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A Full Table of Contents Begins on Page 4A, Annotations on Pages 7A-8A
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‡Side effects are usually mild and can include chest pain, dizziness, headache, hypotension, and nausea.

References:
4. Data on file, Boehringer Ingelheim Pharmaceuticals, Inc., Ridgefield, CT.

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Please see prescribing information on last page of ad for contraindications, warnings, and adverse reactions.

DU PONT PHARMA
Radiopharmaceuticals
THALLIUM CHLORIDE TI 201

DESCRIPTION: Thallium Chloride Ti 201 is supplied in isotonic solution as a sterile, non-pyrogenic diagnostic radiopharmaceutical for intravenous administration. The aqueous solution at the time of preparation contains 37MBq/mg (1mCi/mg) Thallium Chloride Ti 201. The pH adjusted with hydrochloric acid and/or sodium hydroxide solution. It is made isotonic with 10mg/ml sodium chloride and is preserved with 0.9% w/v sodium azide.

Thallium Chloride Ti 201 is cytocyanic produced with no carrier added and contains no less than 98% Thallium Chloride Ti 201 as a percentage of total activity with contaminants less than 0.3% Thallium Ti 200, 1.2% Thallium Ti 202, and 0.0% Lead Ti 203 expressed as a percentage of Ti 201 activity at calibration.

It is recommended that Thallium Chloride Ti 201 be administered close to the calibration time to minimize the effect of higher radionuclide contamination.

INDICATIONS AND USAGE: Thallium Chloride Ti 201 may be useful in myocardial perfusion imaging for the diagnosis and localization of myocardial stenosis. It may also have prognostic value regarding survival, when used in the clinically stable patient following the onset of symptoms of an acute myocardial infarction, to assess the site and size of the perfusion defect. Thallium Chloride Ti 201 may also be useful in conjunction with exercise stress testing as an adjunct in the diagnosis of ischemic heart disease (angiographic coronary artery disease).

It is usually not possible to differentiate recent from old myocardial infarction, or to differentiate exogenous from endogenous myocardial perfusion.

Thallium Chloride Ti 201 is indicated also for the localization of sites of parathyroid hyperactivity in patients with hyperparathyroidism. It may also have a role in the use of delayed imaging to localize extrathyroidal and mediastinal sites of parathyroid hyperactivity and for post-surgical reanastomosis. Thallium Chloride Ti 201 has not been adequately demonstrated to be effective for the localization of normal parathyroid glands.

CONTRAINDICATIONS: None known.

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

PRECAUTIONS: Data are not available concerning the effect of marked alteration in blood glucose, insulin, or pH (such as is found in diabetes mellitus) on the quality of Thallium Chloride Ti 201 scans. Attention is directed to the fact that thallium is a potassium analog, and since the transport of potassium is affected by these factors, the possibility exists that the thallium may likewise be affected.

GENERAL: Do not use after the expiration time and date (5 days maximum after calibration time) stated on the label.

Do not use if contents are turbid.

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

Thallium Chloride Ti 201, as all radioactive materials, must be handled with care and used with appropriate safety measures to minimize external radiation exposure to personnel. Care should also be taken to minimize radiation exposure to patients in a manner consistent with proper patient management.

Cardiogonomy, Metagomy, Impairment of Fertility: No long-term animal studies have been performed to evaluate carcinogenic potential, mutagenic potential, or whether Thallium Chloride Ti 201 affects fertility in males or females.

Ideally, examinations using radiopharmaceuticals, especially those elective in nature, of a woman of childbearing age or pregnant women should be avoided in the 5 days following the onset of menstruation.

Parenteral Use: C: Adequate reproductive studies have not been conducted in animals with Thallium Chloride Ti 201. It is also not known whether Thallium Chloride Ti 201 can cause fetal harm when administered to a pregnant woman. Thallium Chloride Ti 201 should not be given to a pregnant woman except when benefits clearly outweigh the potential risks.

Nursing Mothers: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, it is not known whether this drug is excreted in the breast milk of nursing mothers. Nurses should be warned that they may be exposed to radiation during the course of therapy and should seek advice about the advisability of nursing during therapy.

Pediatric Use: Safety and effectiveness in children below the age of 18 have not been established.

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

ADVERSE REACTIONS: A single adverse reaction to the administration of Thallium Chloride Ti 201 has been reported consisting of hypotension accompanied by bradynia and an off-base rash which responded to antihistamines and steroids within one hour.

HOW SUPPLIED: Thallium Chloride Ti 201 for intravenous administration is supplied as a sterile, non-pyrogenic solution containing at calibration time 37MBq/mg (1mCi/mg) of Thallium Chloride Ti 201, buffered with borate buffer of 8% w/v of alcohol. The pH is adjusted with hydrochloric acid and/or sodium hydroxide solution. Vials are available in the following quantities of radioactivity: 81.4 Bq, 125 Bq, 162 Bq, 244.2 Bq, 325.6 Bq and 366.36 Bq (2.2, 3.3, 4.4, 5.5, 6.6, 8.8 and 9.9 mcg) of Thallium Chloride Ti 201.

Store at room temperature (15-30°C).

IV PERSANTINE® (dipyridamole USP)
Prescribing Information

For intravenous injection

INDICATIONS AND USAGE IV PERSANTINE® (dipyridamole USP) is indicated as an alternative to exercise in thallium myocardial perfusion imaging for the evaluation of coronary artery disease in patients who cannot exercise adequately.

CONTRAINDICATIONS: Hyperreactivity to dipyridamole.

WARNINGS: Serious adverse reactions associated with the administration of intravenous PERSANTINE® (dipyridamole USP) have included fatal and non-fatal myocardial infarction, ventricular fibrillation, symptomatic ventricular tachycardia, transient cerebral ischemia, and bronchospasm.

In a study of 391 patients given intravenous Persantine to evaluate thallium myocardial perfusion imaging, two types of serious adverse events were reported: 1) four cases of myocardial infarction (0.1%), two fatal (0.05%) and two non-fatal (0.05%) and 2) six cases of severe bronchospasm (0.2%). Although the incidence of these serious adverse events was small (0.3%, 10 of 3,591), it was possible that the significant clinical information to be gained through use of intravenous PERSANTINE® (dipyridamole USP) would justify the risk of adverse effects, particularly the risk of bronchospasm during IV Persantine use.

