Introducing Nephroflow™
IODOHIPPURATE SODIUM I 123 INJECTION

Normal Transplant Renogram¹

NEPHROFLOW, Iodhippurate Sodium I 123 Injection, 1.0 mCi

High Count Rate
High Detector Efficiency

Iodohippurate Sodium I 131 Injection, 0.15 mCi

Low Count Rate
Low Detector Efficiency

NEPHROFLOW provides better counting statistics and higher data density.

¹Reference: Data on file, Medi-Physics, Inc., Richmond, CA

To Order call (800) MEDI-123

Now Available 2 mCi Vial
• Particularly useful in obstructed patients
• Slight advantage in photon intensity
• Major advantage in ¼ inch crystal efficiency
• Imaging should be performed as close to calibration time as possible

Comparison of I 123 and I 131

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>I 123</th>
<th>I 131</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode of Decay</td>
<td>Electron capture</td>
<td>Beta</td>
</tr>
<tr>
<td>Half-Life</td>
<td>13.2 hours</td>
<td>193 hours</td>
</tr>
<tr>
<td>Principal Gamma Energy (keV)</td>
<td>159</td>
<td>364</td>
</tr>
<tr>
<td>Intensity</td>
<td>84%</td>
<td>82%</td>
</tr>
<tr>
<td>Half-Value layer, lead, cm</td>
<td>0.037</td>
<td>0.24</td>
</tr>
<tr>
<td>Detection Efficiency:</td>
<td>74.5%</td>
<td>22.5%</td>
</tr>
</tbody>
</table>

Nephroflow

DESCRIPTION: Iodine-123 lodohippurate Sodium I 123 Injection is supplied as a sterile, aqueous, isotonic saline solution for intravenous administration. Each milliliter of the solution contains 37 megabecquerels (1 millicurie) lodohippurate Sodium I 123 at calibration time. 2 milligrams lodohippurate Sodium, 1 percent benzyl alcohol (as a preservative), 9 milligrams per milliliter sodium chloride for isotonicity, and up to 0.1 percent ethanol. The solution is buffered with sodium phosphate and the pH is adjusted to 7.0-7.5 with sodium hydroxide or hydrochloric acid. The radionuclidic composition at calibration time is not less than 94.7 percent I 123, not more than 1.8 percent I 124, and not more than 0.5 percent all others (I 125, I 126, I 130, Na 24, Te 121). The radionuclidic composition at expiration time is not less than 85.5 percent I 123, not more than 12.9 percent I 124, and not more than 1.6 percent all others.

INDICATIONS AND USAGE: Iodine-123 lodohippurate Sodium Injection is a diagnostic aid in determining renal function, renal blood flow, and urinary tract obstruction, and as a renal imaging agent.

CONTRAINdications: None Known.

WARNINGS: None Known.

PRECAUTIONS: General

The contents of the vial are radioactive. Adequate shielding of the preparation must be maintained at all times.

Do not use after the expiration time and date (24 hours after calibration time) stated on the label.

The prescribed lodohippurate Sodium I 123 dose should be administered as soon as practical from the time of receipt of the product (i.e., as close to calibration time as possible) in order to minimize the fraction of radiation exposure due to relative increases in radionuclidic contaminations with time.

Iodine-123 lodohippurate Sodium I 123, 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. Care should also 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 lodohippurate Sodium I 123 affects fertility in males or females.

Pregnancy Category C

Animal reproduction studies have not been conducted with this drug. It is also not known whether lodohippurate Sodium I 123 can cause fetal harm when administered to a pregnant woman, or can affect reproductive capacity. lodohippurate Sodium I 123 should be given to a pregnant woman only if clearly needed.

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

Nursing Mothers

Since iodine-123 is excreted in human milk, formula-feeding should be substituted for breast feeding if the agent must be administered to the mother during lactation.

Pediatric Use

Safety and effectiveness in children have not been established.

