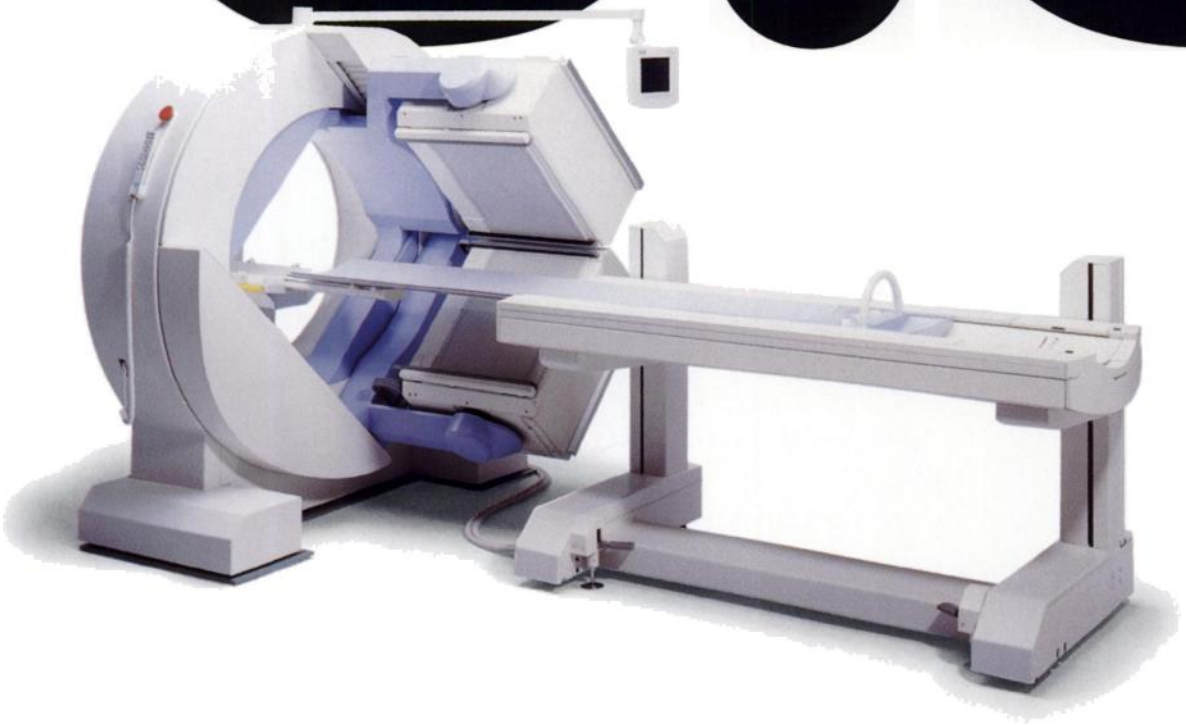
SIEMENS

e.c



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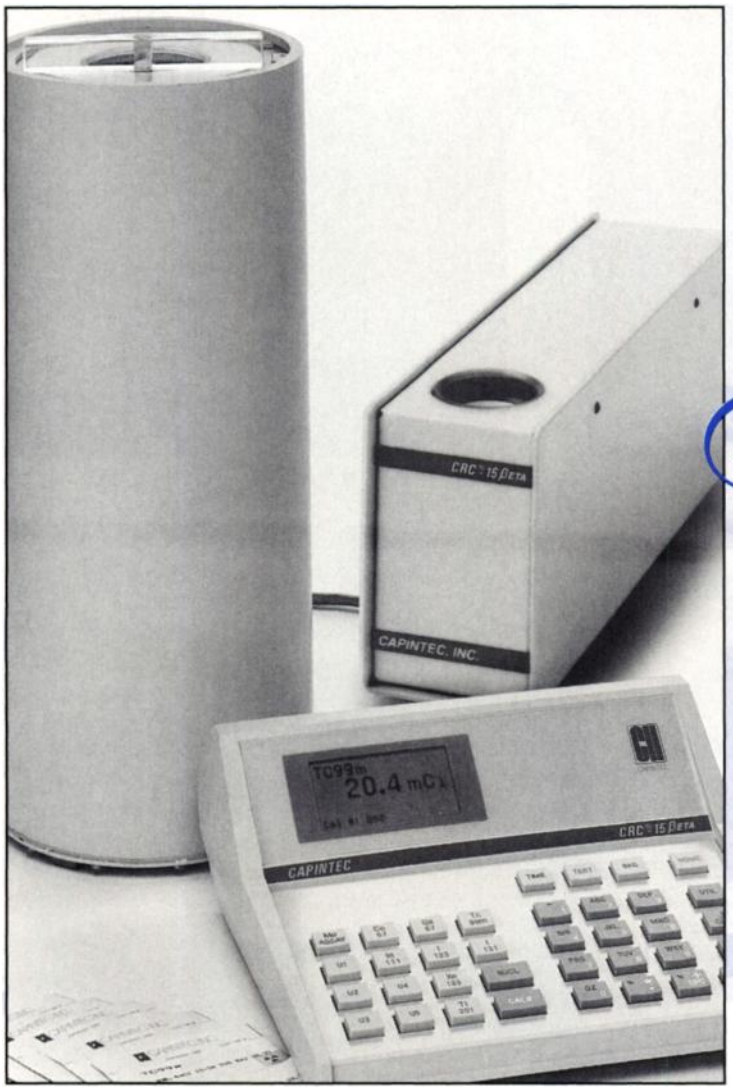
Gamma+Beta... and Counting

Calibration to the Power of 2



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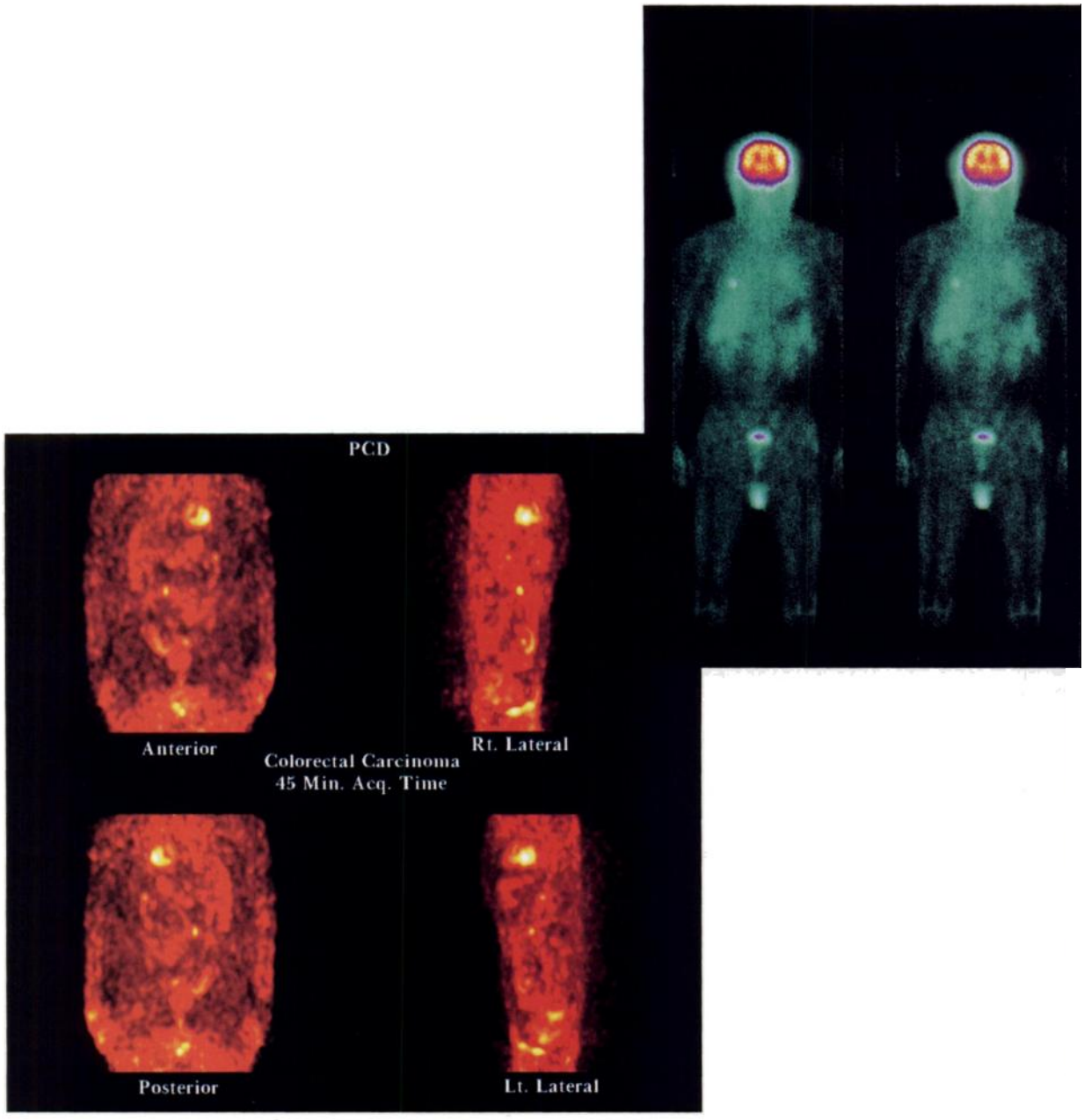
A Look Into The Future...



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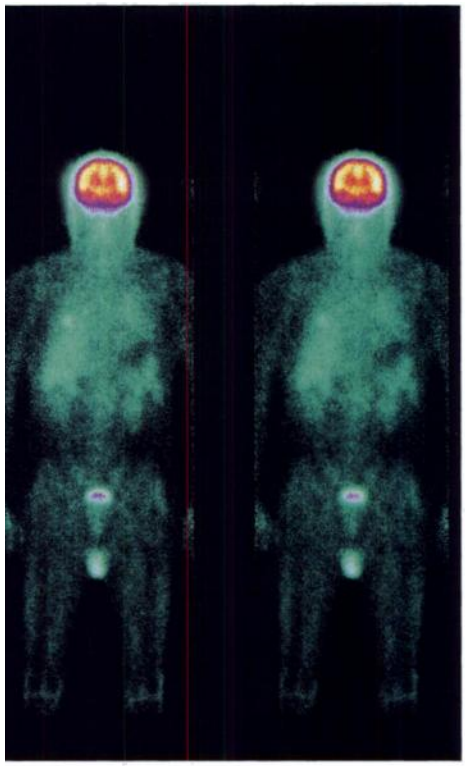
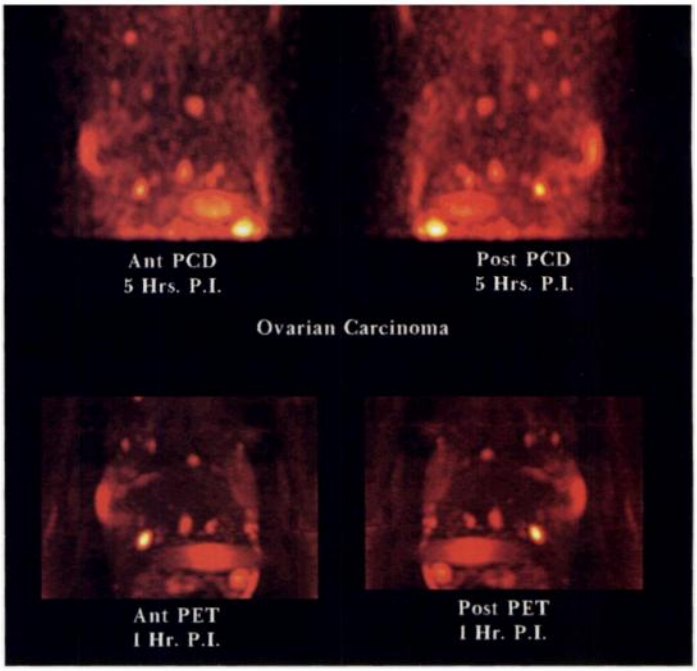


Industry First
The first whole body coincidence scan acquired on a gamma camera.

