CLINICAL TASK: Evaluate differential renal function in a patient with multiple bladder and ureteral surgeries, still having recurring urinary tract infections.  

CONCLUSION: Right hydronephrosis in a somewhat chronically obstructive appearing pattern. Small, poorly functioning left kidney contributing approximately 14% to total renal function.

Better Data Density—Better Statistics—Higher Detector Efficiency

*Courtesy St. Joseph Hospital, Orange, Calif.*
For the past 20 years you have used I131 lodohippurate for your renal studies. Now I123 lodohippurate is available for your use. Use Nephroflow – The physics are better, the statistics are better and the detection efficiency is better. Move into the future.

Comparison of I123 and I131

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>I123</th>
<th>I131</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>1/4&quot; NaI(TI) crystal</td>
<td>74.5%</td>
</tr>
</tbody>
</table>

DESCRIPTION: Nephroflow® is supplied as a sterile, apyrogenic, aqueous, isotonic sodium chloride 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 sodium chloride for isotonicity and up to 0.1 percent alcohol. The solution is buffered with 1.2 milligrams per milliliter sodium phosphate, monobasic and 0.05 milligrams per milliliter sodium phosphate, dibasic (at time of manufacture) and the pH is adjusted to 7.0–8.5 with sodium hydroxide or hydrochloric acid. The radionuclidic composition at calibration time is not less than 94.7 percent I 123, not more than 4.8 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 12.0 percent I 124, and not more than 1.6 percent all others. The ratio of the concentration of I 123 to I 124 changes with time.

INDICATIONS AND USAGE: Nephroflow is a diagnostic agent 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 increase of radionuclidic contaminants with time.

The dose to the bladder wall will be reduced significantly if the patient is encouraged to void within 2 hours after the drug is administered. The dose to the other target organs will also be substantially reduced.

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.

Radioisotopes 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, mutagenic potential, or effects on fertility in male or female animals.

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 capacity 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 lancing have been reported in conjunction with the administration of lodohippurate Sodium I 123.

HOW SUPPLIED: Nephroflow is supplied in nominal 3.5 ml vials as a sterile, apyrogenic, aqueous, isotonic sodium chloride 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. 2041: 1 ml and 37 megabecquerels (1 mCi) per vial,
- MPI Catalog No. 2042: 2 ml and 74 megabecquerels (2 mCi) per vial.
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- What Current SPECT Instrumentation is Available
- How to Purchase a SPECT Camera
  - What the Clinician Needs
  - What the technologist Needs
- What Purchasing Strategies Work
- What are the Basics of Quality Assurance
- How the Algorithms Work
- What is the influence of Attenuation and Uniformity Correction
- How to Position Patients and Set Up the Equipment
- How to Recognize the Technical Artifacts
- How to Apply to Orthopaedics
- How to Use SPECT Rotating Displays
- How to Apply SPECT to Cardiac Imaging
- How to use Gallium-67 and the SPECT Camera
- How to Perform Functional and Dynamic SPECT Brain Imaging

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(415) 392-3434

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Hotel reservation requests received after January 19, 1987 at the $120.00 room rate cannot be guaranteed or honored if the Hotel is sold out.

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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.

14 HRS. AMA CATEGORY 1 CREDIT
1.1 VOICE Credits

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<tr>
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<th>Before Feb. 9</th>
<th>On or After Feb. 9</th>
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<tbody>
<tr>
<td>Physicians/Scientists</td>
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<tr>
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THE PROBLEM:
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SQUIBB™ Diagnostics
DESCRIPTION
Macrotec is a sterile, nonpyrogenic, lyophilized preparation of albumin aggregated. Each 5 ml vial of Macrotec contains 1.5 mg of Technetium Tc 99m Aggregated, 0.0 mg Albumin Human, 0.07 mg (minimum) stannous chloride (SnCl2-2H2O) and 0.19 mg total tin, maximum (as stannous chloride, SnCl2-2H2O) 1.8 mg of sodium chloride with trace amounts of sodium acetate, acetic acid and hydrochloric acid. Macrotec contains no preservatives. The pH of the reconstituted product is between 3.8 and 8.0.

