Positron imaging is demonstrating improved outcomes for oncology. Reimbursement for certain applications is now **approved**—with the likelihood for more indications in the near future.

Successful integration of positron imaging into the clinical practice goes well beyond the delivery of a camera. It requires assistance in reimbursement, clinical protocols, radiopharmaceuticals...and much more. That's why Siemens offers total solutions for every aspect of PET and coincidence imaging. We make it easy to establish a quality positron imaging service.

Whether you perform a few positron procedures a month—or many each day—Siemens has specific product and service solutions to meet your *every* need. With the most extensive worldwide support network...and over 20 years of positron experience, we are well prepared to meet your individual challenges.

And when it comes to technology, there's none better—for dedicated PET or coincidence imaging. See why Siemens ECAT® PET and E.CAM™ coincidence cameras are setting the **standard** in positron imaging today.

**a clear outcome in**

---

Siemens Medical Systems, Inc. • North and South America 847.304.7700 • Canada 905.819.8000 • Europe 49.9131.84.6685
• Asia and Pacific Rim 81.3.5423.4066 • E-mail: feedback@po4.nmg.sms.siemens.com • Web site: http://www.sms.siemens.com/nmg
the standard in clinical excellence

logy

Siemens medical Solutions that help
Capintec is proud to introduce its Captus® 2000 Thyroid Uptake System. With many new features it's the best Thyroid Uptake System yet. Features include: Enhanced data viewing, increased data storage capacity, direct read-outs in CPM, DPM, Curies, and Bequerels with energy spectrum displayed, unique spring-arm for easy collimator positioning, flared collimator swivels 360°, and complete year 2000 compliance. These features, combined with the solid dependability of Capintec, combine to make the Thyroid Uptake System better than ever. The new Captus 2000 Thyroid Uptake System is just another example of Capintec’s dedication to the nuclear medicine industry.
In managing the moderate-to-low risk acute chest pain patient... "Is it ok to send him home?"

Measure LVEF and perfusion with Cardiolite, and your decision becomes clear.

He's waiting. You need to decide. With Cardiolite, you get crucial, post-chest pain risk assessment information to help you make appropriate patient management decisions. An abnormal rest perfusion study with Cardiolite suggests he's had an MI, while a normal rest perfusion study rules out the possibility of MI. When gated, that same rest Cardiolite study also lets you assess LVEF and wall motion—providing greater insight into the patient's condition. And, a follow-up stress study with Cardiolite adds even more information—including assessment of myocardial ischemia.

That's the kind of clear, reliable, and reproducible information you need to make patient management decisions with confidence. So, when the question is whether you should send him home or not, order Cardiolite. It clears your line of vision.

For more information contact us at 1-800-343-7851 or www.cardiolite.com

There have been infrequent reports of signs and symptoms consistent with seizure and severe hypersensitivity after administration of Tc99m Sestamibi.

Please see brief summary of prescribing information on the following page.


Correlation of Cardiac Outcomes With Cardiolite SPECT Findings After 1 Year

Cardiac death
AMI
Revascularization

P = 0.01 compared with revascularization with normal imaging.

Adopted with permission from Tatum et al.

Patients with chest pain were evaluated within 60 minutes of presentation to the ER, and were assigned to one of two levels on the basis of either the risk of HIT or UA. Patients represented in this graph were assigned to level 3 (probable UA) and level 4 (possible UA).
INDICATIONS AND USAGE: Myocardial Imaging: CARDIOLITE, Kit for the Preparation of Technetium Tc 99m Sestamibi for Injection, is a myocardial perfusion agent that is indicated for detecting coronary artery disease by localizing scintigraphic defects (reversible defects) and infarction (non-reversible defects), in evaluating myocardial function and developing information for use in patient management decision.

CARDIOLITE evaluation of myocardial ischemia can be accomplished with rest and cardiovascular stress techniques (e.g., exercise or pharmacologic strain) in accordance with the pharmacologic stress agent's labeling).

It is usually possible to determine the age of a myocardial infarction or to differentiate a recent myocardial infarction from ischemia.

Breast Imaging: MIRALUMA, Kit for the Preparation of Technetium Tc 99m Sestamibi for Injection, is indicated for planning a biopsy as a secondary diagnostic drug after mammography to assist in the evaluation of breast lesions in patients with an abnormal mammogram or a palpable breast mass.

MIRALUMA is not indicated for cancer screening, to confirm the presence or absence of malignancy, and it is not an alternative to biopsy.

CONTRAINDICATIONS: None known.

WARNINGS: Radioactive material in whom cardiac disease is known or suspected, care should be taken to assure continuous monitoring and treatment in accordance with safe, accepted clinical procedures. Infrequently, death has occurred in 24 hours after Tc 99m Sestamibi use and is usually associated with exercise stress testing (see PRECAUTIONS).

Pharmacologic induction of cardiovascular stress may be associated with serious adverse events such as myocardial infarction, arrhythmia, hypotension, bronchoconstriction and cerebrovascular events. Care should be taken when pharmacologic stress is selected as an alternative to exercise; it should be used when indicated and in accordance with the pharmacologic stress agent's labeling.

Technetium Tc 99m Sestamibi has been rarely associated with acute severe allergic and anaphylactic events of angioedema and generalized urticaria. In some patients the allergic symptoms developed on the second injection during CARDIOLITE imaging. Patients who receive CARDIOLITE or MIRALUMA imaging are recommended to have an anti-histamine and resuscitation equipment should be available when administering Technetium Tc 99m Sestamibi. Also, before administering either CARDIOLITE or MIRALUMA, patients should be asked about the possibility of allergic reactions to either drug.

PRECAUTIONS: General: The contents of the vial are intended only for use in the preparation of Technetium Tc 99m Sestamibi and are not to be administered directly to the patient without first undertaking the preparatory procedure.

Radioactive drugs must be handled with care and appropriate safety measures should be used to minimize radiation to patients and to personnel. Also, care should be taken to minimize radiation exposure to the patients consistent with proper patient management.

Contraindication to injection are not radioactive. However, the Sodium Perchlorate Technetium Tc 99m Injection is added, adequate shielding of the final preparation must be maintained.

The components of the kit are sterile and non-pyrogenic. It is essential to follow directions carefully and to adhere to strict aseptic procedure during preparation.

Technetium Tc 99m labeling reactions involved depend on maintaining the stannous ion in the reduced state. Hence, Sodium Perchlorate Technetium Tc 99m Injection containing stannous must not be used.

Technetium Tc 99m labeling reactions involved may be used by physicians who are qualified by training and experience in the safe use and handling of radioactive and whose employment has been approved by the appropriate government agency authorized to license the use of radioisotopes. Stress testing should be performed only under the supervision of a qualified physician and in a laboratory equipped with appropriate monitoring and support facilities.

The most frequent exercise stress test endpoints, which resulted in termination of the test during controlled Tc 99m Sestamibi studies (two-thirds of cardiac patients were):

- Fatigue
- Dyspnea
- Chest Pain
- ST-Depression
- Angina

Information for Patients: CARDIOLITE and MIRALUMA are different names for the same drug. Patients should be advised to inform their health care provider if they had any allergic reaction to either drug.

Carcinogenesis, Mutagenesis, Impairment of Fertility: In comparison with other diagnostic technetium-labeled radiopharmaceuticals, the radiation dose to the ovaries (1.6±0.6 mGy/MBq at rest, 1.2±0.6 mGy/MBq at maximum exposure (ALARA) is in adequate time in women of childbearing capability. (See Dosimetry subsection in DOSAGE AND ADMINISTRATION section).

The active ingredient, (C50H80)62, is evaluated for genotoxic potential in a battery of five tests. No genotoxic effects were found in Ames, CHO/TK6 and CHO/chromosomal exchange and no evidence of mutagenic effects (all in vitro).

At cytotoxic concentrations (≥20 μM), an increase in cells with chromosome aberrations was observed in the in vitro human lymphocytes (CytOrch/10). However, it should be noted that in the in vivo mouse micrometric test at a dose which caused systemic and bone marrow toxicity (30 μg/ml ≤ 0.15 mGy/ml).

Parenteral Drug Administration: Cardiovascular and respiratory function have been analyzed. As a result, it is not known whether Technetium Tc 99m Sestamibi is excreted in human milk during lactation. It is not known whether Technetium Tc 99m Sestamibi is excreted in human milk. Therefore, formula feeding should be substituted for breast feeding.

Pediatric Use: The safety and effectiveness of Technetium Tc 99m Sestamibi in the pediatric population have not been established.