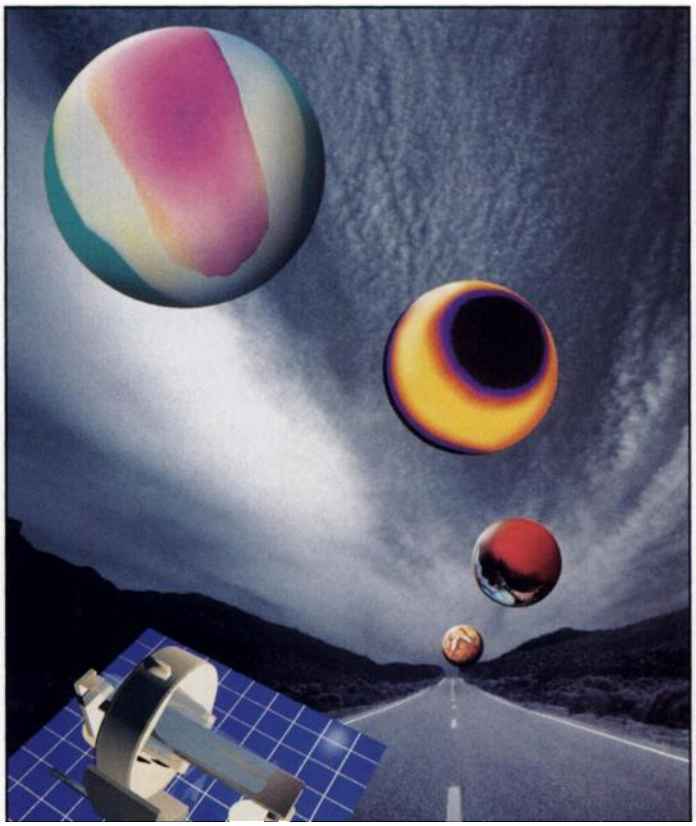


Positron Coincidence Detection

Once again, Picker International is on the leading edge of nuclear medicine imaging with the introduction of the new Positron Coincidence Detection (**PCD™**) imaging.

Available on the PRISM™ 2000XP, **PCD** is pioneering the use of PRISM XP multi-head cameras for imaging positron isotopes. By offering multiple crystal thicknesses, on-the-fly rebinning of data, unique scatter removal, and the fastest advanced image processing in nuclear medicine, **PCD** offers the best range of options for imaging positron-based pharmaceuticals.

To find out more about all the advantages **PCD** gives you, call us today at 1-800-323-0550; e-mail us at info@nm.picker.com; or visit us on the Web at the Nuclear Medicine Modality Home Page, http://www.picker.com/nuclear/nuclear.html.



PICKER
MORE THAN IMAGES. INSIGHT.

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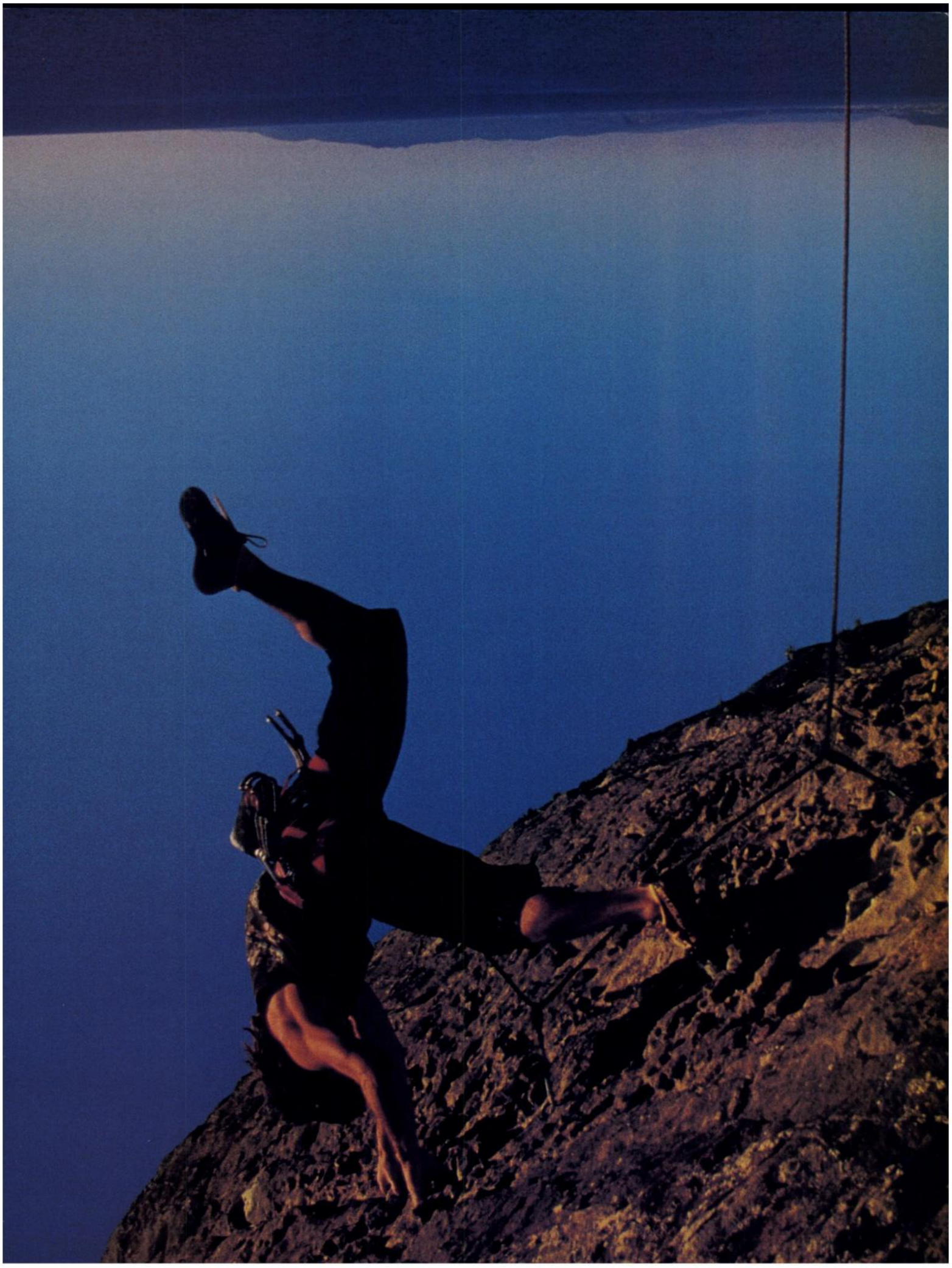
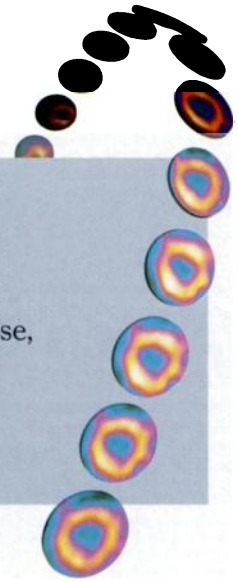


It's better under stress

The value of cardiac imaging lies in the accuracy of stress perfusion images. And that's where Cardiolite® comes through.

With Cardiolite, you can simultaneously obtain stress perfusion and resting function *(gated stress Cardiolite study)*—that's critical diagnostic information regarding cardiac perfusion, wall motion, wall thickening, and LVEF—all of which can help with patient management decisions. And, for patients unable to achieve adequate levels of stress through exercise, imaging results can be optimized by using pharmacologic agents such as I.V. Persantine® (dipyridamole USP).

To enhance patient management, find out about the advantages of stress Cardiolite before you order your next study.



By performing stress Cardiolite studies you can...

- Accurately diagnose CAD
- Risk stratify patients with known or suspected CAD
- Reduce equivocal interpretation in difficult-to-image patients (women, obese, and large-chested)
- Acquire stress perfusion and resting function information
- Improve patient management decisions, which may reduce costs

Cardiolite®

Kit for the preparation of Technetium Tc99m Sestamibi

To reduce the uncertainty Cardiolite comes through

DU PONT PHARMA
Radiopharmaceuticals

Stress testing should be performed only under the supervision of a qualified physician in a laboratory equipped with appropriate resuscitation and support apparatus. There have been infrequent reports of signs and symptoms consistent with seizure and severe hypersensitivity after administration of Tc99m Sestamibi. Pharmacologic stress may be associated with serious adverse events such as myocardial infarction, arrhythmias, hypertension, bronchoconstriction, and cerebrovascular events. Caution should be used when pharmacologic stress is selected as an alternative to exercise.

Persantine® is a registered trademark of Boehringer Ingelheim International GmbH. *I.V. Persantine*® is manufactured and distributed by DuPont Pharma under license from Boehringer Ingelheim Pharmaceuticals, Inc.

Please see brief summary of prescribing information on adjacent page.

Brief Summary

Cardiolite®

Kit for the preparation of Technetium Tc99m Sestamibi

FOR DIAGNOSTIC USE

INDICATIONS AND USAGE: CARDIOLITE®, Kit for the preparation of Technetium Tc99m Sestamibi, is a myocardial perfusion agent that is indicated for detecting coronary artery disease by localizing myocardial ischemia (reversible defects) and infarction (non-reversible defects), in evaluating myocardial function and developing information for use in patient management decisions. CARDIOLITE® evaluation of myocardial ischemia can be accomplished with rest and cardiovascular stress techniques (e.g., exercise or pharmacologic stress in accordance with the pharmacologic stress agent's labeling).

It is usually not possible to determine the age of a myocardial infarction or to differentiate a recent myocardial infarction from ischemia.

CONTRAINDICATIONS: None known.

WARNINGS: In studying patients in whom cardiac disease is known or suspected, care should be taken to assure continuous monitoring and treatment in accordance with safe, accepted clinical procedure. Infrequently, death has occurred 4 to 24 hours after Tc99m 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, arrhythmias, hypotension, bronchoconstriction and cerebrovascular events. Caution should be used 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.

PRECAUTIONS:

GENERAL

The contents of the vial are intended only for use in the preparation of Technetium Tc99m Sestamibi and are not to be administered directly to the patient without first undergoing the preparative procedure.

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 involved depend on maintaining the stannous ion in the reduced state. Hence, Sodium Pertechnetate Tc99m Injection containing oxidants should not be used.

Technetium Tc99m 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 radionuclides and whose experience and training have been approved by the appropriate government agency authorized to license the use of radionuclides.

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

The most frequent exercise stress test endpoints, which resulted in termination of the test during controlled Tc99m Sestamibi studies (two-thirds were cardiac patients) were:

Fatigue	35%
Dyspnea	17%
Chest Pain	16%
ST-depression	7%
Arrhythmia	1%

Carcinogenesis, Mutagenesis, Impairment of Fertility

In comparison with most other diagnostic technetium labeled radiopharmaceuticals, the radiation dose to the ovaries (1.5rads/30mCi at rest, 1.2 rads/30mCi at exercise) is high. Minimal exposure (ALARA) is necessary in women of childbearing capability. (See Dosimetry subsection in DOSAGE AND ADMINISTRATION section.)

The active intermediate, $[Cu(MIBI)_4]BF_4$, 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 (≥ 20μg/ml), an increase in cells with chromosome aberrations was observed in the *in vitro* human lymphocyte assay. $[Cu(MIBI)_4]BF_4$ did not show genotoxic effects in the *in vivo* mouse micronucleus test at a dose which caused systemic and bone marrow toxicity (9mg/kg, > 600 × maximal human dose).

Pregnancy Category C

Animal reproduction and teratogenicity studies have not been conducted with Technetium Tc99m Sestamibi. It is also not known whether Technetium Tc99m Sestamibi can cause fetal harm when administered to a pregnant woman or can affect reproductive capacity. There have been no studies in pregnant women. Technetium Tc99m Sestamibi should be given to a pregnant woman only if clearly needed.