The aggregated particles are formed by denaturation of Albumin Human in a heating and precipitation process. Each vial contains 1-8 million particles, 90% of which are between 10 and 90 microns in size. The average size is 20 to 40 microns; no particles are greater than 150 microns.

Reconstitution of Macrotec with sterile sodium pertechnetate Tc 99m forms an aqueous suspension of Technetium Tc 99m Albumin Aggregated for diagnostic use by intravenous injection. No less than 90% of the pertechnetate Tc 99m added to the reaction vial is bound to the aggregates at preparation time and remains bound throughout the 6-hour lifetime of the suspension.

INDICATIONS AND USAGE
Lung Imaging
Macrotec (Technetium Tc 99m Albumin Aggregated Injection) is a lung imaging agent which may be used as an adjunct in the evaluation of pulmonary perfusion in adults and children. It is useful in the early detection of pulmonary emboli and in the evaluation of the status of the pulmonary circulation in such conditions as pulmonary neoplasm, pulmonary tuberculosis and emphysema.

Isotopic Venography
Macrotec is also indicated for use in isotopic venography as an adjunct in the screening, diagnosis and management of deep vein thrombosis in the lower extremities.

Combined isotopic venography of the lower extremities and the pulmonary vasculature may be performed.

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

The use of Technetium Tc 99m Albumin Aggregated Injection is contraindicated in persons with a history of hypersensitivity reactions to products containing human serum albumin.

WARNINGS
The literature contains reports of deaths occurring after the administration of Albumin Aggregated to patients with pre-existing severe pulmonary hypertension. Instances of hemodynamic or idiosyncratic reactions to preparations of Technetium Tc 99m Albumin Aggregated have been reported.

PRECAUTIONS
General
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 pertechnetate labeled Albumin Aggregated are used in man. Epinephrine, antihistamines and corticosteroids should be kept available for immediate use.

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

The contents of the Macrotec (Technetium Tc 99m Albumin Aggregated Kit) are sterile and non-pyrogenic. It is essential to follow directions carefully and adhere to strict aseptic procedures during preparation.

Contents of the vial are intended only for use in the preparation of Technetium Tc 99m Albumin Aggregated Injection and are NOT to be administered directly to the patient.

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*Thomas P. Haynie, MD, Editor*

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- [ ] Improved
- [ ] About the same
- [ ] Not as good

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What is the best description of your position?

- [ ] Administrator
- [ ] Chemist
- [ ] Commercial Services
- [ ] Computer Specialist
- [ ] Pharmacist
- [ ] Physician
- [ ] Physicist
- [ ] Technologist
- [ ] Other __________________

Suggestions: What features in *The Journal of Nuclear Medicine* would you like to see added, changed, or deleted?

Additional Comments:

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Volume 27 • Number 12 • 1986
Thank you for taking the time to answer this survey. We appreciate the information and will utilize it in our continuing efforts to provide you with a Journal that is enjoyable to read and complements your work in nuclear medicine.

OPTIONAL

Name: ________________________________________________________________
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Coming in 1987 —

Volume 3
Advances in Clinical Cardiology
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Regional Myocardial Metabolism by Positron Tomography

Series Editor: H. W. Heiss

This unique textbook has been prepared by seventy-five (75) authoritative investigators as an outgrowth of the first international symposium in this field. It addresses cardiologists including nuclear and pediatric cardiologists, cardiac surgeons, radiologists, biochemists, biophysicists, pharmacologists and molecular biologists.

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The Society of Nuclear Medicine

★★★★ 6th ★★★★
Conjoint Winter Meeting

Perfusion Imaging: Instrumentation, Modeling, and Radiopharmaceuticals

Date: Monday–Wednesday, February 2–4, 1987

Location: Hyatt Regency on the River Walk, San Antonio, Texas

Program: Includes scientific papers, invited speakers and half-day tutorials involving users' groups. Plus a special 2 hour marketing seminar: Medical Economics 1987: Shake-Ups, Shakedowns, and Shakeouts

Sponsors: SNM Computer, Instrumentation, and Radiopharmaceutical Science Councils

CME credit: 18 hr Category 1 (approximately)

Fees: $75 SNM members; $100 nonmembers; $24 Students

Contact:
The Society of Nuclear Medicine,
Registrar, Education & Meetings Dept.
136 Madison Avenue,
New York, NY 10016-6760
(212)889-0717
Positions Open

Physician

NUCLEAR PHYSICIAN. University Hospitals of Cleveland, Madison Avenue issue, New York, NY 10016-6760 (212)897-0717

NUCLEAR MEDICINE PHYSICIAN. Position open in University Hospital for ABNM certified physician. Resumes to: Dr. L. M. C. 911, University of Illinois at Chicago, Box 6998, Chicago, IL 60680. An equal opportunity employer.

