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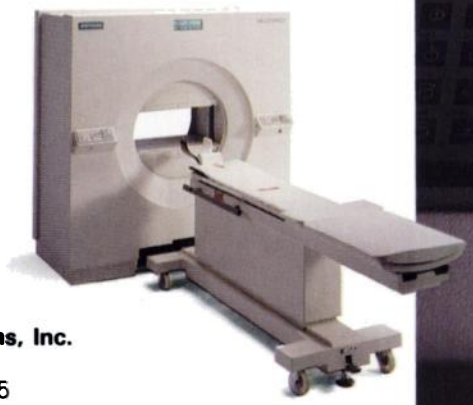

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technology in caring hands

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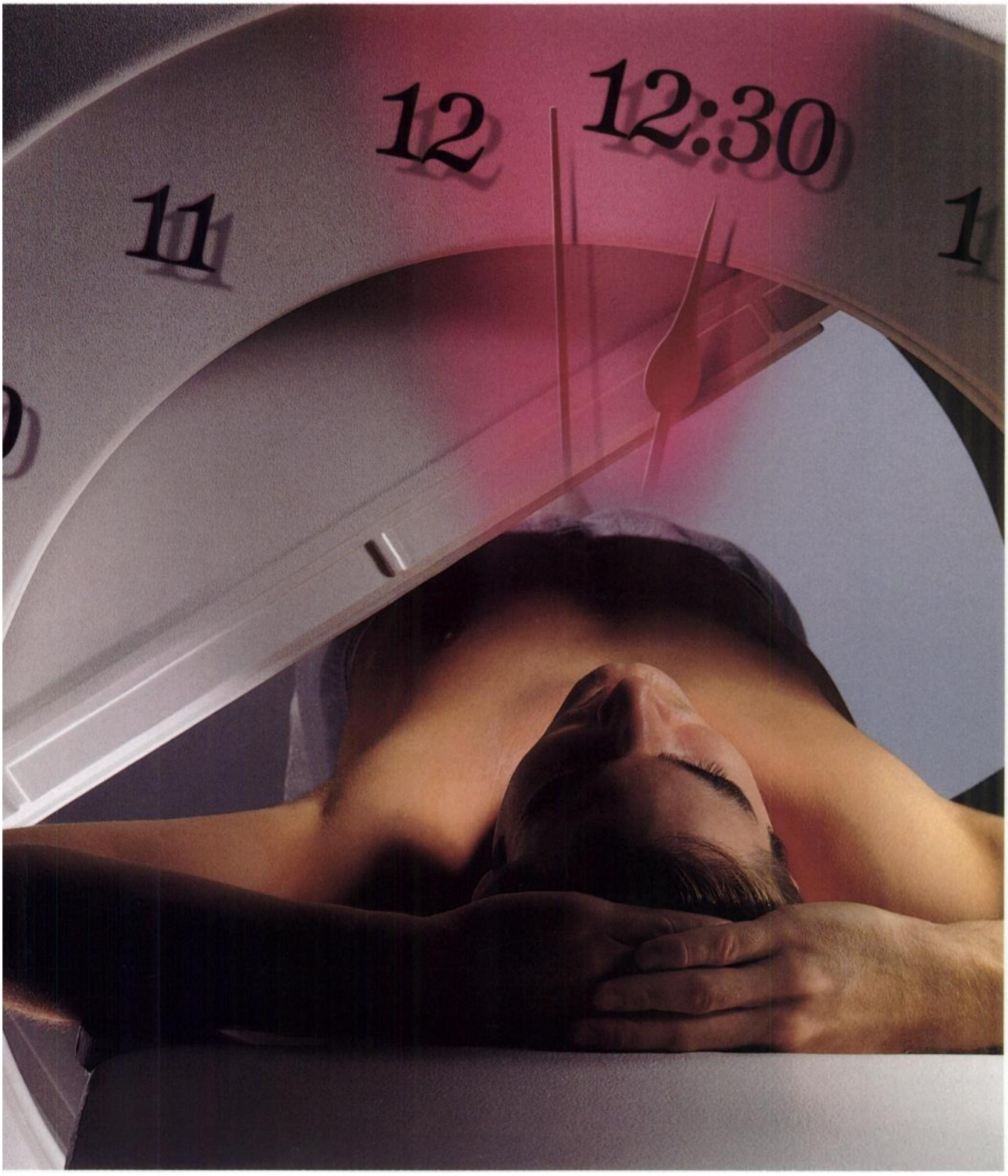
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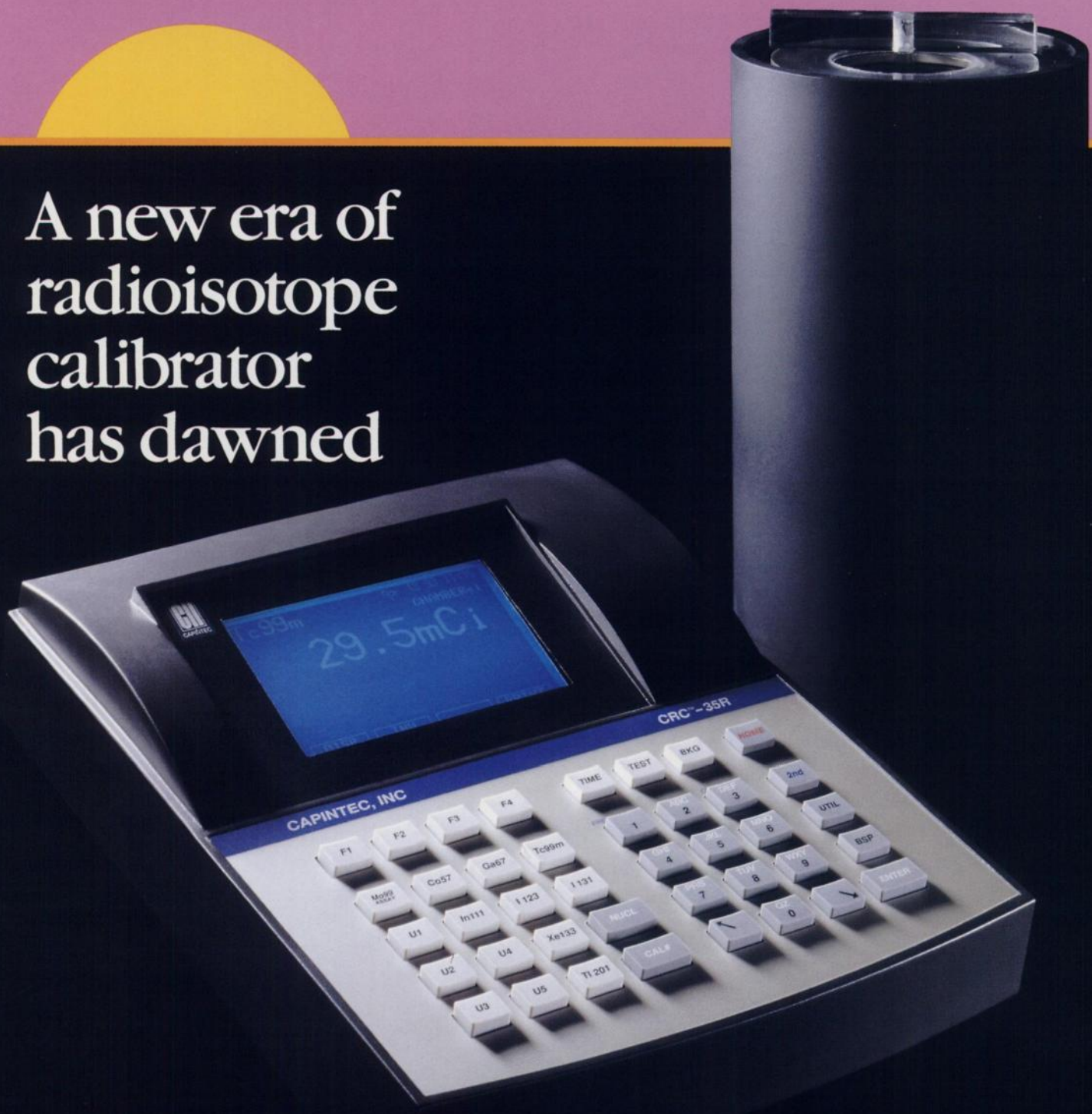
A new era of radioisotope calibrator has dawned



The CAPINTEC CRC-35: a powerful radioisotope dose calibrator which utilizes the latest technology to provide for the individual needs required by generator and unit dose users. With automated inventory control, dose to deliver, daily recordkeeping, radiochemical purity analysis with reports printed on the high speed printer provided. And these are just a few of its many features.

A revolutionary multi-chamber concept of independently active, networked remote chambers with optional display units provides additional flexibility for PET facilities.

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Fax: (201) 825-1336

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Get A Head Start

Celebrate Nuclear Medicine Week
October 3-9, 1993

Nuclear Medicine Week—October 3 through 9—is the prime time to demonstrate pride in your profession — and to make the profession's presence known both among the public and other health care professionals.

Under the sponsorship of the Society of Nuclear Medicine and SNM's Technologist Section, Nuclear Medicine Week offers an excellent opportunity to educate, to stimulate, and to promote the successes of nuclear medicine. This week also gives you a specific time to spotlight your facility to referring physicians, potential patients, and to anyone else in your community who could benefit from nuclear medicine.

To help enhance the visibility of nuclear medicine facilities, Mallinckrodt Medical, in association with the Technologist Section, has designed a striking new poster to mark this year's event. Buttons, stickers, and guidelines are also available to assist you with your celebration. We guarantee that this year's sensational design — carried over on all three items — will draw attention and spur positive comment.

What's more, you'll use the poster, buttons, and sticker as you increase public and professional awareness and add to nuclear medicine's public image.

But don't wait till October...Purchase <u>your</u> posters, buttons, and stickers at the Nuclear Medicine Week booth, located in the reception area of the Toronto Convention Centre.