Nursing Mothers

Technetium Tc99m Pertechnetate is excreted in human milk during lactation. It is not known whether Technetium Tc99m 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 experienced a transient parosmia and/or taste perversion (metallic or bitter taste) immediately after the injection of Technetium Tc99m Sestamibi. A few cases of transient headache, flushing, edema, injection site inflammation, dyspepsia, nausea, vomiting, pruritus, rash, urticaria, dry mouth, fever, dizziness, fatigue, dyspnea, and hypotension also have been attributed to administration of the agent. Cases of angina, chest pain, and death have occurred (see WARNINGS and PRECAUTIONS). The following adverse reactions have been rarely reported: signs and symptoms consistent with seizure occurring shortly after administration of the agent; transient arthritis in a wrist joint; and severe hypersensitivity, which was characterized by dyspnea, hypotension, bradycardia, asthenia and vomiting within two hours after a second injection of Technetium Tc99m Sestamibi.

DU PONT PHARMA
Radiopharmaceuticals

Marketed by
DuPont Radiopharmaceutical Division
The DuPont Merck Pharmaceutical Co.
331 Treble Cove Road
Billerica, Massachusetts, USA 01862
For ordering Tel. Toll Free: 800-225-1572
All other business: 800-362-2868
(For Massachusetts and International, call 508-667-9531)

513121-0296

2/96 Printed in U.S.A.

I.V. PERSANTINE®

(dipyridamole USP) Injection 5mg/ml

Brief Summary of Prescribing Information

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 Hypersensitivity to dipyridamole.

WARNINGS Serious adverse reactions associated with the administration of intravenous Persantine® (dipyridamole USP) have included cardiac death, fatal and non-fatal myocardial infarction, ventricular fibrillation, symptomatic ventricular tachycardia, stroke, transient cerebral ischemia, seizures, anaphylactoid reaction and bronchospasm. There have been reported cases of asystole, sinus node arrest, sinus node depression and conduction block. Patients with abnormalities of cardiac impulse formation/conduction or severe coronary artery disease may be at increased risk for these events.

In a study of 3911 patients given intravenous Persantine® as an adjunct to 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 3911), the potential clinical information to be gained through use of intravenous Persantine® thallium imaging must be weighed against the risk to the patient. Patients with a history of unstable angina may be at a greater risk for severe myocardial ischemia. Patients with a history of asthma may be at a greater risk for bronchospasm during IV Persantine® use.

When thallium myocardial perfusion imaging is performed with intravenous Persantine®, parenteral aminophylline should be readily available for relieving adverse events such as bronchospasm or chest pain. Vital signs should be monitored during, and for 10-15 minutes following, the intravenous infusion of Persantine® and an electrocardiographic tracing should be obtained using at least one chest lead. Should severe chest pain or bronchospasm occur, parenteral aminophylline may be administered by slow intravenous injection (50-100 mg over 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 aminophylline. If 250 mg of aminophylline does not relieve chest pain symptoms within a few minutes, sublingual nitroglycerin may be administered. If chest pain continues despite use of aminophylline 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 parenteral aminophylline, thallium-201 may be injected and allowed to circulate for one minute before the injection of aminophylline. This will allow initial thallium perfusion imaging to be performed before reversal of the pharmacologic effects of Persantine® on the coronary circulation.

PRECAUTIONS See WARNINGS

Drug Interactions Oral maintenance theophylline and other xanthine derivatives such as caffeine may abolish the coronary vasodilatation induced by intravenous Persantine® (dipyridamole USP) administration. This could lead to a false negative thallium imaging result (see Mechanism of Action).

Myasthenia gravis patients receiving therapy with cholinesterase inhibitors may experience worsening of their disease in the presence of dipyridamole.

Carcinogenesis, Mutagenesis, Impairment of Fertility In studies in which dipyridamole was administered in the feed at doses of up to 75 mg/kg/day (9.4 times* the maximum recommended daily human oral dose) in mice (up to 128 weeks in males and up to 142 weeks in females) and rats (up to 111 weeks in males and females), there was no evidence of drug related carcinogenesis. Mutagenicity tests of dipyridamole with bacterial and mammalian cell systems were negative. There was no evidence of impaired fertility when dipyridamole was administered to male and female rats at oral doses up to 500 mg/kg/day (63 times* the maximum recommended daily human oral dose). A significant reduction in number of corpora lutea with consequent reduction in implantations and live fetuses was, however, observed at 1250 mg/kg/day.

*Calculation based on assumed body weight of 50 kg.

Pregnancy Category B Reproduction studies performed in mice and rats at daily oral doses of up to 125 mg/kg (15.6 times* the maximum recommended daily human oral dose) and in rabbits at daily oral doses of up to 20 mg/kg (2.5 times* the maximum recommended daily human oral dose) have revealed no evidence of impaired embryonic development due to dipyridamole. There are, 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 of 50 kg.

Nursing Mothers Dipyridamole is excreted in human milk.

Pediatric Use Safety and effectiveness in the pediatric population have not been established.

ADVERSE REACTIONS Adverse reaction information concerning intravenous Persantine® (dipyridamole USP) is derived from a study of 3911 patients in which intravenous Persantine® was used as an adjunct to thallium myocardial perfusion imaging and from spontaneous reports of adverse reactions and the published literature.

Serious adverse events (cardiac death, fatal and non-fatal myocardial infarction, ventricular fibrillation, asystole, sinus node arrest, symptomatic ventricular tachycardia, stroke, transient cerebral ischemia, seizures, anaphylactoid reaction and bronchospasm.) are described above (see WARNINGS).

In the study of 3911 patients, the most frequent adverse reactions were: chest pain/angina pectoris (19.7%), electrocardiographic changes (most commonly ST-T changes) (15.9%), headache (12.2%), and dizziness (11.8%).

Drug-related adverse events occurring with >1% incidence in this study were: chest pain/angina pectoris (19.7%), headache (12.2%), dizziness (11.8%), electrocardiographic abnormalities/ST-T changes (7.5%), electrocardiographic abnormalities/extrasystoles (5.2%), hypotension (4.6%), nausea (4.6%), flushing (3.4%), electrocardiographic abnormalities/tachycardia (3.2%), dyspnea (2.6%), pain unspecified (2.6%), blood pressure lability (1.6%), hypertension (1.5%), paresthesia (1.3%), and fatigue (1.2%).

Less common adverse reactions occurring in 1% or less of the patients within the study included:

Cardiovascular System: Electrocardiographic abnormalities unspecified (0.8%), arrhythmia unspecified (0.6%), palpitation (0.3%), ventricular tachycardia (0.2% see WARNINGS), bradycardia (0.2%), myocardial infarction (0.1% see WARNINGS), AV block (0.1%), syncope (0.1%), orthostatic hypotension (0.1%), atrial fibrillation (0.1%), supraventricular tachycardia (0.1%), ventricular arrhythmia unspecified (0.03% see WARNINGS), heart block unspecified (0.03%), cardiomyopathy (0.03%), edema (0.03%).

Central and Peripheral Nervous System: Hypothesia (0.5%), hypertonia (0.3%), nervousness/anxiety (0.2%), tremor (0.1%), abnormal coordination (0.03%), somnolence (0.03%), dysphonia (0.03%), migraine (0.03%), vertigo (0.03%).

Gastrointestinal System: Dyspepsia (1.0%), dry mouth (0.8%), abdominal pain (0.7%), flatulence (0.6%), vomiting (0.4%), eructation (0.1%), dysphagia (0.03%), tenesmus (0.03%), appetite increased (0.03%).

Respiratory System: Pharyngitis (0.3%), bronchospasm (0.2% see WARNINGS), hyperventilation (0.1%), rhinitis (0.1%), coughing (0.03%), pleural pain (0.03%).

Other: Myalgia (0.9%), back pain (0.6%), injection site reaction unspecified (0.4%), diaphoresis (0.4%), asthenia (0.3%), malaise (0.3%), arthralgia (0.3%), injection site pain (0.1%), rigor (0.1%), earache (0.1%), tinnitus (0.1%), vision abnormalities unspecified (0.1%), dysgeusia (0.1%), thirst (0.03%), depersonalization (0.03%), eye pain (0.03%), renal pain (0.03%), perineal pain (0.03%), breast pain (0.03%), intermittent claudication (0.03%), leg cramping (0.03%). In additional postmarketing experience, there have been rare reports of allergic reaction including urticaria, pruritus, dermatitis and rash.

DU PONT PHARMA
Radiopharmaceuticals

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Radiopharmaceutical Division
The DuPont Merck Pharmaceutical Co.
Billerica, MA 01862

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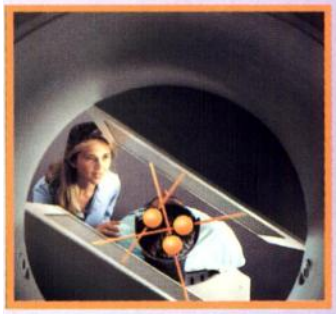
VariCam Get an angle on the future...

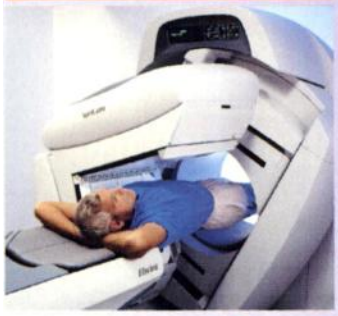


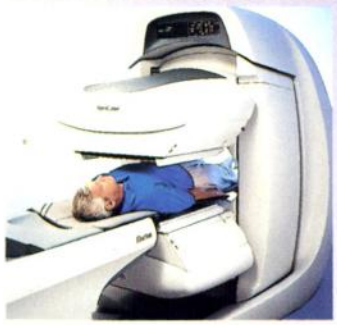
All-Digital, High-Energy Imaging

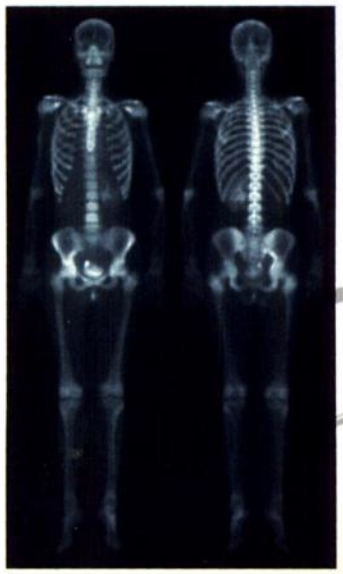
- **Designed for Volumetric Coincidence Detection***
- Leading in High-Energy Imaging
- TransACT™: Transmission Attenuation Corrected Tomography

Robotic Design, Convertible Geometry

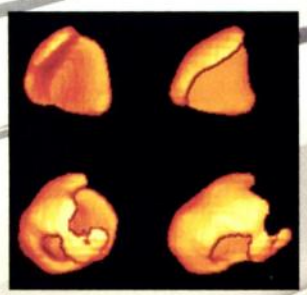
- EleGantry™: Truly open, variable-angle (180°/90°) detector geometry
- OptiTrack™: Real-time fully automatic body-contoured scanning
- Evolving-Images™ with Slip-Ring technology



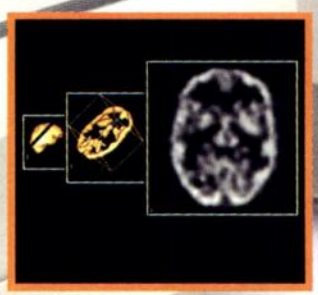




Double-efficiency
Whole-Body scan, featuring superior lesion detectability with OptiTrack real-time body contouring.



Double double-efficiency
right-angle cardiac tomography: simultaneous dual-isotope FDG/MIBI SPECT. (Not for sale in U.S.)