ABNM CERTIFIED PHYSICIAN. Private practice position for recently certified physician with 3-5 years post-training, clinical, and research experience at an academic institution. Strong background in diagnostic medicine, biochemistry, physiology, and nuclear technology is essential. Large, private, midwest hospital. Send CV with references to: Box 1201, Society of Nuclear Medicine, 136 Madison Ave., 8th Fl., New York, NY 10016-6784. EOE.

IMMEDIATE PHYSICIAN OPPORTUNITY to join rapidly growing nuclear medicine/diagnostic ultrasound group in South Florida. Special emphasis on PET. Send CV and research curriculum vitae to: Dr. Robert J. Gotschalk, Box 1040, 5000 N. Miami Shores Blvd., Miami Shores, FL 33161. EOE.

NUCLEAR MEDICINE PHYSICIAN. The Veteran Administration Medical Center, Seattle, Washington and the University of Washington School of Medicine are seeking a board certified or board eligible nuclear medicine physician at the associate professor level. Strong interest and experience in research and teaching are essential, and computer aptitude and experience are desirable. The hospital is in a new facility with state-of-the-art imaging and computer systems and the professional staff includes a medical imaging physicist and computer programmer.

NUCLEAR MEDICAL PHYSICIAN. St. John Hospital, Detroit. The Division of Nuclear Medicine of the Department of Pathology is seeking a well-qualified, ABNM certified or eligible physician. St. John is a 600-bed general hospital serving urban/suburban areas on Lake St. Clair and connecting waters of the Great Lakes. The hospital includes the Detroit International Medical Center; DMC Detroit General Hospital; DMC Midtown General Hospital; St. John Domestic General Hospital; St. John Behavioral Health; St. John Rehabilitation Hospital; St. Catherine Hospital; or St. John Wyandotte Hospital. Contact: John M. Moross, MD, Assistant Professor and Chairman, Search Committee, VA Medical Center, 1600 S. Columbus Way, Seattle, WA 98108. EOE.

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The Division of Nuclear Medicine of the Department of Radiology at North Shore University Hospital and Allied Hospitals (NSUH) is now accepting applications from qualified nuclear medicine physicists to fill a position as Staff Nuclear Medicine Physicist. NSUH is an academic medical center located on the North Shore of Long Island, NY, with 3000 beds. The hospital is centrally located with easy access to New York City. The successful candidate will be expected to provide clinical and research services in all aspects of nuclear medicine, including single photon imaging, positron emission tomography (PET), and cardiac PET. The position is available immediately and requires a minimum of 2 years' experience in nuclear medicine. Applicants should have completed a fellowship in nuclear medicine and possess a valid license to practice in New York State.

Please submit a current CV and a letter of interest to: Dr. L. M. C. 911, University of Illinois at Chicago, Box 6998, Chicago, IL 60680. An equal opportunity employer.

NUCLEAR MEDICINE PHYSICIAN. St. Joseph Hospital, Detroit. The Division of Nuclear Medicine of the Department of Pathology is seeking a well-qualified, ABNM certified or eligible physician. St. Joseph is a 600-bed general hospital serving urban/suburban areas on Lake St. Clair and connecting waters of the Great Lakes. The hospital includes the Detroit International Medical Center; DMC Detroit General Hospital; DMC Midtown General Hospital; St. John Domestic General Hospital; St. John Behavioral Health; St. John Rehabilitation Hospital; St. Catherine Hospital; or St. John Wyandotte Hospital. Contact: John M. Moross, MD, Assistant Professor and Chairman, Search Committee, VA Medical Center, 1600 S. Columbus Way, Seattle, WA 98108. EOE.