ADVERSE REACTIONS: As with all organic iodine containing compounds, the possibility of allergic reactions must be kept in mind. Nausea, vomiting, and fainting have been reported in conjunction with the administration of lodohippurate Sodium I 123.

HOW SUPPLIED: Iodine-123 lodohippurate Sodium I 123 Injection is supplied in nominal 3.5 ml vials as a sterile, nonpyrogenic, aqueous, isotonic saline solution for intravenous injection. Each milliliter contains 37 megabecquerels (1 millicurie) of lodohippurate Sodium I 123 at calibration time.

It is available, in individual vials, in the following sizes:

• MPI Catalog No. 2044: 1 ml and 37 megabecquerels (1 mCi) per vial
• MPI Catalog No. 2042: 2 ml and 74 megabecquerels (2 mCi) per vial

Vials are packaged in individual lead shields with plastic outer container.

Circle Reader Service No. 1
New Dynamic Cardiac Phantom Outperforms the Field!

Offers the Most Versatility* for Quality Control in Acquiring and Processing Gated Radionuclide Ventriculograms (GRNV)

- Provides excellent simulation of left and right ventricle wall motion and volume changes, with constant background activity, to test gated radionuclide ventriculography hardware and software.
- Allows acceptance and QA testing for data acquisition instruments, data processing software, and overall cardiac systems.
- Renders realistic radionuclide ventriculogram and cardiac volume trace.
- Has adjustable heart rate and ejection fraction levels.
- Easy to load and operate; an excellent training aid for all nuclear cardiology personnel.

An article comparing our new Dynamic Cardiac Phantom with other commercially available phantoms appears in the March 1985 issue of JOURNAL OF NUCLEAR MEDICINE TECHNOLOGY, Vol. 13, No. 1, Pgs. 5-9. In the article, “The Use of Phantoms for Quality Control in Gated Cardiac Studies”, the authors, Busemann-Sokole and Cradduck, state that our cardiac phantom “provides a good simulation of left and right ventricular wall motion and stroke volume changes, and constant overlying background activity”, and “offers the most versatility for routine quality control of the overall system”. Copy of article available on request.

For more information, request Bulletin 568-B

NUCLEAR ASSOCIATES
A Division of VICTOREEN, INC.
100 VOICE ROAD
CARLE PLACE, NY 11514-1593
(516) 741-6360
A Subsidiary of Sheller-Globe

Typical data from operation of the Dynamic Cardiac Phantom:

(a) End diastole and end systole frames of a GRNV series.
(b) Histogram of R-R time period showing temporal stability.
(c) Cardiac volume graph from phantom operation.

Circle Reader Service No. 2
MICRODELTA™/MAXDELTA™ computers... the sociable ones. They talk to any gamma camera.

MICRODELTA and MAXDELTA have earned their reputation for reliability and compatibility as nuclear imaging computers. These systems have allowed users throughout the world to add sophisticated data processing capability to their nuclear imaging systems at exactly the level of usefulness and cost-effectiveness required.

Siemens offers full service and support for all MICRODELTA/ MAXDELTA computer systems through the nationwide Siemens Service Network.

For more information about MICRODELTA/MAXDELTA computer systems or about the Siemens Service Network, contact your local Siemens representative or:

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Nuclear Medicine Division
186 Wood Avenue South
Iselin, New Jersey 08830
(201) 321-3420

In Canada, contact:
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Medical Systems Division
1180 Courtney Park Drive
Mississauga, Ontario L5T1P2
(416) 673-1995

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and trapping system

for use in
lung ventilation
studies involving
Xenon 133 and
Xenon 127

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A unit dose of product. A full dose of service.

Unit dose radiopharmaceuticals plus complete nuclear pharmacy services. It's what professionals like you demand. And, with Syncor, that's exactly what you get.

**Safer, Simpler** Syncor (formerly Pharmatopes) handles everything—from preparation and measurement to radioactive waste disposal. Your staff's safety is increased because their radiation exposure can be significantly reduced. Your paperwork is reduced, too, because Syncor helps minimize the amount of documentation needed for NRC compliance.