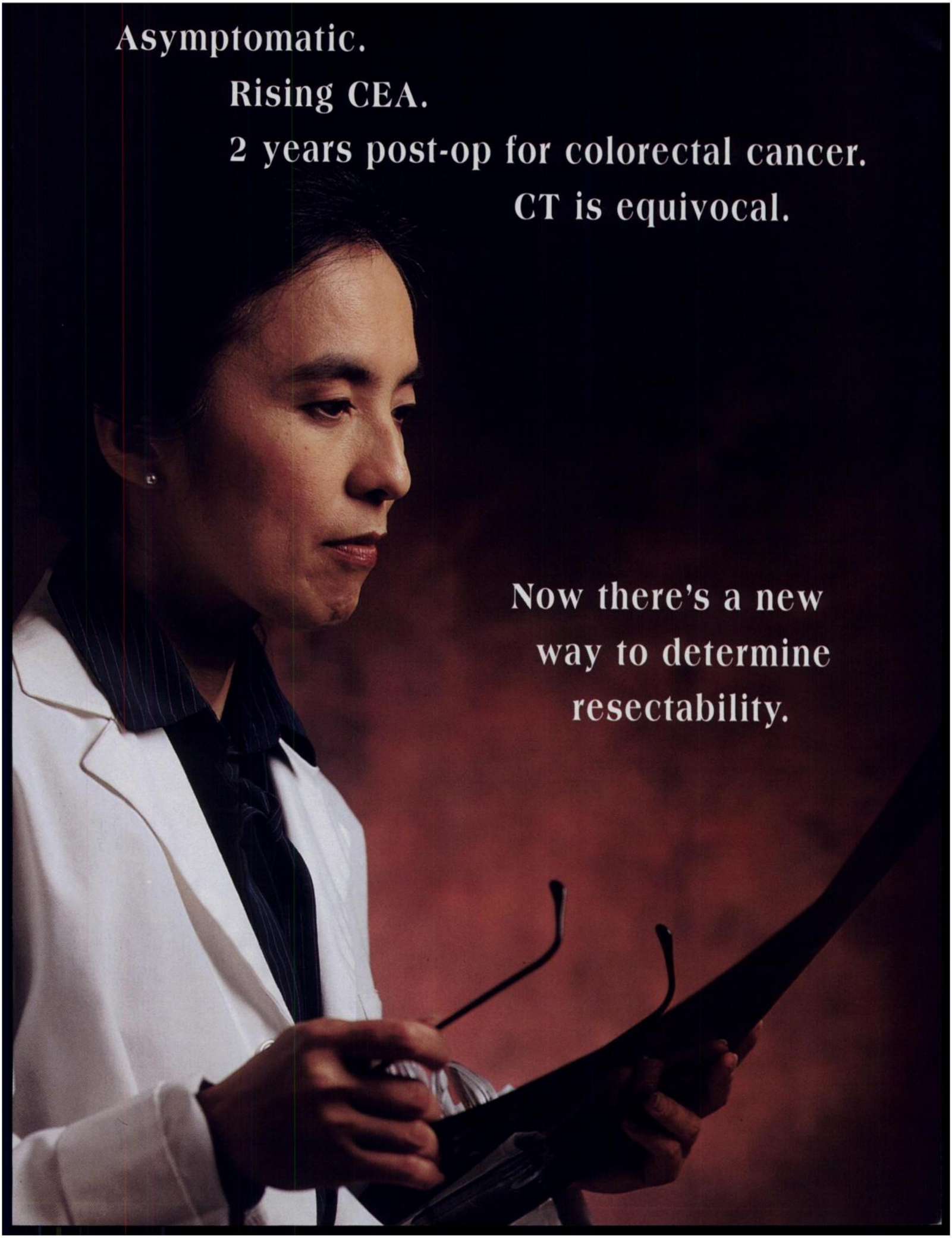


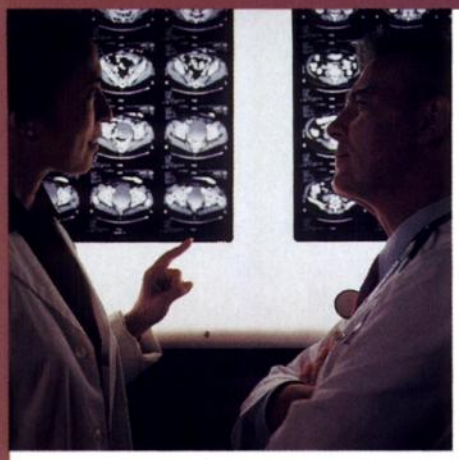
Double double-efficiency
Volumetric Coincidence Detection

Elscint

Circle Reader Service Number 42

Elscint U.S.A.: (201) 342-2020; 1-800-ELSCINT


Asymptomatic.
Rising CEA.
2 years post-op for colorectal cancer.
CT is equivocal.
Now there's a new
way to determine
resectability.



INTRODUCING

CEA-SCAN®
(Arcitumomab)

SENSITIVE IMAGING TO HELP DRIVE MANAGEMENT DECISIONS

CEA-Scan is a new imaging agent that enhances your pre-operative determination of colorectal cancer resectability. CEA-Scan is indicated, in conjunction with standard diagnostic evaluations, for detection of the presence, location and extent of recurrent and/or metastatic colorectal carcinoma involving the liver, extra-hepatic abdomen and pelvis in patients with a histologically confirmed diagnosis of colorectal carcinoma.

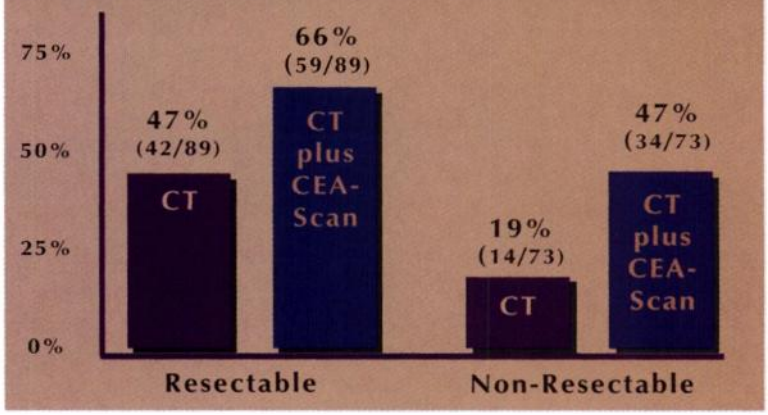
Surgery confirms that CEA-Scan with CT can help you make decisions concerning surgical resectability. Compared to CT alone, CEA-Scan with CT:

- Identified 59/89 versus 42/89 patients with resectable disease, a 40% increase in detection rate
- Identified 34/73 versus 14/73 patients with non-resectable disease, or more than twice as many
- In patients with negative or equivocal CT (occult disease), reduced the number of false-negative patients from 59 to 23, a 60% decrease.[1]

CEA-Scan has a 97% positive predictive value for lesions when concordant with CT (146 true-positive lesions versus 4 false-positives).

BETTER IDENTIFICATION OF RESECTABLE/NON-RESECTABLE DISEASE

Comparison of surgical outcomes correctly identified by CT vs CT plus CEA-Scan (n=209)



IMPROVES SENSITIVITY

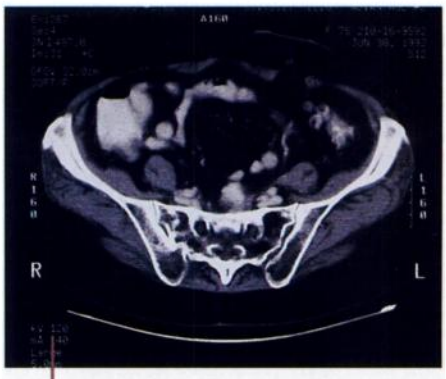
Sensitivity and specificity of CEA-Scan vs standard diagnostic methods (SDM)[1]

	SDM		CEA-Scan
Sensitivity	57.9% (103/178)	*P*=0.006	71.3% (127/178)
Specificity	84.4% (27/32)	*P*=0.12	62.5% (20/32)

SENSITIVE, SAME-DAY IMAGING

CEA-Scan enables improved colorectal cancer detection compared to standard diagnostic methods (SDM, 95% of which were CT).

- In general, CEA-Scan was more sensitive and less specific in the abdomen and pelvis than CT[1]
- However, direct comparisons of the performance characteristics of SDM to CEA-Scan are difficult to interpret, since the results of SDM were entry criteria for both Phase 3 protocols.



Patient underwent abdominoperineal resection in 1987. Presented 5 years post-op with negative CT and rising CEA.

ADVANCED TECHNOLOGY

CEA-Scan offers the advantages of Fab' fragment design.

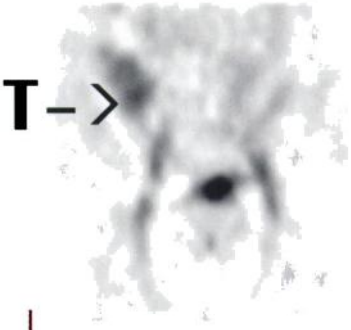
- Short biological half-life (13±4 hours) and rapid blood clearance improve tumor-to-background ratios[2]
- Minimal liver metabolism allows hepatic imaging
- Small fragment size enhances renal clearance
- Fragment technology provides lower immunogenicity

ESTABLISHED SAFETY PROFILE

Over 400 patients who have received CEA-Scan have been evaluated for human anti-mouse antibody (HAMA).

- <1% showed an elevation of HAMA levels
- Limited data are available regarding the safety of re-administration

In the patients studied with CEA-Scan, one patient each developed the following minor self-limiting adverse effects: transient eosinophilia, nausea, bursitis, urticaria, generalized itching, headache, upset stomach and fever. Out of a total of over 500 patients receiving the product to date, there has been a single report of an apparent grand mal epileptic seizure in a severely hypertensive patient that was "possibly related" to CEA-Scan infusion.



CEA-Scan abdominal SPECT image indicating tumor uptake (T, arrow). Surgery confirmed the positive CEA-Scan image.

HELPING YOU MAKE DECISIONS ABOUT TUMOR RESECTABILITY

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Please see adjacent page for brief summary of prescribing information

References:
1. Moffat FL Jr., Pinsky CM, Hammershaimb L, et al. Clinical utility of external immunoscintigraphy with the IMMU-4 technetium-99m-Fab' antibody fragment in patients undergoing surgery for carcinoma of the colon and rectum. Results of a pivotal, Phase III trial. *J Clin Oncol.* 1996;14:2295-2305.
2. Tempero M, Brand R, Holdeman K, Matamoros A. New imaging techniques in colorectal cancer. *Semin Oncol.* 1995; 22(5):448-471.

CEA-SCAN®
(Arcitumomab)

For the Preparation of Technetium Tc 99m Arcitumomab.
Sterile, Non-Pyrogenic, Lyophilized Powder for Intravenous Use Only.

DESCRIPTION
CEA-Scan® is a radiodiagnostic agent consisting of a murine monoclonal antibody Fab' fragment, arcitumomab, formulated to be labeled with ^{99m}Technetium [^{99m}Tc].[1] The active component, arcitumomab, is a Fab' fragment generated from IMMU-4, a murine IgG_1 monoclonal antibody produced in murine ascitic fluid supplied to Immunomedics, Inc., by Charles River Laboratories. IMMU-4 is purified from the ascitic fluid and is digested with pepsin to produce $F(ab')_2$ fragments and subsequently reduced to produce the 50,000-dalton arcitumomab. Each vial contains the non-radioactive materials necessary to prepare one patient dose. CEA-Scan® is a sterile, lyophilized formulation, containing 1.25 mg of arcitumomab and 0.29 mg stannous chloride per vial, with potassium sodium tartrate tetrahydrate, sodium acetate trihydrate, sodium chloride, acetic acid, glacial, hydrochloric acid, and sucrose. The imaging agent, technetium Tc 99m CEA-Scan®, technetium Tc 99m arcitumomab, is formed by reconstitution of the contents of the CEA-Scan® vial with 30 mCi of [^{99m}Tc] sodium pertechnetate in 1 ml of Sodium Chloride for Injection, USP. The resulting solution is pH 5-7 and for intravenous use only. Following administration, the labeled antibody can be visualized by common nuclear medicine instrumentation.