ADVERSE REACTIONS: Adverse events were evaluated in 3741 adults who were evaluated in clinical studies. Of these patients, 63% were <65 years, 20% were ≥65 years, and 0.7% of the patient's gender were not recorded) were in cardiac clinical trials and 67% (100% women) in breast imaging trials. Cases of angina, chest pain, and death have occurred (see WARNINGS and PRECAUTIONS). Adverse events reported at a rate of 0.5% or greater after receiving Technetium Tc 99m Sestamibi administration are shown in the following table:

Table 5. Adverse Events Reported at a ≥ 0.5% of Patients Who Received Technetium Tc 99m Sestamibi in Either Budex or Cardiac Clinical Studies

<table>
<thead>
<tr>
<th>Body System</th>
<th>Body Site</th>
<th>Women</th>
<th>Men</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular</td>
<td>N = 673</td>
<td>31 (1.8%)</td>
<td>32 (1.9%)</td>
<td>63 (0.9%)</td>
</tr>
<tr>
<td>Respiration</td>
<td>N = 673</td>
<td>11 (1.6%)</td>
<td>9 (1.3%)</td>
<td>20 (0.3%)</td>
</tr>
<tr>
<td>Hypertension</td>
<td>N = 405</td>
<td>10 (2.5%)</td>
<td>5 (1.2%)</td>
<td>15 (0.2%)</td>
</tr>
<tr>
<td>Fatigue</td>
<td>N = 673</td>
<td>18 (2.7%)</td>
<td>15 (2.2%)</td>
<td>33 (0.5%)</td>
</tr>
<tr>
<td>Nausea</td>
<td>N = 673</td>
<td>16 (2.4%)</td>
<td>10 (1.4%)</td>
<td>26 (0.4%)</td>
</tr>
<tr>
<td>Vomiting</td>
<td>N = 673</td>
<td>12 (1.8%)</td>
<td>10 (1.5%)</td>
<td>22 (0.3%)</td>
</tr>
<tr>
<td>Current</td>
<td>N = 673</td>
<td>12 (1.8%)</td>
<td>10 (1.5%)</td>
<td>22 (0.3%)</td>
</tr>
</tbody>
</table>

*Includes the 22 patients whose genders were not recorded.

In the clinical studies for breast imaging, breast pain was reported in 12% (1.7%) of the patients. In 11 of 12 patients, chest pain was not observed.

The following adverse reactions have been reported in ≤ 0.5% of patients: signs and symptoms consistent with seizures occurring shortly after administration of the agent; transient atrial fibrillation; angina, arrhythmias, dizziness, bradycardia, abdominal pain, nausea, and severe hypotension characterized by low blood pressure, dyspnea, hypotension, bradycardia, ashen, and walking within two hours after a second injection of Technetium Tc 99m Sestamibi. A few cases of flushing, edema, injection site inflammation, dry mouth, fever, pruritus, rash, pain, and arthralgia and fatigue have also been associated with adverse effects.

DOSEAGE AND ADMINISTRATION: For Myocardial Imaging: The suggested dose range for I.V. administration of CARDIOLITE is a single dose to be employed in the average patient (70 kg) to 370 to 1110 MBq (10 to 30 mCi).

For Breast Imaging: The recommended dose range for I.V. administration of MIRALUMA is a single dose of 480 to 1110 MBq (20 to 30 mCi).

Dose Adjustment: Dose adjustment should be based on the patient's weight, condition, or diagnostic requirement.

DOSE AND ADMINISTRATION: For Myocardial Imaging: The suggested dose range for I.V. administration of CARDIOLITE is a single dose to be employed in the average patient (70 kg) to 370 to 1110 MBq (10 to 30 mCi).

For Breast Imaging: The recommended dose range for I.V. administration of MIRALUMA is a single dose of 480 to 1110 MBq (20 to 30 mCi).

Image Acquisition: Breast Imaging: It is recommended that images are obtained with a table overlay to separate breast tissue from the myocardium and liver, and to exclude potential activity that may be present in the opposite breast. For lateral images, position the patient prone with the bilateral arms comfortably above the head, shoulders flat against the table, head turned to the side and relaxed, with the breast imaged pendent through an overlay cutout. The breast should not be compressed to the extreme. For anterior images, position the patient supine with both arms behind the head. For either lateral or anterior images, shield the chest and abdominal organs, or remove them from the field of view.

For complete study, sets of images should be obtained no faster than 4 minutes after the injection of Technetium Tc 99m Sestamibi:

- ten-minute lateral images with abnormality
- ten-minute anterior images of contralateral breast
- ten-minute anterior images of both breasts

RADIATION DOSEMETRICS: The radiation dose to the whole body and tissues of an average patient (70 kg) per 1110 MBq (30 mCi) of Technetium Tc 99m Sestamibi injected intravenously are shown in Table 10.

Table 10. Radiation Absorbed Doses from Tc 99m Sestamibi Estimated Radiation Absorbed Doses

<table>
<thead>
<tr>
<th>Body Site</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>0.5</td>
<td>0.6</td>
</tr>
<tr>
<td>Heart</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Spinal Cord</td>
<td>1.7</td>
<td>1.7</td>
</tr>
<tr>
<td>Liver</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Bone</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Thyroid</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Spleen</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Uterus</td>
<td>0.4</td>
<td>0.4</td>
</tr>
</tbody>
</table>

*Includes the 22 patients whose genders were not recorded.

Printed in U.S.A. August 1998
THEY’RE ALL DEADLY CHARACTERS—AND NOW, DIATIDIDE HAS THEIR FINGERPRINTS

Our patented CellSeek™ technology finds and treats disease at its earliest stages, by identifying its unique biochemical markers

From earlier cancer detection and pinpoint-accurate treatment, to distinguishing benign from malignant disease processes, to easing the pain of bone cancer, treating cardiovascular disease and more...Diatide's patented technology is opening up a world of diagnostic and therapeutic opportunity that's only been hinted at before.

Our unique technology links synthetic peptides with the commonly used radioisotope technetium-99m. This inspired combination gives our patented compounds the ability to bind to molecular targets on diseased tissue, for the earliest possible detection of disease.

As exciting as our Techtides® are for diagnosis, the therapeutic extension of this technology—Theratides™—can deliver therapy directly to disease sites, for magnified treatment efficacy with minimized side effects.

The promise of our innovative approach has been recognized by expedited evaluation of our first two new drug applications. And with a steady pipeline of products in various stages of development, we’re doing some expediting of our own: ushering in an era of new hope for millions of patients.

www.diatide.com
NASDAQ:DIIT
1-877-DIATIDE

Diatide, Inc.
For a better way to find—and fight—disease.
Decisive information keeps you on course

Guiding you to optimal intervention for neuroendocrine tumors

- Somatostatin receptor scintigraphy with OctreoScan detects and localizes primary tumors and metastatic spread often missed by conventional imaging (sensitivity varies 61%-100%, depending on tumor type).¹
- Whole-body scanning can more definitively confirm the extent of disease.
- You are better able to
  - stage the patient
  - determine diagnostic work-up
  - avoid unnecessary procedures
  - select optimal treatment
  - assess surgical candidates
  - evaluate response to treatment
- Transient adverse effects including dizziness, fever, flush, headache, hypotension, changes in liver enzymes, joint pain, nausea, sweating, and weakness were observed in less than 1% of 538 patients during clinical trials.
- Please see the prescribing information for special considerations regarding patients receiving total parenteral nutrition or concurrent octreotide acetate therapy and patients with insulinoma or impaired renal function.

The accepted standard for GEP* tumors
An emerging choice for small cell lung cancer

*Gastroentero-pancreatic neuroendocrine tumors

See your way clear

OctreoScan®
Kit for the Preparation of Indium In-111 Pentetreotide

Please see adjacent page for brief summary of prescribing information.
Kit for the Preparation of Indium In-111 Pentetreotide

BRIEF SUMMARY OF PRESCRIBING INFORMATION

DESCRIPTION
OctreoScan is a kit for the preparation of indium In-111 pentetreotide, a diagnostic radiopharmaceutical. It is a kit consisting of two components:
1) A 10-mL OctreoScan Reaction Vial which contains a lyophilized mixture of 10 µg pentetreotide.
2) A 10-mL vial of Indium In-111 Chloride Sterile Solution.
Indium In-111 pentetreotide is prepared by combining the two kit components.

INDICATIONS AND USAGE
Indium In-111 pentetreotide is an agent for the scintigraphic localization of primary and metastatic neuroendocrine tumors bearing somatostatin receptors.

CONTRAINDICATIONS
None known.

WARNINGS
DO NOT ADMINISTER IN TOTAL PARENTERAL NUTRITION (TPN) ADJUVANTS OR INJECT INTO TPN INTRAVENOUS ADMINISTRATION LINES; IN THESE SOLUTIONS, A COMPLEX GLUCOSYDOLYX OCTREOTIDE CONJUGATE MAY FORM.

The sensitivity of scintigraphy with indium In-111 pentetreotide may be reduced in patients concurrently receiving therapeutic doses of octreotide acetate. Consideration should be given to temporarily suspending octreotide acetate therapy before the administration of indium In-111 pentetreotide and to monitoring the patient for any signs of withdrawal.