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Please submit a current CV and a letter of interest to: Dr. L. M. C. 911, University of Illinois at Chicago, Box 6998, Chicago, IL 60680. An equal opportunity employer.
ULTRASONOGRAPHER. Position now available for experienced Ultrasound technologist. Pleasant working conditions in progressive 170-bed general hospital located in sunny South West Texas. University town with hunting, fishing, water sports, golf courses and numerous tennis facilities. Additional responsibility will be back-up for nuclear medicine. Qualifications include NM registered or registry eligible by ARRT of NMTCB. Salary negotiable. Submit resume to: Bill McSpadden, CNMT, Special Imaging Supervisor, St. John’s Hospital and Health Center, P.O. Drawer 5741, San Angelo, TX 76902. EOE.

RESEARCH NUCLEAR MEDICINE TECHNOLOGIST. A full-time career position is available for an innovative, certified nuclear medicine technologist utilizing nuclear imaging for pharmaceutical research and development at Merck Sharp & Dohme Research laboratories. It is essential for candidates to have a Bachelor’s degree and 3 to 5 years of nuclear imaging experience, including SPECT. Previous research or animal experience is a plus. Send resume to: Susan R. Jenkins, WP42-2, Research Personnel, Merck Sharp & Dohme Research Laboratories, Sunnymount Pk., West Point, PA 19486. EOE.

NUCLEAR MEDICINE TECHNOLOGIST position is now available in expanding radiology department of progressive hospital in Western Illinois. Applicants must have completed formal training program in NM technology. Must meet requirements for registry by ARRT or Equivalent. Send resume to: Director of Human Resources, Community Memorial Hospital, 1000 W. Harlem Avenue, Monmouth, IL 61462. EOE.

NUCLEAR MEDICINE TECHNOLOGIST. Requires completion of technology program and nuclear medicine certification. Snow skiing, snowmobiling, fishing and hunting are just a few of the recreational opportunities available during our sparkling winter in Central Washington. Employer paid benefits and competitive salary. Contact: Jerri Pousha, St. Elizabeth Medical Center, Human Resources, 110 South 9th Ave., Yakima, WA 98902; (509)573-5096. EOE.

NUCLEAR MEDICINE TECHNOLOGIST. West Florida Regional Medical Center, HCA’s largest hospital, is seeking a full-time technologist for our nuclear cardiology department. Position available after Jan. 1, 1987. Department consists of 3 Gamma Camera, 77 Baird Cameras, 1 Baird Scintivisor, 1 Technicare portable camera, and 5 computers and microprocessors. Send resume to: Employment Office WPBMC, 8383 N. Davis Highway, Pensacola, FL 32514. For more information contact: Dennis Heuser, Technical Director, Nuclear Cardiology Dept., 1-904-478-4460, ext. 4802. EOE.

Positions Wanted

Physicians

Experienced nuclear medicine physician ABNM certified with strong nuclear cardiology background seeks private practice position. Proven record of success in developing a strong nuclear medicine service. Reply to: Box 1204, The Society of Nuclear Medicine, 136 Madison Ave., New York, NY 10016-6760.

NUCLEAR MEDICINE PHYSICIAN. Physician presently completing two-year NM Fellowship at Georgetown University, BE in NM and diagnostic radiology. Reply: Box 1202, The Society of Nuclear Medicine, 136 Madison Ave., 8th Fl., New York, NY 10016-6760.

Equipment Available

ATTENTION TECHNICARE USERS! Diagnostic Plus is your best source for parts, collimators, scintivisors, cryo-therm controls, DUCP upgrades, imagers, whole body tables. Call us to sell an older system or buy a reconditioned computer or camera: (516)742-1939.