INDICATIONS
CEA-Scan® (Arcitumomab) is indicated, in conjunction with standard diagnostic evaluations (e.g., additional imaging evaluation), for detection of the presence, location and extent of recurrent and/or metastatic colorectal carcinoma involving the liver, extrahepatic abdomen and pelvis in patients with a histologically confirmed diagnosis of colorectal carcinoma. CEA-Scan® provides additional information in patients with no evidence of disease by standard diagnostic modalities (SDM) in whom recurrence or metastasis is suspected based upon elevated or rising serum CEA, and in patients with evidence of metastatic or recurrent disease on SDM. A retrospective analysis suggests that these data can be useful in the evaluation of patients in whom surgical intervention (biopsy, exploratory laparotomy and surgical resection) is under consideration.

CEA-Scan® is not indicated for the differential diagnosis of suspected colorectal carcinoma or as a screening tool for colorectal cancer. CEA-Scan® is not intended for readministration or for assessment of response to treatment. (see PRECAUTIONS)

CONTRAINDICATIONS
CEA-Scan® should not be administered to patients who are hypersensitive to products of murine origin or to Technetium [Tc-99m.]

WARNINGS
Anaphylactic and other hypersensitivity reactions can occur following administration of mouse protein to patients. Although serious reactions of this type have not been observed in clinical trials after CEA-Scan® administration, medications for the treatment of hypersensitivity reactions, e.g., epinephrine, antihistamines and corticosteroids, should be available for immediate use in the event of an allergic reaction during administration of this agent.

PRECAUTIONS
General
CEA-Scan® is to be interpreted in conjunction with standard diagnostic modalities. A negative or positive CEA-Scan® by itself should not be utilized in the diagnostic evaluation of colorectal cancer. Discordant results are substantially less predictive than concordant results.

CEA-Scan® should not be used as a screening test for colorectal cancer.

Limited data are available regarding the safety of readministration.[2] There are no data to support the efficacy of CEA-Scan® readministration. CEA-Scan® should be used only once in each patient.

The components of CEA-Scan® are sterile and non-pyrogenic. It is essential to follow preparation directions carefully and to adhere to strict aseptic procedures during preparation of CEA-Scan® [^{99m}Tc]. The contents of the vial are intended only for use in the preparation of CEA-Scan® [^{99m}Tc] and are not to be administered directly to patients.

The contents of the vial before preparation are not radioactive. However, after ^{99m}Tc-pertechnetate is added, adequate shielding of the preparation must be maintained. Appropriate safety measures should be used to minimize radiation exposure to clinical personnel and patients, consistent with proper patient management.

Radiopharmaceuticals should be used only by physicians who are qualified by training and experience in the safe use and handling of radionuclides.

Imaging Interpretation
General
There are limited data to determine the imaging characteristics and efficacy of the CEA-Scan® (Arcitumomab) in detection of lesions outside of the abdominopelvic cavity.[2,3]

Areas of potential false-positive readings, particularly with planar imaging, may be observed near the major bloodpool organs (heart, major vessels, etc.) at very early imaging times, near the sites of antibody fragment metabolism (kidneys and urinary bladder), and in the intestines and gallbladder. Late imaging may also aid in the evaluation of suspected normal bowel activity.

With regard to imaging of tumor near the kidneys or urinary bladder, it is advisable to have the patient void urine prior to acquisition of imaging data to decrease bladder activity. Careful SPECT imaging near the kidneys and bladder has been helpful.

Porta Hepatis Region
Precise localization of lesions in the region of the porta hepatis has been difficult. Lesions within the porta hepatis region may be present within the liver or the portal nodes. At the time of surgical exploration, such lesions (which if nodal would preclude resection of hepatic metastases) should be explored first.

False-Positive Lesions
There were 52 false-positive lesions observed in 41 patients from a total of 209 surgically explored subjects in the two pivotal trials. Thirty-five of these lesions were in occult disease patients. Of the 52 false-positive lesions, 11 were observed in the liver, 17 in the extra-hepatic abdomen, and 24 in the pelvis. A pathological correlate to the lesions was infrequently documented; these included granulomas in the liver (1 instance), adhesions with or without suture granulomas (4 cases), surgical incision site (1 case). Descriptions of false-positive lesions within the abdomen were suggestive of colonic activity in several cases.

Hot, Rimmed, and Cold Lesions
Only hot or rimmed lesions should be considered as positive for tumor. Lesions that are rimmed or cold usually fill in as hot or rimmed, respectively, with time.[3,4] Often, large lesions, due to poor vascularization or central necrosis, will appear to be cold.

Information for Patients
Murine monoclonal antibodies are foreign proteins, and their administration can induce human anti-mouse antibodies (HAMA). While limited data exist concerning the clinical significance of HAMA, the presence of HAMA may interfere with murine antibody-based immunoassays (e.g., serum CEA assays), could compromise the efficacy of *in vitro* or *in vivo* diagnostic or therapeutic murine antibody-based agents, and may increase the risk of adverse reactions. For these reasons, patients should be informed that the use of this product could affect the future use of other murine-based products, including CEA-Scan®, and they should be advised to discuss prior use of murine-based antibody products with their physicians. (see Heterologous Protein Administration)

Heterologous Protein Administration
The presence of HAMA and human anti-mouse fragment antibodies have been reported in patients before and after receiving CEA-Scan® (<1% of patients develop HAMA to the antibody fragment). While hypersensitivity reactions to CEA-Scan® have not been observed to date, it is possible that such reactions could occur, resulting in anaphylactic shock, serum sickness or death. In addition, patients who have previously received murine monoclonal antibody products are more likely to have HAMA. When considering the use of the CEA-Scan® in patients who have previously received murine antibody-based products, physicians should be aware of the potential for HAMA to increase the risk of allergic reactions and to alter clearance and biodistribution. The quality or sensitivity of the imaging study may then be compromised.

Drug/Laboratory Test Interactions
The presence of HAMA in serum may interfere with two-site murine antibody-based immunoassays, such as assays for CEA and CA-125. If HAMA is known or suspected to be present, the clinical laboratory should be notified that interference may occur.

CEA-Scan® may interfere with serum assays for assessment of serum levels of CEA. Therefore, any determination of serum CEA should be made prior to injection with CEA-Scan®. Assays for serum CEA should not be performed within 7 days after injection of CEA-Scan®.

No data are available on possible drug interactions. Do not mix or administer CEA-Scan® with other products. Sufficient time should be allowed for clearance and radioactive decay before and after the use of this product and other products using radionuclides.

Carcinogenesis, Mutagenesis, Impairment of Fertility
No long-term animal studies have been performed to evaluate the carcinogenic or mutagenic potential of Technetium Tc 99m arcitumomab or to determine its effects on fertility in males or females.

Pregnancy - Category C
Animal reproduction studies have not been conducted with CEA-Scan®. It is also not known whether it can cause fetal harm or affect reproductive capacity when administered to a pregnant woman. CEA-Scan® should be used during pregnancy only if, in the opinion of the physician, the information to be gained justifies the potential risk to the fetus. Examinations using a radiopharmaceutical in a woman of child-bearing capability should be performed during the first 8-10 days following the onset of menses, if possible.

Lactation
Before administering a radioactive medicinal product to a mother who is breast feeding, consideration should be given whether the investigation could be reasonably delayed until the mother has ceased breast feeding. If the use of the product is deemed to be clinically indicated, breast feeding should be interrupted, the expressed milk discarded, and formula feedings substituted for breast feeding.

Pediatric Use
Safety and diagnostic accuracy in persons under 21 years of age have not been established.

ADVERSE REACTIONS
In the patients studied with CEA-Scan®, one patient each developed the following minor self-limiting adverse effects: transient eosinophilia, nausea, bursitis, urticaria, generalized itching, headache, upset stomach and fever. Out of a total of over 500 patients receiving the product to date, there has been a single report of an apparent grand mal epileptic seizure in a severely hypertensive patient that was "possibly related" to CEA-Scan® infusion.

Over 400 patients who have received CEA-Scan® have been evaluated for HAMA by Immunomedics using ELISA methodology. Fewer than 1% of the patients showed an elevation of HAMA levels to fragment after being injected with CEA-Scan®. If the physician suspects HAMA based on an adverse reaction or altered biodistribution pattern, and deems that a HAMA assay is clinically warranted, he/she should telephone Immunomedics, Inc., at 800 327-7211, between 8:30 a.m. and 5:00 p.m. Eastern Standard Time, for information on procedures to be followed for submission of patient serum for assessment of HAMA directed against mouse monoclonal antibody fragments.

OVERDOSAGE
Intravenous infusion of intact IgG and $F(ab')_2$ of IMMU-4 in doses of up to 25 mg or arcitumomab at doses up to 10 mg have not shown any serious adverse reaction.

HOW SUPPLIED
Package containing one (1) vial, with a single-use dose of 1.25 mg lyophilized arcitumomab. The product should not be used beyond the expiration date printed on the label.

REFERENCES

1. Hansen HJ, Jones AL, Sharkey RM, Grebenau R, Blazejewski N, Kunz A, Buckley MJ, Newman ES, Ostella F, Goldenberg DM. Preclinical evaluation of an 'instant' ^{99m}Tc-labeling kit for antibody imaging. *Cancer Res.* 1990;50:794-798.
2. Data on File at Immunomedics, Inc.
3. Moffat FL, Pinsky CM, Hammershaimb L, Petrelli NJ, Patt YZ, Whaley FS, Goldenberg DM, and the Immunomedics Study Group. Clinical utility of external immunoscintigraphy with the IMMU-4 technetium-99m-Fab' antibody fragment in patients undergoing surgery for carcinoma of the colon and rectum. Results of a pivotal, Phase III trial. *J Clin Oncol* 1996;14:2295-2305.
4. Behr T, Becker W, Hanappel E, Goldenberg DM, Wolf F. Targeting of liver metastases of colorectal cancer with IgG, $F(ab')_2$, and Fab' anti-carcinoembryonic antigen antibodies labeled with ^{99m}Tc: the role of metabolism and kinetics. *Cancer Res.* 1995;55:5777s-5785s.