PRECAUTIONS
1. Therapy with octreotide acetate can produce severe hypocalcemia in patients with insufficiency. Since pentetreotide is an analog of octreotide, an intravenous line is recommended in any patient suspected of having an insufficiency. An intravenous solution containing glucose should be administered just before and during administration of indium In-111 pentetreotide.
2. The contents of the two vials supplied with the kit are intended only for use in the preparation of indium In-111 pentetreotide and are NOT to be administered separately to the patient.
3. Since indium In-111 pentetreotide is eliminated primarily by renal excretion, use in patients with impaired renal function should be carefully considered.
4. To help reduce the radiation dose to the thyroid, kidneys, bladder, and other target organs, patients should be well hydrated before administration of indium In-111 pentetreotide. They should increase fluid intake and void frequently for one day after administration of this drug. In addition, it is recommended that patients be given a mild laxative (e.g., bisacodyl or lactulose) before and after administration of indium In-111 pentetreotide (see Dosage and Administration section).
5. Indium In-111 pentetreotide should be tested for labeling yield of radioactivity prior to administration. The product must be used within six hours of preparation.
6. Components of the kit are sterile and nonpyrogenic. To maintain sterility, it is essential that directions are followed carefully. Aseptic technique must be used during the preparation and administration of indium In-111 pentetreotide.
7. Octreotide acetate and the natural somatostatin hormone may be associated with cholelithiasis, presumably by altering fat absorption and possibly by decreasing motility of the gallbladder. A single dose of indium In-111 pentetreotide is not expected to cause cholelithiasis.
8. As with any other radioactive material, appropriate shielding should be used to avoid unnecessary radiation exposure to the patient, occupational workers, and other persons.
9. Radiopharmaceuticals should be used only by physicians who are qualified by specific training in the safe use and handling of radionuclides.

Carcinogenesis, Mutagenesis, Impairment of Fertility
Studies have not been performed with indium In-111 pentetreotide to evaluate carcinogenic potential or effects on fertility. Octreotide acetate was evaluated for mutagenic potential in an in vitro mouse lymphoma forward mutation assay and in an in vitro micronucleus assay; evidence of mutagenity was not found.

Pregnancy Category C
Animal reproduction studies have not been conducted with indium In-111 pentetreotide. It is not known whether indium In-111 pentetreotide can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Therefore, indium In-111 pentetreotide should not be administered to a pregnant woman unless the potential benefit justifies the potential risk to the fetus.

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 indium In-111 pentetreotide is administered to a nursing woman.

Pediatric Use
Safety and effectiveness in children have not been established.

ADVERSE REACTIONS
The following adverse effects were observed in clinical trials at a frequency of less than 1% of patients: dizziness, fever, flush, headache, hypotension, changes in liver enzymes, pain, nausea, sweating, and weakness. These adverse effects were transient. Also in clinical trials, there was one reported case of bradycardia and one case of decreased hemotocrit and hemoglobin.

Pentetreotide is derived from octreotide which is used as a therapeutic agent to control symptoms from certain tumors. The usual dose for indium In-111 pentetreotide is approximately 5 to 20 times less than for octreotide and is subtherapeutic. The following adverse reactions have been associated with octreotide in 3% to 10% of patients: nausea, injection site pain, diarrhea, abdominal pain/discomfort, loose stools, and vomiting. Hypertension and hyper- and hypoglycemia have also been reported with the use of octreotide.

DOSEAGE AND ADMINISTRATION
Before administration, a patient should be well hydrated. After administration, the patient must be encouraged to drink fluids liberally. Elimination of extra fluid intake will help reduce the radiation dose by flushing out bound, labelled pentetreotide by glomerular filtration. It is also recommended that a mild laxative (e.g., bisacodyl or lactulose) be given to the patient starting the evening before the radiotracer drug is administered, and continuing for 48 hours. Ample fluid intake is necessary during this period as a support both to renal elimination and the bowel-emptying process. In a patient with an insufficiency, bowel-cleansing should be undertaken only after consultation with an endocrinologist.

The recommended intravenous dose for planar imaging is 111 MBq (3.0 mCi) of indium In-111 pentetreotide prepared from an OctreoScan kit. The recommended intravenous dose for SPECT imaging is 222 MBq (6.0 mCi) of indium In-111 pentetreotide.

The dose should be confirmed by a suitably calibrated radioactivity ionization chamber immediately before administration.

As with all intravenously administered products, OctreoScan should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit. Preparations containing particulate matter or discoloration should not be administered. They should be disposed of in a safe manner, in compliance with applicable regulations.

Aseptic techniques and effective shielding should be employed in withholding doses for administration to patients. Waterproof gowns should be worn during the administration procedure.

Do not administer OctreoScan in TPN solutions or through the same intravenous line.

Radiation Dosimetry
The estimated radiation doses to the average adult (70 kg) from intravenous administration of 111 MBq (3 mCi) and 222 MBq (6 mCi) are presented below. These estimates were calculated by Oak Ridge Associated Universities using the data published by Krenning, et al.

Estimated Absorbed Radiation Doses after Intravenous Administration of Indium In-111 Pentetreotide* to a 70 kg patient

<table>
<thead>
<tr>
<th>PLANAR</th>
<th>SPECT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Kidneys</td>
<td></td>
</tr>
<tr>
<td>Liver</td>
<td></td>
</tr>
<tr>
<td>Spleen</td>
<td></td>
</tr>
<tr>
<td>Urinary Bladder Wall</td>
<td></td>
</tr>
<tr>
<td>Stomach Wall</td>
<td></td>
</tr>
<tr>
<td>Small Intestine</td>
<td></td>
</tr>
<tr>
<td>Upper Large Intestine</td>
<td></td>
</tr>
<tr>
<td>Lower Large Intestine</td>
<td></td>
</tr>
<tr>
<td>Adrenals</td>
<td></td>
</tr>
<tr>
<td>Thyroid</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>54.16</td>
<td>5.42</td>
</tr>
<tr>
<td>12.15</td>
<td>1.22</td>
</tr>
<tr>
<td>73.86</td>
<td>7.39</td>
</tr>
<tr>
<td>6.54</td>
<td>0.63</td>
</tr>
<tr>
<td>4.89</td>
<td>0.49</td>
</tr>
<tr>
<td>2.90</td>
<td>0.29</td>
</tr>
<tr>
<td>3.46</td>
<td>0.35</td>
</tr>
<tr>
<td>30.42</td>
<td>3.04</td>
</tr>
<tr>
<td>5.67</td>
<td>0.57</td>
</tr>
<tr>
<td>4.78</td>
<td>0.48</td>
</tr>
<tr>
<td>5.80</td>
<td>0.58</td>
</tr>
<tr>
<td>7.73</td>
<td>0.77</td>
</tr>
<tr>
<td>7.55</td>
<td>0.76</td>
</tr>
<tr>
<td>7.43</td>
<td>0.74</td>
</tr>
<tr>
<td>13.03</td>
<td>1.30</td>
</tr>
<tr>
<td>26.06</td>
<td>2.61</td>
</tr>
</tbody>
</table>

*Values listed include a correction for a maximum of 0.1% indium In-111 radiometric contamination at calibration.


2. Assumes 4.8 hour voiding interval and International Commission on Radiological Protection (ICRP) 30 model for the gastrointestinal tract calculations.

3. Estimated according to ICRP Publication 53.

HOW SUPPLIED
The OctreoScan kit, NDC 0011-0050-00, is supplied with the following components:

1. A 10-mL OctreoScan Reaction Vial which contains a lyophilized mixture of:
   - (10 µg pentetreotide [N-[D-Arachynethyl]-N,N,N' -tetracetic acid-N'-acetyl-D-phenylalanyl-L-hemicyclonyl-D-phenylalanyl-D-phenylalanyl-L-lysyl-D-phenylalanyl-D-lysyl]-[D-threoninol cyclic (2->7) disulfide], also known as octreotide DTPA),
   - (2.0 mg gentamic acid [2.5-dihydroxybenzoic acid],
   - (4.9 mg trimethyl citrate, anhydrous,
   - (0.37 mg citric acid, anhydrous,
   - (10.0 mg ascorbic acid. Before lyophilization, sodium hydroxide or hydrochloric acid may have been added for pH adjustment. The vial contents are sterile and nonpyrogenic. No bacteriostatic preservative is present.

2. A 10-mL vial of Indium In-111 Chloride Sterile Solution, which contains 1.1 mL of 111 MBq (3.0 mCi/mL) indium In-111 chloride in 0.02 N HCl at time of calibration. The vial also contains ferroc chloride at a concentration of 3.5 µg/mL (ferroc, 1.2 µg/mL). The vial contents are sterile and nonpyrogenic. No bacteriostatic preservative is present.