Equipment Wanted


EUROPEAN NUCLEAR MEDICINE CONGRESS 1987

Budapest, Hungary • August 24-28, 1987

The New Trends and New Possibilities in Nuclear Medicine

The Society of Nuclear Medicine—Europe • 25th Meeting
The European Nuclear Medicine Society • 10th Meeting
The Hungarian Nuclear Medicine Society • 5th Meeting

SCIENTIFIC PROGRAM


Original contributions on a variety of topics related to nuclear medicine will be considered for inclusion in the scientific program. They are:

- Basic Research: Physical science; Emmission computed tomography, (SPECT and PET); Nuclear magnetic resonance; Instrumentation; Image processing—artificial intelligence; Personal computers—computer networks; Quality control.
- Pharmacology: Radiopharmaceutical chemistry; New radiopharmaceuticals; New radiolmmunoassays; Quality control in radiopharmacology; Dosimetry, Radiation risks.
- Clinical Application: Bone/joint diseases; Circulation; Endocrinology; Gastroenterology; Hematology; Cardiology; Immunocintigraphy; Nephrology; Neurology; Pediatrics; Pulmonary diseases; Therapy; Thyroid diseases.

Call for Abstracts: Official Abstract Forms may be obtained by writing to: Prof. L. Csernay, Institute of Nuclear Medicine, University Medical School, H-6720 Szeged, Koranyi fars 8, PF. 469, Hungary. Telephone: 00-36-62-11170. The Deadline for the Receipt of Abstracts is March 10, 1987.

EXHIBITION

A comprehensive exhibition of equipment and radiopharmaceutical manufacturers will be on display.

SOCIAL PROGRAM

An elaborate social program has been planned including: a concert in the Congress Palace of Budapest, wine-and-cheese welcoming party; evening in the Castle of Buda, featuring renowned opera singers, organ music, and a reception in the National Gallery; banquet and dance; farewell luncheon; and the first European Nuclear Medicine Tennis Championship.

Registration: Members of the Society of Nuclear Medicine—Europe (SNME), of the European Nuclear Medicine Society (ENMS), and of the Hungarian Nuclear Medicine Society (HNMS) will be admitted free of charge. Registration fee for all others is: 210 Swiss francs by June 20, 1987, and 300 Swiss francs after June 20, 1987.

Travel Arrangements: Garber Travel, the officially appointed U.S. agent for the SNM in the coordination of travel arrangements to the European Nuclear Medicine Congress, will offer the lowest possible fare and hotel accommodations in Budapest. Garber has agreed to receive Congress Registrations in U.S. dollars for all registrants who are booking both air and land arrangements. Call Toll-Free from outside Massachusetts 1-800-225-4750 or (617)887-9060. Ask for Nuclear Medicine Congress Desk. For detailed information contact: GARBER TRAVEL, P.O. Box 404—Dept. 91-7023, Brookline, MA 02146.

Mailing address for payment and further information: Prof. L. Csernay, Institute of Nuclear Medicine, H-6720 Szeged, Koranyi fars 8, PF. 469, Hungary. Telephone: 00-36-62-11170.

Circle Reader Service No. 20
NATIONAL SALES MANAGER

Syncor International operates an expanding network of over 75 pharmacy service centers that daily prepare and deliver advanced pharmaceuticals, primarily radioactive components, to over 5000 customers. Our service centers are supported by an excellent staff of professional sales representatives, most of whom have clinical backgrounds in nuclear medicine. Presently we are seeking a dynamic individual who is capable of assuming the management responsibility for this Sales Department.

This is a key position reporting directly to the Vice President of Marketing and Sales. In order to be considered, candidates need at least 5 years of proven medical sales management experience, preferably in the diagnostic field. A degree or equivalent in Marketing or Science is required.

Applications must be submitted in writing with a complete resume and salary requirements to:

Carl H. Macklin
Vice President Marketing & Sales
12847 Arroyo Street
Sylmar, CA 91342

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Radiopharmaceuticals and In Vitro Diagnostics
Clinical Trials and Product Development

Leading independent monoclonal health care products company located in suburban Philadelphia has excellent opportunities available for qualified individuals to actively participate in the evaluation and development of biopharmaceutical products. Positions provide significant potential for professional career growth and management level responsibilities. Excellent opportunities for qualified and innovative scientists to work as key members of Centocor’s multidisciplinary investigational team exploring the use of murine and human monoclonal antibodies as in vivo and in vitro diagnostic, as well as therapeutic products.