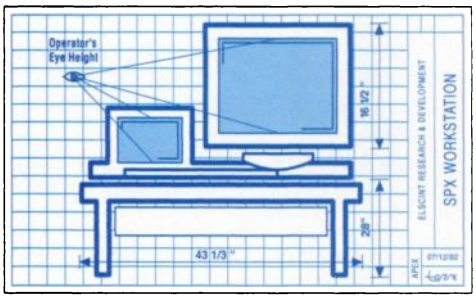
Additional information on prices and on ordering Nuclear Medicine Week items can be obtained by contacting the Society of Nuclear Medicine at **(212)-889-0717.**

Which company is introducing a new line of

7 cameras

4

nuclear imagers with
450% accelerated performance,



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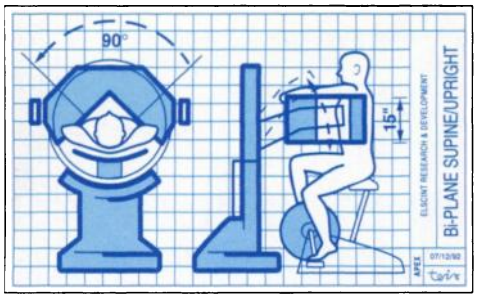
dual-head cameras with
enhanced imaging –
from 30% improved homogeneity to
exceptional 3.2 mm resolution,



and **1**
bi-plane cardiac camera
featuring unique supine-upright
exercise procedures?

- ☐ **Toshiba**
- ☐ **General Electric**
- ☐ **Elscint**
- ☐ **Siemens**
- ☐ **ADAC**
- ☐ **Picker**

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The answer is Elscint.
SNM'93

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If the *point*

of advanced nuclear

camera technology

is higher image

quality...

...why accept a *dated* detector with a poor optical density ratio?

Two classes of detectors are available in nuclear medicine.

In the standard class, the optical density ratio is ≈ 1:40. Meaning there's one photomultiplier tube for every 40 square centimeters of detector crystal.

In the high-performance class, the optical density ratio is below 1:25. Events are more precisely localized, and resolution is increased.

What's surprising is that the standard class is found not only in older systems still in use today, but in single and multi-head systems being *built* today. These systems retain technologies dated from the early 1980s.

In contrast, sophycamera systems deliver optical density ratios as low as 1:20. And that, combined with all the other advanced components of sopha detector technology, results in the finest resolution in the industry.

So when you compare systems, ask whether the detector technology has been upgraded since the last decade. If it's not a sopha system, you're not experiencing the best detector performance available today.

sopha medical

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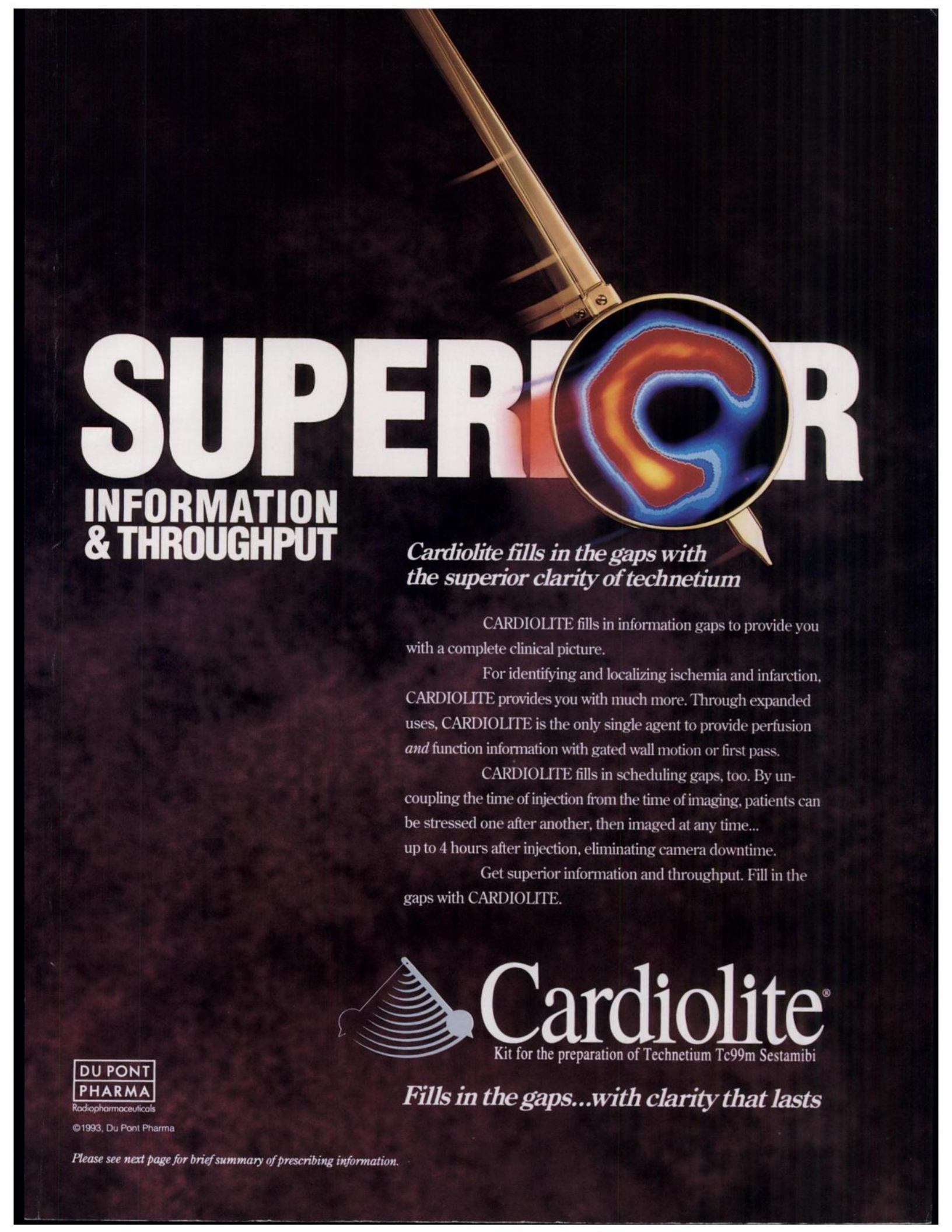
Performance is the point

Call 1-800-47-SOPHA (option 4) for more information on sophycamera optical density and resolution.



Cardiolite fills in the gaps with the superior clarity of technetium

CARDIOLITE fills in information gaps to provide you with a complete clinical picture.

For identifying and localizing ischemia and infarction, CARDIOLITE provides you with much more. Through expanded uses, CARDIOLITE is the only single agent to provide perfusion *and* function information with gated wall motion or first pass.

CARDIOLITE fills in scheduling gaps, too. By uncoupling the time of injection from the time of imaging, patients can be stressed one after another, then imaged at any time... up to 4 hours after injection, eliminating camera downtime.

Get superior information and throughput. Fill in the gaps with CARDIOLITE.

Cardiolite®

Kit for the preparation of Technetium Tc99m Sestamibi

Fills in the gaps...with clarity that lasts

DU PONT PHARMA
Radiopharmaceuticals

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Please see next page for brief summary of prescribing information.

Brief Summary

Cardiolite®

Kit for the preparation of Technetium Tc99m Sestamibi

FOR DIAGNOSTIC USE

DESCRIPTION: Each 5ml vial contains a sterile, non-pyrogenic, lyophilized mixture of:
Tetrakis (2-methoxy isobutyl isonitrile) Copper (I) tetrafluoroborate - 1.0mg
Sodium Citrate Dihydrate - 2.6mg
L-Cysteine Hydrochloride Monohydrate - 1.0mg
Mannitol - 20mg
Stannous Chloride, Dihydrate, minimum ($SnCl_2 \cdot 2H_2O$) - 0.025mg
Stannous Chloride, Dihydrate, ($SnCl_2 \cdot 2H_2O$) - 0.075mg
Tin Chloride (Stannous and Stannic) Dihydrate, maximum (as $SnCl_2 \cdot 2H_2O$) - 0.086mg

Prior to lyophilization the pH is 5.3-5.9. 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 $Tc99m[MIBI]_6^+$ where MIBI is 2-methoxy isobutyl isonitrile.

INDICATIONS AND USAGE: CARDIOLITE, Kit for the preparation of Technetium Tc99m Sestamibi is a myocardial perfusion agent that is useful in the evaluation of ischemic heart disease. CARDIOLITE, Kit for the preparation of Technetium Tc99m Sestamibi is useful in distinguishing normal from abnormal myocardium and in the localization of the abnormality, in patients with suspected myocardial infarction, ischemic heart disease or coronary artery disease. Evaluation of ischemic heart disease or coronary artery disease is accomplished using rest and stress techniques.

CARDIOLITE, Kit for the preparation of Technetium Tc99m Sestamibi, is also useful in the evaluation of myocardial function using the first pass technique.

Rest-exercise imaging with Tc99m Sestamibi in conjunction with other diagnostic information may be used to evaluate ischemic heart disease and its localization.

In clinical trials, using a template consisting of the anterior wall, inferior-posterior wall and isolated apex, localization in the anterior or inferior-posterior wall in patients with suspected angina pectoris or coronary artery disease was shown. Disease localization isolated to the apex has not been established. Tc99m Sestamibi has not been studied or evaluated in other cardiac diseases.

It is usually not possible to differentiate recent from old myocardial infarction or to differentiate 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).

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 metallic or bitter taste immediately after the injection of Technetium Tc99m Sestamibi. A few cases of transient headache, flushing and non-itching rash have also 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 the 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.

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

370-1110MBq (10-30mCi)

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.

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 15-25°C before and after reconstitution.