**Faster, Better** With Syncor, the hours you used to spend in the hot lab can now be devoted to more productive activities. When you need radiopharmaceuticals, a unit dose is just a phone call away, 24 hours a day, with quality you can count on. Professional consultation is also readily available. A licensed nuclear pharmacist is on staff at each of our 37 locations to answer your questions on topics such as dosage, radiopharmaceuticals, quality control, drug interactions and health physics.

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AMR's AccuSync provides R-wave detection with precision and reliability. The finest R-wave Triggering device available for computerized gated cardiac studies.

**AccuSync-5R Features**
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- Digital CRT Monitor.
- ECG Strip Chart Recorder.
- Heart Rate/R-R int.
- Trigger Pulse LED.
- Trigger Control for Ease of Lead Placement and Precise Location of Trigger Pulse.
- R-Trigger Output, Compatible with all Computers.
- No Delay.
- ECG Output
- Playback Mode. (optional)
- Event Marker. (optional)
- Audio Indicator.

**FEATURES**

All AccuSync-5R features with the exception of the Strip Chart Recorder.

All AccuSync-5R features with the exception of Digital CRT Monitor.

All AccuSync-IR features incorporated into a Module designed to fit into certain Mobile cameras.

All AccuSync-IR features with the exception of the Strip Chart Recorder, Playback Mode and Audio Indicator.

All Accu Sync-3 features with the exception of the Heart Rate/R-R int. display.

**MODEL**

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- AccuSync-IR
- AccuSync-2R
- AccuSync-2M
- AccuSync-3
- AccuSync-4

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Special features include:
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- meter reset switch
- slow-fast-integrate response switch with concurrent rate and integrate operation
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(505) 471-3232  TWX: 910-985-0678

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Circle Reader Service No. 7
LUNAR DP3-XT/AT,
The Unique Clinical Solution For Bone Densitometry

Over a decade of research and clinical testing has gone into the LUNAR DP3 dual-photon spine/femur scanners. LUNAR scientists pioneered both single and dual-photon absorptiometry and helped LUNAR become the world’s largest manufacturer of bone measurement instrumentation.

LUNAR now offers the IBM-XT and AT* as options to our acclaimed DP3 scanner. Advanced features of the DP3-XT/AT include:

- Multi-tasking
- Automated peaking
- High-resolution color graphics
- Hard-disk storage

LUNAR continues to set the standard for bone measurement. These new features, plus a light-localizer and a belly-band, add to the DP3’s proven capability.

Contact us to see why the clinical leaders have turned to LUNAR with confidence.

Ask A User!

Our customers comprise over 85% of all clinical facilities using dual-photon absorptiometry. They selected the DP3 because LUNAR’s exclusive know-how ensures trouble-free, question-free operation and because of distinct advantages such as:

- Intelligent scans that reduce scan area, scan time, and patient exposure.
- Multiple sites—lumbar spine, proximal femur, tibia, proximal humerus and other areas
- Graphics displays—ultrafast, high-resolution images
- Normal database of US subjects
- Accuracy/precision based on physically correct algorithms
- High patient throughput with 15-minute scans
- Sophisticated software that takes the guesswork out of scanning
- Medical physics support from our in-house staff
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- Service—1-year warranty with 24-hour response
- Lower cost—extended source life
- Operational ease—menu-driven, automated software

Circle Reader Service No. 8

*IBM-XT and IBM-AT are trademarks of International Business Machine Corporation
RETIREMENT BENEFITS HAVE NEVER BEEN BETTER.

$450 off when you trade in your old calibrator for a new CRC-7.
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$1000 off when you trade in your old calibrator for a new CRC-30BC.
Circle Reader Service No. 19

$750 off when you trade in your old calibrator for a new CRC-I2.
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Budgets are tight these days. So Capintec is offering a retirement plan for your old calibrator with some great benefits:

☐ It will save money. Chances are, the dose calibrator you have now is getting old, and has an increasing need for service. A new unit will save you this expense – in many cases paying for itself in a couple of years.