In addition, the kit also contains the following items:
   - (1) a 25 x 5" needle (B-D, Monodex) used to transfer Indium In-111 Chloride Sterile Solution to the OctreoScan Reaction Vial,
   - (2) a pressure sensitive label, and
   - (3) a package insert.
Give your nuclear department "rapid clearance" capability with MYOVIEW. MYOVIEW clears quickly from the blood, liver, and lungs\(^1\)\(^-\)\(^3\) for quality target-to-background ratios and timely imaging (as soon as 15 minutes or up to 4 hours post-injection).\(^1\) The clearance properties of MYOVIEW allow for highly flexible camera scheduling and enhanced patient management. Any way you look at it, you're cleared for efficiency with MYOVIEW.

In studying patients with known or suspected coronary artery disease, care should be taken to ensure continuous cardiac monitoring and the availability of emergency cardiac treatment.

References:

MYOVIEW. The image of efficiency.
Pediatric Use
Safety and effectiveness in pediatric patients have not been established.

ADVERSE REACTIONS
Adverse events were evaluated in clinical trials of 784 adults (511 men and 253 women) with a mean age of 58.7 years (range 29-94 years). The subjects received a mean dose of 7.67 mCi on the first injection and 22.4 mCi on the second injection of Myoview.

Deaths did not occur during the clinical study period of 2 days. Six cardiac deaths occurred 3 days to 6 months after injection and were thought to be related to the underlying disease or cardiac surgery. After Myoview injection, serious episodes of angina occurred in 3 patients. Overall cardiac adverse events occurred in 5/74 (less than 1%) of patients after Myoview injection.

The following events were noted in less than 1% of patients:
Cardiovascular: angina, hypertension, Torsades de Pointes
Gastrointestinal: vomiting, abdominal discomfort
Hypersensitivity: cutaneous allergy, hypotension, dyspnea
Special Senses: metallic taste, burning of the mouth, smelling something

There was a low incidence (less than 4%) of a transient and clinically insignificant rise in white blood cell counts following administration of the agent.

DOSE AND ADMINISTRATION
For exercise and rest imaging, Myoview is administered in two doses:
The first dose of 5-8 mCi (185-296 MBq) is given at peak exercise.
The second dose of 15-24 mCi (555-886 MBq) is given approximately 4 hours later, at rest. Imaging may begin 15 minutes following administration of the agent.

Dose adjustment has not been established in elderly or liver impaired, pediatric or geriatric patients.

RADIATION DOSIMETRY
Based on human data, the absorbed radiation dose to an average adult (70 kg) from intravenous injections of the agent under exercise and resting conditions are listed in the following table. The values are listed in descending order as rad/mCi and mGy/mCi and assume urinary bladder emptying at 3.5 hours.

**Estimated Absorbed Radiation Dose (Technetium Tc99m Tetrofosmin Injection)**

<table>
<thead>
<tr>
<th>Target organ</th>
<th>Exercise</th>
<th>mGy/MCi</th>
<th>Rest</th>
<th>mGy/MCi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gall bladder wall</td>
<td>0.123</td>
<td>0.180</td>
<td>48.6</td>
<td></td>
</tr>
<tr>
<td>Upper large intestine</td>
<td>0.075</td>
<td>0.113</td>
<td>30.4</td>
<td></td>
</tr>
<tr>
<td>Bladder wall</td>
<td>0.069</td>
<td>0.071</td>
<td>19.3</td>
<td></td>
</tr>
<tr>
<td>Lower large intestine</td>
<td>0.067</td>
<td>0.086</td>
<td>22.2</td>
<td></td>
</tr>
<tr>
<td>Kidney</td>
<td>0.045</td>
<td>0.046</td>
<td>12.5</td>
<td></td>
</tr>
<tr>
<td>Salivary glands</td>
<td>0.030</td>
<td>0.043</td>
<td>11.6</td>
<td></td>
</tr>
<tr>
<td>Ovaries</td>
<td>0.029</td>
<td>0.035</td>
<td>9.55</td>
<td></td>
</tr>
<tr>
<td>Uterus</td>
<td>0.027</td>
<td>0.031</td>
<td>8.36</td>
<td></td>
</tr>
<tr>
<td>Bone surface</td>
<td>0.023</td>
<td>0.021</td>
<td>5.58</td>
<td></td>
</tr>
<tr>
<td>Pancreas</td>
<td>0.019</td>
<td>0.018</td>
<td>4.98</td>
<td></td>
</tr>
<tr>
<td>Stomach</td>
<td>0.017</td>
<td>0.017</td>
<td>4.63</td>
<td></td>
</tr>
<tr>
<td>Thyroid</td>
<td>0.016</td>
<td>0.022</td>
<td>5.83</td>
<td></td>
</tr>
<tr>
<td>Adrenals</td>
<td>0.016</td>
<td>0.015</td>
<td>4.11</td>
<td></td>
</tr>
<tr>
<td>Heart</td>
<td>0.015</td>
<td>0.015</td>
<td>3.93</td>
<td></td>
</tr>
<tr>
<td>Red marrow</td>
<td>0.015</td>
<td>0.014</td>
<td>3.97</td>
<td></td>
</tr>
<tr>
<td>Spleen</td>
<td>0.015</td>
<td>0.012</td>
<td>3.62</td>
<td></td>
</tr>
<tr>
<td>Muscle</td>
<td>0.013</td>
<td>0.012</td>
<td>3.32</td>
<td></td>
</tr>
<tr>
<td>Testes</td>
<td>0.013</td>
<td>0.011</td>
<td>3.05</td>
<td></td>
</tr>
<tr>
<td>Liver</td>
<td>0.012</td>
<td>0.015</td>
<td>4.15</td>
<td></td>
</tr>
<tr>
<td>Thyroid</td>
<td>0.012</td>
<td>0.009</td>
<td>2.54</td>
<td></td>
</tr>
<tr>
<td>Brain</td>
<td>0.010</td>
<td>0.008</td>
<td>2.15</td>
<td></td>
</tr>
<tr>
<td>Lungs</td>
<td>0.008</td>
<td>0.006</td>
<td>2.08</td>
<td></td>
</tr>
<tr>
<td>Skin</td>
<td>0.008</td>
<td>0.007</td>
<td>1.91</td>
<td></td>
</tr>
<tr>
<td>Breasts</td>
<td>0.008</td>
<td>0.007</td>
<td>1.83</td>
<td></td>
</tr>
</tbody>
</table>

Dose calculations were performed using the standard MIRD method (MIRD Pamphlet No. 1 (rev) Society of Nuclear Medicine, 1973). Effective dose equivalents (EDE) were calculated in accordance with ICRP 63 (Ann. ICRP 18 (1-4),1986) and gave values of 8.81 x 10⁻³ mSv/mCi and 1.12 x 10⁻² mSv/Mbq after exercise and rest, respectively.

Manufactured by:
Mycomed Amersham plc
Amersham United Kingdom
Patent No. 5,045,302 (7)

Distributed by:
Medi-Physics, Inc.
Arlington Heights, IL 60004
1-800-633-4123 (Toll Free)

Revised December 1998
Myoview is a trademark of Nycomed Amersham plc.

Amersham HEALTHCARE

Circle Reader Service No. 135
The diagnostic advantages of CardioGen-82® PET myocardial perfusion imaging have always been clear.\textsuperscript{1,2} Now, with the establishment of favorable reimbursement and advancements in equipment technology, the cost-effectiveness story just got even stronger. That's why there's no better time to take a new look at CardioGen-82® PET imaging. Call your Bracco Diagnostics Representative (or call 1-800-257-5181) to see what this combination can mean to you and your practice.
Brief Summary
CardioGen-82®
Rubidium Rb 82 Generator

For Emission of Rubidium Chloride
Rb 82 Injection

Diagnostic: Intravenous

INDICATIONS AND USAGE
Rubidium chloride Rb 82 injection is a myocardial perfusion agent that is useful in distinguishing normal from abnormal myocardium in patients with suspected myocardial infaction.

CardioGen-82® (Rubidium Rb 82 Generator) must be used with an infusion system specifically labeled for use with the generator and capable of accurate measurement and delivery of doses of rubidium chloride Rb 82 injection not to exceed a single dose of 2220 MBq (60 mCi) and a cumulative dose of 4440 MBq (120 mCi) at a rate of 50 mL/min with a maximum volume per infusion of 100 mL and a cumulative volume not to exceed 200 mL. These performance characteristics reflect the conditions of use under which the drug development clinical trials were conducted.

Adequate data from clinical trials to determine precise localization of myocardial infarction or identification of stress-induced ischemia have not been collected.

Positron emission tomographic (PET) instrumentation is recommended for use with rubidium chloride Rb 82 injection.

CONTRAINDICATIONS
None known.

