
TECHNETIUM 99m
GENERATORS
Technetium Tc 99m Generators
for the Production of
Sodium Pertechnetate Tc 99m
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- Internal saline reservoir—lets you automatically elute, eliminating the need to store saline vials.
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The smallest 5 sizes of the Technetium Tc 99m Generator—830, 1660, 2480, 3310 and 4140mCi—are shielded with lead. The remaining fifteen sizes are shielded with depleted uranium internal shielding. Depleted uranium possesses greater density and therefore offers superior shielding properties for our higher activity Generators. Optimum shielding design minimizes radiation to personnel in work areas, providing maximum protection.

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TECHNETIUM Tc 99m GENERATOR for the Production of Sodium Pertechnetate Tc 99m

DESCRIPTION: The Technetium Tc 99m Generator is prepared with fission produced Molybdenum Mo 99 absorbed on alumina in a lead-shielded column and provides a means for obtaining sterile pyrogen-free solutions of Sodium Pertechnetate Tc 99m in sodium chloride injection. The eluate should be crystal clear. With a pH of 4.5-7.5, hydrochloric acid and/or sodium hydroxide may have been used for pH adjustment. Over the life of the generator, an elution will contain a yield of 80% to 100% of the theoretical amount of Technetium Tc 99m available from the Molybdenum Mo 99 on the generator column.

Each eluate of the generator should not contain more than 0.15 microcurie of the Molybdenum Mo 99 per millicurie Technetium Tc 99m per administered dose at the time of administration, and not more than 10 micrograms of aluminum per milliliter of the generator eluate, both of which must be determined by the user before administration.

Since the eluate does not contain an antimicrobial agent, it should not be used after twelve hours from the time of generator elution.

INDICATIONS AND USAGE: Sodium Pertechnetate Tc 99m is used IN ADULTS as an agent for: brain imaging including cerebral radionuclide angiography; thyroid imaging; salivary gland imaging; placenta localization; blood pool imaging including radionuclide angiography; and urinary bladder imaging (direct isotopic cystography) for detection of vesico-ureteral reflux.

Sodium Pertechnetate Tc 99m is used IN CHILDREN as an agent for: brain imaging including cerebral radionuclide angiography; thyroid imaging; blood pool imaging including radionuclide angiography; and urinary bladder imaging (direct isotopic cystography) for the detection of vesico-ureteral reflux.

CONTRAINDICATIONS: None known.

WARNINGS: Radiation risks associated with the use of Sodium Pertechnetate Tc 99m are greater in children than in adults. In general, the younger the child the greater the risk owing to greater absorbed radiation doses and longer life expectancy. These greater risks should be taken firmly into account in all benefit-risk assessments involving children.

PRECAUTIONS: As in the use of any radioactive material, care should be taken to minimize radiation exposure to the patient consistent with proper patient management and to insure minimum radiation exposure to occupational workers.

Since the eluate does not contain an antimicrobial agent, it should not be used after twelve hours from the time of generator elution.

Carcinogenesis, Mutagenesis, Impairment of Fertility

No long-term animal studies have been performed to evaluate carcinogenic potential or whether Technetium Tc 99m may affect fertility in males or females.

Pregnancy Category C

Animal reproductive studies have not been conducted with Technetium Tc 99m. It is also not known whether Technetium Tc 99m can cause fetal harm when administered to a pregnant woman or can affect reproductive capacity. Technetium Tc 99m should be given to a pregnant woman only if the expected benefits to be gained clearly outweigh the potential hazards.

Ideally, examinations using radiopharmaceuticals, especially those effective in nature, of a woman of childbearing capability should be performed during the first few (approximately 10) days following the onset of menses.

Nursing Mothers

Technetium Tc 99m is excreted in human milk during lactation, and therefore formula feedings should be substituted for breast feedings.

Pediatric Use

See **INDICATIONS AND USAGE, DOSAGE AND ADMINISTRATION.** See also description of additional risk under **WARNINGS.**

Radiopharmaceuticals should be used only by physicians who are qualified by training and experience in the safe use and handling of radionuclides, and whose experience and training have been approved by the appropriate government agency authorized to license the use of radionuclides.

The generator should not be used after 16 days from the date and time of calibration.

At time of administration, the solution should be crystal clear.

ADVERSE REACTIONS: Allergic reactions including anaphylaxis have been reported infrequently following the administration of Sodium Pertechnetate Tc 99m.

HOW SUPPLIED: Sodium Pertechnetate Tc 99m is supplied as a Molybdenum Mo 99/Technetium Tc 99m generator in sizes from 830 millicuries up to 16,600 millicuries (in approximately 830 millicurie increments) of Molybdenum Mo 99 as of 10:00 P.M. Eastern Time of the day of calibration. The TECHNETIUM Tc 99m GENERATOR consists of:

1) sterile generator, 2) Sodium Chloride injection source, 3) 10 cc sterile evacuated vials, 4) sterile needles, 5) elution vial shield* 6) finished drug labels. Elution vials in 5 cc and 20 cc sizes are available upon request.

*Initial order only.

The TECHNETIUM Tc 99m GENERATOR should not be used after sixteen (16) days from the date and time of calibration.

For multidose use, the eluate should be used within 12 hours of the generator elution time. If the eluate is used to reconstitute a kit, the radiolabeled kit should not be used after 12 hours from the time of generator elution or 6 hours after reconstitution of the kit, whichever is earlier.

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September 2–5, 1986

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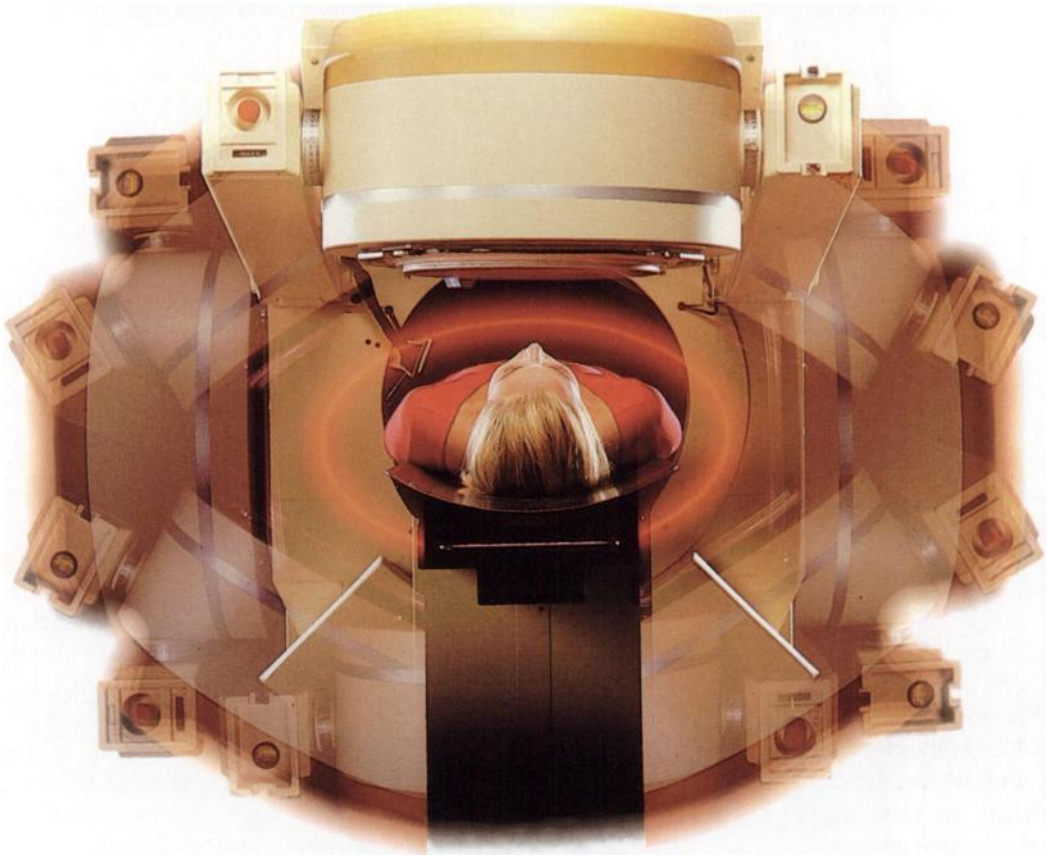

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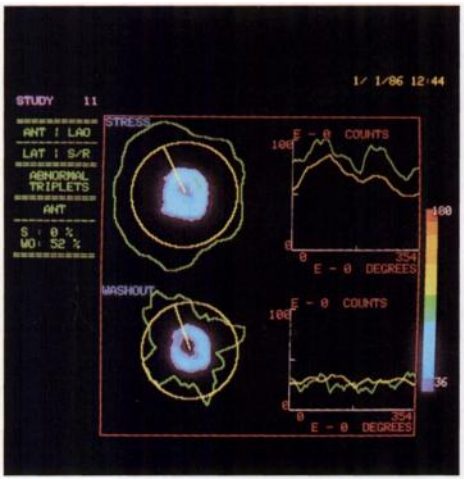

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THE JOINT ACNP/SNM SPECT SYMPOSIUM

Presented by the American College of Nuclear Physicians and The Society of Nuclear Medicine, based on the results of surveys conducted at the 1984 and 1985 SNM Annual Meetings, SPECT Imaging was nominated as the single most desired symposia topic. The Symposium is designed for radiologists, nuclear medicine physicians, and nuclear medicine technologists who wish to increase their knowledge of SPECT utilization. A national panel of distinguished speakers will present topics to include:

- How SPECT works
- Patient set-up for SPECT
- SPECT brain imaging
- Pediatric applications
- Orthopedic applications
- Cardiac imaging
- SPECT in the community hospital
- Quality control

DATE AND LOCATION

Monday-Tuesday, September 22-23, 1986
The Washington Marriott Hotel
1221 22nd Street, NW
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202-872-1500

HOTEL RESERVATIONS

A block of rooms has been set aside at the special rate of $104/single and $124/double at the Marriott Washington Hotel, 1221 22nd Street, NW, Washington, D.C. (202-872-1500). Use any major credit card to make your reservation. Indicate that you are with the American College of Nuclear Physicians to be sure you receive the preferential rate.