☐ Better performance. Along with greater operational efficiency, Capintec calibrators have added a number of useful and time-saving features. Things like improved record keeping that will simplify your daily life.

So, while it's your old calibrator that's retiring, you’re the one who benefits. Find out about it. Your Capintec rep will be glad to show you how it pays to retire...now.

Capintec, Inc., 6 Arrow Road, Ramsey, New Jersey 07446
Please send me more information on your trade-in offer. I’m interested in the following calibrator: ☐ CRC-7 ☐ CRC-I2 ☐ CRC-30BC
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With our commitment to offering only the very best educational resources available in nuclear medicine, we feel that this meeting will be our finest to date.

SCIENTIFIC PAPERS

This year's presentation of over 600 scientific papers includes a distillation of the latest advancements and finest work achieved by outstanding scientists and physicians in the field of nuclear medicine. These papers, presented by the original authors, with over 30 subjects to choose from, will provide a unique opportunity for enhancing your knowledge or exploring new avenues in correlative areas of nuclear medicine. Ample time is allotted at these presentations for questions and discussions. An extensive display of scientific posters and exhibits will augment the presentations.

CONTINUING EDUCATION COURSES

Refresher and state-of-the-art continuing education courses in chemistry, physics, quality assurance, cardiovascular nuclear medicine, PET, SPECT, and NMR will supply up-to-the-minute approaches and procedures for all clinical settings.

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The ever-increasing importance of the role of the nuclear medicine technologist will be explored in our Technologist Program, and over 70 hours of clinical updates will provide chief and staff technologists with the latest in basic, intermediate, and advanced studies. This program will broaden expertise and enhance the technologist's contributions to nuclear medicine.

EXPOSITION

More than 1,800 exhibitors from over 90 pharmaceutical and equipment manufacturers will display their latest products in a lively atmosphere. These knowledgeable commercial representatives offer the technical depth our field demands, and they are valuable sources of timely and pertinent information.

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The Society of Nuclear Medicine is continually adding to its library of audiovisuals, books, and other publications. A stop at the publications booth is well worth the time. Here you will find on display what the society has to offer for year-round educational advancement.

Networking opportunities and job referral boards are available at special locations throughout the meeting as well as membership information at our membership booth.

Registration: $120 SNM members; $215 nonmembers
Hotels: $89 average rate/night
If you need further information, please contact:

The Society of Nuclear Medicine
Education and Meetings Department
136 Madison Avenue
New York, N.Y. 10016
(212)889-0717 Telex: 510-100-5285

Circle Reader Service No. 10
The Journal of Nuclear Medicine
Dual-photon absorptiometry is the method recommended by the American College of Physicians for study of bone mineral content in patients with suspected or known metabolic bone disease.

The method is no longer in question - only which instrument, and the company that makes it and stands behind it. We'd like you to consider the important differences Novo Diagnostic Systems provides.

**Increased Patient Throughput**

The Novo BMC-LAB 22a has been optimized for both lumbar spine and femoral neck scanning. With a larger maximum scanning area, four preprogrammed scanning modes and simplified positioning procedures, the BMC-LAB 22a enables:

- More rapid scanning times with the same high accuracy and reproducibility.
- Less patient repositioning.

The result is greater patient throughput for more economic operation and greater patient compliance.

**Greater Accuracy, Reproducibility**

Only the BMC-LAB 22a utilizes a primary hydroxyapatite-equivalent phantom for calibration. Together with automated QC software that provides a continually updated record of instrument performance, Novo instrumentation ensures the highest degree of reproducibility for sequential imaging and comparison with other users' data.

**Novo Diagnostic Systems**

- **Meaningful User Support**

  Novo supports your instrument with:
  - NRC licensure assistance (USA).
  - On-site training until you are fully operating.
  - Software and computer updating.
  - Referral-generation programs.

And only Novo can provide the resources of a 60-year-old company with a proven commitment to diagnostic and therapeutic medicine.