When thallium myocardial perfusion imaging is performed with intravenous Persantine, parenteral antihypertensives should be readily available for relieving adverse events such as bronchospasm or chest pain. The following signs should be monitored during and for 15-10 minutes after the injection of Persantine and an electrocardiographic tracing should be obtained using at least one chest lead. Should severe chest pain or bronchospasm occur, parenteral antihypertensives may be administered by slow intravenous injection (50-100 mg per 30-60 seconds) in doses ranging from 50 to 250 mg. In the case of severe hypotension, the patient should be placed in a supine position with the head tilted down if necessary, before administration of parenteral antihypertensives. 250 mg of antihypertensive does not relieve chest pain symptoms within a few minutes, sublingual nitroglycerin can be administered. If chest pain continues despite use of antihypertensive and nitroglycerin, the possibility of myocardial infarction should be considered.

If the clinical condition of a patient with an adverse event permits a one minute delay in the administration of an antihypertensive, intravenous injection of Persantine should be given at a rate of 500 mg/minute (63 times the maximum recommended daily oral dose). A significant reduction in number of corpora lutea with consequent reduction in implantations and live fetuses was observed, however, at 1,250 mg/minute.

Calcium channel blocking agents based on assumed body weight of 50 kg.

Precautions: Category C: Reproduction studies performed in mice and rats at oral doses of up to 125 mg/kg (15 times the maximum recommended daily human oral dose) and in rabbits at daily oral doses of up to 20 mg/kg (3 times the maximum recommended daily human oral dose). No evidence of impaired embryonic development due to dipyridamole. There is, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human responses, this drug should be used during pregnancy only if clearly needed.

Calculation based on assumed body weight 50 kg.

For intravenous injection at a minimum rate of 250 mg/minute. This drug should not be used in patients with known-allergic reactions to dipyridamole, or in patients who have had a history of bronchial asthma, bronchial hyperactivity, or cardiorespiratory disease.

Central and Peripheral Nervous System: Headache (10%), dizziness (5%), paresthesia (0.1%), somnolence (0.2%), drowsiness (0.3%), apnoea (0.3%), facial flushing (0.1%), flushing (0.1%), chest pain (0.1%), palpitations (0.2%), facial redness (0.1%), syncope (0.1%), shortness of breath (0.1%), dyspnoea (0.1%), hypotension (0.1%), tachycardia (0.1%), arrhythmia (0.1%), chest pain (0.1%), palpitations (0.2%), chest pain (0.1%), palpitations (0.2%), chest pain (0.1%), palpitations (0.2%).
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1 hour after injection

4 hours after injection

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In blinded studies, CARDIOLITE imaging was 83% to 96% sensitive and 79% to 100% specific in detecting myocardial infarction, when compared with final diagnoses.¹

Reassuring safety profile

No known contraindications
Few adverse reactions

Of 2780 patients in worldwide trials, approximately 8% experienced a transient metallic taste following injection. A few cases of transient headache, mild nausea, flushing, and non-itching rash have also been reported. In worldwide commercial experience, one patient showed signs and symptoms consistent with seizure 8 to 10 min after injection. No other adverse reactions specifically attributable to the use of CARDIOLITE have been reported.²

Reference

CARDIOLITE scans (SPECT) from a 62-year-old male with three prior myocardial infarctions (LFOV camera equipped with a high-resolution collimator, 64 x 64 matrix, 180° arc RAO to LPO, 64 projections, 25 s/projection)

Please see last page of advertisement for brief summary of prescribing information.

Cardiolite®
Kit for the preparation of Technetium Tc-99m Sestamibi

FOR DIAGNOSTIC USE

DESCRIPTION: Each 5 mL vial contains a sterile, non-pyrogenic, lyophilized mixture of:
- Tetakis (2-methoxy isobutyl isonitrile) Copper (I) tetrafluoroborate - 1.0 mg
- Sodium Citrate Dihydrate - 2.6 mg
- L-Cysteine Hydrochloride Monohydrate - 1.0 mg
- Mannitol - 20 mg
- Stannous Chloride, Dihydrate, minimum (SnCl2•2H2O) - 0.025 mg
- Stannous Chloride, Dihydrate, (SnCl2•2H2O) - 0.075 mg
- Tin Chloride (Stannous and Stannic) Dihydrate, maximum (as SnCl2•2H2O) - 0.086 mg

Prior to lyophilization the pH is 5.3 to 5.9. The contents of the vial are lyophilized and stored under nitrogen.

This drug is administered by intravenous injection for diagnostic use after reconstitution with sterile, non-pyrogenic, oxidant-free Sodium Pertechnetate Tc99m Injection. The pH of the reconstituted product is 5.5 (5.0-6.0). No bacteriostatic preservative is present.

The precise structure of the technetium complex is Tc99m(MIBI)4+ where MBI is 2-methoxy isobutyl isonitrile.

INDICATIONS AND USAGE: CARDIOLITE®, Kit for the preparation of Technetium Tc-99m Sestamibi, is a myocardial perfusion agent that is useful in distinguishing normal from abnormal myocardium, and in the localization of the abnormality, in patients with suspected myocardial infarction. It is also useful in the evaluation of myocardial function using the first-pass technique.

CONTRAINDICATIONS: None known.

WARNINGS: In studying patients in whom cardiac disease is known or suspected, take care to assure continuous monitoring and treatment in accordance with safe, accepted clinical procedure.

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 undergoing the preparative procedures (as outlined in the full prescribing information).

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

Contents of the kit before preparation are not radioactive. However, after the Sodium Pertechnetate Tc99m 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 procedures during preparation.

Technetium Tc99m labeling reactions involving technetium ion in the reduced state. Hence, Sodium Pertechnetate Tc99m Injection containing oxidants should not be used.

Technetium Tc-99m Sestamibi should not be used more than six hours after preparation.

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

Carcinogenesis, Mutagenesis, Impairment of Fertility
In comparison with most other diagnostic technetium-labeled radiopharmaceuticals, the radiation dose to the ovaries (0.5 rad/30 MBq) is high. Minimal exposure (ALARA) is necessary in women of childbearing capability. (See Dosimetry section in DOSAGE AND ADMINISTRATION section.)

The active intermediate, Cu(MIBI)BF4, was evaluated for genotoxic potential in a battery of five tests. No genotoxic activity was observed in the Ames, CHO/HPRT and sister chromatid exchange tests (all in vitro). At cytotoxic concentrations (≥ 20 rad/μL), an increased incidence in cells with chromosome aberrations was observed in the in vitro human lymphocyte assay. Cu(MIBI)BF4 did not show genotoxic effects in the in vivo mouse micronucleus test at a dose which caused systemic and bone marrow toxicity (9 mg/kg, > 600 X maximum human dose).