SPECT LUNCHEON

There will be a luncheon for symposium attendees on both days of the meeting to give everyone time to relax and meet with colleagues. If you would like to attend one or both of the luncheons, please check the appropriate box on the registration form and include an additional $18.00 for each luncheon.

14 HRS. AMA CATEGORY 1 CREDIT 1.1 VOICE Credits

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Technologists		
Members	$ 75.00	$ 95.00
Nonmembers	105.00	125.00
Students	50.00	

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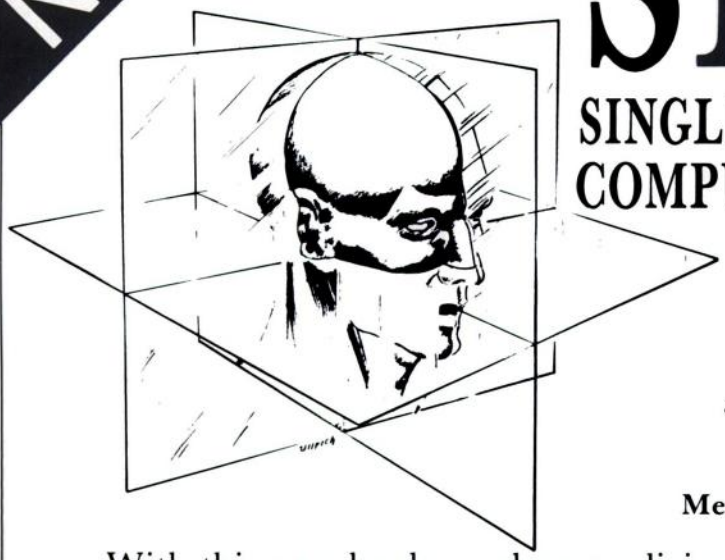
For more information, please contact the **Education & Meetings Department,** The Society of Nuclear Medicine, 136 Madison Avenue, New York, NY 10016 (212)889-0717.

NEW



SPECT

SINGLE PHOTON EMISSION COMPUTED TOMOGRAPHY: A PRIMER

Robert J. English, CNMT
and Susan E. Brown, CNMT

Publication Date: June 1986
168 pp; 6 × 9 softcover
Members: $15.00/Non-members: $17.00

With this new book, nuclear medicine technologists can now expand their knowledge of the specialty to encompass the increasingly important modality of SPECT. The Primer answers the technologist's fundamental questions about SPECT, as both a text and as an extension of any manufacturer's operating manual.

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- **Quality Control Requirements**
- **Acquisition Parameters**
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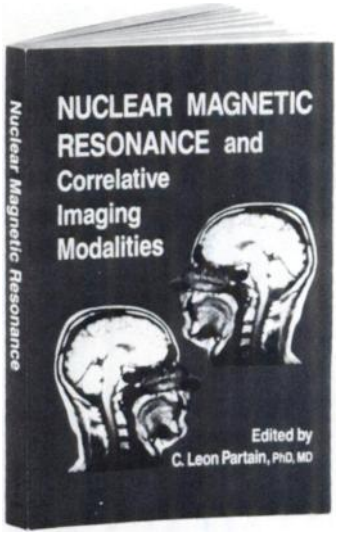
NUCLEAR MAGNETIC RESONANCE and Correlative Imaging Modalities



Edited by C. Leon Partain, PhD, MD

6 × 9" softcover; 312 pages
$35.00 SNM members; $47.00 non-members
Publication Date: January 1984

This multi-authored book contains state-of-the-art summaries on ultrasound, x-ray, computed tomography, and digital radiography in addition to NMR. The correlative aspects of each modality with nuclear medicine are investigated. Material devoted to NMR covers topics such as basic principles and instrumentation; considerations of site preparation; safety and quality control; pulse sequences and tissue contrast; and the current clinical results at certain hospital installations. Facts on the economic, legal, and political aspects of NMR are also included.

Anyone in nuclear medicine—from professional to student—interested in new technologies to ensure a quantitative, physical, and biochemical basis for accurate medical diagnosis will profit from reading this comprehensive publication.

HIGHLIGHTS FROM THE CONTENTS

NMR Spectroscopy
M.R. Willcott and Gary E. Martin

The Basis of Imaging and Chemical Analysis by NMR
Paul A. Bottomley

Magnet Systems: Resistive, Superconducting and Permanent
William Oldendorf

Pulse Sequences for NMR Imaging Using Multidimensional Reconstruction Techniques
Lawrence E. Crooks, John C. Hoenninger, and Mitsuaki Arakawa

Pulse Sequence and Image Contrast
John C. Gore

Nuclear Medicine—NMR Correlation
F. David Rollo

NMR and PET for Metabolic Studies
R. Edward Coleman, Robert J. Herfkens, Michael E. Phelps, and Burton P. Drayer

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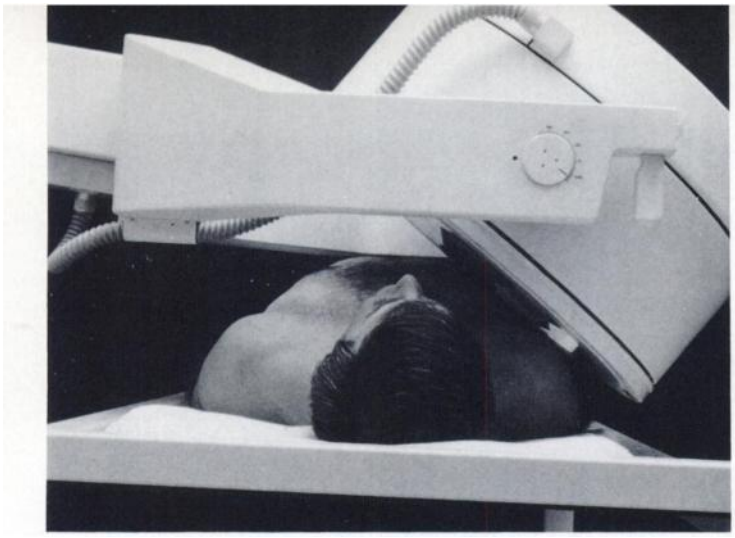

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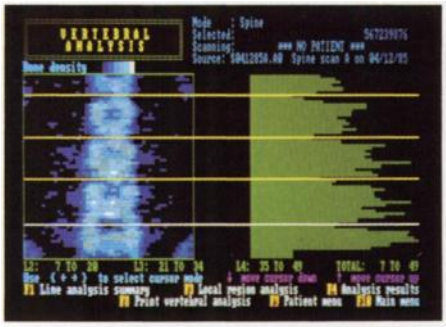

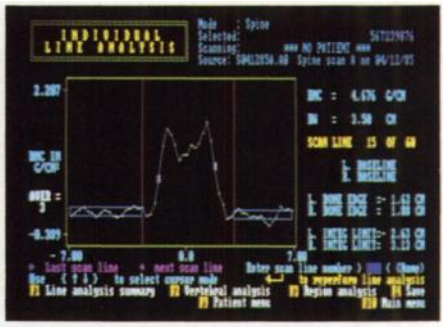

◄ **INDIVIDUAL LINE ANALYSIS:** *If desired, a more detailed analysis can be performed on an individual scan line. BoneStar software allows the operator to modify computer selected baseline and bone edge parameters where necessary.*

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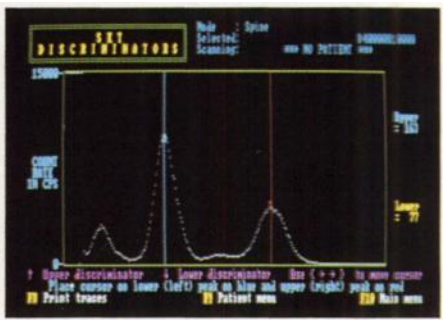

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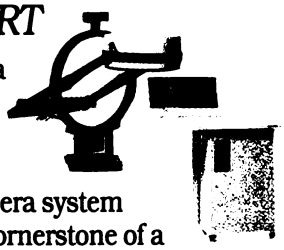

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Visit our Booth at the European Nuclear Medicine Congress in Goslar, FRG Sept. 2-5, 1986

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SIEMENS

See us at the European Nuclear Medicine Congress Goslar, FRG, September 2-5, 1986

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Coupled with our Automatic Radiochemistry System, Sumitomo CYPRIS Cyclotrons offer outstanding performance especially for use in hospital environments.