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

Table 4. Radiation Absorbed Doses from Tc99m Sestamibi

	Estimated Radiation Absorbed Dose			
	REST			
	2.0 hour void		4.8 hour void	
Organ	rads/ 30mCi	mGy/ 1110MBq	rads/ 30mCi	mGy/ 1110MBq
Breasts	0.2	2.0	0.2	1.9
Gallbladder Wall	2.0	20.0	2.0	20.0
Small Intestine	3.0	30.0	3.0	30.0
Upper Large Intestine Wall	5.4	55.5	5.4	55.5
Lower Large Intestine Wall	3.9	40.0	4.2	41.1
Stomach Wall	0.6	6.1	0.6	5.8
Heart Wall	0.5	5.1	0.5	4.9
Kidneys	2.0	20.0	2.0	20.0
Liver	0.6	5.8	0.6	5.7
Lungs	0.3	2.8	0.3	2.7
Bone Surfaces	0.7	6.8	0.7	6.4
Thyroid	0.7	7.0	0.7	6.8
Ovaries	1.5	15.5	1.6	15.5
Testes	0.3	3.4	0.4	3.9
Red Marrow	0.5	5.1	0.5	5.0
Urinary Bladder Wall	2.0	20.0	4.2	41.1
Total Body	0.5	4.8	0.5	4.8
	STRESS			
	2.0 hour void		4.8 hour void	
Organ	rads/ 30mCi	mGy/ 1110MBq	rads/ 30mCi	mGy/ 1110MBq
Breasts	0.2	2.0	0.2	1.8
Gallbladder Wall	2.8	28.9	2.8	27.8
Small Intestine	2.4	24.4	2.4	24.4
Upper Large Intestine Wall	4.5	44.4	4.5	44.4
Lower Large Intestine Wall	3.3	32.2	3.3	32.2
Stomach Wall	0.5	5.3	0.5	5.2
Heart Wall	0.5	5.6	0.5	5.3
Kidneys	1.7	16.7	1.7	16.7
Liver	0.4	4.2	0.4	4.1
Lungs	0.3	2.6	0.2	2.4
Bone Surfaces	0.6	6.2	0.6	6.0
Thyroid	0.3	2.7	0.2	2.4
Ovaries	1.2	12.2	1.3	13.3
Testes	0.3	3.1	0.3	3.4
Red Marrow	0.5	4.6	0.5	4.4
Urinary Bladder Wall	1.5	15.5	3.0	30.0
Total Body	0.4	4.2	0.4	4.2

Radiopharmaceutical Internal Dose Information Center, July 1990, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831, (615) 576-3449.

HOW SUPPLIED: Du Pont Radiopharmaceutical's CARDIOLITE®, Kit for the Preparation of Technetium Tc99m Sestamibi, is supplied as a 5ml vial in kits of two (2), five (5) and thirty (30) vials, sterile and non-pyrogenic.

Prior to lyophilization the pH is between 5.3-5.9. The contents of the vials are lyophilized and stored under nitrogen. Store at 15-25°C before and after reconstitution. Technetium Tc99m Sestamibi contains no preservatives. Included in each two (2) vial kit are one (1) package insert, six (6) vial shield labels and six (6) radiation warning labels. Included in each five (5) vial kit are one (1) package insert, six (6) vial shield labels and six (6) radiation warning labels. Included in each thirty (30) vial kit are one (1) package insert, thirty (30) vial shield labels and thirty (30) radiation warning labels.

The U.S. Nuclear Regulatory Commission has approved this reagent kit for distribution to persons licensed to use byproduct material pursuant to section 35.11 and section 35.200 of Title 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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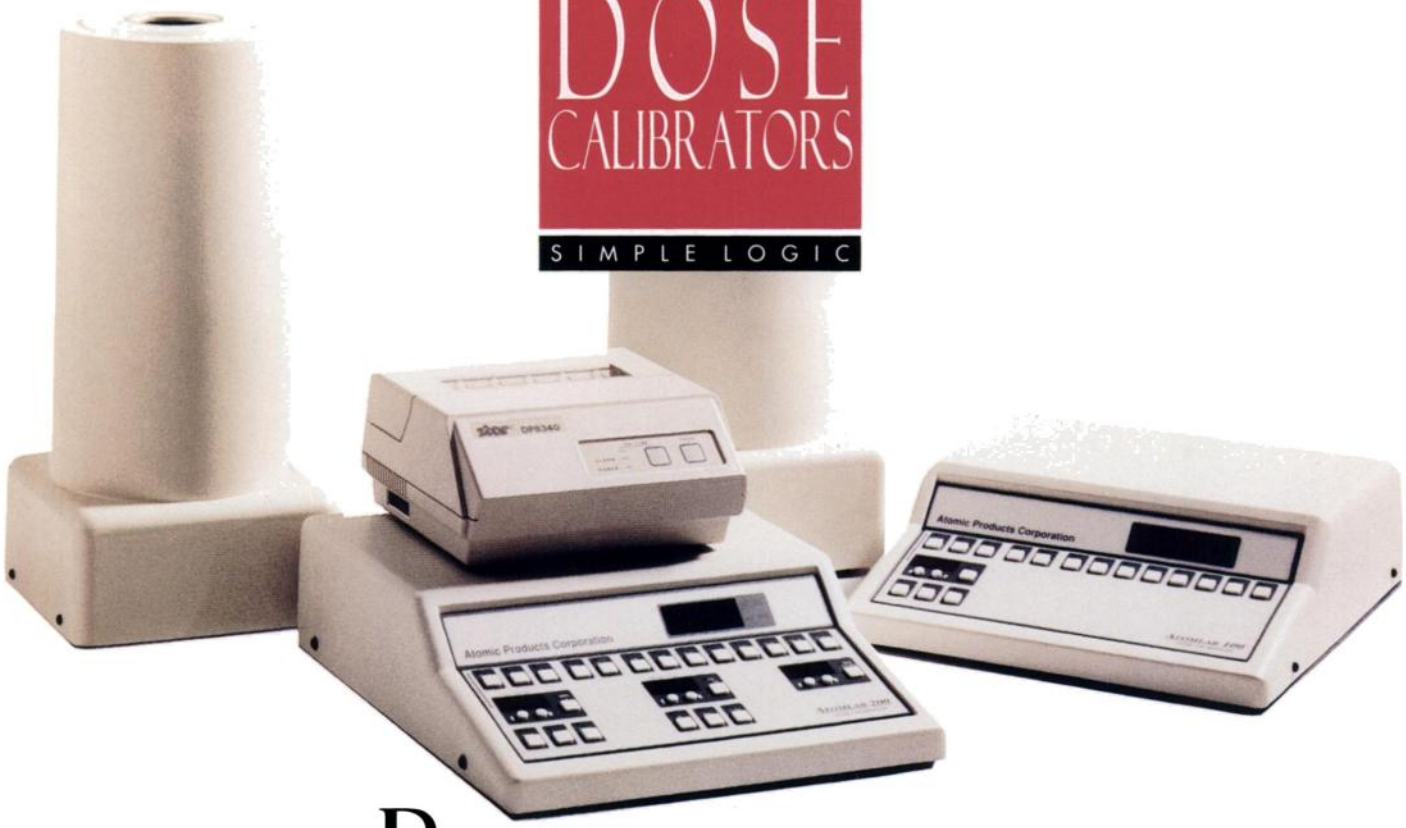

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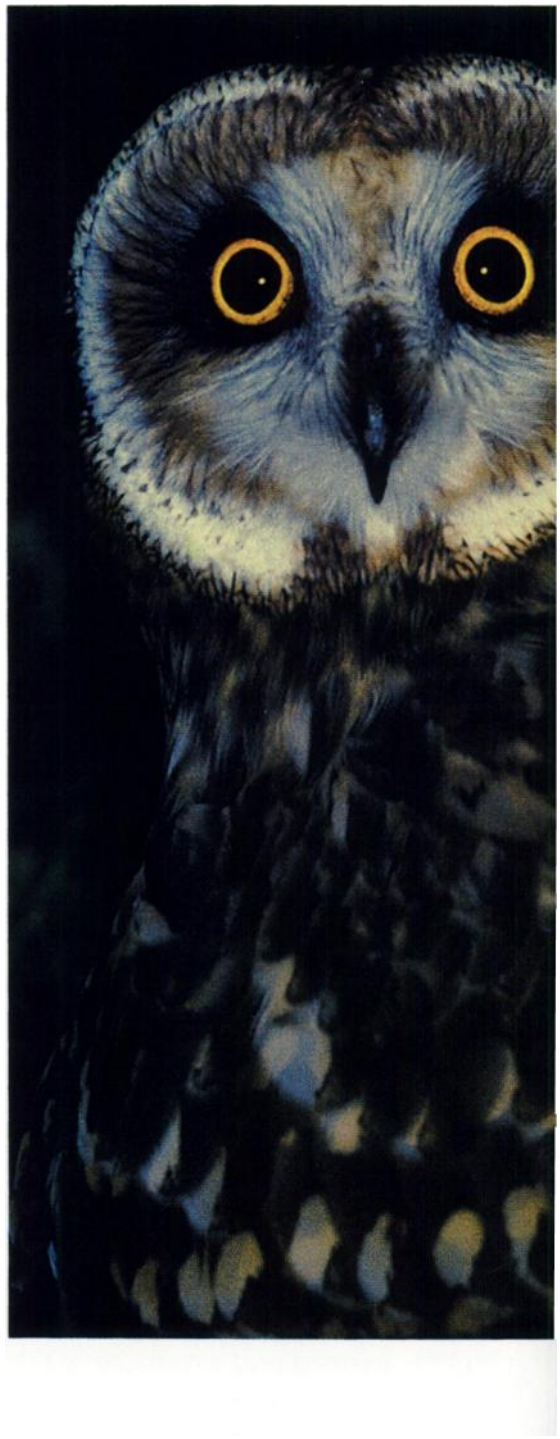
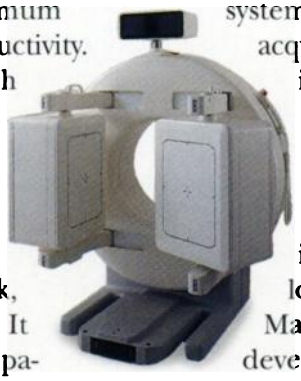


Expanded camera angles. Expanded applications. That's the key to the new Maxxus dual-head imaging system. With its pivoting, externally-mounted detectors, Maxxus gives you just what the name implies: maximum imaging flexibility for maximum departmental productivity.

But there's much more to our versatility story. The movable table, for example, can be lowered to a height of just 22" for quick, easy patient set-up. It can accommodate patients weighing up to 400 lbs. And it can also be detached from the system to allow open access to the detectors for easy scanning of seated or standing patients. These and other features give you the option to choose everything from whole body imaging and SPECT to a broad range of clinical studies. Maxxus is a true general purpose imaging system.



Even the configurations are flexible. Maxxus is available as a totally integrated system with full data acquisition and processing functions. Or it can be configured as a camera-only acquisition system. Both are compatible with the Starlink local area network.

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For details, contact your local Sales Representative by calling 1-800-643-6439.