Pregnancy Category C
Animal reproduction and teratogenicity studies have not been conducted with Technetium Tc-99m Sestamibi. It is also not known whether Technetium Tc-99m Sestamibi can cause fetal harm when administered to a pregnant woman or can affect reproductive capacity. Therefore, there have been no studies in pregnant women. Technetium Tc-99m Sestamibi should be given to a pregnant woman only if clearly needed.

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

Nursing Mothers
Technetium Tc-99m Pertechnetate is excreted in human milk during lactation. It is not known whether Technetium Tc-99m Sestamibi is excreted in human milk. Therefore, formula feedings should be substituted for breast feedings.

Pediatric Use
Safety and effectiveness in children below the age of 18 have not been established.

ADVERSE REACTIONS: During clinical trials, approximately 8% of patients experience transient metal or bitter taste immediately after the injection of Technetium Tc-99m Sestamibi. A few cases of transient headache, flushing and non-itching rash have also been attributed to administration of the agent. One patient demonstrated signs and symptoms consistent with seizure, 8 to 10 minutes after administration of the drug. No other adverse reactions specifically attributable to the use of Technetium Tc-99m Sestamibi have been reported.

DOSEAGE AND ADMINISTRATION: The suggested dose range for I.V. administration to be employed in the average patient (70 kg) is:

- 370 to 1110 MBq (10 to 30 mCi)

The dose administered should be the lowest required to provide an adequate study consistent with ALARA principles (See also PRECAUTIONS).

When used in the diagnosis of myocardial infarction, imaging should be completed within four hours after administration (see also CLINICAL PHARMACOLOGY section in full prescribing information).

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

Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration whenever solution and container permit.

Store at room temperature (15 to 30°C) before and after reconstitution.

RADIATION DOSIMETRY: Table 4 shows the radiation doses to organs and tissues of an average patient (70 kg) per 1110 MBq (30 mCi) of Technetium Tc99m Sestamibi injected intravenously.

<table>
<thead>
<tr>
<th>Organ</th>
<th>2.0 hour void</th>
<th>4.8 hour void</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MBq/30mCi</td>
<td>MBq/30mCi</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breasts</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Gallbladder Wall</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Small Intestine</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Upper Large Intestine Wall</td>
<td>5.4</td>
<td>5.4</td>
</tr>
<tr>
<td>Lower Large Intestine Wall</td>
<td>3.9</td>
<td>4.2</td>
</tr>
<tr>
<td>Stomach Wall</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Heart Wall</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Kidneys</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Liver</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Lungs</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Bone Surfaces</td>
<td>0.07</td>
<td>0.7</td>
</tr>
<tr>
<td>Thyroid</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Ovaries</td>
<td>1.5</td>
<td>1.6</td>
</tr>
<tr>
<td>Testes</td>
<td>0.3</td>
<td>0.4</td>
</tr>
<tr>
<td>Red Blood Cell</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Urinary Bladder Wall</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Total Body</td>
<td>0.5</td>
<td>0.5</td>
</tr>
</tbody>
</table>


HOW SUPPLIED: Du Pont's CARDIOLITE®. Kit for the preparation of Technetium Tc-99m Sestamibi is supplied as a 5 mL vial in kits of two (2), five (5) and thirty (30) vials, sterile and non-pyrogenic.

Prior to lyophilization the pH is between 5.3 and 5.9. The contents of the vials are lyophilized and stored under nitrogen. Store at room temperature (15 to 30°C) before and after reconstitution. Technetium Tc-99m Sestamibi contains no preservatives.

Included in each (2) two vial kit is one (1) package insert, five (5) vial shield labels and five (5) radiation warning labels. Included in each five vial kit is one (1) package insert, five (5) vial shield labels and five (5) radiation warning labels. Included in each thirty vial kit is one (1) package insert, thirty (30) vial shield labels and thirty (30) radiation warning labels.

The US Nuclear Regulatory Commission has approved this reagent kit for distribution to persons licensed to use byproduct material identified in SN 35.100 and 35.200 of 10 CFR Part 35, to persons who hold an equivalent license issued by an Agreement State, and, outside the United States, to persons authorized by the appropriate authority.

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EFFICIENCY REDEFINED

QUICK...
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The rapid uptake and washout of CardioTec enables you to start imaging two minutes after injection, and complete a resting-state study within 90 minutes! CardioTec speed may let you begin patient treatment earlier, enabling patients to return home sooner, improving throughput and scheduling.

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Good spatial resolution, high myocardial extraction, sensitivity and specificity enhance the ability to distinguish myocardial ischemia and infarction!

CardioTec redefines efficiency in myocardial perfusion imaging. Potential uses for myocardial perfusion agents include imaging patients undergoing post-angioplasty (PTCA), post-surgical (CABG) and post-medical (thrombolysis).

The only technetium-based myocardial perfusion imaging agent for rest and stress imaging

CardioTec
(Kit for the Preparation of Technetium Tc 99m Teboroxime)

Please see the brief summary of prescribing information for CardioTec on the adjacent page.
Cardiotec®
Kit for the Preparation of Technetium Tc 99m Teboroxime

FOR DIAGNOSTIC USE

DESCRIPTION
Each 5 mL reaction vial contains a sterile, nonpyrogenic, lyophilized formulation of 2.0 mg cyclohexanedione dioxime, 2.0 mg methyl boronic acid, 2.0 mg pentaetic acid, 9.0 mg citric acid, anhydrous; 100 mg sodium chloride, 50 mg gamma cyclodextrin and 0.058 mg (maximum) total tin expressed as stannous chloride (SnCl₂), 0.020 mg (minimum) stannous chloride (SnCl₂). The pH is adjusted with sodium hydroxide and/or hydrochloric acid prior to lyophilization. The contents of the vial are lyophilized and sealed under nitrogen at the time of manufacture. No bacteriostatic preservative is present.

When sterile, pyrogen-free sodium pertechnetate Tc 99m injection is added to the vial, and the solution is heated at 100°C for 15 minutes, the diagnostic agent Technetium Tc 99m Teboroxime is formed for administration by intravenous injection. The pH of the reconstituted product is 3.7 (range 3.3 to 4.1).

INDICATIONS AND USAGE
Technetium Tc 99m Teboroxime is a myocardial perfusion agent that is useful in distinguishing normal from abnormal myocardium in patients with suspected coronary artery disease using rest and stress techniques.