Among other things, CYPRIS Systems offer such advanced features as:

Simple, neat arrangement of components
Single dee and the fewer number of components in our cyclotron allow the machine to be compact, small in size and weight, and ideal for installation in tight spaces.

Easy operation
Simply touch four push buttons for beam accelleration.

Short time start-up
It takes only ten minutes to produce gaseous $^{15}O_2$, $C^{15}O$, and $C^{15}O_2$.

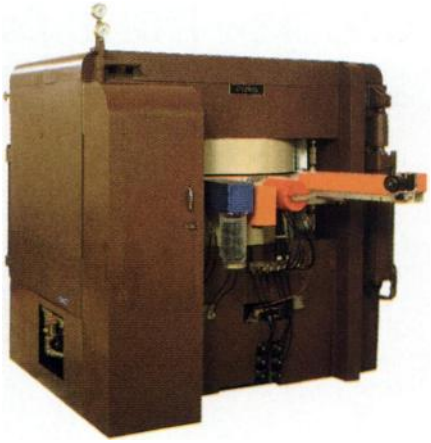
Computer control
Microprocessor control keeps monitoring status of operations via CRT. Malfunctions, if any, can be traced with ease, permitting quick trouble-shooting.

Wide coverage of radiochemistry systems
Our range of radiochemistry systems covers nearly all the RI labelled compounds in use in medical diagnosis including ^{11}C-methyl iodide, ^{11}C-cyanide, ^{13}N-ammonia, ^{15}O-water, and ^{18}F-fluorodeoxiglucose.

Adaptability to additional radiochemistry systems
Modification of the computer program in the Universal Controller will easily open the way for use with any new radiochemistry systems.

This merely scratches the surface of the Sumitomo CYPRIS System.

For details, please contact SUMITOMO at the address below.



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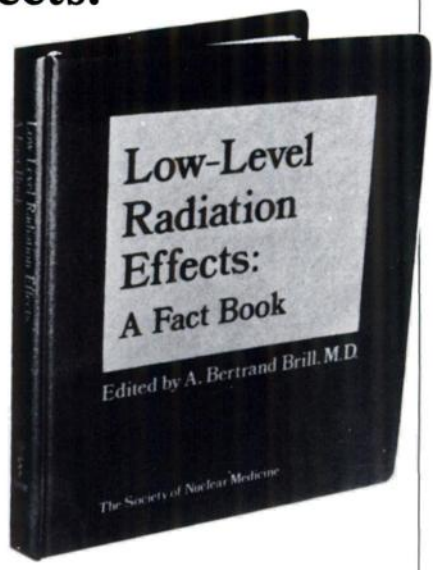
Sales Agent in North America: Medi Physics Inc. 4050 Lakeside Drive, Richmond CA. 94806, U.S.A. Phone: (415) 222-8006

SNM Offers Important Up-to-Date Information on Low-Level Radiation

Second Edition

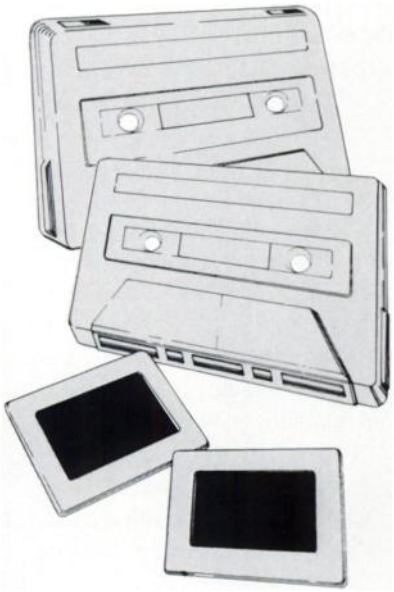
Low-Level Radiation Effects: A Fact Book

Edited by A. Bertrand Brill, M.D., Ph.D.



This book represents a conscientious attempt to provide an unbiased, up-to-date source of knowledge regarding the potential long- and short-term effects of radiation exposure to humans. Important new sources of information provided the stimulus for publishing the 1985 updtes, which can be included with the original document. New reports issued by UNSCEAR, ICRP, and NCRP and references to recent publications of findings among Japanese A-bomb survivors have been added. Prepared in 8½ × 11 " looseleaf format to facilitate periodic additions, this fact book contains a concise reference list for readers wishing to obtain additional, or more detailed information.

Cost: **$32.00** for original document (156 pages, including binder) plus 1985 update package (80 pages).
$10.00 for updates purchased separately (80 pages without binder).
Postage is included in prices.



Biological Effects of Low-Level Radiation *(an audiovisual)*

Richard L. Witcofski, Ph.D.

Illustrates up-to-date information about the effects on humans of low-level radiation and the difficulties of detection. The various sources of radiation exposure to the population are provided. Three potential biological effects of low-level exposure (cancer induction, genetic effects, and effects on the embryo) are each discussed in detail, particularly in light of the studies on exposed humans. And, finally, the risks of exposure to low levels of radiation are compared to other risks of life. *Approved for Category 1 credit and .1 CEU (VOICE) credit.* 80 slides; 59-min audio.

Cost: **$55.00** for members, **$75.00** for non-members, plus
$5.00 per order for postage and handling in US.
$10.00 per order for postage and handling outside US.

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Prepayment required in US funds drawn on US banks only. No foreign funds accepted. For payments made in US dollars, but drawn on a foreign bank, add $4.50 bank processing fee for Canadian bank drafts or $40.00 for all other foreign. Make checks payable to: **The Society of Nuclear Medicine, 136 Madison Avenue, New York, NY 10016.** Prices are subject to change without notice.

For Diagnosis, Prevention, and Patient Management of Osteoporosis and Other Metabolic Bone Diseases and Disorders

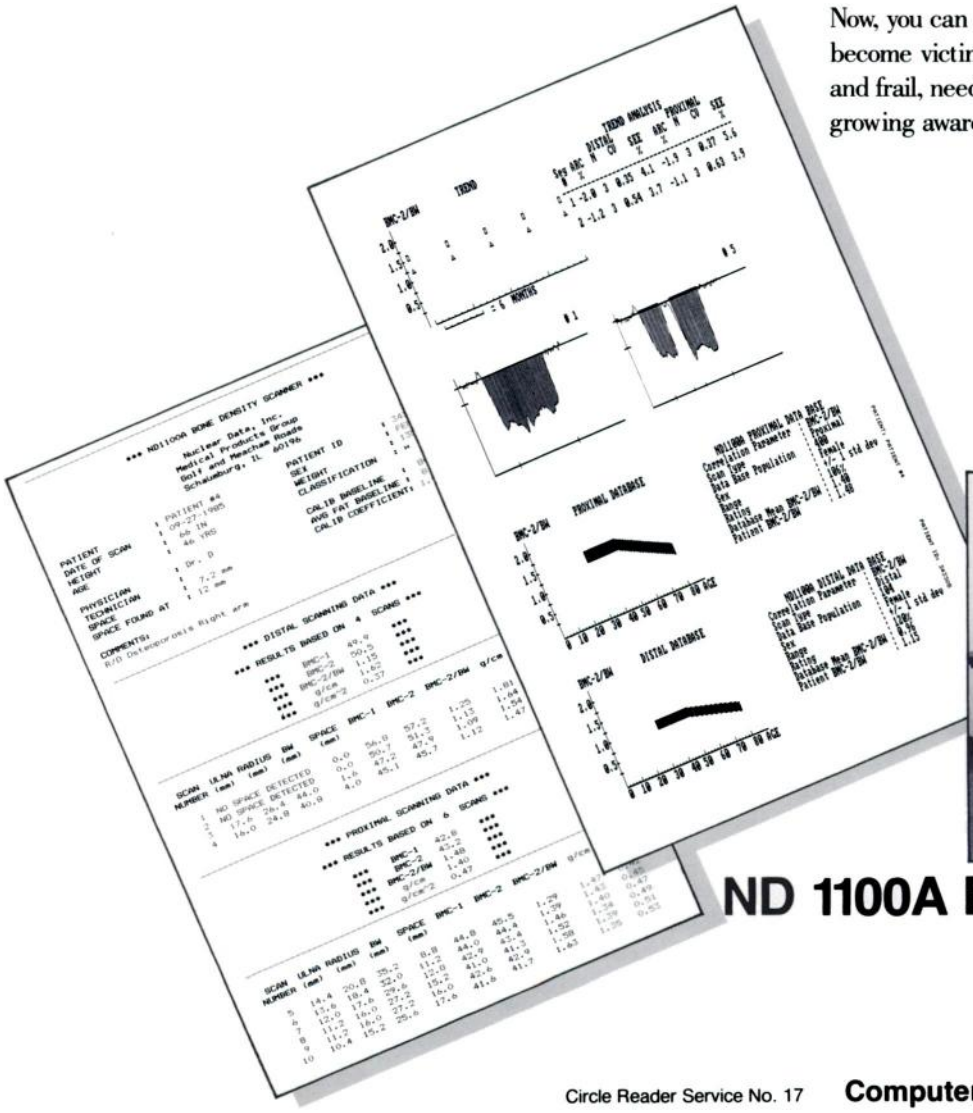
Single Photon?