WARNINGS
Caution should be used during infusion as patients with congestive heart failure may experience a transitory increase in circulatory volume load. These patients should be observed for several hours following the Rb-82 procedure to detect delayed hemodynamic disturbances.

PRECAUTIONS
General
Data are not available concerning the effect of marked alterations in blood glucose, insulin, or pH (such as is found in diabetes mellitus) on the quality of rubidium chloride Rb 82 scans. Attention is directed to the fact that rubidium is physiologically similar to potassium, and since the transport of potassium is affected by these factors, the possibility exists that rubidium may likewise be affected.

Rubidium chloride Rb 82 injection must be administered only with an appropriate infusion system capable of meeting the performance characteristics previously described. (See INDICATIONS AND USAGE.) The drug should be used only by those practitioners with a thorough understanding of the use and performance of the infusion system.

Repeat doses of rubidium chloride Rb 82 injection may lead to an accumulation of the longer lived radioactive contaminants strontium Sr 82 and strontium Sr 85.

Since eluate obtained from the generator is intended for intravenous administration, aseptic techniques must be strictly observed in all handling. Only additive free Sodium Chloride Injection USP should be used to elute the generator. Do not administer eluate from the generator if there is any evidence of foreign matter.

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.

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

Carcinogenesis, Mutagenesis, Impairment of Fertility
No long-term studies have been performed to evaluate carcinogenic potential, mutagenicity potential, or to determine whether rubidium Rb 82 may affect fertility in males or females.

Pregnancy Category C
Animal reproductive studies have not been conducted with rubidium Rb 82. It is also not known whether rubidium Rb 82 can cause fetal harm when administered to a pregnant woman or can affect reproductive capacity. Rubidium Rb 82 should be given to pregnant women only if the expected benefits to be gained clearly outweigh the potential hazards.

Ideally, examinations using radiochemicals, especially those examinations which are elective in nature, in women of childbearing capability should be performed during the first few (approximately 10) days following the onset of menses.

Nursing Mothers
It is not known whether rubidium Rb 82 is excreted in human milk. Due to the short half-life of rubidium Rb 82 (75 sec) it is unlikely that the drug would be excreted in human milk during lactation. However, because many drugs are excreted in human milk, caution should be exercised when rubidium Rb 82 is administered to nursing women.

Pediatric Use
Safety and effectiveness in children have not been established.

ADVERSE REACTIONS
No adverse reactions specifically attributable to rubidium Rb 82 have been reported during controlled clinical trials.

issued: March, 1996

(J4-263E)


012724NM
Right on Target

promoting nuclear medicine

1998 1st Place Winner
Beth MacGillivray

Beth MacGillivray of Ottawa Hospital placed 1st in last year's PR Stars Contest. Beth used general informational lectures to inform the public on nuclear medicine. She created an interchangeable slide presentation and a traveling storyboard for her audiences. Beth's efforts resulted in various newspaper articles and television spots.

1998 2nd Place Winner
Nellie Kelty

Nellie Kelty, 2nd place PR Stars winner, took advantage of the University of Maryland Medical Center's nuclear medicine department's grand opening to gain as much exposure for nuclear medicine as possible. Nellie's use of tours, receptions and educational lectures was a great way to showcase what goes on in a nuclear medicine department.

1998 3rd Place Winners (photo not shown)
Lisa Mauzy, Michelle Shuster and Lori Daley

Three technologists from the VA Connecticut Healthcare System showed us how their team efforts earned them 3rd place in the contest. This group held various receptions and educational demonstrations throughout Nuclear Medicine Week. They set up display boards illustrating the evolution of nuclear medicine and showed healthcare workers how nuclear medicine is on the cutting edge of technology.

Deadline: December 1, 1999

Look for more details, prize information and entry forms in future issues of The Journal of Nuclear Medicine, the Journal of Nuclear Medicine Technology and the Society's homepage at www.snm.org.

Show pride in our profession by entering the 1999 PR Stars Contest.

Your dedication and efforts to the field of nuclear medicine can now be rewarded. Share your promotional activities and efforts completed during 1999 and enter to win recognition and prizes.

As a nuclear medicine technologist, you know that nuclear medicine procedures are safe and effective. But you also know that patients and referring physicians are sometimes uneasy or uninformed about them. Share with us the various ways in which you informed the public about nuclear medicine.

For the second year in a row, Capintec, Inc. has agreed to co-sponsor this contest that makes everyone in the nuclear medicine industry a winner.

As Nuclear Medicine Week approaches, October 3-9, take advantage of this great opportunity to promote the nuclear medicine field.

Proudly sponsored by

CAPINTEC, INC.
Fully expanded and updated, the 1999 Procedure Guidelines Manual features 29 comprehensive nuclear medicine protocols, including three all-new guidelines: Gastric Emptying and Motility, GI Bleeding/Meckel’s Diverticulum Scintigraphy, and Breast Scintigraphy. Learn how your facility’s procedures stack up against the latest recommendations of the SNM experts. Own the definitive collection of the most commonly performed procedures in nuclear medicine for only $35.00 (plus shipping and handling).

To order, contact the Society of Nuclear Medicine at (703) 708-9000 x250.
Celebrate Nuclear Medicine Week

OCTOBER 3-9, 1999

Spotlight your facility and demonstrate your enthusiasm, devotion and pride in your profession.

Nuclear Medicine Week gives you the opportunity to educate potential patients, referring physicians and your community about the history, value and safety of nuclear medicine.

Keep the celebration alive all year long! Promoting nuclear medicine does not need to be limited to Nuclear Medicine Week. Take advantage of every opportunity throughout the year to increase the understanding and utilization of nuclear medicine.

Don't forget the 1999 PR Stars Contest sponsored by the SNM-TS and Capintec, Inc. Look for details, prize information and entry forms in JNM and JNMT.

Featured on this page is the 1999 Nuclear Medicine Week merchandise entitled, “Nuclear Medicine: Getting the Picture” designed by the Society of Nuclear Medicine Technologist Section (SNM-TS).
The SNM Physician Evaluation Program is a self-assessment program for physicians. Each organ specific CD-ROM contains patient histories and nuclear medicine images. Program participants review clinical information, interpret images and submit written reports of their findings.

- Based on actual clinical cases that contain patient images and clinical information.
- Review educational feedback to improve your practice skills.
- Compare your case reports with the peer-reviewed model reports.
- Complete all case reports and receive AMA/PRA Category 1 credit.
- Simulates a real practice environment.
- No travel required, complete the module at your own pace.
- No pass/fail.
- Excellent teaching tool for residents.

For more information please contact the SNM PEP Project Coordinator, at (703) 708-9000.

SNM PEP is sponsored by an educational grant from MDS Nordion

This activity was planned and produced in accordance with the ACCME Essentials.
Nuclear Medicine Self-Study Programs in Cardiology

Renew Your Perspective on Nuclear Medicine Cardiology with the SNM’s All-New Self-Study Series

Whether you’re a nuclear medicine resident preparing for your board exams, or a veteran clinician, the Nuclear Medicine Self-Study Program series in Cardiology will meet your self-assessment needs. These Self-Study Programs offer an innovative package and approach to ensure that you receive timely, targeted materials as soon as they’re available.

The all-new Cardiology Self-Study series offers eight topics, a new topic published every three months. Each topic is clearly written by experts in the field with annotated references, challenging questions and extensive answers with critiques. Publication dates are in parenthesis.

Cardiology Topics
Series Editor: Elias H. Botvinick, MD

Published

Topic 1: Physical and Technical Aspects of Nuclear Cardiology (October 1997)
Contributors: Ernest Garcia, MD, Elias Botvinick, MD, Bruce Hasagawa, PhD and Neil Ratzlaff, MS, CNMT
ISBN 0-932004-52-0
Price: $25 (SNM members); $35 (nonmembers)

Published

Topic 2: Pharmacologic Stress (June 1998)
Contributors: Mario S. Verani, MD, Jeffrey Leppo, MD, Elias H. Botvinick, MD, Michael W. Dae, MD and Susan Alexander, MD
ISBN 0-932004-60-1
Price: $45 (SNM members); $60 (nonmembers)

Published

Topic 3: Cardiac PET Imaging (September 1998)
Contributors: Richard A. Goldstein, MD, Randall A. Hawkins, MD, PhD, Edward M. Geltman, MD, Carl Hoh, MD, Richard Brunken, MD, Yong Choi, PhD, Maria Sciammarella and Elias H. Botvinick, MD
ISBN 0-932004-54-7
Price: $35 (SNM members); $50 (nonmembers)

Published

Topic 4: Radionuclide Assessment of Congenital Heart Disease (September 1998)
Contributor: Michael W. Dae, MD

Note: Topics 3 and 4 appear in one volume.