CONTRAINDICATIONS
None known.

WARNINGS
Stress testing should be performed only under the supervision of a qualified physician and in a laboratory equipped with appropriate monitoring, resuscitation and support apparatus.

PRECAUTIONS
General
Contents of the reaction vial are intended only for use in the preparation of Technetium Tc 99m Teboroxime and are not to be administered directly to the patient.

Contents of the kit before preparation are not radioactive. However, after the addition of sodium pertechnetate Tc 99m injection, adequate shielding of the final preparation must be maintained. The components of the kit are supplied sterile and non-pyrogenic. Aseptic procedures normally employed in making additions and withdrawals from sterile, non-pyrogenic containers should be used during the addition of the pertechnetate solution and the withdrawal of doses for patient administration.

The technetium Tc 99m labeling reactions involved in preparing the agent depend on maintaining the stannous ion in the reduced state. Any oxidant present in the sodium pertechnetate Tc-99m supply may thus adversely affect the quality of the radiopharmaceutical. Hence, sodium pertechnetate Tc-99m containing oxidants should not be employed.

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

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 ensure minimum radiation exposure to occupational workers.

Tc-99m Teboroxime should be formulated no more than 6 hours prior to clinical use.

Carcinogenesis, Mutagenesis, Impairment of Fertility
In comparison with most other diagnostic technetium labeled radiopharmaceuticals, the radiation dose to the ovaries (1.8 mrad/50 mCi) is high. Minimal exposure (ALARA) is necessary in women of childbearing capability. (See Dosimetry subsection in DOSAGE and ADMINISTRATION section.)

No long-term animal studies have been performed to evaluate carcinogenic potential or to determine the effects of Cardiotec on fertility in males or females.

Three different mutagenicity assays (a reversion test with bacteria, a chromosomal aberration assay and an in vitro mouse micronucleus assay) conducted with cold (decayed) technetium labeled Cardiotec gave negative results.

Cardiotec was weakly positive for inducing forward mutations at the TK locus in LS/78Y mouse lymphoma cells in the absence of metabolic activation (but only at high concentrations that were toxic to the cells and reduced growth to 33% or less relative to vehicle controls). Cardiotec was negative in this assay in the presence of metabolic activation.

Pregnancy Category C
Animal reproduction studies have not been conducted with Technetium Tc 99m Teboroxime. It is also not known whether Technetium Tc 99m Teboroxime can cause fetal harm when administered to a pregnant woman or can affect reproductive capacity.

Technetium Tc 99m Teboroxime should be given to a pregnant woman only if the expected benefits to be gained clearly outweigh the potential hazards.

Ideally, examinations using radiopharmaceuticals, especially those 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
Technetium Tc 99m is excreted in human milk during lactation. Therefore, formula feedings should be substituted for breast feedings.

Pediatric Use
Safety and effectiveness in children below the age of 18 have not been established.

ADVERSE REACTIONS
Uncommon adverse reactions reported in clinical trials include metallic taste in mouth, burning at injection site, facial swelling, numbness of hand and arm, hypotension and nausea after administration of Technetium Tc 99m Teboroxime.

HOW SUPPLIED
Cardiotec® (Kit for the Preparation of Technetium Tc 99m Teboroxime) is supplied in kits of 5, 10, and 25 reaction vials. (J4-282A)

Reference
1. Data on file, Squibb Diagnostics.
Information for Classified Advertisers—1991

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That's performance for the 90s. And beyond. Whether your goal is more sophisticated capabilities. Or a more efficient department. Or both.

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Contributing Authors: Susan Gilbert, Adrian D. LeBlanc, Robert Schleipman, James E. Silvers, Donald E. Widmann, Brenda Woods.
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DIRECTOR, DIVISION OF NUCLEAR MEDICINE. The Department of Radiology, University of British Columbia is seeking a Director of Nuclear Medicine. Salary commensurate with experience and qualifications. Proposed start date July 1, 1991. The deadline for closing this competition is May 31, 1991. Please send curriculum vitae and bibliography and names of three references to: Brain C. Lentle, MD, Professor and Head, Department of Radiology, Vancouver General Hospital, Heather Pavilion, Room 63, Floor A, Vancouver, BC, V5Z 1M9. In accordance with immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada. The University of British Columbia is committed to the federal government’s employment equity programme and encourages applications from all qualified individuals.

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CHIEF TECHNOLOGIST: Nuclear Medicine Department. Salary: $37,800—$56,700. The UCSF, Dept. of Nuclear Medicine at SF General is seeking an individual to administer, develop and maintain program in Q.A., Radiation Safety and Equip. Maintenance in both In Vivo and In Vitro procedures. Must have excel. interpersonal and comm. skills, 3 yrs. recent super. exp. + computer & software Mgt., B.S. in biological/physical science and current CA. Nuc. med. cert. Send resume to: RCMDIE8922, UCSF Personnel, 1550-7th Avenue, SF, CA 94434. EOE.

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**Mercy General Hospital**

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**Mercy San Juan Hospital**

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We’re seeking a special individual to provide technical leadership for the development of applications software designed to meet the needs of our clinical users. Responsibilities will involve the definition and prototyping of clinical applications software; management of software development at research collaborator sites; and active participation in PET research programs at the nearby University of Tennessee Medical Center.

Ideal candidates will have an advanced degree in Engineering, Science, or Computer Science and at least eight years experience developing medical image processing software, preferably in PET or nuclear medicine. Excellent leadership, interpersonal, and communications skills are required. A strong customer orientation—focused on the needs of clinical users—is also very important.

CTI is headquartered in Knoxville, Tennessee—an area with extensive educational, cultural, and recreational opportunities; a low cost-of-living; and high-quality, affordable housing. We offer career opportunities we consider very special: a technically-challenging product, the chance to contribute significantly to the success of a growing business, and a unique working environment. We also offer a competitive compensation, benefits, and relocation package. Please send a current resume to: Jack Kreyling, Recruiting Specialist, CTI, 810 Innovation Drive, Box 22999, Knoxville, TN 37933. An Equal Opportunity Employer.
Nuclear Medicine Technologists

The University of Texas M.D. Anderson Cancer Center, one of the world’s leading comprehensive cancer institutions, is seeking registered or registry eligible candidates in Nuclear Medicine to work in our fully computerized and highly automated Division of Diagnostic Imaging.