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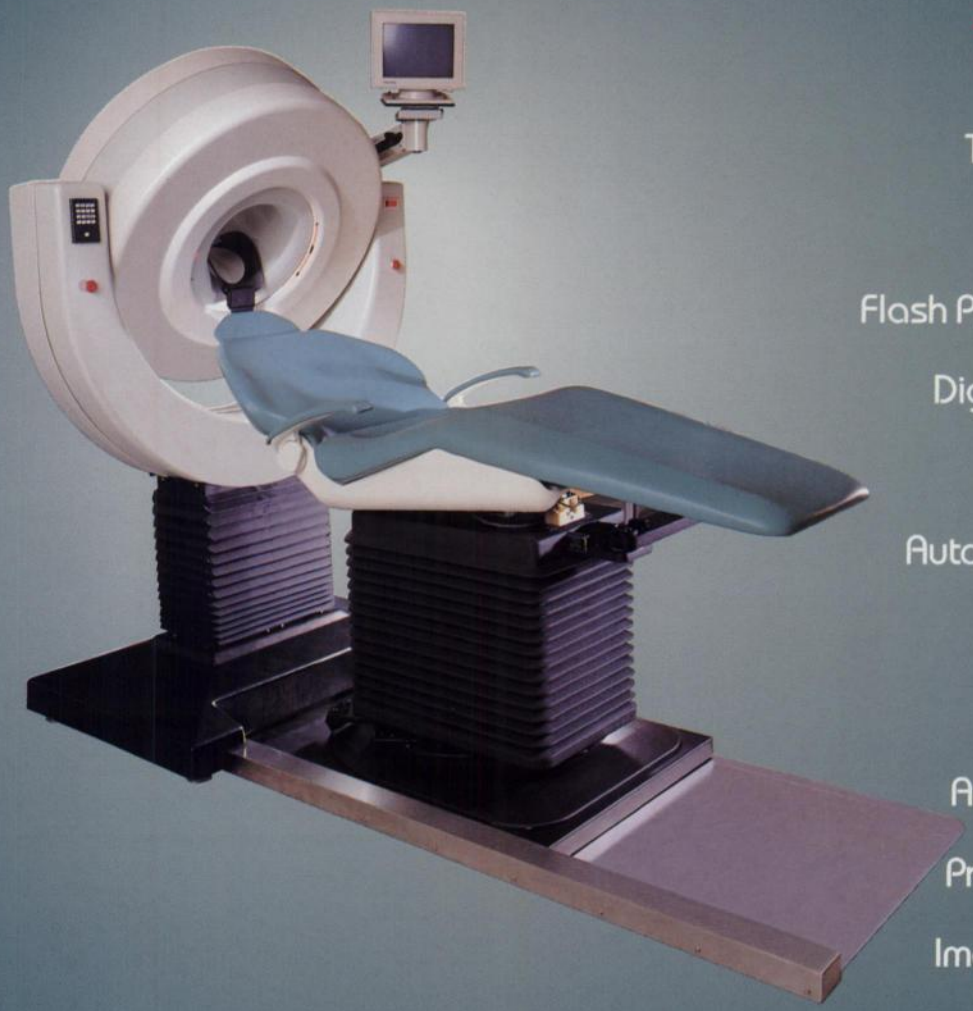

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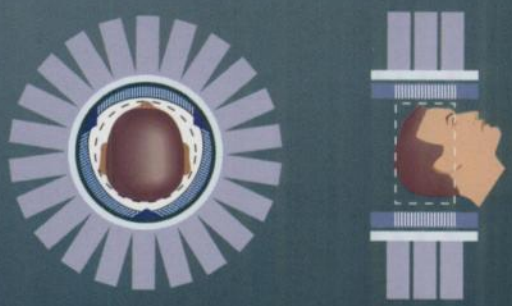

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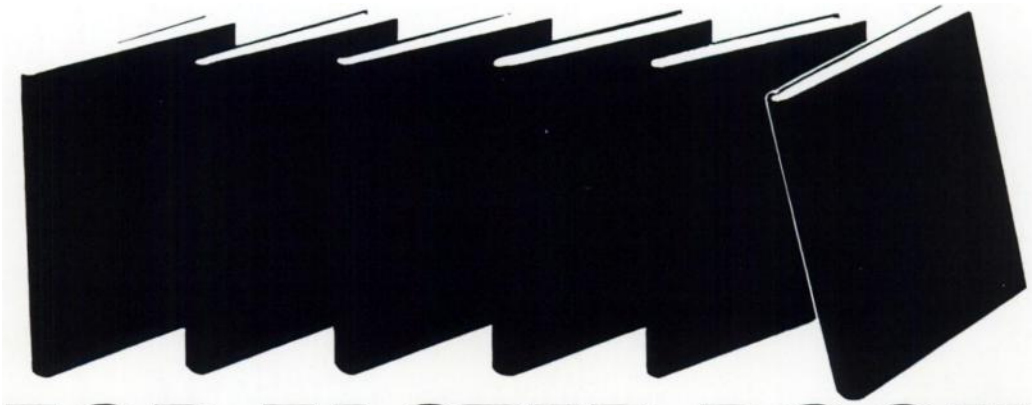

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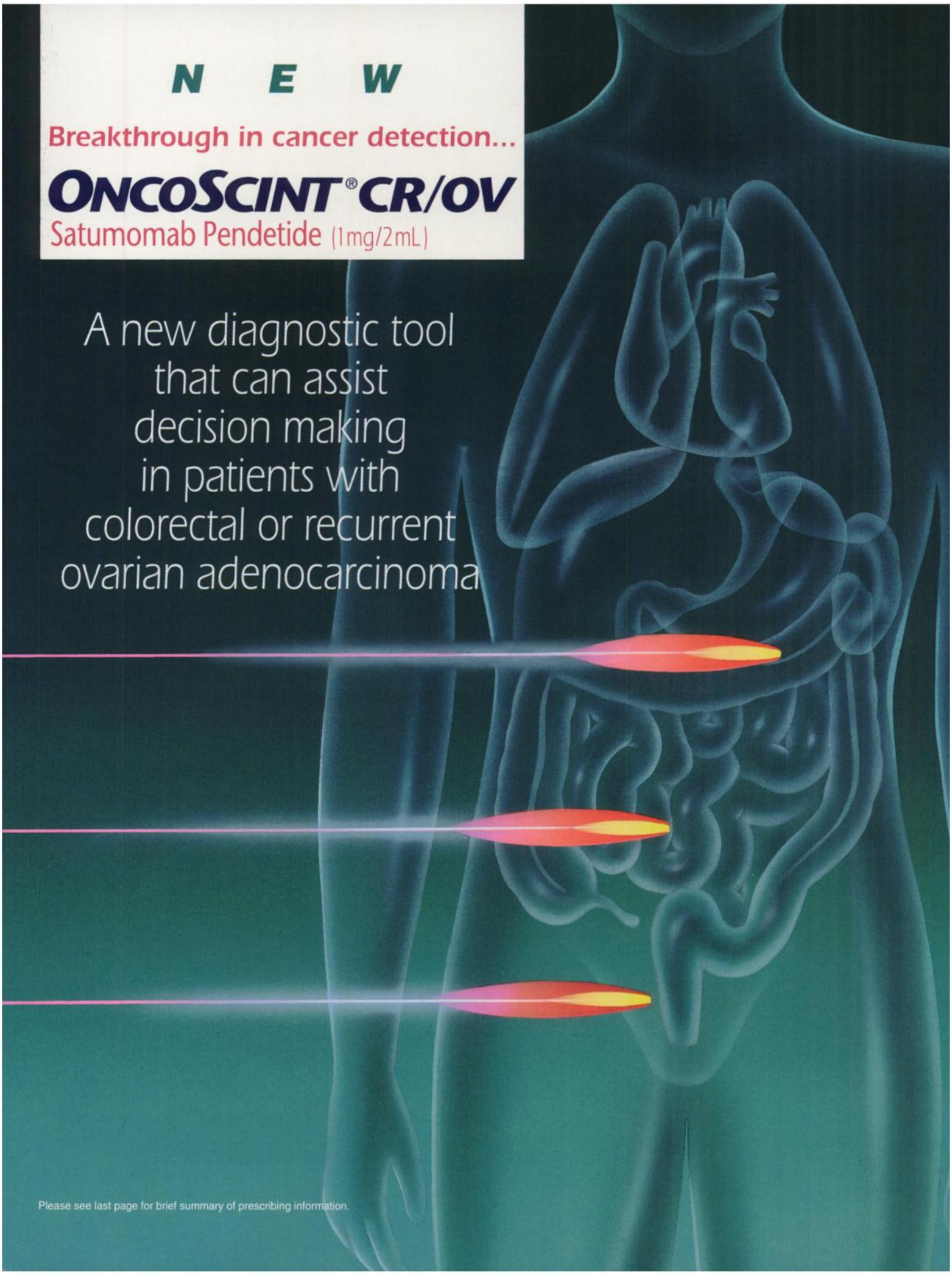

N E W
Breakthrough in cancer detection...
ONCOSCINT® CR/OV
Satumomab Pendetide (1mg/2mL)
A new diagnostic tool
that can assist
decision making
in patients with
colorectal or recurrent
ovarian adenocarcinoma
Please see last page for brief summary of prescribing information.