Or

Osteoporosis afflicts up to 20 million Americans and leads to 1.3 million fractures each year. One in five women with hip fractures (40,000) dies, and another 20% are permanently crippled. The medical, nursing home, and social cost of osteoporosis and its consequences comes to $6 billion in the U. S. each year.

Yet, with the development of clinical bone densitometry instruments, nuclear medicine may now move into a new era of service—the identification and management of those persons most at risk to develop osteoporosis and other bone disorders and diseases. You can support attending physicians in their efforts to prevent crippling osteoporosis by identifying patients at risk and by participating in effective management programs.

No greater opportunity exists to practice preventive medic
Now, you can contribute to the day when proud people need no
become victims of their own bodies, need not become stooped and frail, need not live in fear of falling. You can contribute to the growing awareness that osteoporosis is preventable.



ND 1100A Bone Density Scanner

Single photon absorptiometry
1 percent precision
For distal/proximal forearm scans
Rectilinear scanning
Computer-assisted site search for serial studies

Circle Reader Service No. 17

Dual Photon?

Both?

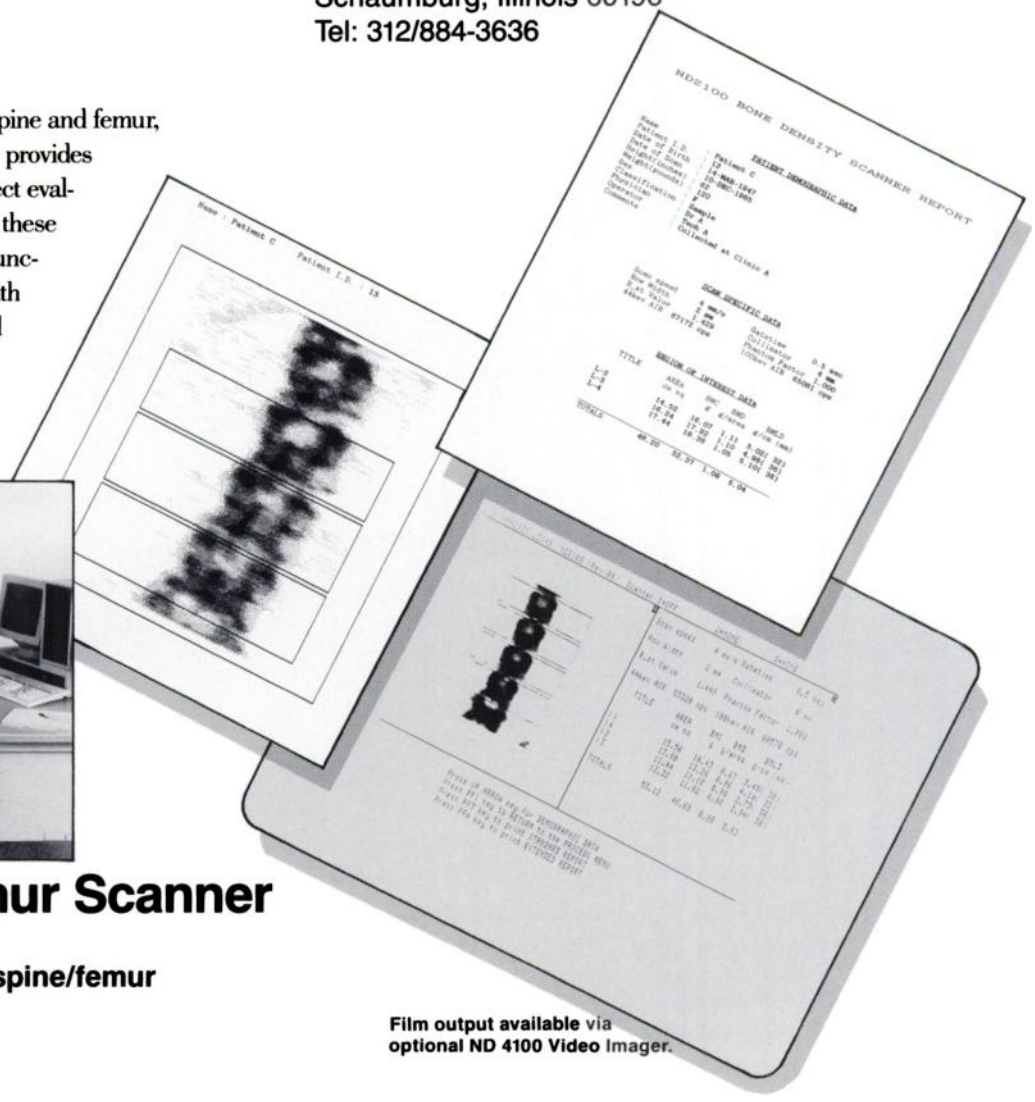
The Choice Is Yours

For precise measurement of bone mineral content (to within 1%) of both cortical and trabecular bone, the ND 1100A single photon bone densitometer is unsurpassed. This instrument utilizes rectilinear scanning of the distal forearm for precise determination of very slight changes in bone mineral content over relatively short periods. Computer-assisted site search assures reproducibility of the results, no matter how much time elapses between measurements, permitting long-term evaluation of minute changes in bone mineral content.

Committed to Imaging Excellence

Nuclear Data, Inc.
Instrumentation Division
ND Medical Products
Golf and Meacham Roads
Schaumburg, Illinois 60196
Tel: 312/884-3636

For site-specific visualization of the lumbar spine and femur, the ND 2100 dual photon spine scanner provides clear, high resolution images permitting direct evaluation of the state of the trabecular bone in these crucial areas. Featuring a powerful multifunctional computer, fast data processing with large storage capacity, and sophisticated softwear, the ND 2100 densitometer is ideal for the clinical environment.



ND 2100 Spine/Femur Scanner

Dual photon absorptiometry
Accurate visualization of lumbar spine/femur
Unparalleled image quality
Permits direct evaluation

Film output available via **optional ND 4100 Video** Imager.

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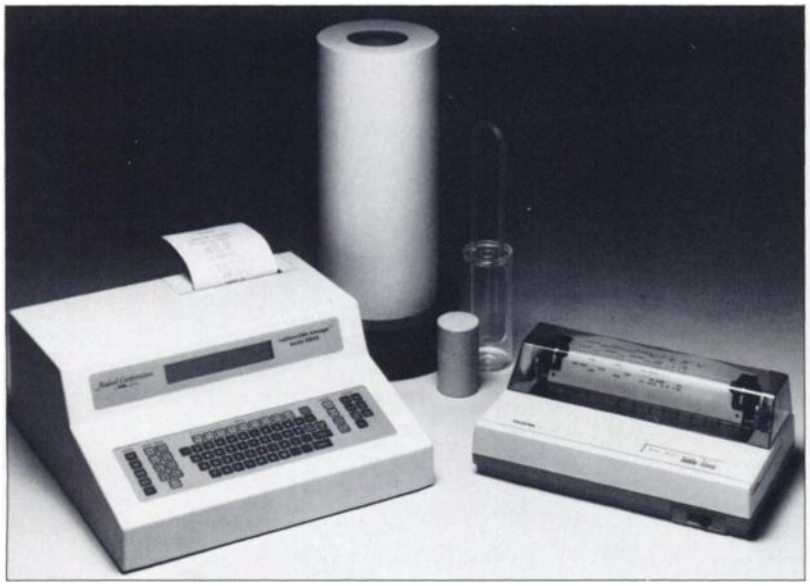
Buying a dose calibrator which is specifically designed to save you both time and money, while maintaining the highest standards of quality and accuracy, is common sense. Radcal dose calibrators are designed exactly that way.



MODEL 4045

MODEL 4050

Radcal dose calibrators have advanced, state-of-the-art features which are standard. They are microprocessor-based, with auto-ranging digital controls (no knobs or dials), have wide dynamic ranges, easy-to-read LCD displays, Ci-Bq selection available, remote sensors, splash-proof lab-tough designs, built-in self-testing, moly breakthrough shield and high-protection sensor shielding.

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Model 4045 — Is designed for the lab requiring a full range of self-generating records at a moderate price. This system has two printers — one, a self-contained patient dose and inventory printer and a second, larger printer which summarizes daily transactions. Its 80-key typewriter-style keyboard allows for quick, complete dose and inventory recording. An electronic bias supply is standard.

Compare Radcal's cost and features with other systems. You'll be pleased to see that we offer substantially more — at a lower price.

All systems feature a one-year warranty and are UL approved.

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EUROPEAN NUCLEAR MEDICINE CONGRESS 1986

Congress Center "Achtermann", Goslar, Federal Republic of Germany, Sept. 2–5, 1986

PARTICIPATING ORGANIZATIONS

The Society of Nuclear Medicine–Europe
24th Meeting

The European Nuclear Medicine Society
9th Meeting

The German Society of Nuclear Medicine
1st Meeting

SCIENTIFIC PROGRAM: Nearly 600 abstracts have been submitted (30% from the FRG, 55% from other European countries, and 15% from countries outside Europe), and there will be three parallel sessions with papers on: endocrinology, circulation, gastroenterology, cardiology, neurology, nonmalignant bone and joint diseases, oncology, pulmonary diseases, therapy, basic research, efficacy, quality control, radiation risk, new methodologies, new radiopharmaceuticals, and new technologies.