M.D. Anderson, located within the renowned Texas Medical Center in Houston, offers reimbursement for interviewing expenses, interest free loans, competitive salaries, an excellent benefit package, and relocation assistance. Houston offers diverse cultural, dining, sports, and entertainment activities and Texas residents do not pay state income tax.

We recognize your contribution as a prestigious professional and encourage you to call Victor Stonebrook at (713) 792-8005 collect or send your resume to: M.D. Anderson Cancer Center, 1515 Holcombe Blvd., HMB 205, Houston, Texas 77030.

Equal opportunity/affirmative action employer. Smoke-free environment.

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- Temporary Staffing Service
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- highly qualified, experienced technologists on a PRN basis
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- assistance in eliminating revenue loss due to staffing shortages

For information regarding the services call 813-461-9642

NUCLEAR MEDICINE TECHNOLOGIST

Washoe Medical Center, northern Nevada’s largest medical facility, is seeking a full-time Technologist to join our Nuclear Medicine Department. This individual must have A.R.R.T., A.S.C.P. or N.M.T.C.B. registration or certification in Nuclear Medicine Technology, with a working knowledge of same, including nuclear cardiology and computer applications. C.P.R. certification also is required. Membership in The Society of Nuclear Medicine is preferred.

On-campus fitness and child care centers and much more. And beautiful Lake Tahoe and other dazzling vacation resorts are just minutes away! Please send your resume with salary history to:

M. Andrea Webster
Human Resources Supervisor

WASHOE MEDICAL CENTER
An affiliate of Washoe Health System
77 Pringle Way, Reno, NV 89520-0109 (800)282-4767
An Equal Opportunity Employer

"Be a part of the Heart"

Nuclear Medicine Technologist

As a professional at St. Elizabeth Medical Center you will have the opportunity to work with the SPECT imaging systems in an innovative environment.

As we celebrate 100 years of providing care and concern to the Yakima Valley in South Central Washington we invite you to join our family. We are seeking a registered/certified technologist or a professional with 3 years of nuclear medicine experience.

We offer a competitive salary package and a cafeteria style approach to your benefits, including healthcare and childcare reimbursement. You can make your own choices at St. Elizabeth. For more information call Jerri Daily, Employment Coordinator, St. Elizabeth Medical Center, 110 South 9th Avenue, Yakima, WA 98902, (509) 575-5096. EOE.

ST. ELIZABETH MEDICAL CENTER

SISTERS OF PROVIDENCE
Nuclear Medical Technologists (CNMT)

OUR LADY OF THE LAKE Regional Medical Center, located in Baton Rouge, LA, Louisiana's largest and finest acute-care facility, is currently seeking Nuclear Medical Technologists who are CNMT registered or registry eligible. We offer assistance with interviewing and moving expenses, an excellent salary structure, and a comprehensive benefit package.

We are located one hour's drive from historic New Orleans and three hours' drive from the sandy beaches of Florida.

Interested candidates call or send confidential resume to:

Dawn Abbott
Human Resources Dept.
Our Lady of the Lake
Regional Medical Center
5000 Hennessy Blvd.
Baton Rouge, LA 70809
(504)765-8803

NUCLEAR MEDICINE TECHNOLOGIST

Hoag Hospital, a 417-bed non-profit hospital nestled on the scenic Southern California coast between Los Angeles and San Diego has an outstanding career opportunity in its nuclear medicine department.

Candidate will perform all aspects of Nuclear Medicine Technology, including SPECT imaging and computer processing of acquired data. Requires a working knowledge of radiopharmacy and NMTCB certification. The department features:

- Siemens SPECT camera interfaced to Star II computer
- Siemens Nuclear camera interfaced to SOPHY computer
- Technicare portable camera interfaced to SOPHY computer
- Toshiba dual-head and whole-body camera
- Philips' triple-head SPECT system

Technologists rotate on all cameras and computers. Hoag offers you an opportunity to advance through a unique three-step career ladder. Send resume to Teresa Lubans, Reprint Manager, Human Resources Department, 301 Newport Blvd., Box Y, Newport Beach, CA 92660-8012, or call Jen Hammett, Technical Manager, (714) 760-6530.

Nuclear Medicine Technologist

Our progressive 200 Bed regional referral medical center, located in south central Nebraska, has an excellent full-time position available for a Registered or Registry Eligible Nuclear Medicine Technologist. We offer excellent benefits, salary, relocation assistance, paid interviewing, travel expenses and a sign on Bonus. To learn more about our job opportunity, call us at 1-800-658-4250!

Human Resources
Good Samaritan Hospital
31st & Central Avenue
Kearney, Nebraska 68847

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Prior experience in thyroid clinic helpful.

We provide you the freedom, technology and resources to focus on quality patient care, the collaborative support of knowledgeable colleagues and the opportunity to make a significant contribution to your field.

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Send your curriculum vitae to: Irwin P. Goldstein, M.D., Associate Medical Director, SCPMG, Dept. 066, Walnut Center, Pasadena, CA 91106-5013.

Or call 1-800-541-7946.

KAISER PERMANENTE
Southern California Permanente Medical Group
Partners Practicing Good Medicine

Nuclear Medicine Technologist

The Department of Nuclear Medicine at The United Hospital is currently seeking a full-time certified Nuclear Medicine Technologist.

The United Hospital is a 350-bed tertiary care facility located in Grand Forks, North Dakota and is affiliated with the University of North Dakota Medical School.

The Nuclear Medicine Department performs more than 3,000 exams per year and is expected to rise further as renovations and expansions are completed. The department is equipped with state-of-the-art Siemens SPECT/Computer systems as well as planar cameras.

Qualified candidate will have a current valid NMTCB certification or registry eligible as well as proficiency in the performance of imaging and pharmaceutical preparation procedures. One to three years experience preferred.

We offer a competitive salary and excellent benefit package. For more information or to apply contact Margo Svoboda, Employment Coordinator, or Steve Metcalf, Nuclear Medicine Supervisor at:

The United Hospital
1200 So. Columbia Road
Grand Forks, ND 58201
1-800-437-5375 or (701)780-5119

An Equal Opportunity/Affirmative Action Employer M/F/H/V Member VHA
Fundamentals of Nuclear Medicine

2nd Edition
Edited by Naomi P. Alazraki, MD and Fred S. Mishkin, MD

Following the format of the acclaimed first edition, the editors have revised and expanded each chapter, adding major new sections on PET imaging, diagnostic decision making, parathyroid and adrenal imaging, and bone density measurement. In addition, several new scan images and graphs serve to illustrate the text.