For further information please contact:

**NOVO DIAGNOSTIC SYSTEMS**

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tlp. 45-2-9823 33

tlp. 1-203-846-8420

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tlp. 49-613-1386340

Belgium: Novo Industrie S.A. Brussels.
tlp. 32-2-465-2400

tlp. 44-6286-4808

Holland: Nucletron Trading B.V. Leersum.
tlp. 31-3434-5-4224

Switzerland: Nucletron S.A. Lausanne.
tlp. 32-1-2125-2423

tlp. 33-1-621-6666

Italy: Tecnologie Avanzate. Turin.
tlp. 39-11-550284

Spain: ITISA. Madrid tlp. 34-1-253-8620

Japan: Nissei Sangyo Co. Ltd. Tokyo.
tlp. 3-504-7111

Korea: Sam Woo Medical Co. Ltd.
Seoul tlp. 568-3166

Australia: Baltex Medical Systems.
Berowra Heights, tlp. 2-456-1245
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 acceleration.

**Short time start-up**
It takes only ten minutes to produce gaseous $^{15}$O, $^{15}$N, and $^{15}$O₂.

**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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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 x 8½; in 2 colors;**
- **20¢ per pamphlet; minimum order: 100 copies**

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**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 x 8½; in 2 colors;**
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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.

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**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**

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NUCLEAR MEDICINE PHYSICIAN. The University of Miami/Jackson Memorial Medical Center is seeking a nuclear medicine physician, ABNM certified or eligible, with clinical, teaching, and research experience. Rank and salary will depend on qualifications and experience. Send CV: to: Aldo N. Servantini, MD, Director, Nuclear Medicine Division, University of Miami School of Medicine (D-37), P.O. Box 016960, Miami, FL 33101. An Equal Opportunity/Affirmative Action Employer.

NUCLEAR MEDICINE PHYSICIAN-PATHOLOGIST. BC/BE in both pathology and nuclear medicine for 1,000-bed Central Florida hospital. Contact: Ben Willard, Jr., MD, 1414 South Kuhl Ave., Orlando, FL 32806. EOE.

Resident

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RESIDENCY IN NUCLEAR MEDICINE. Two-year ACME approved program offering very broad clinical and basic science experience. The program is an integrated program involving tarry care, specialized care, and community hospitals in a balanced program. The program also includes oncology and pediatric exposure, strength basics science teaching, radiation safety, radiopharmaceutical services, RIA, and research opportunities. Opportunities for exposure to MRI, CT, and ultrasound are available during the course of the 2-year training program. For qualified individuals, an advanced 1-year fellowship is available with emphasis in nuclear cardiology or nuclear oncology. This program is an integrated program of the State University of New York at Buffalo School of Medicine. Positions available July 1, 1986. Contact: J. A. Prezio, MD, Chairman and Program Director, SUNY/Buffalo Nuclear Medicine, VANC, Building 5, 3455 Bailey Ave., Buffalo, NY 14215. EOE.

Physician

DIRECTOR, Division of Nuclear Medicine, Department of Radiology, University of Colorado Health Sciences Center, Denver, CO, beginning July, 1986. Excellent equipment (Picker ST300 15 inch noncircular SPECT, GE 400 AT 15 inch SPECT, portable Picker, Dynamo 10, all with upgraded computers), complete hot lab facilities and animal research facilities in newly renovated diagnostic imaging center. Department has an excellent radiology residency program along with superb divisions of diagnostic ultrasound, radiology, radiation therapy and radiological sciences. Departmental equipment acquisitions include: a new fully equipped MRI system and a brand new fast CT scanner. The directorship is under the directorship of the department's executive committee and will have a major role in the administrative activities of the department. For more information, write to: Michael L. Mando-Johnson, MD, Professor and Acting Chairman, Department of Radiology, C277, University of Colorado Health Sciences Center, 4200 E. 9th Ave., Denver, CO 80262, or phone (303)394-7817. Equal Opportunity/AA Employer.