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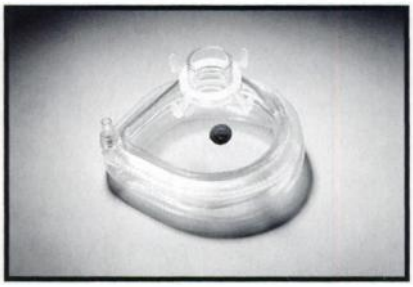

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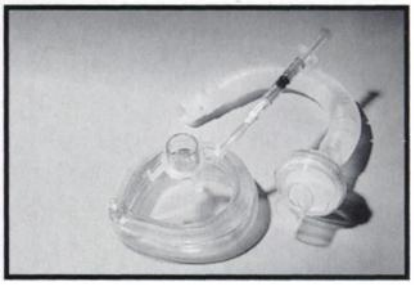

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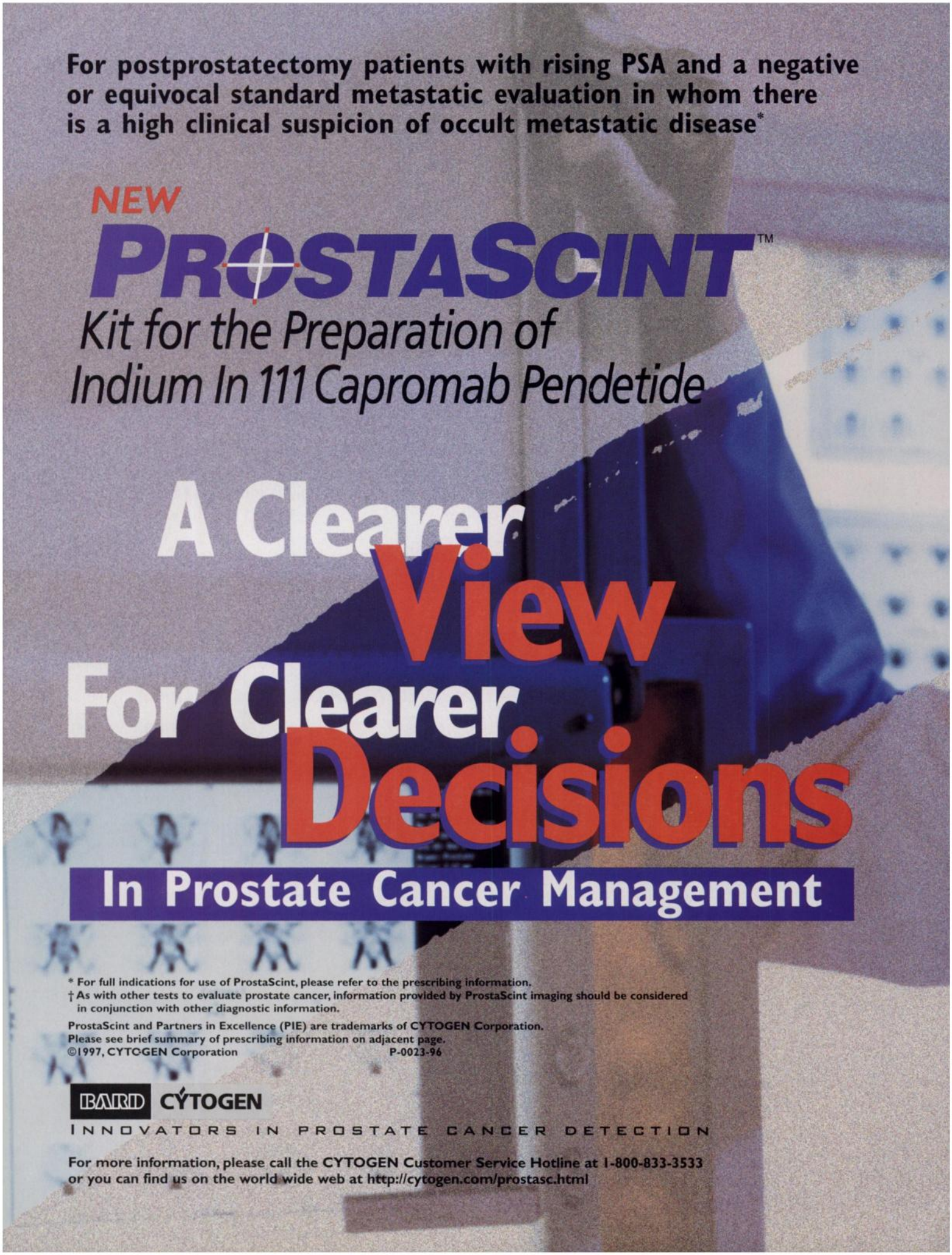
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Please see brief summary of prescribing information on adjacent page.
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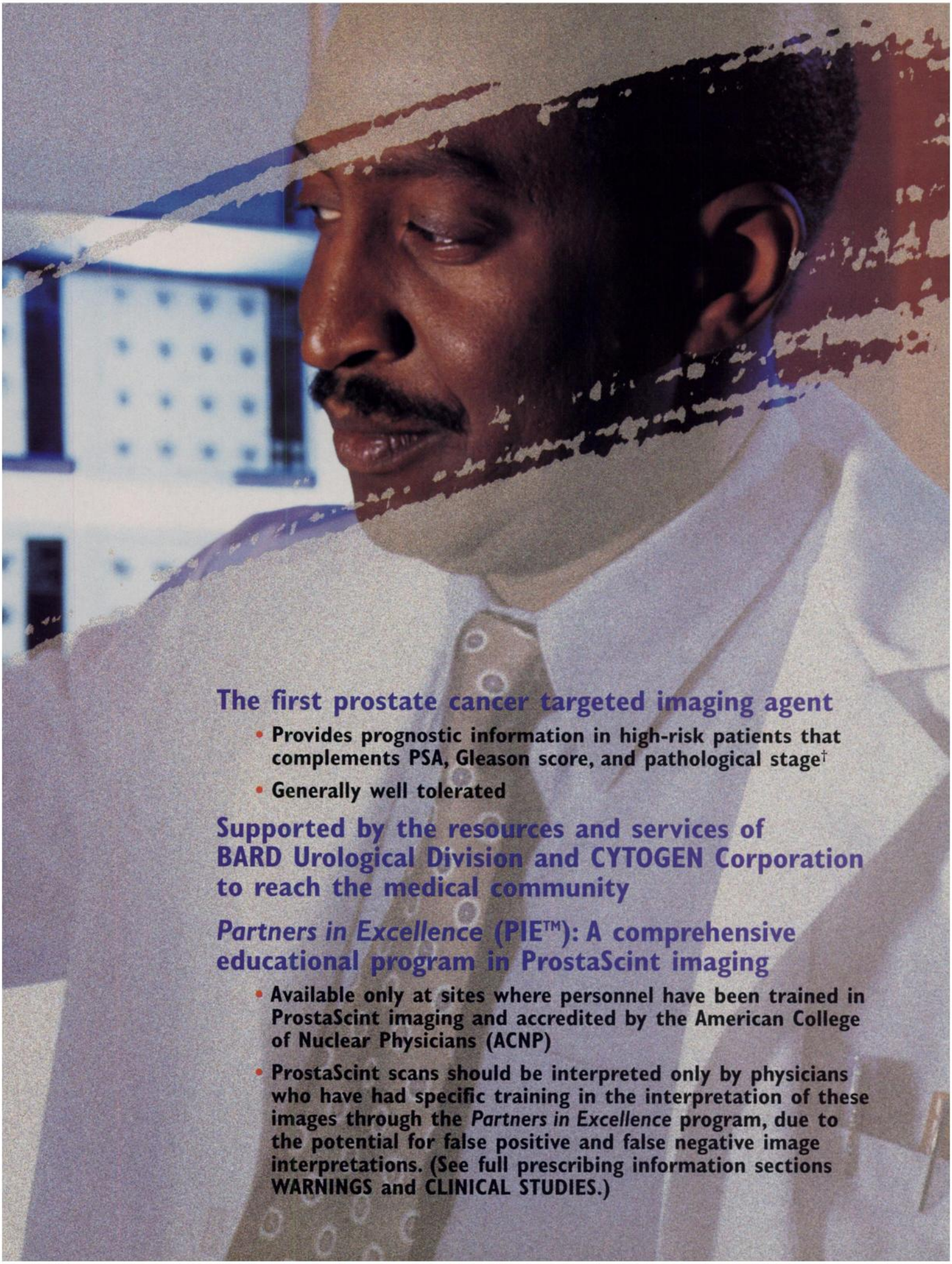

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- Provides prognostic information in high-risk patients that complements PSA, Gleason score, and pathological stage†
- Generally well tolerated

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- Available only at sites where personnel have been trained in ProstaScint imaging and accredited by the American College of Nuclear Physicians (ACNP)
- ProstaScint scans should be interpreted only by physicians who have had specific training in the interpretation of these images through the *Partners in Excellence* program, due to the potential for false positive and false negative image interpretations. (See full prescribing information sections WARNINGS and CLINICAL STUDIES.)

ProstaScint™ Kit (Capromab Pendetide)

Kit for the Preparation of Indium In 111 Capromab Pendetide
For Intravenous Use Only

BRIEF SUMMARY–Consult package insert for full prescribing information

INDICATIONS AND USAGE Indium In 111 ProstaScint™ (Capromab Pendetide) is indicated as a diagnostic imaging agent in newly-diagnosed patients with biopsy-proven prostate cancer, thought to be clinically-localized after standard diagnostic evaluation (e.g. chest x-ray, bone scan, CT scan, or MRI), who are at high-risk for pelvic lymph node metastases (see CLINICAL PHARMACOLOGY, Imaging Performance in Newly-Diagnosed Patients). It is not indicated in patients who are not at high risk. Indium In 111 ProstaScint™ is also indicated as a diagnostic imaging agent in post-prostatectomy patients with a rising PSA and a negative or equivocal standard metastatic evaluation in whom there is a high clinical suspicion of occult metastatic disease. The imaging performance of Indium In 111 ProstaScint™ following radiation therapy has not been studied. The information provided by Indium In 111 ProstaScint™ imaging should be considered in conjunction with other diagnostic information. Scans that are positive for metastatic disease should be confirmed histologically in patients who are otherwise candidates for surgery or radiation therapy unless medically contraindicated. Scans that are negative for metastatic disease should not be used in lieu of histological confirmation. ProstaScint™ is not indicated as a screening tool for carcinoma of the prostate nor for readministration for the purpose of assessment of response to treatment.

CONTRAINDICATIONS Indium In 111 ProstaScint™ should not be used in patients who are hypersensitive to this or any other product of murine origin or to Indium In 111 chloride.

WARNINGS Patient management should not be based on Indium In 111 ProstaScint™ (Capromab Pendetide) scan results without appropriate confirmatory studies since in the pivotal trials, there was a high rate of false positive and false negative image interpretations (See PRECAUTIONS). Indium In 111 ProstaScint™ images should be interpreted only by physicians who have had specific training in Indium In 111 ProstaScint™ image interpretation (see PRECAUTIONS, Imaging Precautions). Allergic reactions, including anaphylaxis, can occur in patients who receive murine antibodies. Although serious reactions of this type have not been observed in clinical trials after Indium In 111 ProstaScint™ administration, medications for the treatment of hypersensitivity reactions should be available during administration of this agent. Indium In 111 ProstaScint™ may induce human anti-mouse antibodies which may interfere with some immunoassays, including those used to assay PSA and digoxin (see PRECAUTIONS, Drug/Laboratory Test Interactions).

PRECAUTIONS

General There were high rates of false positive and false negative image interpretations in the pivotal trials (see Clinical Studies). False positive scan interpretations may result in: (1) inappropriate surgical intervention to confirm scan results; (2) inappropriate denial of curative therapy if results are not confirmed; or (3) inadequate surgical staging if only areas of uptake are sampled. Surgical sampling should not be limited to the areas of positive uptake, unless histologic examination of these areas is diagnostic. Due to the potential for false negative scan interpretations, negative images should not be used in lieu of histologic confirmation. Proper patient preparation is mandatory to obtain optimal images for interpretation (see Imaging Precautions, below). Bone scans are more sensitive than ProstaScint™ (Capromab Pendetide) for the detection of metastases to bone, and Indium In 111 ProstaScint™ should not replace bone scan for the evaluation of skeletal metastases.

Imaging Precautions Radiopharmaceuticals should be used only by physicians and other professionals who are qualified by training and experience in the safe use and handling of radionuclides. Indium In 111 ProstaScint™ images should be interpreted only by physicians who have had specific training in the interpretation of Indium In 111 ProstaScint™ images. There may be Indium In 111 ProstaScint™ clearance and imaging localization observed in the bowel, blood pool, kidneys, and urinary bladder. When obtaining all 72-120 hour planar and Single-Photon Emission Computed Tomography (SPECT) images, the bladder should be catheterized and irrigated. The administration of a cathartic is required the evening before imaging the patient, and a cleansing enema should be administered within an hour prior to each 72-120 hour imaging session. The contents of the kit are not radioactive. However, after the Indium In 111 chloride is added, appropriate shielding of Indium In 111 ProstaScint™ must be maintained. Care should be taken to minimize radiation exposure to patients and medical personnel, consistent with proper hospital and patient management procedures. Each ProstaScint™ kit is a unit of use package. The contents of the kit are to be used only to prepare Indium In 111 ProstaScint™; unlabeled ProstaScint™ should NOT be administered directly to the patient. After radiolabeling with Indium In 111, the entire Indium In 111 ProstaScint™ dose must be administered to the patient for whom it was prescribed. Reducing the dose of Indium In 111, unlabeled ProstaScint™, or Indium In 111 ProstaScint™ may adversely impact imaging results and is not recommended. The components of the kit are sterile and pyrogen-free and contain no preservative. Indium In 111 ProstaScint™ should be used within 8 hours after radiolabeling. It is essential to follow the directions for preparation carefully and to adhere to strict aseptic procedures during preparation of the radiolabeled product.