PRE-CONGRESS TEACHING COURSES: Monday, Sept. 1, Workshop on Comparison of Emission Tomography Techniques, Dept. of Nuclear Medicine, Medical School Hannover; Clinical Aspects of Osteoporosis, Dept. of Nuclear Medicine, City Hospital of Kassel.

PLENARY SESSIONS: Non-nuclear medicine physicians have been invited to present their views on the "Clinical Demands on Nuclear Medicine." O. Pachinger (Austria) will speak on cardiology, W.-D Heiss (FRG) will cover neurology, and J. Klostersky and J. Frühling (Belgium) will discuss oncology. Eugene L. Saenger, MD, of the Saenger Radioisotope Laboratory in Cincinnati, Ohio (USA), will discuss "the important task of proving the efficacy of nuclear medicine." Dr. Saenger is also a member of The Society of Nuclear Medicine's Efficacy Subcommittee. The von Hevesy Lecture will be given by W.E. Adam (FRG) "Nuclear Medicine in Europe 1986" will be presented by D.P. Pretschner and H. Hundeshagen (FRG).

EXHIBITION: A comprehensive exhibition of equipment and radiopharmaceutical manufacturers will be on display in a new park-house, specially refitted for this purpose, close to the Congress Center. The scientific posters will also be displayed in this area.

SOCIAL PROGRAM: Many social activities have been planned, including a concert of chamber music by internationally reknowned soloists from the Conservatory of Music in Brussels, a medieval festival in the Goslar marketplace, a tour of the Herzog August Library in Wolfenbuttel (the greatest library of 17th-century Germany where Leibniz and Lessing worked), and a one-day visit to see the churches and medieval gardens of the cities of Hildesheim and Hannover.

REGISTRATION: Members of the Society of Nuclear Medicine—Europe (SNME), of the European Nuclear Medicine Society (ENMS), and of the German Society of Nuclear Medicine will be admitted free of charge to the scientific sessions and exhibition hall. Registration fee for all others is:

400 DM ($185.00) Physicians, Physicists, Chemists, Engineers
200 DM ($ 92.50) Technicians, Technologists

All payments must be made in **German Deutsche Marks.** Please make checks payable to: Deutsches Reisebüro GmbH, DER-Congress.

Mailing address for payment and further information: Deutsches Reiseburo GmbH, DER-CONGRESS, Eschersheimer Landstrasse 25-27, D-6000 Frankfurt/Main 1, FRG.

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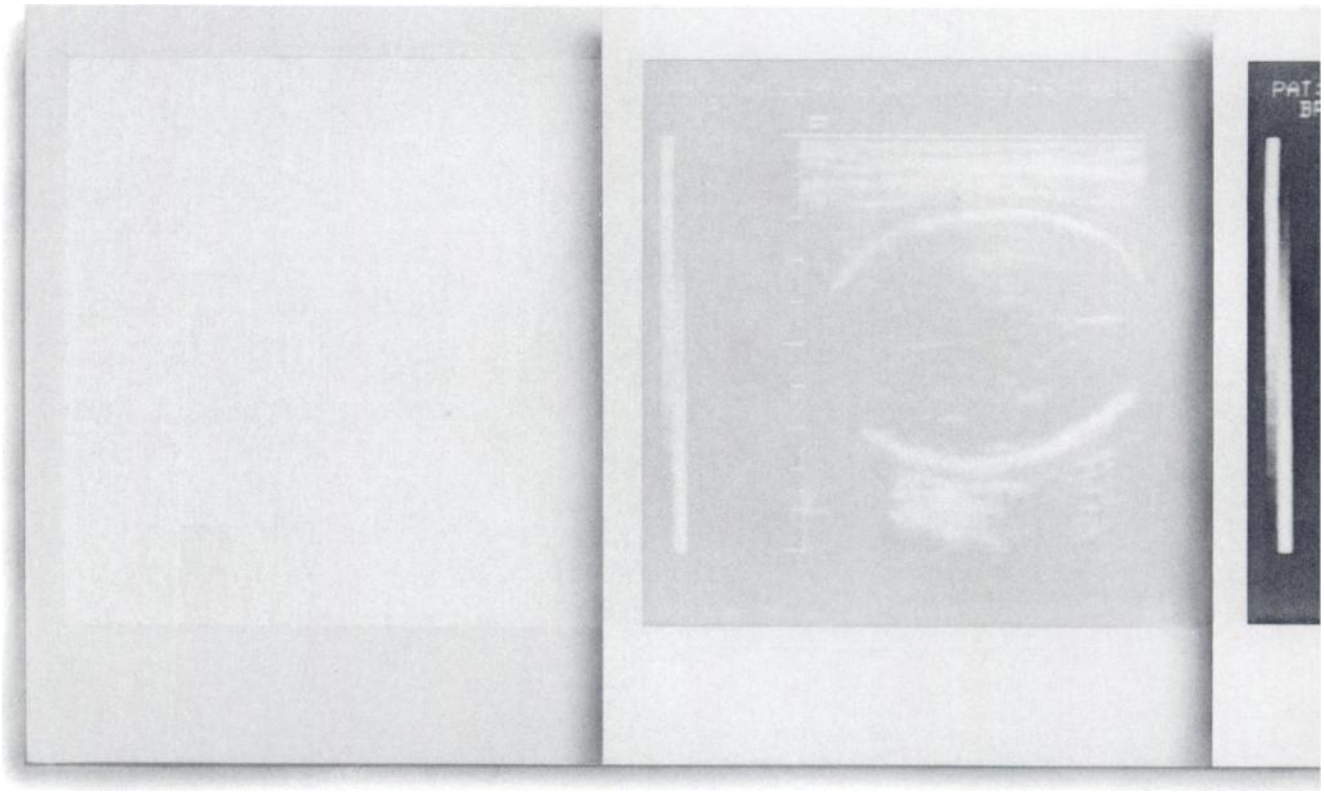

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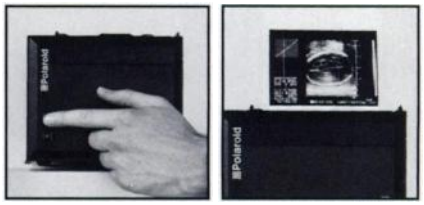

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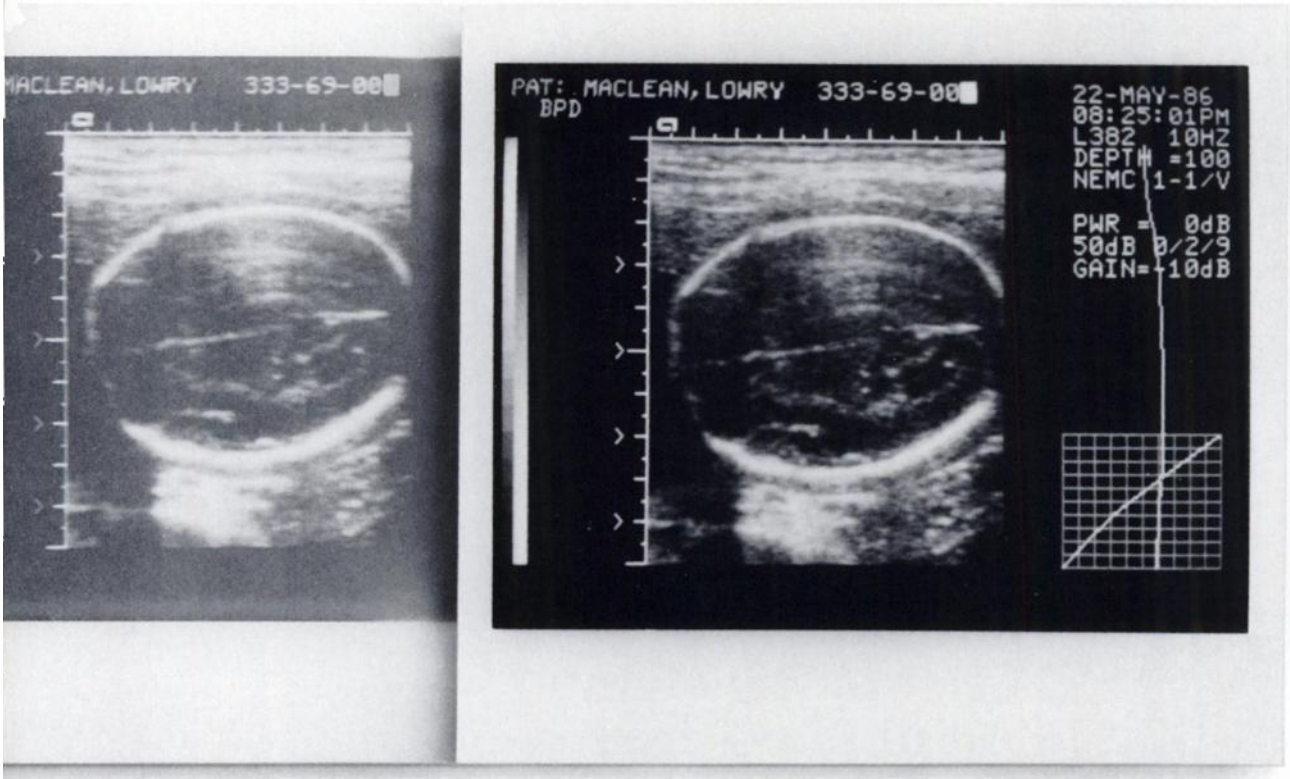

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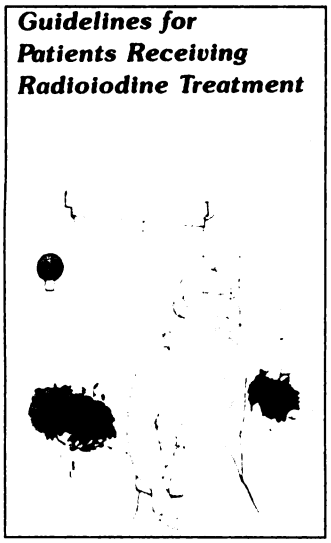
Educate your patients with SNM Patient Information Pamphlets

A Patient's Guide to Nuclear Medicine

Well illustrated, this 16-page pamphlet explains what nuclear medicine is, how the procedures are performed, and how they can help in the early detection of disease.