N E W

OncoScint® CR/OV

Satumomab Pendetide (1mg/2mL)

To enhance decision making in the management of patients

The first monoclonal antibody-based in determining both the location and

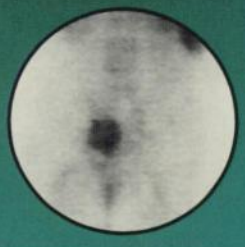
Reveals malignancy with tumor-targeted accuracy—

specifically targets the cell-surface antigen, TAG-72, common to colorectal and ovarian adenocarcinomas,[1,2] making it possible—with the use of existing nuclear medicine equipment—to detect extrahepatic abdominal and pelvic lesions.[3,4]

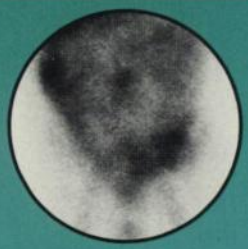
Provides information beyond the scope of standard diagnostic modalities—when interpreted in conjunction with a review of information obtained from other appropriate tests

Found to be beneficial in these difficult situations:

- determining the source of a rising serum tumor marker in patients with an otherwise-negative workup[2,4,5]



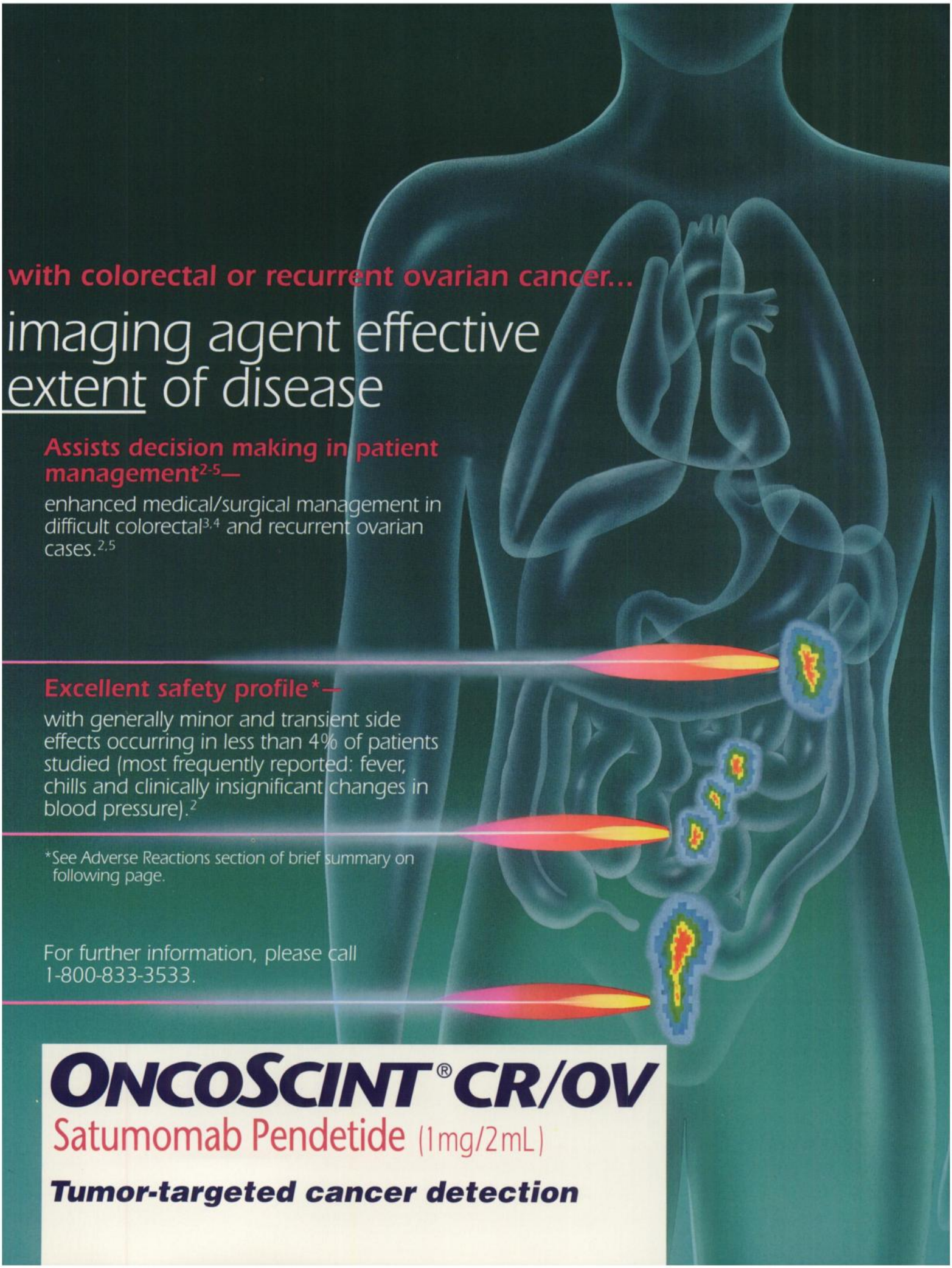
- determining extrahepatic abdominal and pelvic involvement in patients thought to have isolated and resectable recurrence[2,4]



- differentiating disease from postsurgical or postradiation anatomic changes[4]

OncoScint is a registered trademark of CYTOGEN Corporation.

Please see last page for brief summary of prescribing information.



with colorectal or recurrent ovarian cancer...

imaging agent effective extent of disease

Assists decision making in patient management[2-5]—

enhanced medical/surgical management in difficult colorectal[3,4] and recurrent ovarian cases.[2,5]

Excellent safety profile*—

with generally minor and transient side effects occurring in less than 4% of patients studied (most frequently reported: fever, chills and clinically insignificant changes in blood pressure).[2]

*See Adverse Reactions section of brief summary on following page.

For further information, please call 1-800-833-3533.

ONCOSCINT® CR/OV

Satumomab Pendetide (1mg/2mL)

Tumor-targeted cancer detection

OncoScint® CR/OV Kit (satumomab pendetide)

Kit for the Preparation of indium In 111 satumomab pendetide For Intravenous Use Only

Brief summary of prescribing information

INDICATIONS AND USAGE

OncoScint® CR/OV-In (indium In 111 satumomab pendetide) is a diagnostic imaging agent that is indicated for determining the extent and location of extrahepatic malignant disease in patients with known colorectal or ovarian cancer. Clinical studies suggest that this imaging agent should be used after completion of standard diagnostic tests when additional information regarding disease extent could aid in patient management. The diagnostic images acquired with OncoScint® CR/OV-In should be interpreted in conjunction with a review of information obtained from other appropriate tests.

OncoScint® CR/OV-In is not indicated as a screening test for ovarian or colorectal cancer.

Administration of OncoScint® CR/OV-In may result in falsely elevated values from *in vitro* immunoassays, including tests for carcinoembryonic antigen (CEA) and CA 125. Because this interference may persist for months, the clinical laboratory should investigate for assay interference in patients who develop elevated CEA or CA 125 subsequent to imaging with OncoScint® CR/OV-In (see *Drug/Laboratory Test Interactions*).

Due to insufficient safety and efficacy data regarding repeat administration of this product, this imaging agent is limited to single use only.

CONTRAINDICATIONS

OncoScint® CR/OV-In (indium In 111 satumomab pendetide) 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

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 OncoScint® CR/OV-In (indium In 111 satumomab pendetide) administration, medications for the treatment of hypersensitivity reactions should be available during administration of this agent.

PRECAUTIONS

General The components of the kit are sterile and pyrogen free and contain no preservative. OncoScint® CR/OV-In (indium In 111 satumomab pendetide) 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.

Each OncoScint® CR/OV kit is a unit of use package. The contents of the kit are to be used only to prepare OncoScint® CR/OV-In; unlabeled OncoScint® CR/OV should NOT be administered directly to the patient. After radiolabeling with indium-111, the entire OncoScint® CR/OV-In dose must be administered to the patient for whom it was prescribed. **Reducing the dose of either component may adversely impact imaging results, and, therefore, is not recommended.**

The contents of the kit are not radioactive. However, after the indium In 111 chloride is added, appropriate shielding of OncoScint® CR/OV-In must be maintained. Care should be taken to minimize radiation exposure to patients and medical personnel, consistent with proper hospital and patient management procedures.

In addition, 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.

Information for Patients Murine monoclonal antibodies are foreign proteins, and their administration can induce human anti-murine antibodies (HAMA). While limited data exist concerning the clinical significance of HAMA, the presence of HAMA may interfere with murine-antibody based immunoassays, could compromise the efficacy of 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 OncoScint® CR/OV-In, and should be advised to discuss prior use of murine-antibody based products with their physicians (see *Heterologous Protein Administration*).

Heterologous Protein Administration Murine monoclonal antibodies (MAbs) are heterologous proteins, and their administration can induce human anti-murine antibodies (HAMA).

OncoScint® CR/OV-In has been shown to induce HAMA to murine IgG after single administration in about 40% of patients in tumor imaging trials. HAMA levels became negative (undetectable or < 400 ng/mL) in approximately half of such patients at 4 to 12 months after infusion.

While limited data exist concerning the clinical significance of HAMA, detectable HAMA levels can alter the clearance and tissue biodistribution of MAbs. In patients who develop persistently elevated serum HAMA levels, the efficacy of diagnostic or therapeutic murine antibody-based agents may be compromised.

When considering the administration of OncoScint® CR/OV-In to patients who have previously received murine antibody-based products, physicians should be aware of the potential for HAMA to alter clearance and biodistribution. The quality or sensitivity of the imaging study may be compromised. Therefore, prior to administration of murine antibodies, including OncoScint® CR/OV-In, the physician should review the patient history to determine whether the patient has previously received such products.

Preliminary data are available from repeat-administration studies of OncoScint® CR/OV-In in 69 patients who have received 105 repeat doses. However, there are insufficient data to determine the safety and efficacy of this product after repeat administration (see ADVERSE REACTIONS).

Drug/Laboratory Test Interactions: The presence of HAMA in serum may interfere with two-site murine antibody-based immunoassays, including assays for carcinoembryonic antigen (CEA) and CA 125. When present, this interference generally results in falsely high values. If HAMA is known or suspected to be present, the clinical laboratory should be notified and appropriate measures taken to avoid this interference. These methods include the use of non-murine immunoassays, or HAMA removal by adsorption, blocking, or heat inactivation.

Carcinogenesis, Mutagenesis, Impairment of Fertility Long-term animal studies have not been performed to evaluate the carcinogenic or mutagenic potential of OncoScint® CR/OV-In or to evaluate its effect on fertility in males or females.

Pregnancy Category C Animal reproduction studies have not been conducted with OncoScint® CR/OV-In. It is also not known whether OncoScint® CR/OV-In can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. OncoScint® CR/OV-In should not be administered to a pregnant woman unless, in the opinion of the physician, the information to be gained outweighs the potential risks. MAb B72.3 has been shown to react with fetal gastrointestinal tissues.

In general, examinations using radiopharmaceuticals in women of childbearing potential should be performed during the first few days (approximately 10) following the onset of menses.

Nursing Mothers and/or Lactating Women It is not known whether OncoScint® CR/OV-In is excreted in human milk and, if so, for how long. Because many drugs are excreted in human milk, caution should be exercised when OncoScint® CR/OV-In is administered to a nursing woman. OncoScint® CR/OV-In has not been administered to lactating females and therefore should not be administered to nursing mothers unless, in the opinion of the physician, the information to be gained outweighs the potential risk. In such cases, formula feedings should be substituted for breast feedings.

Pediatric Use The safety and effectiveness of OncoScint® CR/OV-In in children have not been established.

Now, to assist decision making in the management of patients with colorectal or recurrent ovarian cancer...