Fundamentals of Nuclear Medicine fills the need for a current basic text to acquaint practitioners and students with the possibilities and limitations of nuclear medicine in detecting and evaluating common disorders. It is essential to all those who want an understanding of this rapidly evolving technology as it emerges from the investigative to the clinical stage.

Table of Contents

Radiation in Perspective
1. Basic Science of Nuclear Medicine
2. Radiation and Dose
3. Radiation Effects
4. Radiopharmaceuticals
5. Imaging of Radiation

The Diagnostic Process and Nuclear Medicine
6. Sensitivity, Specificity, and Predictive Value

Organ Imaging with Radionuclides
7. Cardiovascular System
8. Pulmonary System and Thromboembolism
9. Liver and Gastrointestinal Tract
10. Biliary Tract
11. Genitourinary Tract
12. Skeletal System
13. Central Nervous System

Imaging Disease Process
14. Trauma
15. Inflammatory and Infectious Process
16. Cancer

Nonimaging Diagnostic Techniques
17. Nuclear Medicine, Prescription, and Predictive Value

To Order:

Single copies of Fundamentals of Nuclear Medicine, 2nd Edition, are available for $15.00 plus $2.50 postage and handling for each book ordered. Payment must be made in U.S. funds drawn on U.S. banks only. For payment made in U.S. funds, but drawn on a foreign bank, add a bank processing fee of $4.50 for Canadian bank drafts or $40.00 for all other foreign bank drafts. Checks or purchase order must accompany all orders. Make checks payable to: The Society of Nuclear Medicine.

SPECIAL STUDENT OFFER: Bulk quantities of Fundamentals of Nuclear Medicine, 2nd Edition, are available for instructors to introduce medical and technologist students to nuclear medicine. Accredited instructors may purchase a minimum of 10 copies at $4.00 each (includes shipping).

The Society of Nuclear Medicine
136 Madison Avenue, Dept. 588J
New York City, NY 10016-6760
SPECT BRAIN IMAGING
CLINICAL FELLOWSHIP

Department of Radiology
Section of Nuclear Medicine

BENEFIT:
This program is designed for nuclear medicine physicians, radiologists, technologists and referring physicians. It is intended to educate participants about the clinical utility of SPECT brain imaging with agents such as SPECTamine® and Ceretec®. Objectives include:
- Development of interpretation skills for brain images.
- Appreciation of clinical applications of SPECT brain imaging.
- Knowledge of image acquisition and reconstruction.
- Appreciation of factors that influence image quality.
- Knowledge of quality control techniques for SPECT.

SPONSORSHIP:
This program is sponsored by the Medical College of Wisconsin.

TUITION:
The tuition fee of $650 includes the course syllabus, handouts, breaks, breakfasts, lunches, and other amenities involved in making this a pleasant learning experience. Maximum enrollments have been established. Cancellations prior to the course will be refunded, less a $30 administrative fee.

CREDIT:
The Medical College of Wisconsin is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians.

Accordingly, the Medical College of Wisconsin designates this continuing medical education activity as meeting the criteria for 13.00 hours in Category 1 toward the Physician's Recognition Award of the American Medical Association.

Nuclear Medicine Technologists who attend the SPECT Brain Imaging Clinical Fellowship are eligible for 1.0 VOICE credit.

Register me for the following dates: (Please indicate a second choice)

I will need hotel reservations for ___________ Sunday and Monday night/
______________________ only Monday night.
I will need a ___________ single/ ___________ double room.

A check in the amount of $650 should accompany this registration form and be made payable to the Medical College of Wisconsin. Telephone registrations must be confirmed by check within 10 days.

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City/State/Zip _______________________
Office Phone (___) __________________

work address _______________________

home address _______________________

Registrations and payment should be sent to:
LisaAnn Trombath
SPECT Brain Imaging Fellowship Coordinator
Nuclear Medicine Division
Medical College of Wisconsin
6700 W. Wisconsin Avenue
Milwaukee, WI 53226 (414)257-6068

CardioGen-82®
Rubidium Rb 82 Generator

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

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 mCi/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 infusions 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 maintaining 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 eluates obtained from the generator are 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 eluates 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.

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

Carcinogenesis, Mutagenesis, Impairment of Fertility
No long-term 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 radiopharmaceuticals, 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 menstural bleeding.

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.

HOW SUPPLIED
CardioGen-82 (Rubidium Rb 82 Generator) is supplied in the form of strontium Sr 82 adsorbed on a hydrous stannic oxide column with an activity of 20-150 millicuries Sr-82 at calibration time. The generator is encased in a lead shield surrounded by a labeled plastic container. Complete assay data for each generator are provided on the container label. CardioGen-82 (Rubidium Rb 82 Generator) is intended for use only with an appropriate, properly calibrated infusion system labeled for use with the generator.
We’ve removed your PET collar

PET perfusion studies without a cyclotron

CardioGen-82® (Rubidium Rb 82 Generator) is the only generator-based myocardial perfusion agent indicated for PET imaging.

Now in 45 to 60 minutes you can have PET images to help you distinguish normal from abnormal myocardium. All without the expense of a cyclotron!

The short 75-second half-life lowers the radiation burden to the patient. When incorporated into the Rubidium Infusion System, serial imaging of myocardial blood flow changes can be performed as often as every ten minutes.

The CardioGen-82 System also improves patient throughput and scheduling efficiency by enabling you to perform multiple studies in a short time.

Remove the PET collar from your department. Get the PET images you need in 45 to 60 minutes, without a costly cyclotron.

CardioGen-82®
Rubidium Rb-82 Generator

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

Pulmonex Xenon System

Atomic Products introduces the Pulmonex Xenon System, a complete integrated system with a delivery unit and built-in gas trap. Simple operation of a single handle on the front panel permits full-system control of xenon gas flow from initial application to the final washout of the xenon into the gas trap. With all the controls located on the front panel, the user can control the system, observe the patient, and monitor the gamma camera from one position. There are three easy functions to use when performing a ventilation study on the Pulmonex: Start, Single Breath and Equilibrium Imaging, and Washout. One technologist can perform an entire study by moving a single handle. It’s safe and simple. All internal systems are completely shielded for patient and operator safety. A bacteriostatic filter is used at the mouthpiece to prevent system contamination. Atomic Products Corporation, P.O. Box 702, Shirley, NY 11967. (516) 924-9000.