Senior Clinical Research Positions
Nuclear Medicine Physician

Responsibilities include the supervisory planning and implementation of major clinical research programs, contributing to the introduction of diagnostic blood tests and radiopharmaceuticals. Design of clinical protocols, selection of clinical investigators and insuring compliance with regulations and scientific protocols are important aspects of the position. Further responsibilities include direct interaction with the organization’s immunologists, toxicologists, pharmacologists, and biostatisticians in the preparation of regulatory agency submissions and scientific publications. Position requires research experience in cardiac imaging, oncologic nuclear medicine, immunology, or radiopharmaceutical development and provides the opportunity to pursue academic and clinical activities. Applicants must be board certified in nuclear medicine and/or nuclear radiology and have significant administrative skills, as well as proven experience in clinical research.

Apply with curriculum vitae to: Harvey J. Berger, M.D., Senior Vice President, Medical Affairs, Centocor, Inc., 244 Great Valley Parkway, Malvern, PA 19355. An equal opportunity employer.

Fifteenth Annual Meeting

Imperial College, London; April 13–15, 1987

BNMS Annual Lecture:
"Imaging the Chemistry of Mental Illness"
Professor Henry N. Wagner Jr., MD
The Johns Hopkins Medical Institutions,
Baltimore, Maryland, USA

Review and Original Papers
Specialist Sessions:
Pediatrics in Nuclear Medicine
Technicians (Technologists)
Physics/Computing
SPECT

Commercial and Poster Exhibitions
Further information available from: The Conference Secretary, Mrs. Angela Taylor, 22 Leinster Ave., East Sheen, London SW14 7JP
ATTENTION SNM MEMBERS

new clubs are seeking active members to join in the petition for Council status.

Brain Imaging Council—the proposed council will offer specialists the opportunity to have a forum for discussion and rapid dissemination of information pertaining to brain imaging. It hopes to establish international educational scientific programs to examine current investigations.

Commercial Services Council—the proposed council will be opened to all individual members to provide a forum for those individuals who wish to share information and experience about the commercial aspects of nuclear medicine. It hopes to create an educational arena to assist others entering into business, whether it be industry or private practice.

To receive a copy of either petition, please write indicating council of choice to:
Membership Department, The Society of Nuclear Medicine, 136 Madison Avenue, Dept. 1186JC, New York, NY 10016-6784, (212)889-0717.

14th TRAINING COURSE ON HORMONAL ASSAY TECHNIQUES OF THE ENDOCRINE SOCIETY
March 23–27, 1987 • Holiday Inn • Bethesda, Maryland

This course will be organized and directed by Bruce D. Weintrab, MD, Chief, Molecular, Cellular, and Nutritional Endocrinology Branch, NIDDK. The faculty will be comprised of leading scientists from the National Institutes of Health. The course will consist of morning lectures on fundamentals and theoretical background, and afternoon workshops and laboratory demonstrations. Topics will include radioimmunoassay, radio-receptor assay, non-isotopic immunoassay, in vitro bioassay, measurement of polypeptide messenger RNA, high performance liquid chromatography, and hybridoma and cell fusion techniques. For applications and information: The Endocrine Society, 9650 Rockville Pike, Bethesda, MD 20814; (301)530-9660.

NUCLEAR MEDICINE TECHNOLOGIST (certified or eligible) needed for Arizona Hospital. Radiology Tech. capabilities preferred but not mandatory. Excellent benefits, salary negotiable. Close to the Las Vegas and Colorado River Resort areas. An excellent opportunity in a growing Arizona community. Information: Dir. of Personnel, Kingman Regional Medical Center, 3269 Stockton Hill Rd., Kingman, Arizona 86401 (602)757-2101, ext. 133.

When all else fails.

Good diskettes are good enough. Some of the time.

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If the name DYSAN is not on the diskette you are using, then you may not have the better diskette. For the best name in magnetic media, call JRT ASSOCIATES

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The Computer Systems Expert
Software Programs for Radionuclide Intake and Dose Evaluation

Science Applications International Corporation (SAIC) has introduced the REMedy internal dosimetry evaluation system, a set of microcomputer software programs. These programs allow the user to input data describing the conditions surrounding a radionuclide exposure or intake, and process the data according to the calculations methodology recommended by the International Commission on Radiological Protection (ICRP), or a substitute metabolic model, to estimate initial intake and subsequent dose. The REMedy programs are introduced as a series of computer software programs consisting of air- and bioassay-based assessment modules labeled REMedy-A and REMedy-B.