NUCLEAR MEDICINE PHYSICIAN. Well-trained Board certified nuclear medicine physician with Board certification/eligibility in internal medicine as associate in successful private nuclear general internal medicine practice looking to full partnership. Progressive combined rural/industrial community 50 min. from Salt. and Wash. DC. Please send resume to: Box 200, Society of Nuclear Medicine, 136 Madison Ave., New York, NY 10016. EOE.

VETERANS ADMINISTRATION MEDICAL CENTER, Seattle, Washington and the University of Washington School of Medicine are seeking a Board certified or eligible nuclear medicine physician at the assistant professor level. Strong interest and experience in research and teaching are essential. Strong computer and experience in reading are desirable. The hospital is in a new facility with state-of-the-art imaging and computer systems and the presence of the staff includes a medical imaging physicist and computer programmer. Starts July 1, 1986. Contact: William D. Cade, MD, Chairman, Search Committee, VA Medical Center, 1660 S. Columbia Way, Seattle, WA 98108. The University of Washington is an Equal Opportunity Employer.

TECHNOLOGIST. Immediate opening for experienced NM technologist, ARRT, for private NM laboratory. Cardiovascular and computer experience required. Ultrasound helpful. Send CV: Drs. Gottlieb & Block, 1150 NW 14th St., Suite 1, Miami, FL 33136. EOE.

Position Wanted

Physician

EXPERIENCED NM PHYSICIAN, 49, MD PhD, ABNM, university faculty, seeks new position. Active in esophageal transit, thyroid, computer applications, residency program development. Reply: Box 201, Society of Nuclear Medicine, 136 Madison Ave., New York, NY 10016.

Seminar

BONE MINERAL ANALYSIS WORKSHOP AND TUTORIAL, March 8, 1986, Nuclear Medicine Consultants, 350 Parnassus, San Francisco, CA. The course is intended for licensed physicians (nuclear medicine and radiology) and licensed NM or radiology technologists and provides hands-on experience with Lunar single and dual energy absorptometers, procedure protocols, interpretation guidelines, and reference standardization. Contact: Kathleen Meier, Nuclear Medicine Consultants, 350 Parnassus, Suite 908, San Francisco, CA 94117; (415)664-7400.
Computer Scientist

We are recruiting for a computer scientist, preferably with experience in image processing, for an expanding Nuclear Cardiology Laboratory at The Long Island College Hospital—a major teaching affiliate of Downstate Medical Center in New York City. Responsibilities include teaching of residents and technologists, supervision of clinical computer applications, and a major effort in the development of new quantitative programs for both planar and SPECT imaging modalities.

Send CV with salary history and requirements to: Steven Reisman, MD, Director, Nuclear Cardiology.

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Nuclear Medicine Technologist. A casual, as needed, position is available for a registered nuclear medicine technologist within the nuclear medicine segment of the radiology department. Experience is preferred, recent graduates will be considered.

TMMC offers an attractive salary and benefits program. Applicants interested in further information regarding these positions should contact:

Department of Human Resources
TIMKEN MERCY MEDICAL CENTER
1320 Timken Mercy Drive, NW
Canton, Ohio 44708
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- SI-18 Basic Concepts in Cardiac Anatomy and Physiology by Glen W. Hamilton, MD
- SI-19 The Measurement of Ejection Fraction by William Ashburn, MD
- SI-20 Intracardiac Shunts and Cardiac Output by William Ashburn, MD
- SI-21 Perfusion Studies of the Ischemic Heart by Glen W. Hamilton, MD
- SI-22 Detection of Acute Myocardial Infarction by B. Leonard Holman, MD

Each audiovisual kit comes complete with expert narration and carefully selected supporting visual materials. Consisting of 35-mm color slides and standard audio cassette, each kit forms a complete teaching package suitable for individual or group instruction. All programs are approved for Category 1 and VOICE credit.

Mail to: Society of Nuclear Medicine, P.O. Box 11307, Chicago, IL 60611 (312)943-0450

Specify quantity desired.