Circle Reader Service No. 101

Radioisotope Calibrator

Capintec, Inc. announces the availability of the CRC® 712 series, radioisotope dose calibration systems designed specifically for PET applications. Features include manual and automatic range selection for fast activity reading, up to five remote chamber configurations, Curie/Becquerel readout, RS-232 interface, auxiliary display units, and data logging printer capabilities. When the CII Ionization chamber is used in a laboratory hot cell, it is advantageous to mount the chamber under an opening in the floor of the hot cell so that the chamber doesn’t take up work space in the hot cell. A mounting flange is available for the ionization chamber, which matches the mounting holes that are provided in the laboratory cell. Capintec Instruments, Inc., 6 Arrow Road, Ramsey, NJ 07446. (201) 825-9500.

Circle Reader Service No. 103

Nuclear Medicine Workstation

Siemens Medical Systems, Inc. has designed a nuclear medicine workstation, ICON, that features a direct-manipulation user interface, distributed processing, and universal networking to existing configurations. The direct-manipulation user interface effectively meets the need of the user by saving time through simplicity of operation and high processing speed. The system provides direct access to all tasks, eliminating repetitive user interactions and increasing processing speed, while the software incorporates pull-down menus and graphics for all functions. Dedicated processors provide true distributed processing and task independence without compromising speed and clinical throughput. Software protocols may be customized to ensure consistency in application, intuitive interaction, and accuracy. Comprehensive software, standard with all ICON computers, offers a spectrum of acquisition, processing, and display capabilities, including an easy to learn software interface. ICON systems support many network configurations including a high speed bi-directional data transfer between MicroDELTAm/MaxDELTAm computers and DELTAmanger for virtually unrestricted data access, a high speed Ethernet interface, and local area networking. ICON’s universal networking capability extends and enhances the value of existing computer systems. Scott Moore, Nuclear Medical Division, Siemens Medical Systems, Inc., 2501 Barrington Road, Hoffman Estates, IL 60195. (708) 304-7252.

Circle Reader Service No. 102
Mab Solid Phase RIA

Becton Dickinson has released a new T4 monoclonal antibody (Mab) solid phase radioimmunoassay test. Solid phase antibody coated tubes are used so no centrifugation or shaking is necessary. No reagent reconstitution is required because the reagents are supplied in liquid form. Handling is reduced because the procedure only requires two pipetting steps for sample and tracer and one incubation. Incubation is done at room temperature. Sample requirements are flexible. Assay requires only 25 μL of sample and can be run on serum, EDTA, plasma, or heparinized plasma. The assay covers the range of 0 to 20 μg/dL with a sensitivity of 0.38 μg/dL. Comparison studies with other commercially available T4 radioimmunoassay procedures indicate good correlation between methods. Irene Forsen, Becton Dickinson Diagnostic Instrument Systems, 7 Loveton Circle, Sparks, MD 21152. (301) 785-6204. Circle Reader Service No. 104

CAMAC ADC

EG&G Ortec introduces the Model ADI14 CAMAC 16K ADC, a 14-bit analog-to-digital (ADC) converter with a fast FERabus readout and CAMAC. The converter has the digital resolution and synchronization needed for high-multiplicity coincidence experiments with germanium detectors. Its 16,000 channels and 5 μs conversion time allow handling of high count rates over a wide range of energies. With 5 μs conversion zero-suppression, the FERabus readout skips ADCs without data in 3 ns, and reads out active ADCs at a rate of 100 ns per word. Individual gates, pile-up rejection inputs, and a master gate input offer unprecedented control for coincidence experiments. The converter’s live-time clock takes the guesswork out of coincidence dead-time corrections. CAMAC controls include zero and overflow suppression, FERabus or CAMAC readout, individual gates, master gate, singles or coincidence modes, individual lower-level discriminators, upper-level discriminator, and dc-offset. Sanford Wagner, EG&G Ortec, 100 Midland Road, Oak Ridge, TN 37831. (615) 482-4411. Circle Reader Service No. 105

Fluorescence Photometry System

Nikon Inc.’s Instrument Group has developed a comprehensive photometry system for measuring and analyzing low-level intracellular ions in living cells. The Photoscan system provides digital photometers for measuring photon counts per millisecond and versatile software for single- or dual-channel data acquisition and data analysis. Neuroscientists, cell biologists, and others working with fluorescence microscopy can integrate Photoscan with their fluorescence microscopes regardless of brand. Photoscan can connect the system to IBM-compatible personal computers for complete data acquisition, analysis, and publication-quality hard copy. Three versions of the photometry system are available. Photoscan 1 is designed for studying single-emission fluorochromes such as FLUO-3 or the dual-emission probes such as INDO-1 for calcium analysis. It is a single-emission or a simultaneous dual-emission photon counting photometer system complete with data acquisition and analysis capabilities. Photoscan 2 is ideal for studying dual excitation ratio fluorescence probes such as the popular calcium fluorochrome FURA-2. It performs real-time ratio fluorescence measurements for both single- and dual-wavelength excitation probes with either single- or dual-emission capability. It is a complete system with digital PMTs, optical chopper-based dual wavelength fiber optic illumination system, and easy-to-use data acquisition and analysis software. Photoscan 3 is similar to Photoscan 2 but uses a 10-hole filter wheel for multi-wavelength excitation, which allows simultaneous multiple fluorochrome studies. Photoscan was developed by Photon Technology International Inc. of South Brunswick, New Jersey and is being marketed in the United States by Nikon. Instrument Group, Nikon Inc., 1300 Walt Whitman Drive, Melville, NY 11747. (516) 547-8300. Circle Reader Service No. 106
This year Nuclear Medicine Week will be observed from July 28—August 3. Nuclear Medicine Week, sponsored by The Society of Nuclear Medicine and Technologist Section, was developed to educate the general public and health care professionals of the diagnostic and treatment capabilities of nuclear medicine.

Nuclear Medicine Week is the only time during the year that the entire nuclear medicine community unites to present its message. It is an excellent opportunity to reach out to those who could benefit from nuclear medicine; it is also a most opportune time to promote your facility to referring physicians and potential patients.

A new poster, button and sticker have been designed to help you promote this worldwide event in your community. In addition, a set of guidelines with suggestions to increase participation is available from the Society. We encourage all those involved in nuclear medicine to join with us to increase the awareness and improve the perception of nuclear medicine.

To purchase posters, buttons and stickers for your institution, and to receive a guidelines packet, visit the Nuclear Medicine Week booth located in the registration area of the Convention Center.
CELEBRATE
NUCLEAR MEDICINE WEEK
July 28 – August 3, 1991

The following materials are available for promoting Nuclear Medicine Week in your area.
One poster, sticker, and a button, all in full color, have been designed for this year.