Information for Patients Murine monoclonal antibodies (MAbs) are foreign proteins, and their administration can induce HAMA. While limited data exist concerning the clinical significance of HAMA, the presence of HAMA may interfere with murine-antibody based immunoassays, or could compromise the efficacy of diagnostic or therapeutic murine antibody-based agents and increase the risk of adverse reactions. For these reasons, patients should be informed that the use of this product could adversely affect the future ability to diagnose recurrence of their tumor, the ability to perform certain other laboratory tests, or to use other murine-based products. Patients should be advised to discuss prior use of murine-antibody based products with their physicians (see Heterologous Protein Administration, below).

Heterologous Protein Administration Indium In 111 ProstaScint™ has been shown to induce HAMA to murine IgG infrequently and with low peak levels after single administration. HAMA levels were detected (at >8 ng/ml) by RIA after single infusion in 8% (20/239) of patients, while 1% of patients had levels greater than 100 ng/ml. In addition, serum HAMA levels were detected by RIA after repeat infusion in 19% (5/27) of the patients. While limited data exist concerning the clinical significance of HAMA, detectable serum levels can alter the clearance and tissue biodistribution of MAbs. The development of persistently elevated serum HAMA levels could compromise the efficacy of diagnostic or therapeutic murine antibody-based agents. In repeat administration trials, 93% (65/70) of the evaluable repeat infusions were associated with normal tissue distribution of the MAb conjugate. Pre-infusion serum HAMA levels were generally not predictive of altered distribution. When considering the administration of Indium In 111 ProstaScint™ to patients who have previously received other murine antibody-based products, physicians should be aware of the potential for assay interference and increased clearance and altered biodistribution, which may interfere with the quality or sensitivity of the imaging study. Prior to administration of murine antibodies, including Indium In 111 ProstaScint™, the physician should review the patient history to determine whether the patient has previously received such products.

Drug Interactions The effect of surgical and/or medical androgen ablation on the imaging performance of Indium In 111 ProstaScint™ has not been studied. Preliminary data suggest hormone ablation may increase PSMA expression, with concurrent decrease in tumor expression of PSA.[1] The use of ProstaScint™ in this patient population cannot be recommended at this time.

Drug/Laboratory Test Interactions The presence of HAMA in serum as a result of ProstaScint™ may interfere with some antibody-based immunoassays (such as PSA and digoxin). When present, this interference generally results in falsely high values. When following PSA levels, assay methods resistant to HAMA interference should be utilized. PSA assays which were found to be resistant to HAMA interference were Hybritech Tandem-R and Abbott IMX. When patients have received Indium In 111 ProstaScint™, the clinical laboratory should be notified to take appropriate measures to avoid interference by HAMA with clinical laboratory testing procedures. These methods include the use of non-murine-based immunoassays, HAMA removal by adsorption, or sample pre-treatment to block HAMA activity.

Carcinogenesis, Mutagenesis, Impairment of Fertility Long-term animal studies have not been performed to evaluate the carcinogenic or mutagenic potential of Indium In 111 ProstaScint™ or to evaluate its effect on fertility.

Pregnancy ProstaScint™ is not indicated for use in women.

Nursing Mothers and/or Lactating Women ProstaScint™ is not indicated for use in women.

Pediatric Use The safety and effectiveness of Indium In 111 ProstaScint™ in pediatric patients have not been established. ProstaScint™ is not indicated for use in children.

ADVERSE REACTIONS ProstaScint™ (Capromab Pendetide) was generally well tolerated in the clinical trials. After administration of 529 single doses of Indium In 111 ProstaScint™, adverse reactions were observed in 4% of patients. The most commonly reported adverse reactions were increases in bilirubin, hypotension, and hypertension, which occurred in 1% of patients. Elevated liver enzymes and injection site reactions occurred in slightly less than 1% of patients. Other adverse reactions, listed in order of decreasing frequency, were: pruritus, fever, rash, headache, myalgia, asthenia, burning sensation in thigh, shortness of breath, and alteration of taste. Most adverse reactions were mild and readily reversible. Data from repeat administration in 61 patients revealed a similar incidence of adverse reactions (5%). No deaths were attributable to Indium In 111 ProstaScint™ administration.

REFERENCE 1. Wright, GL, Jr; et al. Expression of Prostate-Specific Membrane Antigen in Normal, Benign, and Malignant Prostate Tissues. *Urol Oncol.* 1995; 1:18-28.

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Scientific Agenda

Patients With Stable Symptoms	**Ami E. Iskandrian, MD** Philadelphia, Pennsylvania, USA
Patients After Acute Myocardial Infarction	**Mario Verani, MD** Houston, Texas, USA
Patients Before Major Noncardiac Surgery	**Jeffrey Leppo, MD** Worcester, Massachusetts, USA
Stress Modalities in Echocardiography	**Eugenio Picano, MD** Pisa, Italy
Stress Modalities in Nuclear Cardiology	**Raymond Taillefer, MD** Montreal, Canada
Pharmacoeconomic Impact	**Leslee Shaw, PhD** Durham, North Carolina, USA

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Dept. MD04
c/o Gardiner-Caldwell SynerMed
75A Lackawanna Avenue
Parsippany, NJ 07054-9497

Telephone: (908) 832-4120

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Pharmacologic Stress Testing - Emerging Role in Patient Management and Health Economics

Tuesday, April 8, 1997, Florence, Italy
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SNM
44TH ANNUAL MEETING
Critical Dates

Item		Due Date
ABSTRACT FORMS		
Scientific Papers	October Issue JNM	1/9/97
Scientific Exhibits	October Issue JNM	1/9/97
REGISTRATION FORM	Contact: Dept. Meeting Services	4/28/97
HOUSING FORM	Contact: Dept. Meeting Services	5/2/97

DON'T FORGET THE MID-WINTER MEETING IS IN PALM SPRINGS, CALIFORNIA

DATE: February 5-11, 1997

LOCATION: The Palm Springs Riviera Resort and Racquet Club

EDUCATION PROGRAM SPONSOR: The Computer and Instrumentation Council

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ANNOUNCING THE 1997 NATIONAL ELECTION FOR THE SOCIETY OF NUCLEAR MEDICINE (SNM)

The SNM Committee on Nominations presents the following candidates endorsed by the SNM House of Delegates at the 1997 Mid-Winter Meeting:

VICE PRESIDENT-ELECT CANDIDATES:

Conrad E. Nagle, M.D. - Central Chapter
Robert F. Carretta, M.D. - Northern California Chapter

Vice President-Elect for 1997-1998
President-Elect for 1998-1999
President for 1999-2000

DELEGATES-AT-LARGE CANDIDATES (four vacancies available):

Robert W. Burt, M.D. - Central Chapter
Jeffry A. Siegel, Ph.D. - Greater New York Chapter
Madhukar (Mathew) Thakur, Ph.D. - Greater New York Chapter
James Seabold, M.D. - Missouri Valley Chapter
Kevin J. Donohoe, M.D. - New England Chapter
Brian Eisenberg, M.D. - Pacific Northwest Chapter
Peter S. Conti, M.D. - Southern California Chapter
Stanley L. Mills, M.D., Ph.D. - Southwestern Chapter

The following Elected Chapter Delegates due to underrepresentation were certified by the Committee on Nominations and approved by the SNM House of Delegates:

Donald S. Schauwecker, Ph.D., M.D. - Central Chapter
Arnold Strashun, M.D. - Greater New York Chapter
Darrel W. McIndoe, M.D. - Mideastern Chapter

LOOK FOR YOUR BALLOTS TO ARRIVE MIDDLE TO LATE MARCH.* DON'T FORGET TO VOTE!

*SNM Members eligible to vote in the annual election include: Full Members, Associate Members, Member Emeritus and Associate Member Emeritus. SNM Members that do not have voting privileges include: Technologist Members, Affiliate Members, Institutions, Honorary Members, In-Training.

Mid-Eastern Chapter of the Society of Nuclear Medicine

27th Annual Meeting

"Pits and Pearls of Nuclear Medicine"

This meeting will be held on Friday, Saturday and Sunday morning April 18, 19 and 20, 1997 at the Uniformed Services, University of Health Sciences, Jones Bridge Road, Bethesda, Maryland.

The topics for this meeting will include:

1. Assessment of the clinical bench mark data on reimbursement, incentives, management perspectives and cost in Nuclear Medicine.
2. Practical aspects of Nuclear Oncology and Nuclear Cardiology for Radiologists, Clinical Pitfalls in Bone Scan Interpretation and WBC Leukocyte Imaging, Brain Perfusion Scans and Urological Imaging.
3. Nuclear Radiology quiz with proven cases (with prize awards).

Our speakers will be Drs. Edward Coleman, Ronald Neumann, Naomi Alazraki, Dennis Patton, Douglas Eggil, Ronald Van Heertum, James Tatum, Richard Holmes, Kenneth McKusick, Eduard Kotlyarov and Mr. Donald Kooy

The Technologist program will be announced at a later time.

The Society of Nuclear Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing education for physicians.

The Society of Nuclear Medicine designates this educational activity for up to 15 credit hours in Category I credits towards the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

For information and registration, contact the Chapter Administrator, Richard F. Gramm at 410-465-8323 (voice or fax).

Eduard V. Kotlyarov, MD, PhD, Vice-President, Chairman Program Committee, Mid-Eastern Chapter, Society of Nuclear Medicine

DuPont Pharma Nuclear Oncology

Deadline extended to April 15, 1997!

Research Fellowship

The Society of Nuclear Medicine (SNM) Awards Committee announces that a fellowship for $10,000 is available for July 1, 1997.

The objectives of this fellowship are to (1) Encourage physicians to enter the field of Nuclear Oncology and (2) Support clinical research in the area of Technetium Tc 99m labeled compounds for breast imaging as a complement to mammography. Funds can be used to support the research and/or salary of the investigator. Preference will be given to those new to the field of Nuclear Oncology. The Award will be announced at the next Annual SNM Meeting, June 1997 in San Antonio,Texas.

For more information and an application contact:
Society of Nuclear Medicine
SNM Awards Committee
1850 Samuel Morse Dr.
Reston, VA 20190-5316
Phone: (703) 708-9000/ Fax: (703) 708-9015

Position Available

Nuclear Medicine Physician

Midwest 5 member Pathology/Nuclear Medicine Group has a full-time position opening for a well trained Board Certified Nuclear Physician with good interpretive and communicative skills. Prefer experienced candidate with pathology or internal medicine background. Well established, active department with state-of-the-art equipment and computer performing a complete range of studies for tertiary care hospital system and 70+ physician group. Reply with C.V. and letter of interest to: Society of Nuclear Medicine, Box #301-97, 1850 Samuel Morse Drive, Reston, VA 20190-5316.

Postdoctoral Fellowship in PET/SPECT/fMRI Imaging

Unique opportunity for postdoctoral training in functional imaging research. Emphasis on neuropsychiatric, psychopharmacologic, oncology imaging and qualification techniques. Excellent mix of clinical and basic research. Opportunity for fMRI/PET correlation. MD and clinical credentials required. May start as early as May/June 1997. Applications to: Dean F. Wong, MD, PhD, Johns Hopkins Medical Institute, Radiology-JHOC Bldg., Room 3245, 601 N. Caroline Street, Baltimore, MD 21287-0807. E-mail: dfwong@rad.jhu.edu.