NEW ONCOSCINT® CR/OV

Satumomab Pendetide (1mg/2mL)

Effective in determining both the location and extent of disease

Please refer to complete prescribing information before using **OncoScint CR/OV.**

ADVERSE REACTIONS

After administration of over 500 single i.v. doses of OncoScint® CR/OV-In (indium In 111 satumomab pendetide) in clinical trials, adverse reactions were observed in less than 4% of patients. No deaths attributable to OncoScint® CR/OV-In administration were reported. The most common adverse reaction was fever, which occurred in less than 2% of patients. Other adverse reactions, each of which occurred in less than 1% of patients, are listed in order of decreasing frequency: chills, hypotension, hypertension, rash, pruritus, sweating, nausea, arthralgia, asthenia, chest pain, headache, hypothermia, pain, flushing, diarrhea, confusion, dizziness, nervousness, crying, and angioedema. Although causality was not determined, an isolated occurrence of reversible thrombocytopenia was observed in a patient who received OncoScint® CR/OV-In in clinical trials.

Additional adverse reactions after 105 repeat administrations of OncoScint® CR/OV-In in 69 patients included two reports of fever, one complaint of abdominal pain, and two cases of non-serious, readily reversible reactions characterized primarily by flank pain.

OVERDOSAGE

The maximum amount of OncoScint® CR/OV-In (indium In 111 satumomab pendetide) that can be safely administered has not been determined. In clinical trials, single doses of 20 mg of OncoScint® CR/OV-In were administered to 64 patients with various types of epithelial carcinomas; the type and frequency of adverse reactions at this dose were similar to those observed with lower doses.

DOSAGE AND ADMINISTRATION

The dose of OncoScint® CR/OV (satumomab pendetide) is 1 mg radiolabeled with 5 mCi of indium In 111 chloride. Each dose is administered intravenously over 5 minutes and should not be mixed with any other medication during its administration. The patient dose of the radiolabel should be measured in a dose calibrator prior to administration.

Each OncoScint® CR/OV kit is a unit dose package. After radiolabeling with indium-111, the entire OncoScint® CR/OV-In dose should be administered to the patients. **Reducing the dose of either component may adversely impact imaging results, and is, therefore, not recommended.**

HOW SUPPLIED

The OncoScint® CR/OV kit (NDC No. 0044-0579-01) for the preparation of indium-111 labeled OncoScint® CR/OV includes one vial containing 1 mg of satumomab pendetide per 2 mL of sodium phosphate buffered saline and one 2 mL vial of sodium acetate buffer solution, 0.5 *M*. These solutions are sterile and pyrogen free and contain no preservative. Each kit also includes one sterile 0.22 µm Millex® GV filter, prescribing information, and two identification labels.

U.S. Patent Nos. 4,671,958 and 4,741,900

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Revised 12/30/92

References **1.** Nabi HA, Doerr RJ. Radiolabeled monoclonal antibody imaging (immunoscintigraphy) of colorectal cancers: current status and future perspectives. *Am J Surg.* 1992;163:448-456. **2.** Data on file. Cytogen Corporation, Princeton, NJ. **3.** Doerr RJ, Abdel-Nabi H, Krag D, et al. Radiolabeled antibody imaging in the management of colorectal cancer: results of a multicenter clinical study. *Ann Surg.* 1991;118-124.**4.** Collier BD, Abdel-Nabi H, Doerr RJ, et al. Immunoscintigraphy with ^{111}In-CYT-103 in the management of colorectal carcinoma: a comparison with computed tomography. *Radiology.* 1992;185:179-186. **5.** Surwit EA, Childers JM, Krag DN, et al. Clinical assessment of ^{111}In-CYT-103 immunoscintigraphy in ovarian cancer. *Gynecol Oncol.* 1993; 48:285-292.

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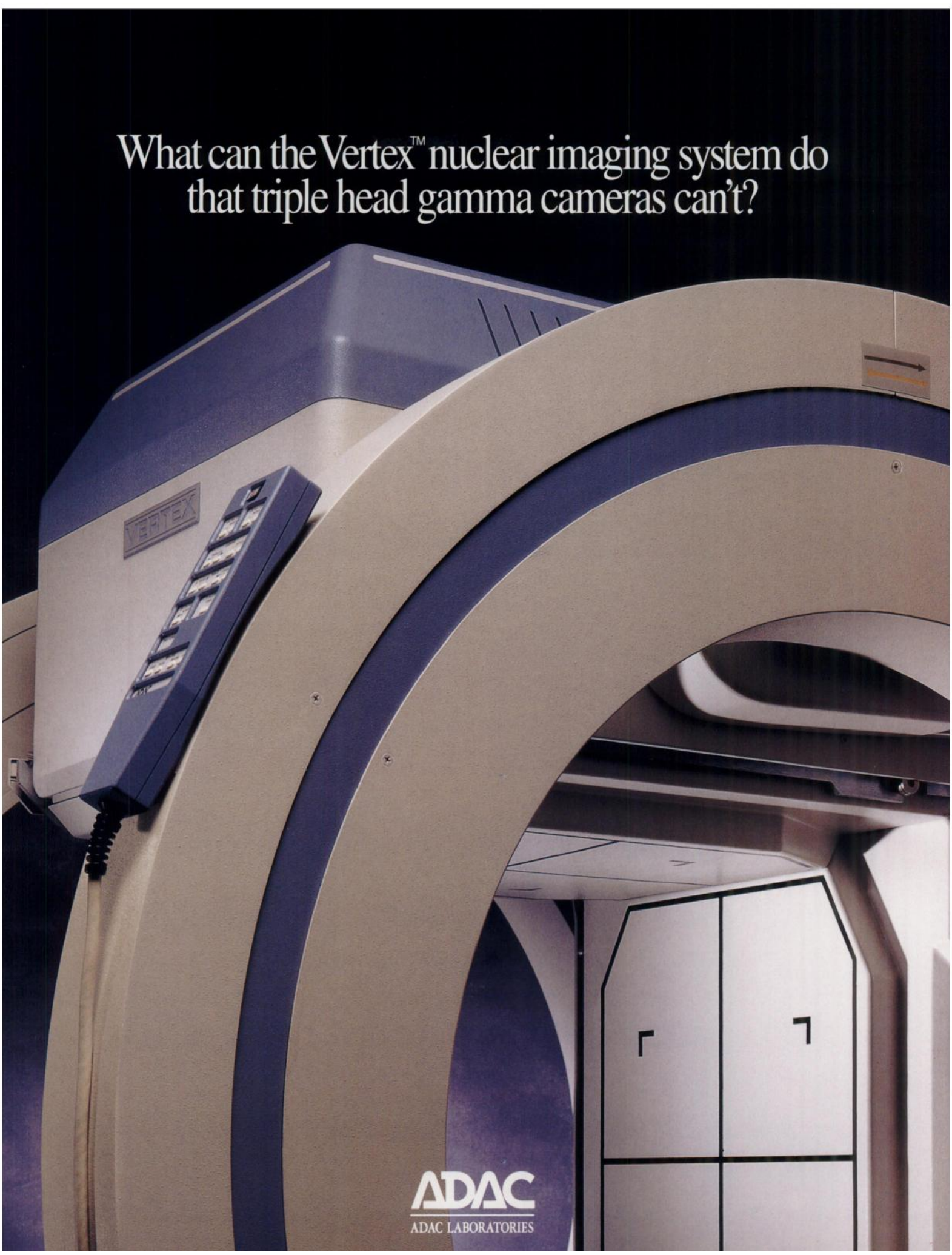

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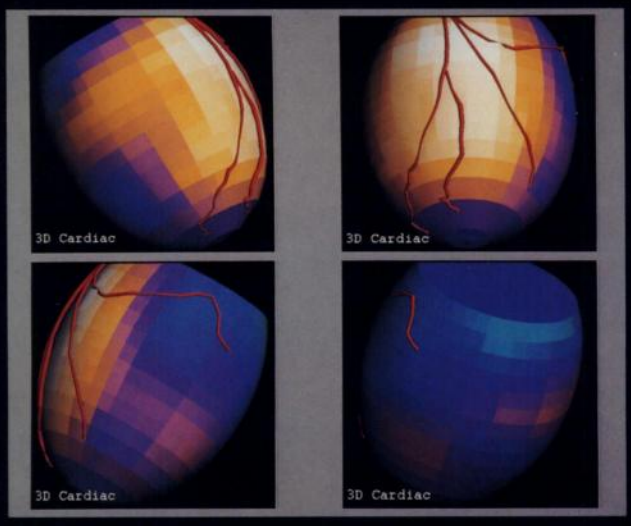
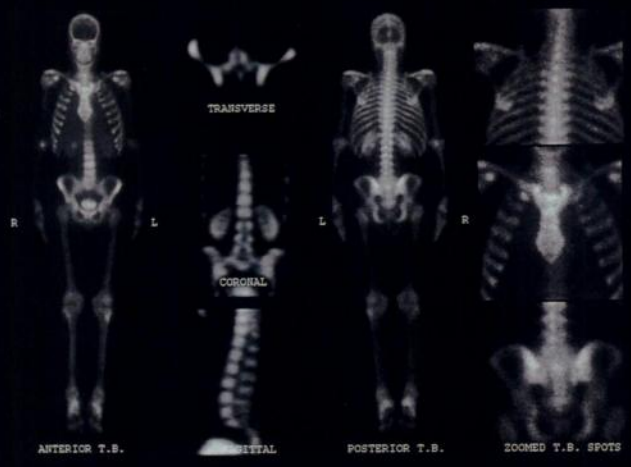


*Cardiac SPECT**



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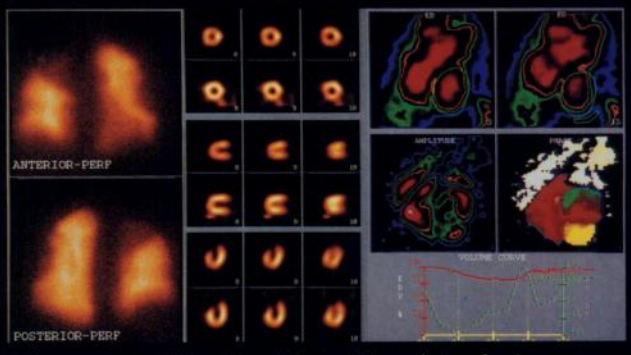

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*Image courtesy of Emory University.