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Technology of Nuclear Magnetic Resonance

Edited by
Peter D. Esser, PhD, and R. Eugene Johnston, PhD

...provides a source for physicians and scientists seeking introductory material or information on current developments of NMR technology.

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Kit for the Preparation of Technetium Tc 99m Albumin Aggregated Injection

For complete prescribing information consult package insert, a brief summary of which follows:

- **Unit Dose**

  The kit consists of 10 unit dose reaction vials, each containing sterile, pyrogen-free, nonradioactive ingredients necessary to produce Technetium Tc 99m Albumin Aggregated Injection for diagnostic use by intravenous injection. Each 5 ml reaction vial contains 0.11 mg of Albumin Aggregated, 0.09 mg stannous tartrate, and 0.3 ml of isotonic saline. The pH has been adjusted to 4.5-7.0 with hydrochloric acid and sodium hydroxide. No bacteriostatic preservative is present. The Albumin Aggregated is prepared from Human that is nonreactive when tested for hepatitis B surface antigen (HbsAg) by radioimmunoassay. The aggregated particles consist of 95% or more of Albumin Human in a healthy and aggregation process. Each vial contains 0.5-1.0 million particles. By light microscopy, 90% or more of the particles are between 50 and 90 micrometers. The typical average size is 20-40 micrometers. Note: is greater than 150 micrometers.

- **Multidose**

  The kit consists of 10 multidose reaction vials, each containing sterile, pyrogen-free, nonradioactive ingredients necessary to produce Technetium Tc 99m Albumin Aggregated Injection for diagnostic use by intravenous injection. Each 10 ml reaction vial contains 0.24 mg of Albumin Aggregated, 0.37 mg stannous tartrate, and 0.6 ml of isotonic saline. The pH has been adjusted to 4.5-7.0 with hydrochloric acid and sodium hydroxide. No bacteriostatic preservative is present. The Albumin Aggregated is prepared from Human that is nonreactive when tested for hepatitis B surface antigen (HbsAg) by radioimmunoassay. The aggregated particles consist of 95% or more of Albumin Human in a healthy and aggregation process. Each vial contains 1.5-2.5 million particles. The typical average size is 10-30 micrometers. The typical average size is 20-40 micrometers. Note: is greater than 150 micrometers.

- **Technetium Tc 99m Albumin Aggregated Injection** for intravenous use is in its final dosage form when sterile isotonic Sodium Peritcneteum Tc 99m Injection is added to each vial. There is no greater than 90% of the Peritcneteum Tc 99m added to the reaction vial is bound to the aggregates at preparation time and remains bound throughout the 3-hour lifetime of the preparation.

- **INDICATIONS AND USAGE:** Technetium Tc 99m Albumin Aggregated Injection is a long imaging agent which may be used as an adjunct in the evaluation of pulmonary perfusion in adults and children.

- **CONTRAINDICATIONS:** Technetium Tc 99m Albumin Aggregated Injection should not be administered to patients with severe pulmonary hypertension.

- **PRECAUTIONS:**

  **General**

  The contents of the kit before preparation are not radioactive. However, after Sodium Peritcneteum Tc 99m Injection is added, adequate shielding of the final preparation must be maintained. In patients with right-to-left heart shunts, additional risk may exist due to the rapid entry of Albumin Aggregated into the systemic circulation. The safety of this agent in such patients has not been established.

  Hypersensitivity reactions are possible whenever protein-containing materials, such as Technetium Tc 99m labeled Albumin Aggregated, are used. Concomitant administration of corticosteroids should be considered for immediate use.

  The intravenous administration of any particulate material such as Albumin Aggregated impairs a temporary, small mechanical impediment to blood flow. While this effect is probably pharmacologically insignificant in most patients, the administration of Albumin Aggregated is possibly hazardous in cases of pulmonary and other states of severely impaired pulmonary blood flow.

- **Storage**

  Store kit contents and final preparations at 2-8°C. Do not freeze.