experience in handling radiation sources for intracavitary procedures as well as radiation dosimetry. I do not remember if these residents spent time in Nuclear Medicine, but if so they should be considered for inclusion in your US/NRC Isotope License as users. This training and experience should definitely be counted.

Sincerely yours,


Sheila E. Hodgson, M.D.
Associate Professor
Division of Radiation Oncology

CONTROL NO. 80479

SEH:gdb

DOCTORS HOSPITAL

DENNISON AT THIRD AVENUE
COLUMBUS, OHIO 43201

DEPARTMENT OF RADIOLOGY AND NUCLEAR MEDICINE

THEODORE C. HOBBS, D.O.
CARL L. NEUFELD, D.O.
ROY E. FARNEMAN, D.O.
GERHARDT R. FITZ, D.O.
GEORGE O. FAERBER, D.O.
ROBERT L. COX, D.O.

ROGER S. RUBEN, D.O.
J. JAMES JERELE, D.O.
JOHN A. HIPPLE, D.O.
RONALD J. ZARZYCKI, D.O.
A. LEE ANTRY, D.O.
GEORGE W. CALLENDINE, Jr. Ph.D.

November 22, 1985

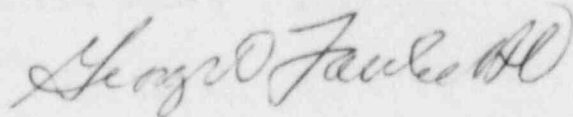
To Whom It May Concern:

Richard W. Adams, D. O. was a resident in the Department of Radiology and Nuclear Medicine at Doctors Hospital from August 1, 1982 through July 31, 1985. This statement supplements NRC forms 313M supplement A and supplement B.

During Dr. Adams training at Doctors Hospital, he spent rotations totalling 6 months in Clinical Radioisotope Training. During this time, he received classroom and laboratory instruction in the Nuclear Medicine Section and in the Radiation Oncology Section by clinical instructors and the physicist in Basic Radioisotope Handling Techniques.

In addition, Dr. Adams spent September, October and November 1984 at the Ohio State University during which he received training in Radiation Biology, Physics, and Clinical Radiation Therapy as outlined by the attached letter from Ohio State University. In addition while at Doctors Hospital, he attended three yearly courses in Radiation Physics and Radiobiology for a total of 96 hours sponsored by the American Osteopathic College of Radiology.

Sincerely,



George O. Faerber, D. O.
Certified in Nuclear Medicine
by ABNM and AOBNM
Chairman, Residency Program
Committee Doctors Hospital - Department
of Radiology & Nuclear Medicine

GOF:wb

Enclosures

CONTROL NO. 80479