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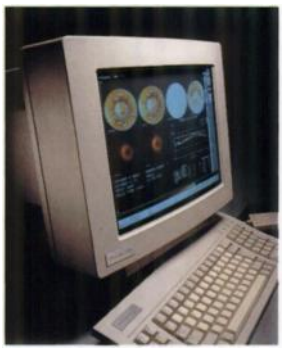

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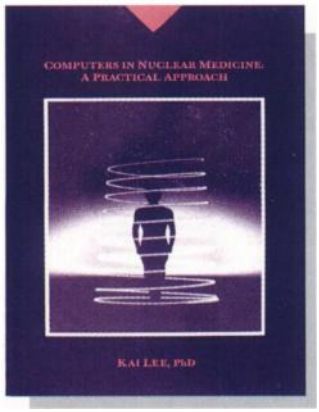

Kai Lee, PhD
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This illustrated guide explains both how computers work and how processing techniques obtain diagnostic information from radionuclide images. Coverage includes

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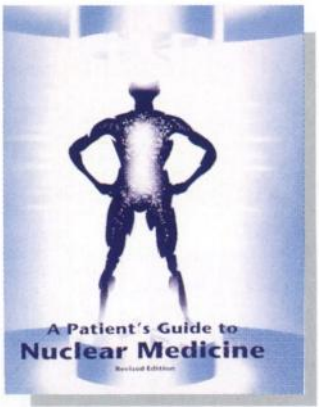

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A Patient's Guide to Nuclear Medicine, Revised Edition

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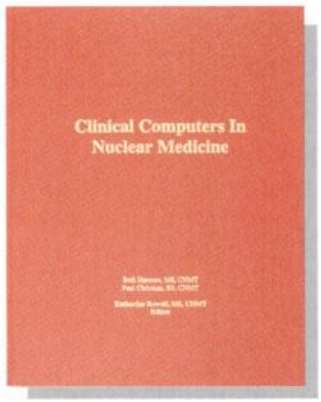

Katherine L. Rowell, MS, CNMT, Editor
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Clinical Computers in Nuclear Medicine

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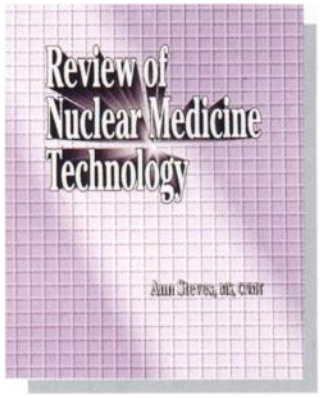

Ann M. Steves, MS, CNMT
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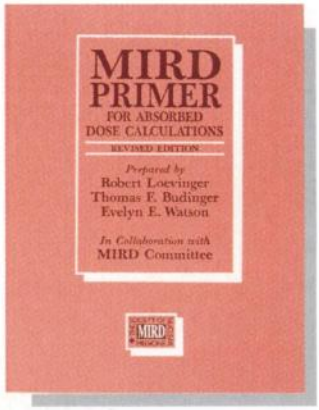

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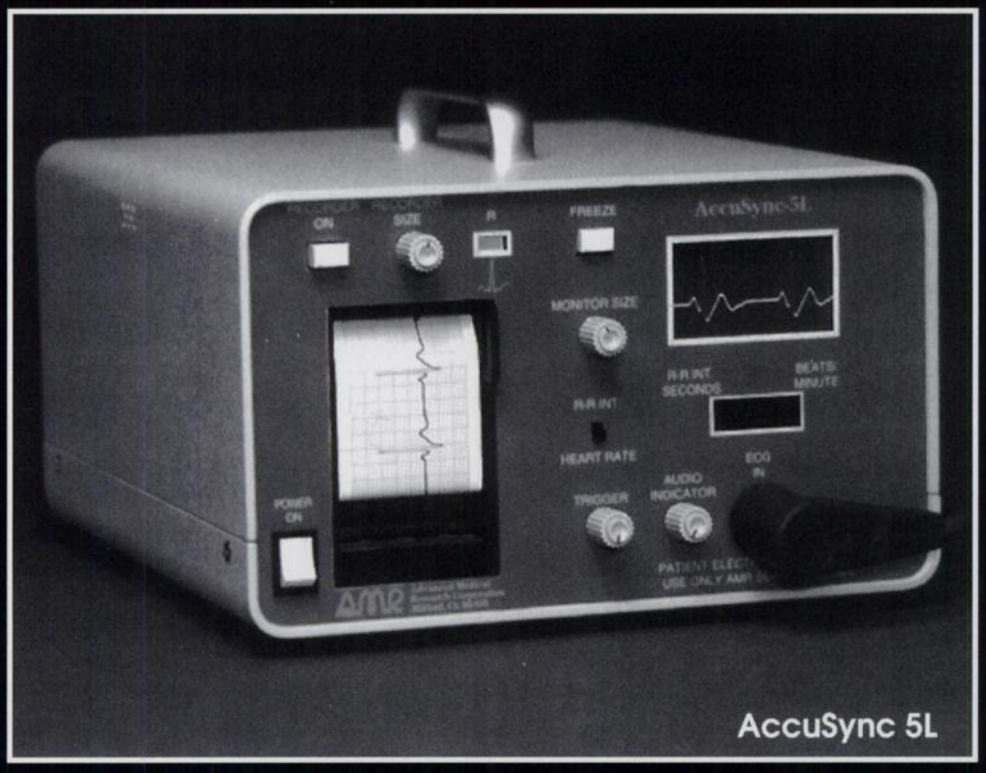

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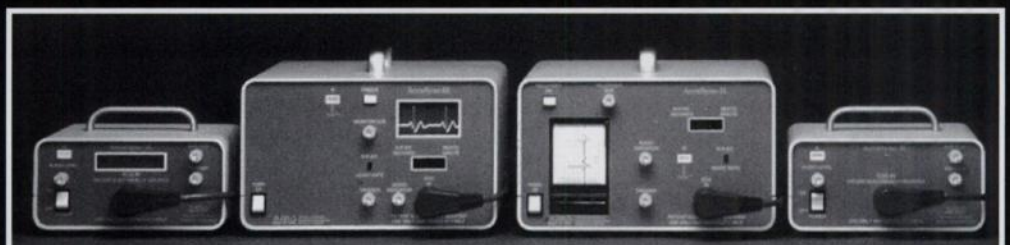

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6L		•	•	•
1L	•		•	•
3L			•	•
4L				•

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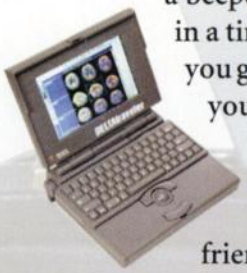

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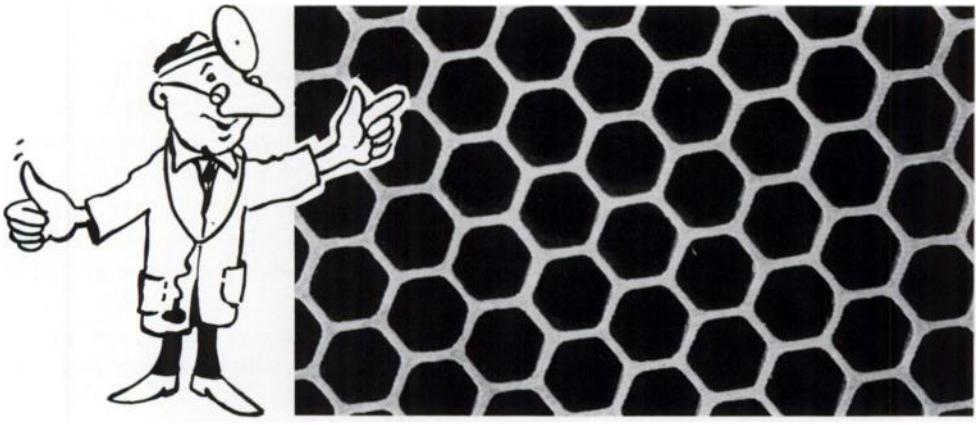

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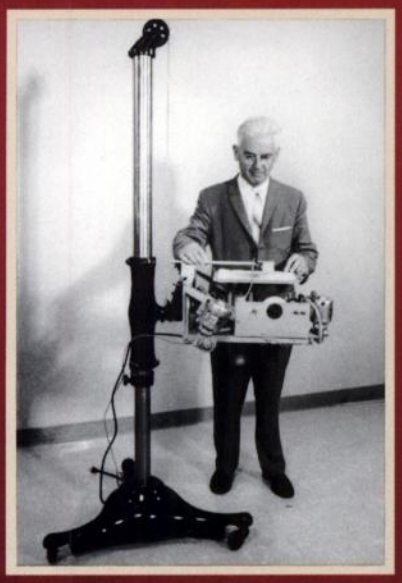


Points of Reference

Although the history of nuclear medicine may be marked in several ways–by the introduction of new radiopharmaceuticals or seminal studies in the field–one obvious way to chart nuclear medicine's progress is through the series of imaging devices which have continually altered both scientific study and clinical practice.

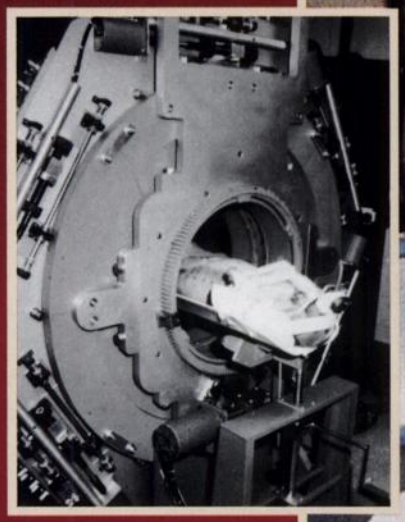
Viewed from the perspective of medicine's long history, four decades seem insignificant. Yet rarely has medical technology advanced so rapidly and so dramatically, sometimes making a short five-year period seem like an epoch. Each decade since the fifties has seen startling technical reorientations as new imaging devices–and the computers integral to them–have changed the face of nuclear medicine. The photographs here merely mark nuclear medicine's major landmarks. They serve as visual touchstones to the successful 40-year marriage of nuclear medicine science and nuclear medicine technology.