Divided into 3 sections, the guide opens with a general overview of nuclear medicine. A question-and-answer section follows, addressing such topics as safety, the benefits of nuclear medicine procedures, pre- and post-instructions, and testing of pregnant women and children. The third section explains some of the more commonly performed procedures such as bone, liver, lung, heart, and thyroid uptake scans.

16 pp; 5½ × 8½; in 2 colors;
20¢ per pamphlet; minimum order: 100 copies



Guidelines for Patients Receiving Radioiodine Treatment

Prepared in collaboration with the U.S. Nuclear Regulatory Commission, this 8-page pamphlet answers patients' questions about home care after receiving radioiodine treatment for thyroid conditions.

Easy-to-read language outlines important precautions patients can follow to help reduce radiation exposure to others. It also contains a checklist that physicians can review with their patients to determine which guidelines are appropriate for them and how they should be followed.

8 pp; 5½ × 8½; in 2 colors;
30¢ per pamphlet; minimum order: 25 copies

Healthcare professionals in private practice, hospitals, and clinics will find that these pamphlets provide a brief, attractive, and inexpensive way to educate patients and their families about the importance of proper health care.

ORDERING INFORMATION

Single copies are available for review at $1.50 each. All prices include postage and handling. Prepayment required in U.S. funds drawn on U.S. banks only. Make checks payable to: The Society of Nuclear Medicine. *Prices are in U.S. dollars and subject to change without notice.*

THE SOCIETY OF NUCLEAR MEDICINE
Book Order Department, 136 Madison Avenue, New York, NY 10016

Circle Reader Service No. 23

Policy—*The Journal of Nuclear Medicine* accepts classified advertisements from medical institutions, groups, suppliers, and qualified specialists in nuclear medicine. Acceptance is limited to Positions Open, Positions Wanted, Equipment Available, and Seminars. We reserve the right to decline, withdraw, or modify advertisements that are not relevant to our readership.

Rates for Classified Listings—$10.00 per line or fraction of line (approx. 50 characters per line, including spaces). Please allow 28 characters for the first line which will appear in capital letters. Special rates for *SNM members* on Positions Wanted: $9.50 per line. *Note: Box numbers are available for the cost of the 2 lines required.*

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Positions Open

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NUCLEAR MEDICINE PHYSICIAN at the Assistant Professor level in academically oriented program. Board (ABNM) certified or eligible. Experience in all aspects of nuclear medicine with interest in research. Send CV to: John R. Hansell, MD, Chief, Department of Nuclear Medicine, VA Medical Center, 39th & Woodland, Philadelphia, PA 19104. Equal Opportunity/Affirmative Action Employer. Qualified female and minority candidates are encouraged to apply.

NUCLEAR MEDICINE PHYSICIAN at the Assistant Professor level in academically oriented program. Board (ABNM) certified or eligible. Experienced in all aspects of nuclear medicine with special interest in cardiovascular nuclear medicine. Excellent clinical and research opportunities available. Send CV to: A. Alavi, MD, Chief, Division of Nuclear Medicine, Department of Radiology, Hospital of the University of Pennsylvania, 3400 Spruce St., Philadelphia, PA 19104. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer. Qualified female and minority candidates are encouraged to apply.

FULL-TIME POSITION OPEN FOR BOARD CERTIFIED NUCLEAR RADIOLOGIST OR NUCLEAR MEDICINE PHYSICIAN in 428-bed community hospital in far western suburb of Chicago. 4,500 Procedures per year, 500 cardiac. Fee for service. Send CV to: Dr. Carl Dinello, Elmhurst Memorial Hospital, 200 Berteau Ave., Elmhurst, IL 60126; (312)833-1400, ext. 4756. EOE.

Resident

NUCLEAR MEDICINE RESIDENCY. The Division of Nuclear Medicine of the Department of Radiology of the New York Hospital-Cornell Medical Center invites applications for its accredited residency program in nuclear medicine beginning July 1, 1987. Requests for information and applications should be directed to: Dr. Salil Sarkar, Program Director, New York Hospital-Cornell Medical Center, 525 East 68th St., New York, NY 10021. An Affirmative Action/Equal Opportunity Employer.

Technologist

NUCLEAR MEDICINE TECHNOLOGIST. Position now available for progressive individual in a challenging full-time position with mobile service based in Madison, WI area. Company is expanding services to include computer capabilities. Knowledge of radiommunoassay, imaging, computer, and nuclear cardiology needed. Must be either registered or registry eligible. Salary negotiable. Send resume to: Shared Imaging Service, Inc., P.O. Box 501, Stoughton, WI 53589. EOE.

Positions Wanted

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NUCLEAR MEDICINE TECHNOLOGIST seeks position in Scranton or Allentown, PA. NJ graduate, 2.5 yrs experience in Nassau County Medical Center Eastmeadow, NY. Call: Indu Bali, (717)824-0381 (8-10 am or after 1:30 pm).

NUCLEAR MAGNETIC RESONANCE. REGISTERED NUCLEAR MEDICINE TECHNOLOGIST with supervisory/teaching background and 2 years NMR experience desires to relocate to Northeast. Reply to Box 801, The Society of Nuclear Medicine, 136 Madison Ave., New York, NY 10016-6784.

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(Baton Rouge, LA)

Oversee the Nuclear Medicine Department of Our Lady of the Lake Regional Medical Center in Baton Rouge, Louisiana. Position is immediately available in the Diagnostic Laboratory of our 819-bed acute care facility. Selected applicant must be certified in Nuclear Medicine with minimum 5 years experience including at least 2 years as supervisor, and a 4-year degree in biological science. A degree in business or psychology may also be considered. We offer an excellent salary structure and benefits package, plus relocation assistance. Qualified candidates, send your resume to:

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MEDICAL PHYSICIST or MEDICAL IMAGING SCIENTIST

The Department of Nuclear Medicine, Saint Agnes Medical Center, Fresno California, affiliated with the University of California, San Francisco, is seeking applicants for the position of Technical Director. The department performs an average of 320 clinical procedures per month and has the latest instrumentation including four SPECT systems, a computer network with six acquisition/processing stations, single- and dual-energy bone densitometers, and an imaging animal research lab. The Technical Director's responsibilities are the supervision of technologists, computer operators, and research associates; instrumentation quality control and procedure quality assurance. The responsibilities also include the department's State isotope licenses, radiation safety and the instruction of nuclear medicine principles to technologists and physicians participating in the department Preceptorship Program in SPECT. The successful candidate will have the opportunity to do research in SPECT true three-dimensional reconstruction, texture analysis of SPECT slices, in vivo assessment of amine receptors and to develop new lines of investigation. Requirements include a Master's degree and previous well-documented experience or a PhD degree in medical physics or computer science. Salary is competitive, being above the average national salary according to the AAPM 1985 salary survey. For confidential consideration send your CV to Sheila Middaugh, Employment Supervisor, Saint Agnes Medical Center, 1303 East Herndon Avenue, Fresno, California 93710.

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Nuclear Medicine Technologist

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We offer competitive salary and an excellent flexible benefit program.

If you are ARRT registered and wish to live in the beautiful rural environment of northern New England with cultural, social and recreational opportunities and work in a fast paced, state-of-the-art and growing department, please send resume to Personnel Department, Mary Hitchcock Memorial Hospital, 2 Maynard Street, Hanover, NH 03756 or call (603) 646-5777 for further information.

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SNM COUNCILS

To satisfy the needs of those individual disciplines within nuclear medicine, The Society of Nuclear Medicine has established special interest Councils that function autonomously within the Society and are open to all interested members.

Academic Council

The **ACADEMIC COUNCIL** is composed of faculty members of nuclear medicine departments, divisions, or sections in accredited nuclear medicine schools, or in those in AMA approved nuclear medicine residency programs in the U.S. or Canada.

The objectives of the Council are: (1) to promote medical education, research, and patient care related to nuclear medicine; (2) to develop better methods of undergraduate and graduate teaching of nuclear medicine; and (3) to provide a forum for discussion of problems of mutual interest and concern, as well as an informal exchange of ideas and programs. Within the Council there is a subgroup of directors of nuclear medicine residency training programs who confer at least annually with the ABNM on areas of mutual interest.