REMedy-A (for "Air" Module) allows the orderly calculation and documentation of radionuclide intake and dose for a maximum of 15 subjects who have occupied an area with airborne concentrations of up to 10 different nuclides, as well as the direct calculation of committed and first-year dose for cases where radionuclide intake is known.

The REMedy-B module enables the assessment of radionuclide intake and dose on the basis of bioassay measurements. REMedy-B (for "Bioassay") provides the ability to interpret bioassay measurements. It is suited for activities such as the screening of large numbers of potentially exposed workers after an accident involving radioactive material, or the development and application of programs for routine evaluation of radiation and documentation of internal dose.

Science Applications International Corporation, 10210 Campus Point Dr., San Diego, CA 92121.

Circle Reader Service No. 101

Mobile Barrier

Nuclear Associates has introduced the Clear-Pb® nuclear medicine mobile barrier that protects working personnel from radiation emitted by patients who are undergoing nuclear medicine examinations. It features a large Clear-Pb lead-plastic viewing window that blocks nearly 90% of Te-99m gamma rays. Clear-Pb panels are optically clear, distortion-free and shatter-resistant. The opaque lower panel is shielded with 1/4 inch of lead for a higher level of radiation protection, and patients can be closely observed with reduced radiation exposure hazard. Locking castors provide full mobility. Nuclear Associates, 100 Voice Road, Carle Place, NY 11514-1593.

Circle Reader Service No. 102
If you’re looking for the best uptake system, designed for patient comfort and easy operation, take a look at the Thyroid Uptake System II from Atomic Products.

It sets new performance standards because it is “truly dedicated” to thyroid uptake activity studies.

Operation is simple, and straightforward, thanks to the user-friendly menu selection and logical control panel design. All operations and calculations are handled by a high-speed microprocessor with data displayed on the built-in video monitor. An optional printer is available for hard copy.

The isotope menu is preselected for 7 isotopes (I-123; 1-125; I-131; Co-57; Cr-51; Tc-99m; Cs-137), with a manual override.

Patient measurements are automatically decay corrected, and it calculates the final uptake percentage. It has a memory capacity for 8 separate patients, 3 measurements per patient.

The system can be configured as a free-standing unit, or used in a tabletop setting, depending on your needs and patient requirements.

The Thyroid Uptake System II. It sets new standards for uptake studies. From your Nuclear Medicine Source... Atomic Products Corporation.

For additional information, call us today.
Technetium 99m Sulfur Colloid Injection

Kit for the Preparation of Technetium Tc 99m Sulfur Colloid Injection

14,800 MBq (400 mCi) per vial maximum activity.
- Only one 5 minute boil is necessary; no need to re-boil, which takes more time and can add to personnel exposure rates.
- Can be rapidly cooled, greatly reducing costly early morning time delays.
- High reticuloendothelial system uptake: in average patients, 80 to 90% of the injected particles to the liver, 5 to 10% to the spleen and the balance to the bone marrow.
- Stable formulation: may be used up to six (6) hours after preparation.

To Order Call: 800 MEDI-123

DESCRIPTION: Each kit contains sufficient material to prepare five (5) formulations. Each formulation consists of a reaction vial containing 0.5 ml 1 N hydrochloric acid, and two syringes, one containing a 1.1 ml aqueous solution of 19.9 mCi sodium thiosulfate and the other containing 6.3 mCi in 2.1 ml of an aqueous buffer solution containing 17.7 mg sodium acetate anhydrous. All components are sterile and pyrogen-free. When a solution of sterile and pyrogen-free Sodium Percetrchnate Tc 99m Injection is mixed with these components, following the instructions provided with the kit, Technetium Tc 99m Sulfur Colloid Injection is formed. The product so derived is intended for intravenous injection. The precise structure of Technetium Tc 99m Sulfur Colloid Injection is not known at this time. Not less than 50 percent of the radioactivity corresponds to the Technetium Tc 99m in colloidal form.

INDICATIONS AND USAGE: Technetium Tc 99m Sulfur Colloid Injection is used in adults and children as an agent for imaging areas of functional reticuloendothelial cells in the liver, spleen and bone marrow.