Contributors in remaining Self-Study Cardiology topics include: Drs. Daniel S. Berman, MD, Cedars-Sinai Medical Center, Los Angeles; Elias Botvinick, MD, University of California, San Francisco; Jamshid Maddahi, MD, UCLA, Los Angeles; H. William Strauss, Stanford University Medical Center, Stanford; and Mario S. Verani, Methodist Hospital, Houston.

Published

Topic 5: Myocardial Perfusion Imaging by Single-Photon Radionuclides, part I (February 1998)
ISBN: 0-932004-57-1

Published

Topic 6: Myocardial Perfusion Imaging by Single-Photon Radionuclides, part II (Spring 1999)

Published

Topic 7: Imaging Acute Myocardial Infarction (Summer 1999)

Published

Topic 8: Radionuclide Ventriculography (Fall 1999)
ISBN: 0-932004-56-3

To order, simply contact SNM’s book distributor, Matthews Medical Books, at their toll free number (800) 633-2665 (non-U.S. 314-432-1401), or Fax: (314) 432-7044. If you choose to order the complete series, please have your credit card number ready when calling Matthews Medical Books. Each topic will be automatically sent to you as they are released. Your credit card will only be charged once a topic is ready for shipping.

A similar Self-Study Series on Nuclear Oncology is also available. Look for advertisements in JNM and check SNM’s on-line book catalog (www.snm.org) for future updates.
As a clinician, you know nuclear medicine procedures are safe and effective. But you also know that patients are sometimes uneasy about them. Give your patients peace of mind by providing them with concise and thorough information. Whatever your most commonly ordered procedure, you'll find an SNM Patient Pamphlet that will address your patient education needs.

Start with “The Benefits of Nuclear Medicine.” This pamphlet defines commonly performed nuclear medicine procedures, and includes a question and answer section geared for the patient.

Other Patient Pamphlet topics offer your patients descriptions on specific exam preparations, exam procedures and special instructions for your patients to follow when they go home and after their treatment.

- Nuclear Medicine Benefits
- Radioiodine Treatment
- Stress-Rest Test
- Brain Imaging
- Liver and Hepatobiliary Imaging
- Breast Imaging
- Bone Imaging
- Renal Imaging in Children
- Prostate Cancer
- Ovarian and Colorectal Cancer

All pamphlets are 40¢/copy; minimum order of 50.

To order the SNM Patient Pamphlet Series contact the SNM's medical fulfillment company, Matthews Medical Books.

800-633-2665
Non-U.S. 314-432-1401 or FAX 314-432-7044
E-mail: rlh@mattmccoy.com

For more information on SNM books, visit our Web site:
http://www.snm.org
Radionuclides in Nephrourology

This collection of articles provides a comprehensive review of the latest nuclear medicine procedures used to evaluate patients with kidney and urinary tract disease. Includes authoritative Consensus Reports that ensure techniques meet basic standards and enhance the utility of tests. The Consensus Reports are a valuable resource helping practitioners to better:

- Analyze test results
- Identify problem areas
- Detect renovascular hypertension
- Measure renal clearances
- Detect obstructive uropathy

HIGHLIGHTING

State-of-the-Art Applications in Nuclear Medicine Nephrourology and Urology

In addition to these timely Consensus Reports, Radionuclides in Nephrourology also includes thirty-nine current articles contributed from leading research institutions throughout the world.

Nephrourologists, urologists and internists will find that Radionuclides in Nephrourology is an essential addition to their imaging libraries.

Consensus Reports Cover:

- ACE Inhibitor Renography for Detecting Renovascular Hypertension
- Renal Clearance
- Diuresis Renography for Investigating Dilated Upper Urinary Tract

Other Topics Include:

- Simultaneous OIH and DTPA Renography in Essential Hypertension
- Noninvasive Quantification of Individual Renal Function
- Renal SPECT with Dynamic Tracers
- Prostate Cancer Radioimmunoscintigraphy

For more information on SNM books, visit our Web site: http://www.snm.org

To order, simply contact SNM's book distributor, Matthews Medical Books, at their toll free number: 800-633-2665

Non-U.S. 314-432-1401 or FAX 314-432-7044
Log onto our online bookstore at www.snm.org/about/catalog.html and browse through our book catalog for specialized and definitive titles in the field of nuclear medicine. Here, you'll find pictures of the newest SNM books, detailed descriptions, authors, editors and prices. Just click on the price of the book and add it to your shopping cart. It's that easy!

The online bookstore offers quick and easy access to any of our self-study topic booklets in cardiology and oncology. Publications range from Nuclear Regulatory Commission (NRC) guidelines to Medical Internal Radiation Dose (MIRD) data. And SNM educational books and study guides set the gold standard for proficiency in key areas of the discipline. In addition, the Society offers highly regarded introductions to the field, both for patients as well as medical students. Because the Society publishes only clearly focused research on areas of broad importance, as well as on the most advanced findings in the field, its books offer information available nowhere else.

For all of your clinical and educational needs, the SNM online bookstore is for you.

Cyberspace is filled with hundreds of fascinating sites for allied health professionals. But how do you access them? Which sites have solid information, and which are fluff?

Navigating the net can be confusing at first, but the SNM Technologist Section has made it easy for health care web-novices to make their way round the cyberuniverse.

The Internet Guide for Allied Health Professionals is the only internet handbook specifically designed for professionals in diagnostic imaging and allied fields. No prior experience with the internet is necessary—just a basic familiarity with computers. The Internet Guide covers all you need to get started surfing through the wealth of medical or diagnostic sites.

Order your copy now from SNM's book distributor, Matthews Medical Books, at their toll-free number 1-800-633-2665 (non-U.S., 314-432-1401, or Fax: 314-432-7044).
Positions Wanted

**Nuclear Medicine Physician**

BC NM physician with excellent CV and experience in all aspects of NM including cardiac, neuro, SPECT, PET and therapy seeks a FT position. Please e-mail nat99@worldnet.att.net.

**Nuclear Oncology/PET Fellowship**

The Memorial Sloan-Kettering Cancer Center Division of Nuclear Medicine has openings for a one- to two-year fellowship in Nuclear Oncology/PET, starting January 1, 2000. Candidates should be board certified in Nuclear Medicine or have successfully completed two years of ACGME-accredited nuclear medicine residency. Interested individuals should send CV to: Henry W. Yeung, MD, Residency Program Coordinator, Nuclear Medicine Service, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021 or e-mail information to yeungh@mskcc.org. Fax: (212) 717-3263.

**Musculoskeletal Radiologist**

Progressive subspecialized large private practice radiology group is seeking individual with subspecialty training in musculoskeletal MR. The practice is affiliated with a medical school and residency program, thereby offering the benefits of both private practice and the pursuit of academic interests. The practice is located in coastal Virginia with a mild climate and many recreational activities available with the Chesapeake Bay and Atlantic Ocean nearby. Interested persons should send a CV or contact Stephen Carr, MD, Director of Recruiting, Medical Center Radiologists, 6330 North Center Drive, Building 13, Suite 220, Norfolk, VA 23502. Phone: (757) 466-0089. Fax: (757) 466-8017.

**Nuclear Medicine**

Progressive subspecialized large private practice radiology group is seeking individual fellowship-trained in nuclear medicine. The practice is affiliated with a medical school and residency program, thereby offering the benefits of both private practice and the pursuit of academic interests. Position will include eventual directorship of Nuclear Medicine Department. The practice is located on the Atlantic coastline with a mild climate and all water sports available. Interested persons should send a CV or contact Stephen Carr, MD, Director of Recruiting, Medical Center Radiologists, 6330 North Center Drive, Building 13, Suite 220, Norfolk, VA 23502. Phone: (757) 466-0089. Fax: (757) 466-8017.

**General Radiologist**

Progressive subspecialized large private practice radiology group is seeking a qualified body imaging radiologist comfortable with all modalities of diagnostic radiology except angiography and interventional. The practice is affiliated with a medical school and residency program, thereby offering the benefits of both private practice and the pursuit of academic interests. The practice is located on the Atlantic coastline with a mild climate and all water sports available. Interested persons should send a CV or contact Stephen Carr, MD, Director of Recruiting, Medical Center Radiologists, 6330 North Center Drive, Building 13, Suite 220, Norfolk, VA 23502. Phone: (757) 466-0089. Fax: (757) 466-8017.

**Interventional Radiologist**

Progressive subspecialized large private practice radiology group is seeking an Interventional Radiologist. The practice is affiliated with a medical school and residency program, thereby offering the benefits of both private practice and the pursuit of academic interests. The practice is located in coastal Virginia with a mild climate and many recreational activities available with the Chesapeake Bay and Atlantic Ocean nearby. Interested persons should send a CV or contact Stephen Carr, MD, Director of Recruiting, Medical Center Radiologists, 6330 North Center Drive, Building 13, Suite 220, Norfolk, VA 23502. Phone: (757) 466-0089. Fax: (757) 466-8017.