Cardiovascular Council

The **CARDIOVASCULAR COUNCIL** consists of Society members interested in the performance and application of cardiovascular nuclear medicine procedures. It seeks to provide a forum for discussion and development of cardiac scintigraphic methods in an effort to realize the most beneficial applications. The Council actively seeks individuals who share this goal.

Instrumentation Council

The **INSTRUMENTATION COUNCIL** promotes the advancement and dissemination of knowledge of instrumentation utilized in nuclear medicine and serves as a resource center in instrumentation for the Society.

Computer Council

The **COMPUTER COUNCIL** is made up of Society members who have an interest in computers and their application in the diagnostic, therapeutic, and investigative areas of nuclear medicine. It provides a source of information relating to computer science to the Society membership through its meetings and publications.

Correlative Imaging Council

The **CORRELATIVE IMAGING COUNCIL** provides a structure in which clinicians and scientists can develop and disseminate information on the medical and physiological applications of various imaging modalities as they correlate to nuclear medicine.

Radioassay Council

The **RADIOASSAY COUNCIL** maintains the scientific, economic, and historic elements of the radioassay discipline within the Society.

Radiopharmaceutical Science Council

The **RADIOPHARMACEUTICAL SCIENCE COUNCIL** provides a forum for discussion and dissemination of information relating to the radiopharmaceutical sciences and promotes and encourages basic radiopharmaceutical research and development within the Society. It publishes a newsletter and holds periodic meetings on special subjects.

If you are interested in joining any or all of the Councils, please contact the Membership Department. The cost for 1986 Council membership is only $5.00 per council.

The Society of Nuclear Medicine
Membership Department 136 Madison Avenue, New York, NY 10016, (212)889-0717.

Simplicity

The RADX ISOTOPE DOSECALIBRATOR 1001 is so easy to operate, it's automatic.

RADX presents the easy way to improve your assay. The RADX DC1001 is a fully digital isotope dosecalibrator. With push-button operation you accurately and easily assay isotope radioactivity.

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Molybdenum 99	Iodine 125
Cesium 137	Iodine 131
Chromium 51	Thallium 201
Cobalt 57	Xenon 133

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RADX features the best available microprocessor electronics. Take your choice of Curie or Becquerel assay. Activity readout time takes just 4-10 seconds.

The exclusive RADX ion chamber has set a standard for performance since 1968. It delivers long term reproducibility, linearity and dependability.

Only RADX offers an electronic isolator as a standard component. This feature assures assays are not affected by energy spikes in the electrical power source.

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Circle Reader Service No. 26

RADX

The Automatic Way to Assay

Each description of the products below was condensed from information supplied by the manufacturer. The reviews are published as a service to the professionals working in the field of nuclear medicine and their inclusion herein does not in any way imply an endorsement by the Editorial Board of The Journal of Nuclear Medicine *or by The Society of Nuclear Medicine.*

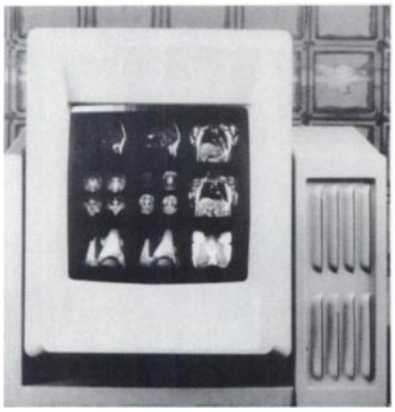
A Ring Badge to Protect Dosimeter

Teledyne Isotopes has introduced a recently developed Ring Badge, RB-3. Because it can be heat sealed, it protects a dosimeter from dirt and water. The RB-3 also features a velcro fastener that permits it to be adjusted to different finger sizes. The company also offers labels that can be inserted into the clear cavity, and can be printed in a typewriter or on a computer. A high-wattage heat sealer is required, and is also available from the company. **Teledyne Isotopes, 50 Van Buren Avenue, Westwood, NJ 07675.**

Circle Reader Service No. 101

Photographic-Quality CRT

Matrix Instruments has introduced a high-resolution CRT and digital display system with a 2048 × 2048 pixel image. The Matrix Mega-Pixel 4™ has a 14-inch diagonal



viewing surface and can display multiple images simultaneously.

Prior to transmitting images or filming them, an onboard microprocessor allows the operator to format on the screen, and allows the radiologist to examine and select images. Because Mega-Pixel 4 (sometimes referred to as "the electronic lightbox") allows formatting on the screen, as well as windowing and other functions, all images can be studied prior to filming. After the physician selects images from one or more modalities and they are formatted, the images can then be hard copied on film using a Matrix multiformat film recorder for archiving. **Matrix Instruments Inc., One Ramland Rd., Orangeburg, NY 10962.**

Circle Reader Service No. 102

Quality Control for Gamma Counters

Westchem has introduced a quality control program for gamma counters in a clinical laboratory. This program is suited for the laboratory using any of the high throughput multi-detector gamma counters.

The three dimensions of the program are: 1) daily validation of gamma counter accuracy, reproducibility, and detector equivalency relative to the isotope and background; 2) third-party verification of instrument calibration using certified sealed reference point sources of I-125 or Co-57 isotopes; 3) extensive documentation and quality control recommendations for compliance with regulatory agencies, according to the company. **Westchem, PO Box 19368, San Diego, CA 92119.**

Circle Reader Service No. 103

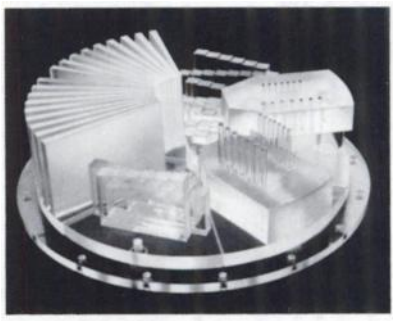
Multiple Acquisition and Processing For Cameras

Link Systems has introduced a multiple acquisition and processing system (MAPS 5000) that provides each camera with its own independent and self-contained acquisition/processing. In larger departments with multiple cameras, data can be transferred by data links or by disk transfer to a processing station, according to the company. MAPS 5000 incorporates 16 bit CPUs with up to 512 Kbyte memory and removable Winchester disks, and enables any number of units to be interconnected or to transfer data between MAPS 5000 and any micro, mini, or mainframe system. In imaging, MAPS uses a 256 × 256 display system with up to 256 gray/color levels, which incorporates a dedicated 64 Kbyte image memory. **Link Analytical, PO Box 50810, 3290 Bayshore Rd., Palo Alto, CA 94303; Link Systems Limited, Halifax Rd., High Wycombe, Bucks HP12 3SE, England; Link Systems (France), Le Maziere, Rue des Mazieres, 91033 Evry Cedex.**

Circle Reader Service No. 104

Three Phantoms and Isotope Calibrator

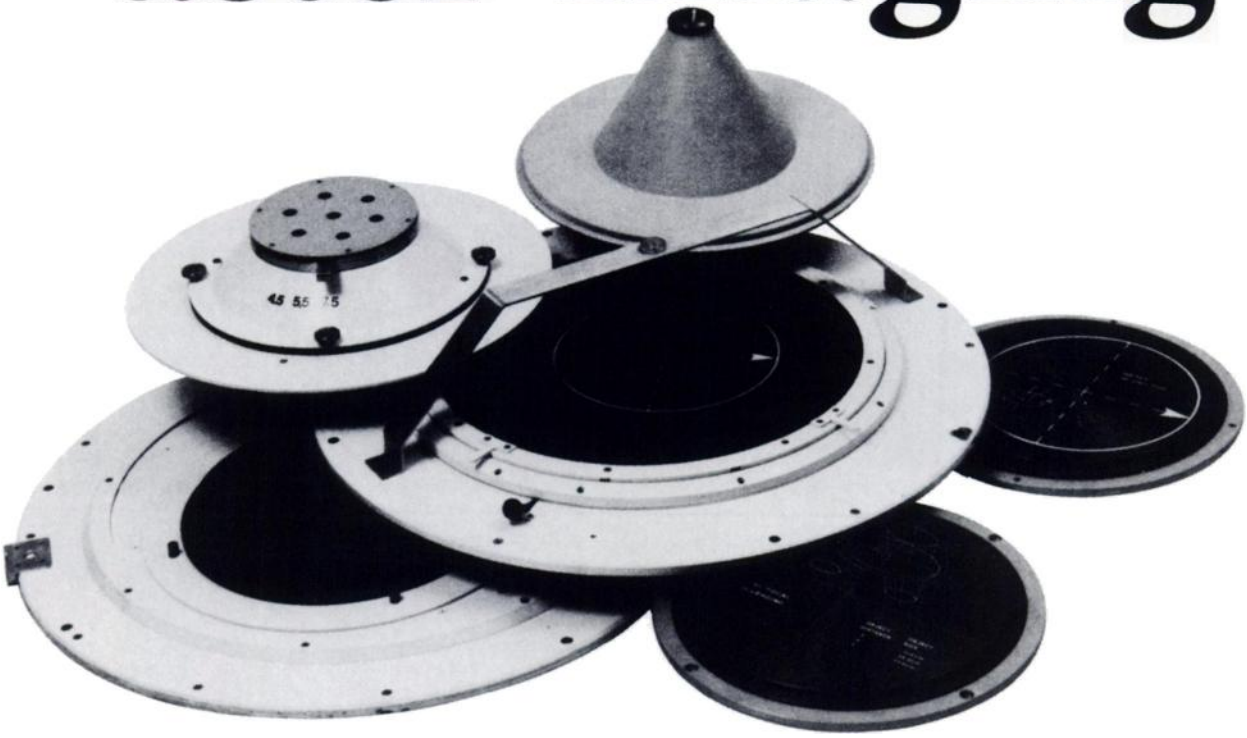
Nuclear Associates has introduced three phantoms and a radioisotope calibrator. The PET/SPECT Performance Phantom offers a single system for measuring resolution, linearity and uniformity of photon emission CT systems. The Multi-Purpose Phantom provides the means to evaluate the following NMRI parameters: slice thickness, slice orientation, interslice gap, magnetic field homogeneity, radio frequency signal uniformity, spatial resolution in positive and negative contrast, and modulation transfer function. The Dynamic Cardiac Phantom