Christ Hospital

ACGME Accredited
Two-Year Nuclear Medicine Residency

Two PGY-II positions available for two-year nuclear medicine residency the The Christ Hospital in Cincinnati, Ohio. The Christ Hospital, one of the country's most prestigious private institutions, is affiliated with University of Cincinnati Hospital. State-of-the-art equipment includes: one dual-head whole-body planar scanner, two triple-head SPECT scanners, two dual-head SPECT scanners, one single-head SPECT scanner, one multi-crystal cardiac first-pass camera and a Positron Emission Tomography scanner and cyclotron. The experience will include cardiac and non-cardiac clinical nuclear medicine, radiopharmacy, radioimmunoassay, physics, mathematics and radiation protection. Extensive lectures and teaching conferences are pre-planned and the faculty to resident ration is 1:1. Our department, which includes 16 technical staff, performs well over 15,000 imaging procedures annually. Extensive academic support, library resources and the opportunity for research exists. Salary and benefits are highly competitive. Applicants must have at least one year of clinical experience in ACGME approved program. To apply, send/fax complete CV with two letters of recommendation to Stephen J. Pomeranz, MD, Director of Advanced Imaging, c/o Nuclear Medicine Residency Coordinator, 2139 Auburn Ave., Cincinnati, Ohio 45219. Telephone: 513-369-1146, Fax: 513-369-8414.

The Christ Hospital is an equal opportunity employer.

Nuclear Medicine Instructor

Hillsborough Community College, a multi-campus educational institution, located in west-central Florida, invites applications for the position of Nuclear Medicine Instructor for the HCC campus at Dale Mabry.

Qualified applicants are required to have an associate degree in nuclear medicine technology and a baccalaureate degree in nuclear medicine or a related field from a regionally accredited college or university plus a minimum of two (2) years of post-graduate professional experience in the field. Preference will be given to candidates that possess a maters degree in nuclear medicine or a closely related discipline. The selected candidate must be credentialed as a nuclear medicine technologist by the AART and/or NMTCB. Strong preference will be given to the candidates who also certification by the American Board of Science in Nuclear Medicine (ABSNM). Additional certifications in other medical imaging modalities is also desired.

HCC offers a competitive salary and a generous employee benefits program.

To apply: Submit a resume that clearly illustrates attainment of the minimum qualifications, a complete work history, a photocopy of academic transcripts and certifications and the names, addresses and phone number of three (3) professional references before the application deadline. Incomplete resume packets will not be considered.

Application deadline: 4:00 p.m. on April 11, 1997

Hillsborough Community College
Human Resources Office
P.O. Box 31127
Tampa, FL 33631
813-253-7573 (office) • 813-253-7034 (fax)
EOE/ADA/AA Employer

Senior Nuclear Medicine Technologist

Central Maine Medical Center is a 250-bed regional referral, acute care facility. We are part of Central Maine Healthcare Corporation, an integrated delivery system of acute care, long-term care and outpatient facilities, serving more than 200,000 individuals in a 3-county region. Convenient to 4-season recreation and only 1/2 hour from the coast, we have an immediate opening for an experienced Technologist to join our busy department. Qualified candidates will have NMTCB or AART(N) registration, a minimum of 3 years' experience in Nuclear Medicine and demonstrated supervisory experience.

Please send resume to: ***Erin Pendexter, Human Resources, Central Maine Medical Center, P.O. Box 4500, Lewiston, ME 04240; phone (207) 795-2386.***
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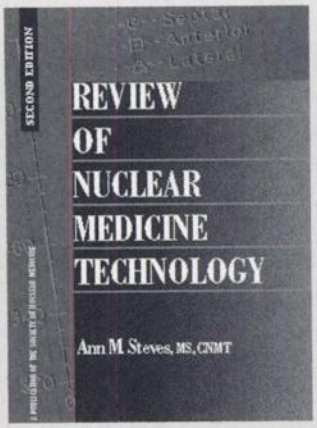
DEFINING THE FIELD...

New Titles in Technology from the Society of Nuclear Medicine

Recently published books from SNM provide authoritative, up-to-date discussions of key subjects in nuclear medicine technology. Adding to your professional library has never been easier.



Review of Nuclear Medicine Technology *Second Edition*

Ann M. Steves, MS, CNMT

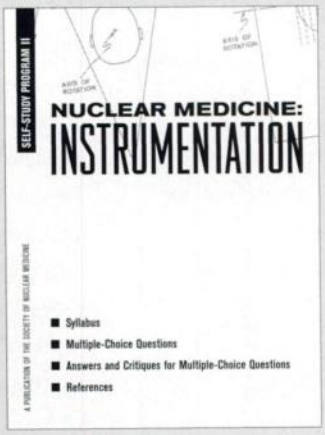
$30.00 members/$40.00 nonmembers. The single most effective study aid you can own for national certification exams. Updated text includes— Latest information on NRC regs; new sample exercises/ questions; r ecently introduced radiopharmaceuticals; expanded nuclear cardiology section.

(Look for the *National Certification Examination Question Book*—the companion text to the *Review of Nuclear Medicine Technology*— coming from SNM in spring 1997. Hundreds of self-testing questions that help students excel on exams.)

SPECT: A Primer, *Third Edition*

Robert J. English, CNMT

$30.00 members/$40.00 nonmembers. Thoroughly updated, basic information essential for working with SPECT in day-to-day clinical settings. Three all-new chapters on acquisition devices, processing devices, clinical indications. New material throughout.



Nuclear Medicine Self-Study Program II: Instrumentation

$45.00 members/$63.00 nonmembers. The second volume in the ongoing nuclear medicine self-assessment series. Includes authoritative and thorough text syllabus, up-to-date references, questions, answers, and critiques.

SNM Patient Pamphlet Series

"*The Benefits of Nuclear Medicine*"; "*Nuclear Medicine Bone Imaging*"; "*Renal Imaging in Children*"; "*Cardiac Nuclear Imaging and Stress-Rest Test*"; "*Brain Imaging*"; "*Liver and Hepatobiliary Imaging*"; "*Guidelines for Patients Receiving Radioiodine Therapy*"

.40 per copy/minimum 50 copies. Designed to promote patient confidence, newly expanded Pamphlet Series includes targeted information on most commonly used procedures. "Guidelines for Patients Receiving Radioiodine Therapy" available in Spanish (look for other pamphlets for Spanish-speaking patients coming spring 1997).

Computer Friendly Books from SNM

These recent SNM books are your best guides to mastering nuclear medicine computer technology.

Computers in Nuclear Medicine: A Practical Approach

Kai Lee, PhD

$30 members/$42 nonmembers. Both an overview of the latest techniques in nuclear medicine technology as well as an authoritative study guide, this practical handbook is a valuable addition to the libraries of students and specialists alike.

Clinical Computers in Nuclear Medicine

Katherine L. Rowell, MS, CNMT, Editor

$35 members/$49 nonmembers. A companion text to *Computers in Nuclear Medicine*, this survey traces the evolution of nuclear medicine computer technology. An essential guide for staff operating computers in clinical settings.

Also of Interest from SNM

Curriculum Guide for Nuclear Medicine Technologists, Second Edition

Wanda M. Mundy and Gregory Passmore

$13.93/student price $9.95 (with proof of student status). A definitive educational reference tool for administrators and educators, coverage targets curricula of hospital-based certificate programs with a structure aimed at national examinations. Easily supplemented for associate and baccalaureate degree programs.

SNM BOOKS AND PAMPHLETS ARE EASY TO ORDER—

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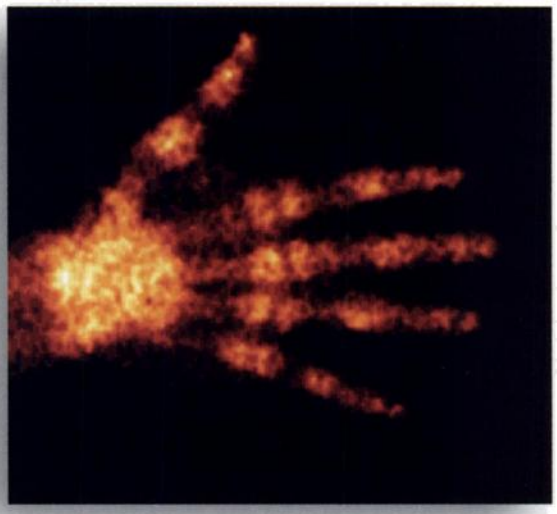

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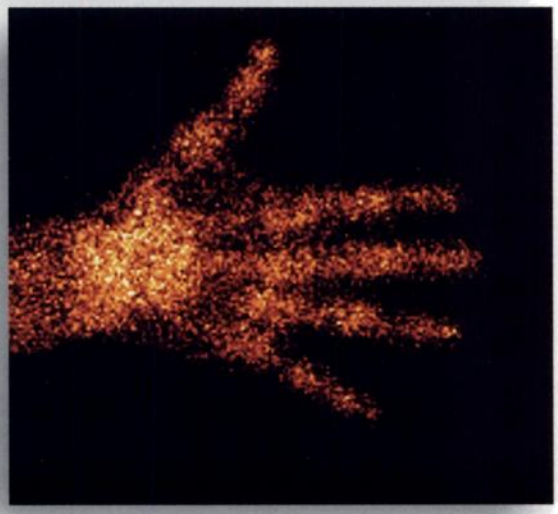

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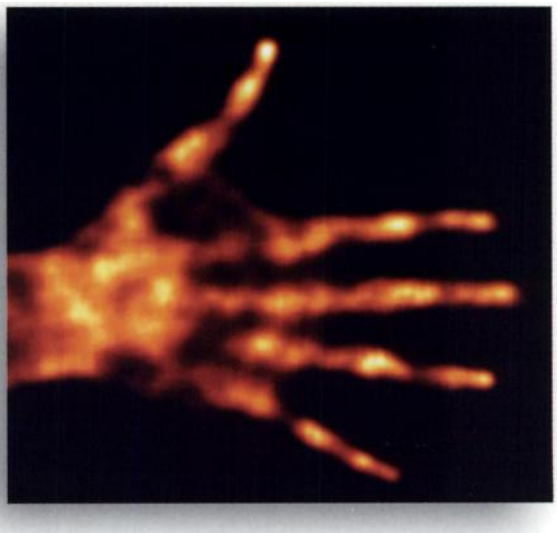

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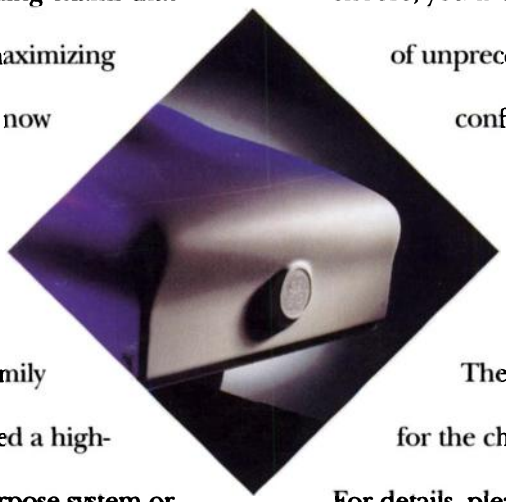
The Nuclear Medicine department of the 21st Century is destined to be fast-paced. Financially challenged. And charged with providing exams that minimize healthcare costs while maximizing patient satisfaction. Fortunately, now there's a revolutionary new family of Nuclear Medicine systems designed to help you meet all these challenges – the Millennium™ family from GE. Whether you need a high-performance general-purpose system or equipment optimized for cardiac, whole-body or small-organ SPECT imaging, there's a Millennium to meet your requirements. Whichever solution you choose, you'll be immediately ushered into an era of unprecedented reliability and diagnostic confidence... an era of unmatched productivity backed by the long-term security of investment that's become the hallmark of GE.



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