CONTRAINDICATIONS: None known.

WARNINGS: Although rare, deaths have occurred following intravenously administered gelatin stabilized Tc 99m sulfur colloid. Advanced cardiopulmonary life support systems should be readily available where and when the drug is administered.

PRECAUTIONS: General

The contents of the two syringes, one syringe containing the sodium thiosulfate solution and the second syringe containing the appropriate buffer solution, are intended only for use in the preparation of the Technetium Tc 99m Sulfur Colloid Injection and are NOT to be directly administered to the patient.

The contents of the kit are not radioactive. However, after the Sodium Percetrchnate Tc 99m Injection is added, adequate shielding of the final preparation must be maintained.

The contents of the kit are sterile and pyrogen-free. It is essential to follow the directions carefully and to adhere strictly to aseptic procedures during preparation. This preparation contains no bacteriostatic preservative.

Sodium Percetrchnate Tc 99m solution containing more than 10 micrograms/ml of aluminum ion should not be used to formulate the Technetium Tc 99m Sulfur Colloid Injection. The Sodium Percetrchnate Tc 99m solution must also be free of oxidizing agents such as peroxides and hypochlorites.

Technetium Tc 99m Sulfur Colloid Injection is physically unstable, and the particles will settle with time. Failure to agitate the vial adequately before use may result in nonuniform distribution of radioactivity. If there is any delay in administration of the preparation, the syringe should also be gently agitated.

It is also recommended that, because of the increasing probability of aggregation with age, a batch of Technetium Tc 99m Sulfur Colloid Injection not be used after six (6) hours from the time of formulation.

Radiopharmacists 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.

Technetium Tc 99m Sulfur Colloid Injection, as well as other radionuclide drugs must be handled with care and appropriate safety measures should be used to minimize external radiation exposure to clinical personnel. Also, care should be taken to minimize exposure to patients, consistent with proper patient management.

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY

No long term animal studies have been performed to evaluate carcinogenic potential, mutagenic potential, or whether Technetium Tc 99m Sulfur Colloid affects fertility in males or females.

Pregnancy Category C

Animal reproductive and teratogenicity studies have not been conducted with Technetium Tc 99m Sulfur Colloid Injection. It is also not known whether Technetium Tc 99m Sulfur Colloid Injection can cause fetal harm when administered to a pregnant woman, or can affect reproductive capacity. There have been no studies in pregnant women. Technetium Tc 99m Sulfur Colloid Injection should not be given to a pregnant woman only if clearly needed.

Ideally, examinations using radiopharmaceuticals, especially those selective in nature, of a woman of child-bearing 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. Therefore, formula feedings should be substituted for breast feedings.

ADVERSE REACTIONS: The following adverse reactions have been reported associated with the use of Technetium Tc 99m Sulfur Colloid: cardiopulmonary arrest, seizures, amphoteric shock, hypotension, dyspnea, abdominal pain, fever, chills, bronchospasm, nausea, vomiting, perisphincter, redness, urticaria, numbness, and burning at the injection site.

Several deaths and cases of lung and soft tissue uptake other than RES have been reported in association with the use of Technetium Tc 99m Sulfur Colloid (see WARNINGS).

The size and physical-chemical properties of the sulfur colloid particles formed from the components of the kit may determine the biodistribution of the colloid and its uptake by the RES. Diseases affecting the RES may also alter the expected uptake pattern.

HOW SUPPLIED:

Kit Contents:
5 STERILE REACTION VIALS, each containing 0.5 ml 1.0 N hydrochloric acid.
5 STERILE SYRINGES, (labeled "A"), each containing 1.9 mg sodium thiosulfate anhydrous in 0.1 ml aqueous solution.
5 STERILE SYRINGES, (labeled "B"), each containing 5.3 mg geat in 2.1 ml aqueous buffer solution containing 17.7 mg sodium acetate anhydrous.
10 PRESSURE-SENSITIVE LABELS for final preparation of Technetium Tc 99m Sulfur Colloid Injection.
1 PACKAGE INSERT

Storage
Store kit at room temperature; refrigeration not required.

Circle Reader Service No. 23