**Full-Time Physician**

Large community-based teaching hospital with outpatient diagnostic facility in the Northwest suburbs of Chicago seeking a board certified full-time physician with a clinical background preferably in IM. Must be experienced in general nuclear medicine and PET with academic and research interests. Please send your CV to: Dr. Charles Martinez, Lutheran General Hospital, Nuclear Medicine, 1775 W. Dempster, Park Ridge, IL 60068.

---

**Radiologist/ Nuclear Medicine Specialist**

**British Columbia**

The Central Vancouver Island Health Region is a large geographic area that includes the communities of Duncan, Ladysmith, Chemainus, Parksville, Qualicum, Port Alberni, Tofino, Ucluelet and Nanaimo. Our region stretches from the top of the Malahat in the south; north to Deep Bay and then west to Tofino and Ucluelet, serving a diverse population of about 250,000. Our vision is of healthy people and healthy communities.

Nanaimo Regional General Hospital (439 beds) is searching for a combined Radiologist/ Nuclear Medicine Specialist to join six others for a mixed hospital/private practice. Nanaimo, situated on Vancouver Island, has an immediate population of over 125,000; secondary referral population of over 300,000.

Services provided by our Medical Imaging Department include, spiral CT, ultrasound, echocardiography, growing nuclear medicine, diagnostic/screening mammography, angiography, bone densitometry, potential for MRT. Basic skills in CT/Ultrasound-guided biopsies/drainage required. Echocardiography, MRT considered assets.

Forward curriculum vitae and names of three references to:

Dr. D. O’Keeffe
Director of Medicine Imaging
Nanaimo Regional General Hospital
1200 Duufferin Crescent
Nanaimo, B.C., V9S 2B7
Fax: (250) 755-7652
Tel: (250) 755-7608.

---

**Nuclear Medicine/ Research Technologist**

**Seattle, WA**

Children’s Hospital and Regional Medical Center has a position available for an ARRT (N) or CNMT registered person to work with our Nuclear Medicine team. CHRM/C is beginning to use radiolabeled antibodies to treat cancer in children and desires an individual that could perform clinical studies and research duties. This is a challenging position that involves clinical duties, staff education and follow-up inservices. This motivated individual should have 2-3 years experience in Nuclear Medicine with a strong radiation safety background and antibody research experience. Pediatric expertise is highly preferred. Good communication and interpersonal skills are necessary for this highly participative position. Relocation assistance is available.

If you’re interested in improving the lives of children on a daily basis in an area consistently rated one of the best in the country to live, forward your resume to: Children’s Hospital, CL-31, HR, 4800 Sand Point Way NE, Seattle, WA 98105. Fax: (206) 368-4820. For more information, visit us at www.seattlechildrens.org EOE.
NMP Research Fellowship

Nihon Medi-Physics Co., Ltd. (NMP) announces the availability of financial support for research and development projects intended to discover new radiopharmaceuticals and radioisotope-related devices for in vivo diagnostic and/or therapeutic applications. Grants of up to US $100,000 will be awarded for 2000/2001. Grants may be used to support the research and/or salary of the researcher for a 12-month project. Extensions will be considered in appropriate circumstances, subject to satisfactory review. An independent Scientific Advisory Board within NMP will review applications. For more information or an application form, please contact

Nihon Medi-Physics Co., Ltd. California Office, 2200 Powell St., Suite 765, Emeryville, CA 94608. Fax: (510) 420-8927. E-mail: jlwu@aol.com or akiharu_otaka@msn.com.


LEADERSHIP AND PRIDE

Leadership at Catholic Healthcare West, Bay Area Region is not a value we just talk about. It's something we expect of every employee. It's how we've won the lion's share of admiration in the community for the care we provide. It's the pride we take in our purpose, in our strength, and in our values.

SEQUOIA HOSPITAL (Redwood City)
Sr. Nuclear Medicine Technologist*
Full-time
Nuclear Medicine Technologist
Per diem

SETON MEDICAL CENTER (Daly City)
Nuclear Medicine Coordinator
*Sign-on Bonus and Relocation Assistance May Be Available

Please visit our website at www.chwbay.org for more information. Or, send your resume to: Catholic Healthcare West, Bay Area Region, Human Resources, #JNM0899, 185 Berry Street, Suite 5100, San Francisco, CA 94107. Email resume@chw.edu. Phone (415) 882-7475. Fax (415) 882-7490. EOE.

Bay Area Region
Catholic Healthcare West

CHW

O'Connor Hospital
Saint Francis Memorial Hospital
Saint Louise Hospital
St. Mary's Medical Center
Sequoia Hospital
Seton Medical Center
Seton Medical Center Coastside

www.chwbay.org

Monte
ty County

NUCLEAR MEDICINE TECHNOLOGIST

Monterey County evokes a magic that most only experience through brief vacations. Now you can enjoy the area's rolling hills, breathtaking coastline and mild climate while working at Salinas Valley Memorial Healthcare System, a modern 232-bed district hospital located just 16 miles from Carmel with easy access to Big Sur to the south and San Francisco to the north. Currently, we have a P/T (8a-12 noon, M-F) Certified Nuclear Medicine Technologist position available. Requires CRT and CNMT certificate. Cardiac Gated SPECT experience is essential.

We offer competitive compensation and benefits package. For consideration, please fax resume to (831) 753-5117 or mail to: HR, 450 E. Romie Lane, Salinas, CA 93901. E-mail: jcrasford@svmh.com. Visit our website at www.svmh.com. EOE
Nuclear Medicine
Portland, Oregon

Northwest Permanente, P.C., a physician-managed multispecialty group serving over 440,000 members of Kaiser Permanente in the Northwest has an excellent opportunity in the Portland area for a Radiologist board certified or eligible in Nuclear Medicine.

Our program in Oregon and Washington offers a collegial and professionally stimulating environment in one of the most successful managed care systems in the country, plus a quality lifestyle in the Pacific Northwest. In addition, we provide a competitive salary and benefit package, which includes a generous retirement program, sabbatical leave, professional liability coverage and more. Please forward C.V. to:

H.M. Clark, Director
Professional Resources
Northwest Permanente, P.C.
500 NE Holladay, Suite 100
Portland, OR 97232-2508

Nuclear Medicine
Bone Imaging

As a clinician, you know nuclear medicine procedures are safe and effective. But you also know that patients are sometimes uneasy about them. Give your patients peace of mind by providing them with concise and thorough information.

Since bone scans are used to detect arthritis, osteoporosis, fractures and sports injuries, as well as unexplained bone pain, bone imaging is one of the most commonly performed nuclear medicine tests. The Nuclear Medicine Bone Imaging pamphlet prepares patients for the test, explains exam procedures and informs patients what needs to be done after the test.

To order, simply contact SNM’s book distributor, Matthews Medical Books, at their toll free number (800) 633-2665 (non-U.S. 314-432-1401), or Fax: (314) 432-7044. Check SNM’s on-line book catalog (www.snm.org) for future patient pamphlets and books.

SNM Patient Pamphlets Offer the Reassurance Your Patients Need.

INTRODUCING THE MOST UP-TO-DATE SELF-ASSESSMENT PROGRAM ON INSTRUMENTATION

Nuclear Medicine Self-Study Program II: Instrumentation is the most current and comprehensive self-assessment program on this vital topic available today. With more than 35 pages devoted to questions, answers and critiques, this program is an essential tool for reviewing and upgrading your skills or preparing for board certification.

Topics Include—
- Nonimaging Instrumentation
- Anger Scintillation Cameras
- Multiple-Element Scintillation Camera
- Effect of Camera Performance on Clinical Imaging
- Quality Control for Anger Cameras
- Emission Computed Tomographic Imaging
- Nuclear Medicine Computers, Acquisition and Processing Software and System Management


For more information on SNM books, visit our web site at http://www.snm.org

Call toll-free to order your copy today! $45.00 SNM members / $63.00 nonmembers.
Matthews Medical Books 800-633-2665 (outside U.S. 314-432-1401)
# SOCIETY OF NUCLEAR MEDICINE’s 46th ANNUAL MEETING

## AUDIO & VIDEO TAPES

- **V99-1 (1 Video)** Annual Meeting Highlights — Henry N. Wagner, MD

## CONTINUING EDUCATION COURSES

- **V99-2 (1 Video)** Basic Principles and Technical Considerations of Dual Head Gamma Camera Coincidence Imaging (DGCIC) — J. Anthony Parker, MD, PhD; Ian-Qiao Luo, PhD; John N. Aarsvold, PhD; James A. Patton, PhD; Benjamin M. Tsui, PhD; Naomi Alazraki, MD; Hussain M. Abdel-Dayem, MD

- **V99-3 (1 Video)** Emerging New Cancer Therapies for Lymphoma — Gerald L. DeNardo, MD; Christine A. White, MD; Gregory A. Witte, MD; Richard L. Wilt, MD