Posters — $5.00 each, 4 – 9 posters are $4.50 each, 10 or more $4.00 each.
I would like _______ posters × $ _______ $ _________

Buttons — $1.00 each
I would like to order _______ buttons $ _________

Stickers — $.25 each (same design as the button)
I would like to receive _______ stickers.
(Minimum order is 10 stickers) $ _________
Total $ _________

☐ I would like to order a free set of Guidelines for promoting Nuclear Medicine Week.

Payment must be enclosed with your order. Payments must be made in U.S. dollars drawn on U.S. banks. No foreign funds will be accepted. Make checks payable to The Society of Nuclear Medicine

Orders will be sent out by 1st class mail or UPS. Orders received after July 1, 1991 will be assessed a 15% surcharge, payable before shipment, to ensure timely delivery.

Name
Hospital/Company
Telephone

Address
City
State
Zip

Please return this form to:
Nuclear Medicine Week
The Society of Nuclear Medicine
136 Madison Avenue,
New York, NY 10016-6760
Cardiotec®

Kit for the Preparation of Technetium Tc 99m Teboroxime

FOR DIAGNOSTIC USE

DESCRIPTION

Each 5 mL reaction vial contains a sterile, nonpyrogenic, lyophilized formulation of 2.0 mg cyclohexadienone dioxime, 2.0 mg methyl boronic acid, 2.0 mg pentic acid, 9.0 mg citric acid, anhydrous; 100 mg sodium chloride, 50 mg gamma cyclodextrin and 0.058 mg (maximum) total tin expressed as stannous chloride (SnCl2), 0.020 mg (minimum) stannous chloride (SnCl2). The pH is adjusted with sodium hydroxide and/or hydrochloric acid prior to lyophilization. The contents of the vial are lyophilized and sealed under nitrogen at the time of manufacture. No bacteriostatic preservative is present.

When sterile, pyrogen-free sodium pertechnetate Tc 99m injection is added to the vial, and the solution is heated at 100°C for 15 minutes, the diagnostic agent Technetium Tc 99m Teboroxime is formed for administration by intravenous injection. The pH of the reconstituted product is 3.7 (range 3.3 to 4.1).

INDICATIONS AND USAGE

Technetium Tc 99m Teboroxime is a myocardial perfusion agent that is useful in distinguishing normal from abnormal myocardium in patients with suspected coronary artery disease using rest and stress techniques.

CONTRAINDICATIONS

None known.

WARNINGS

Stress testing should be performed only under the supervision of a qualified physician and in a laboratory equipped with appropriate monitoring, resuscitation and support apparatus.

PRECAUTIONS

General

Contents of the reaction vial are intended only for use in the preparation of Technetium Tc 99m Teboroxime and are not to be administered directly to the patient.

Contents of the kit before preparation are not radioactive. However, after the addition of sodium pertechnetate Tc 99m injection, adequate shielding of the final preparation must be maintained.

The components of the kit are supplied sterile and non-pyrogenic. Aseptic procedures normally employed in making additions and withdrawals from sterile, non-pyrogenic containers should be used during the addition of the pertechnetate solution and the withdrawal of doses for patient administration.

The technetium Tc 99m labeling reactions involved in preparing the agent depend on maintaining the stannous ion in the reduced state. Any oxidant present in the sodium pertechnetate Tc-99m supply may thus adversely affect the quality of the radiopharmaceutical. Hence, sodium pertechnetate Tc-99m containing oxidants should not be employed.

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

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 ensure minimum radiation exposure to occupational workers.

Tc-99m Teboroxime should be formulated no more than 6 hours prior to clinical use.

Carcinogenesis, Mutagenesis, Impairment of Fertility

In comparison with most other diagnostic technetium labeled radiopharmaceuticals, the radiation dose to the ovaries (1.8 rads/50 mCi) is high. Minimal exposure (ALARA) is necessary in women of childbearing capability. (See Dosimetry subsection in DOSAGE and ADMINISTRATION section.)

No long-term animal studies have been performed to evaluate carcinogenic potential or to determine the effects of Cardiotec on fertility in males or females.

Three different mutagenicity assays (a reversion test with bacteria, a chromosomal aberration assay and an in vitro mouse micronucleus assay) conducted with cold (decayed) technetium la-

beled Cardiotec gave negative results.

Cardiotec was weakly positive for inducing forward mutations at the TK locus in L5178Y mouse lymphoma cells in the absence of metabolic activation (but only at high concentrations that were toxic to the cells and reduced growth to 33% or less relative to vehicle controls). Cardiotec was negative in this assay in the presence of metabolic activation.

Pregnancy Category C

Animal reproduction studies have not been conducted with Technetium Tc 99m Teboroxime. It is also not known whether Technetium Tc 99m Teboroxime can cause fetal harm when administered to a pregnant woman or can affect reproductive capacity.

Technetium Tc 99m Teboroxime should be given to a pregnant woman only if the expected benefits to be gained clearly outweigh the potential hazards.

Ideally, examinations using radiopharmaceuticals, especially those 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

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

Pediatric Use

Safety and effectiveness in children below the age of 18 have not been established.

ADVERSE REACTIONS

Uncommon adverse reactions reported in clinical trials include metallic taste in mouth, burning at injection site, facial swelling, numbness of hand and arm, hypotension and nausea after administration of Technetium Tc 99m Teboroxime.

HOW SUPPLIED

Cardiotec® (Kit for the Preparation of Technetium Tc 99m Teboroxime) is supplied in kits of 5, 10, and 25 reaction vials.

(J4-282A)


SQUIBB™ Diagnostics

Reference

1. Data on file, Squibb Diagnostics.
**NEW! CardióTec**

(Kit for the Preparation of Technetium Tc 99m Teboroxime)

**THE ONLY TECHNETIUM-BASED AGENT FOR STRESS AND REST**

QUICK...
Rapid uptake and washout: complete stress and rest studies in only 90 minutes.

CLEAR...
Sharp images: enhance diagnostic ability to distinguish ischemia and infarction.

CLEAN...
Rapid blood clearance: greater patient comfort.

The first technetium-based myocardial perfusion agent for rest and stress imaging.

**NEW CardióTec**

(Kit for the Preparation of Technetium Tc 99m Teboroxime)

Please see the brief summary of prescribing information for CardióTec on the adjacent page.

Circle Reader Service No. 77