facilitates the quality control needed to perform gated blood pool studies for noninvasive determination of ventricular ejection fraction. It mimics the anatomic and physiologic characteristics of the heart, yet it provides reproducible data. The COMP-U-CAL computerized radioisotope calibrator provides rapid measurements of isotope activity, calculates its concentration and performs Mo-99 assays. The COMP-U-CAL is preprogrammed for seven radioisotopes: Tc-99m, Ga-67, Tl-201, Xe-133, I-123, I-131, and In-111. It is also calibrated to measure 75 additional radioisotopes, according to the company. **Nuclear Associates, 100 Voice Rd., Carle Place, NY 11514-1593.**

Circle Reader Service No. 105

Faster Imaging



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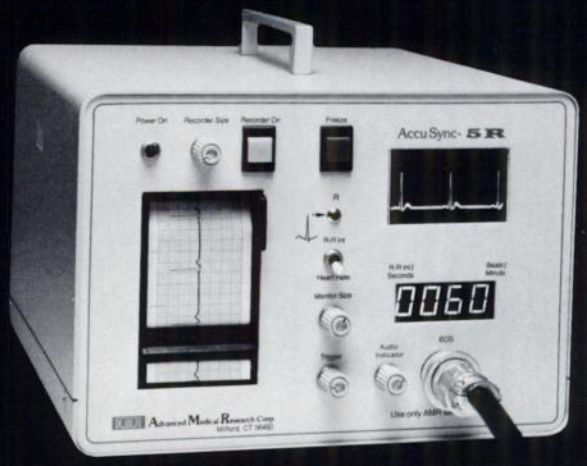

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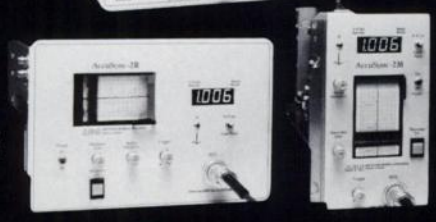
AccuSync-2R AccuSync-2M		All **AccuSync-IR** features incorporated into a Module designed to fit into certain Mobile cameras.
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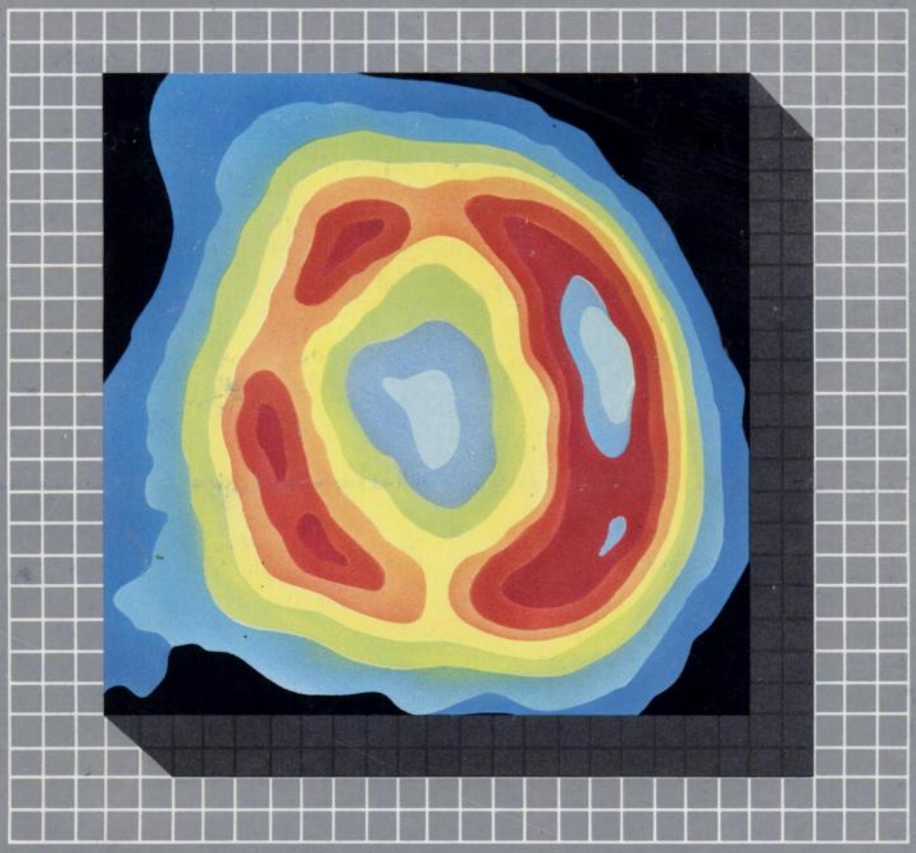
Circle Reader Service No. 28

Thallous Chloride Tl 201



For your patients, we have:

- Significantly increased our production to meet your demand . . . *you get WHAT you want . . . WHEN you want it.*
- Coast-to-coast distribution network which also allows you to receive your Thallous Chloride Tl 201 with other MPI products, saving multiple delivery charges.
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Take advantage of us. Let MPI be your prime supplier.

*Activity at calibration time: 2.0 mCi at 10 p.m. Pacific Time.
You receive 2.8 mCi per vial at noon of day preceding calibration.

Thallous Chloride Tl 201
For complete prescribing information consult package insert, a brief summary of which follows:

DESCRIPTION: Thallous Chloride Tl 201 is supplied in isotonic solution as a sterile, nonpyrogenic diagnostic radiopharmaceutical for intravenous administration. Each unit dose contains 1 milliliter and each milliliter contains 2 millicuries of Thallous Chloride Tl 201 at calibration time. pH adjusted to 5.0–8.0 with hydrochloric acid and/or sodium hydroxide. Contains no bacteriostatic preservative. Thallium Tl 201 is cyclotron produced and is essentially carrier-free. Radionuclidic purity at calibration time is at least 98.0% with less than 1.0% Thallium Tl 200, 1.0% Thallium 202 and 0.2% Lead Pb 203. The concentration of each radionuclidic contaminant changes with time.

INDICATION AND USAGE: Thallous Chloride Tl 201 may be used in cardiac imaging to define the extent of myocardial infarction.

It may also be useful in conjunction with exercise stress testing as an adjunct in the diagnosis of ischemic heart disease (atherosclerotic coronary artery disease).

CONTRAINDICATIONS: None known.

WARNINGS: When studying patients suspected or known to have myocardial infarction or ischemia, care should be taken to assure continuous clinical monitoring and treatment in accordance with safe, accepted procedure. Exercise stress testing should be performed only under the supervision of a qualified physician and in a laboratory equipped with appropriate resuscitation and support apparatus.

PRECAUTIONS

General

Do not use after the expiration time and date (4 days after calibration time) stated on the label.

Discard vial after single use. Do not use if contents are turbid.

The patient dose should be measured by a suitable radioactivity calibration system immediately prior to administration.

Ideally, examinations using radiopharmaceuticals, especially those elective in nature on a woman of childbearing capability should be performed during the first few (approximately 10) days following the onset of menses.

Thallous Chloride Tl 201 as well as other radioactive drugs must be handled with care, and appropriate safety measures should be used to minimize radiation exposure to clinical personnel. Also, care should be taken to minimize radiation exposure to the patient consistent with proper patient management.

Radiopharmaceuticals should be used only by physicians who are qualified by training and experience in the safe use and handling of radionuclides, and whose experience and training have been approved by the appropriate government agency authorized to license the use of radionuclides.

Carcinogenesis, Mutagenesis, Impairment of Fertility

No long-term animal studies have been performed to evaluate carcinogenic potential, mutagenicity potential, or whether Thallous Chloride Tl 201 affects fertility in males or females.

Pregnancy Category C

Animal reproduction studies have not been conducted with Thallous Chloride Tl 201. It is also not known whether Thallous Chloride Tl 201 can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Thallous Chloride Tl 201 should be given to a pregnant woman only if clearly needed.

Nursing Mothers

It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when Thallous Chloride Tl 201 is administered to a nursing woman.

Pediatric Use

Safety and effectiveness in children have not been established.

ADVERSE REACTIONS: Adverse reactions related to use of this agent have not been reported to date.

HOW SUPPLIED: Thallous Chloride Tl 201 is supplied as a sterile, nonpyrogenic, isotonic solution in unit dose vials containing 1 milliliter. Each milliliter contains 2 millicuries of Thallous Chloride Tl 201 at calibration time. Contains no bacteriostatic preservative.

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