- **V99-4 (1 Video)** The Sentinel Node in Surgical Oncology — Peter J. El-Naggar, MD; Mohammad R. S. Keshigian, MSC, MB, BS; FRCR, FRCR(Gen); Orrego E. Nieweg, MD, PhD

- **V99-5 (1 Video)** New Therapeutic Modalities for Solid Tumors — Sally J. DeNardo, MD; Agamenmon Epenotou, MD; Malik Juwaid, MD; Jean F. Chatal, MD, PhD; Gerald L. DeNardo, MD

- **V99-6 (1 Video)** Myocardial Perfusion Imaging: Practical Issues I — Gary V. Heller, MD; Myron C. Gerson, MD; Raymond Talller, MD; Jack A. Ziffer, PhD; Nagaia Tamaki, MD; Michael R. Freeman, MD

- **V99-7 (1 Video)** Clinical Applications of Neuroradiologic Imaging — N. Paul L. G. Voertman, MD, PhD; Masanori Ichida, MD; John P. Settyb, MD

- **V99-8 (1 Video)** Diagnostic Delimmas in Living Scan Interpretation — Leonard M. Freeman, MD; Henry W. Gray, MD; Daniel Woresly, MD

## SNM TAPE SPECIALS

<table>
<thead>
<tr>
<th>Product Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Video (VHS) Tapes</td>
<td>$29.95</td>
</tr>
<tr>
<td>Individual Video (VHS) Tapes (non-member)</td>
<td>$49.95</td>
</tr>
<tr>
<td>Individual Video PAL / SECAM Tapes</td>
<td>$59.95</td>
</tr>
<tr>
<td>Individual Video PAL / SECAM Tapes (non-member)</td>
<td>$79.95</td>
</tr>
<tr>
<td>Any 8 Video (VHS) Tapes ($17.00/each) (member)</td>
<td>$216.00</td>
</tr>
<tr>
<td>Full Set of 16 Video (VHS) Tapes with Free Album (member)</td>
<td>$368.00</td>
</tr>
<tr>
<td>Individual Audio Tapes</td>
<td>$11.00</td>
</tr>
<tr>
<td>Any 8 Audio Tapes ($10.50/each)</td>
<td>$84.00</td>
</tr>
<tr>
<td>Any 16 Audio Tapes with Free Album ($10.00/each)</td>
<td>$160.00</td>
</tr>
<tr>
<td>Any 32 Audio Tapes with Free Albums ($9.50/each)</td>
<td>$304.00</td>
</tr>
<tr>
<td>Full Set of 121 1999 Meeting Audio Tapes with Free Albums</td>
<td>$999.00</td>
</tr>
</tbody>
</table>

## CME Unlimited

CME Unlimited is proud to be the official recording and marketing company for the Society of Nuclear Medicine’s 46th Annual Meeting, held June 6-10, 1999, in Los Angeles, California.

Audio and video cassette copies of sessions listed below are available via TELEPHONE, FAX, MAIL, or ONLINE ORDER. All orders will be shipped within 7-10 business days.

To order immediately, have your credit card ready and call toll-free 1-800-776-5454 from 8:00 a.m. to 5:00 p.m. (PST). Monday - Friday, or visit the SNM Online Tape Store at [http://www.snm.org](http://www.snm.org) via the What’s New, Education and Research, and Publications section for 24 hour a day ordering convenience. For mail or FAX orders, please mark your selections, complete the coupon on the opposite page, Include full payment, and send this entire order form to CME Unlimited.

For your convenience, we accept MasterCard, Visa, and American Express as well checks.

## CONTINUING EDUCATION COURSES

- **V99-10 (4 Videos)** Breast Cancer Overview — Inq Khaliqullah, MD; Kathy S. Thomas, CNMT; FSNA; Linda E. Digges, CNMT; Reinhold Tiling, MD; Herman Vargas, MD; Merry L. Teter, MD; David A. Mankoff, MD

- **V99-11 (3 Videos)** Prostate Cancer - A Rounded View from the Patient’s, Treatment Physician’s, Researcher’s and Diagnostician’s Perspectives — Phillip M. Regan, CNMT; Vilu Bhadkamkar, MSC, MS; Randi F. Schuyvalli, MSW, ACSW; Michael K. Haxman, MD; Richard J. Tassull, CNMT; Frances K. Keen, MD, RT(NA), MBA; Kathleen M. Kitaak, CNMT

- **V99-12 (Plenary Session and Formal Opening)** Plenary Session and Formal Opening — James W. Hatcher, MD; Peter S. Conte, MD, PhD; Lynne Ray, CNMT, FSNA; Mary Jo Stuttmann, CNMT; Michael E. Phillips, PhD

## CATEGORICAL SEMINARS

- **V99-13 (4 Tapes, $44)** Recent Developments in Therapeutic Nuclear Medicine

## AUDIO TAPES ONLY

- **V99-14 (3 Tapes, $33)** Nuclear Cardiology Techniques and Applications

- **V99-15 (4 Tapes, $44)** Changing Strategies in Patient Management: The Impact of New Modalities

- **V99-16 (3 Tapes, $33)** FDG Imaging Without PET

- **V99-17 (4 Tapes, $44)** From Biology to Scintigraphy: New Directions in Pediatric Oncology

- **V99-18 (3 Tapes, $33)** PET FDG in Clinical Oncology - The Future is Now

- **V99-19 (4 Tapes, $44)** Molecular Biology for the Nuclear Medicine Specialist

- **V99-20 (4 Tapes, $44)** Absolute Quadrant in Cardiac PET, Spect and Endothelial Dysfunction

- **V99-21 (4 Tapes, $44)** Neuroimaging: A Tool for Neuropharmacology and Drug Discovery

- **V99-22 (Current NBC Regulations for the Release of Patients from Licensee Control**

- **V99-23 (Interpreting Myocardial Perfusion Spect – Read with the Experts**

- **V99-24 (Cost-Effectiveness Studies in Nuclear Medicine**

- **V99-25 (Attenuation Correction: Principles and Applications**

- **V99-26 (Bioethics in the Changing World of Managed Care**

- **V99-27 (Palliation of Painful Bone Metastases in the Clinical Practice of Nuclear Medicine**

- **V99-28 (Radiotherapeutic Pharmaceutical Pre-Clinical Studies and Design Strategies**

- **V99-29 (SPECT Brain Imaging Pracica: Technical Aspects**

- **V99-30 (Principles and Applications of Iterative Reconstruction Methods**

- **V99-31 (Radionuclide Bone Imaging Analysis - Read with the Experts**

---

Continued on Opposite Side
This reference book provides a complete list of differential diagnoses for virtually every pattern described in modern nuclear medicine scintigraphy, including the latest findings in nuclear cardiology, PET, antibody and somatostatin receptor imaging. A full list of all diagnostic patterns reported for every organ system is given. Pharmacologic effects on labeling and distribution are fully described.

Diagnostic Patterns in Nuclear Medicine assists in image interpretation by providing complete diagnoses for every scintigraphic pattern. All entries are documented by published references. Organization by organ system provides an easy-to-find, detailed differential diagnosis.

The clinician simply looks up any scintigraphic finding to determine possible causes of that finding, ranked in order of probability, making Diagnostic Patterns in Nuclear Medicine the most complete referenced diagnostic guide available.

Table of Contents
Part I: Cardiovascular System
Part II: Central Nervous System
Part III: Endocrine System
Part IV: The Eye
Part V: Gallium Imaging
Part VI: Gastrointestinal System
Part VII: Genitourinary System
Part VIII: Hematologic Studies/Diseases
Part IX: Peri-Diaphragmatic Disease
Part X: Pulmonary System
Part XI: Skeletal System
Part XII: Tumor/Inflammation Imaging (Non-Gallium, Non-Leukocyte)
"High Energy Metabolic Tracers"
- The Science of Tomorrow, Delivered Today -

TOLL FREE
1-877-FDG-DOSE

www.EasternIsotopes.com
GE NUCLEAR MEDICINE/PET

Defining Leadership into the Next Millennium

Leadership Defined

True leadership can be measured. It stands the test of time and scrutiny.

At GE Medical Systems, we define and measure leadership by what our customers say about us:

- **Number One** Ranking for Nuclear Medicine in 1998 by the medical industry leading consultant, MDB Information Network (formally M.D. Byline)
- **Number One** Medical Imaging Company as recognized by Medical Imaging Magazine's 1998 Readers Choice Award
- **Number One** Most admired company as designated by the Business Leaders Poll, Fortune Magazine, for 1998 and 1999

#1 Ranking

World's Largest Customer Base

GE Medical Systems
We bring good things to life.

Visit us at www.ge.com/medical/nuclear or call 1-800-643-6439

For more than 100 years, healthcare providers have relied on GE for high quality medical technology, services, and productivity solutions

© 1999 General Electric Company

Circle Reader Service No. 62