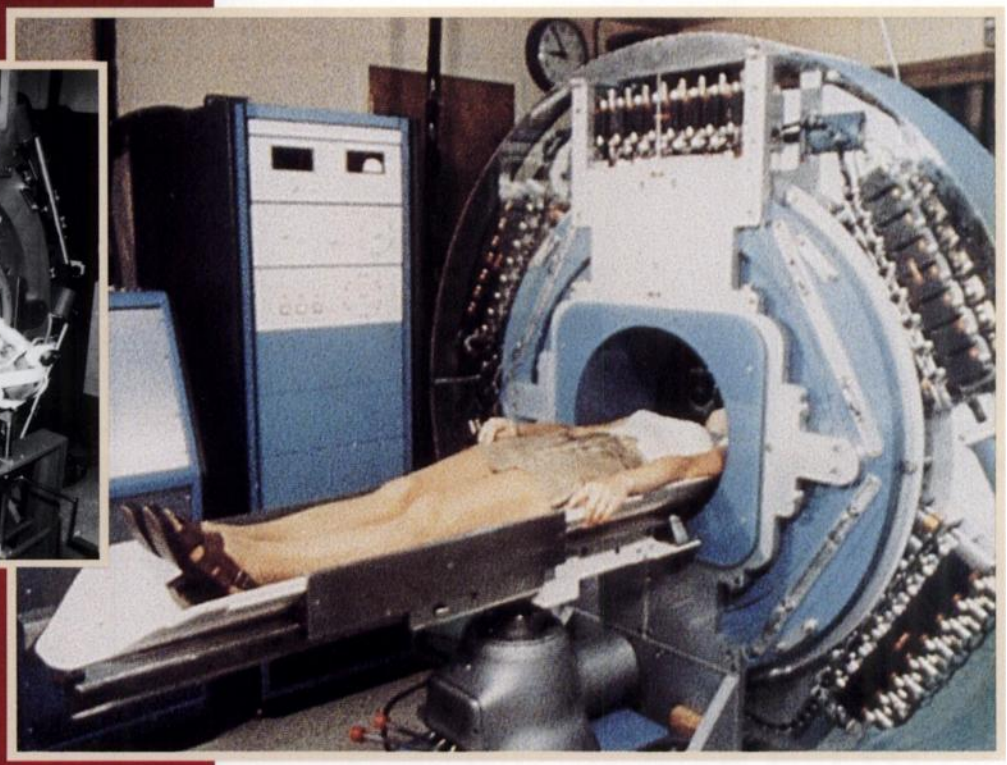
Top: Benedict Cassen with his first rectilinear scanner in 1951. (Courtesy W.H. Blahd, M.D.)

Center: In Hal Anger's gamma camera, scintillation positions were transferred to a cathode ray tube screen from which data were recorded on photographic film. (Courtesy Donner Laboratory, Lawrence Berkeley Laboratory, University of California)

Bottom: An early prototype of an instrument eventually leading to the construction of commercial positron emission tomgraphs. (Courtesy Michael M. Ter-Pogossian, Ph.D.)

Bottom Right: "PETT III" produced the first human PET scans published in 1976. (Courtesy Michael E. Phelps, M.D.)





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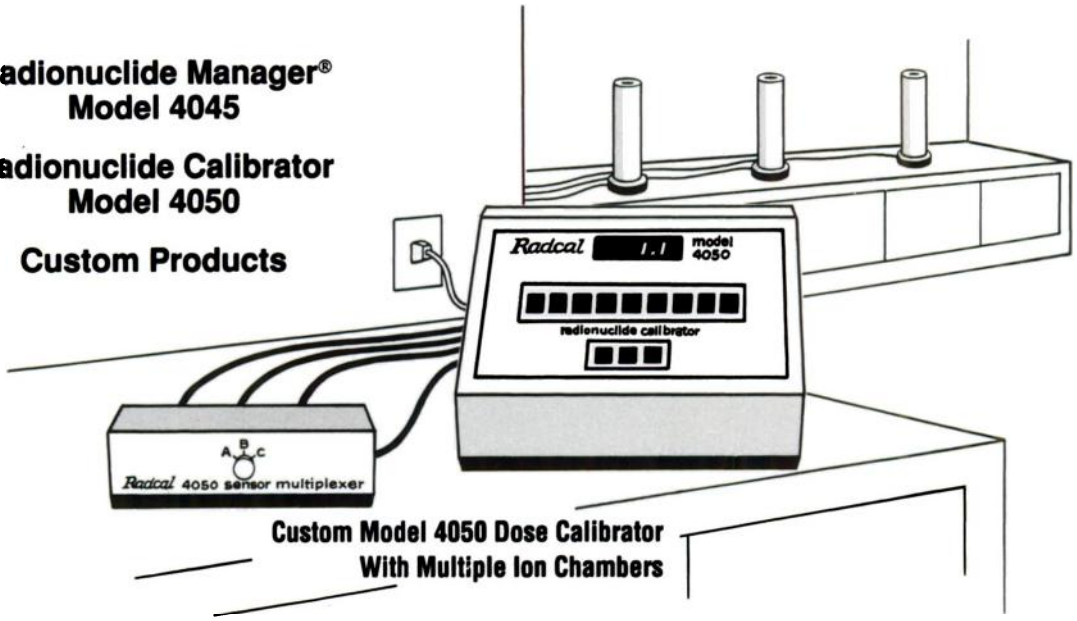

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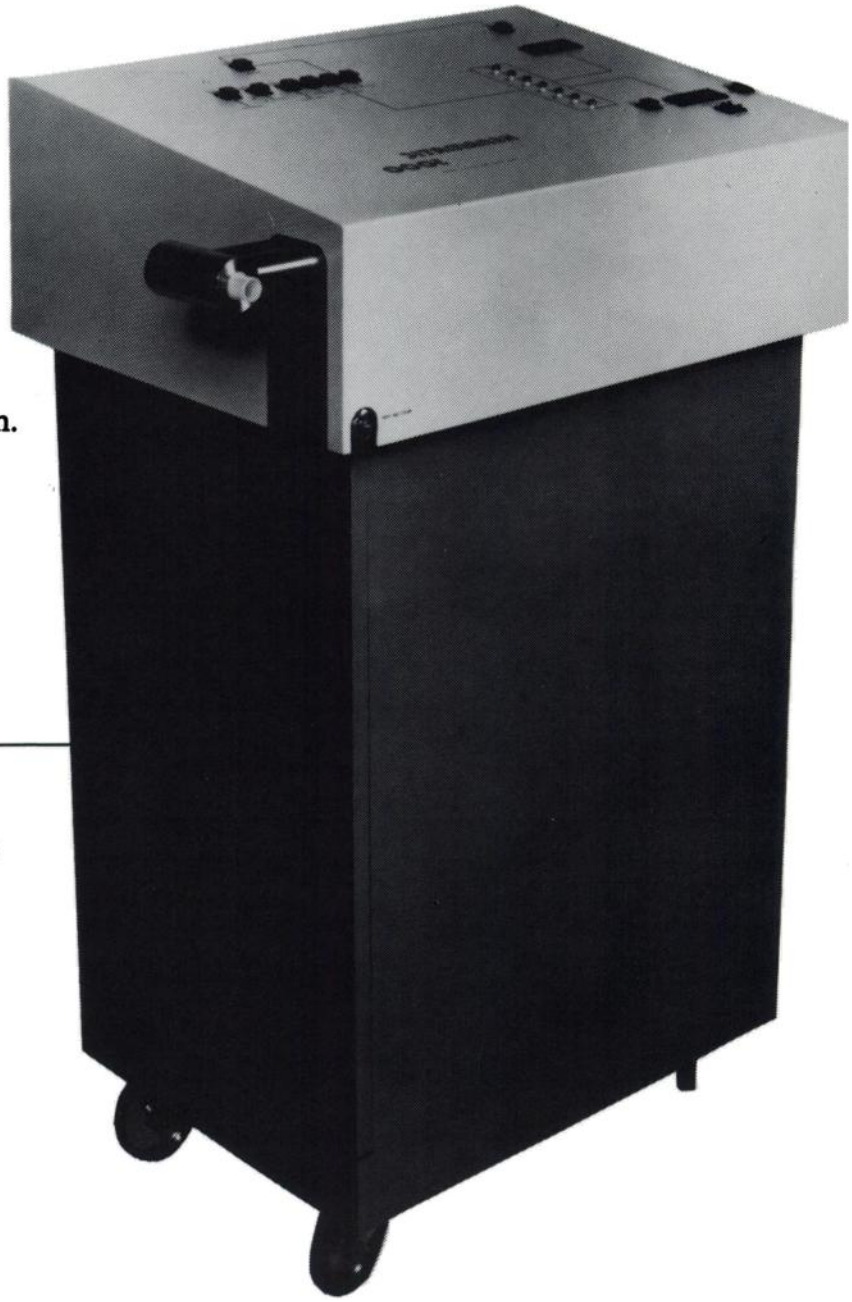

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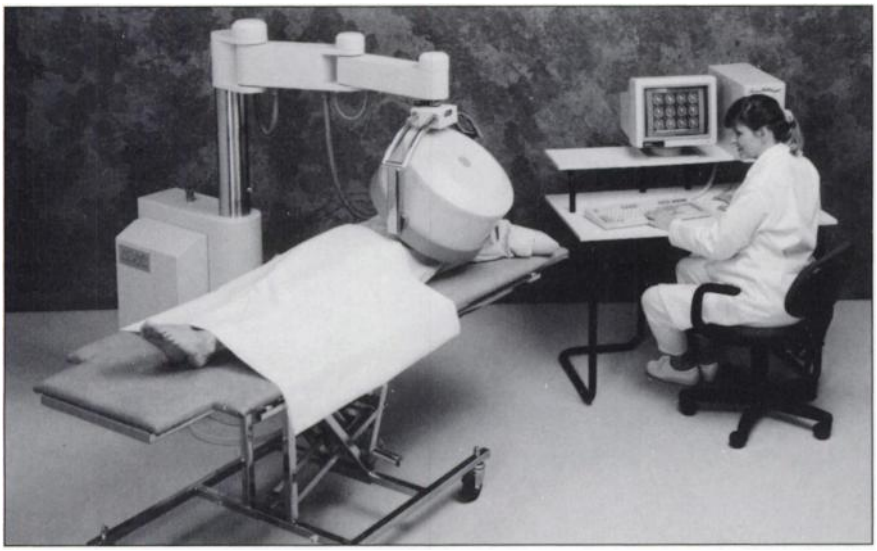
Extended Arm Gamma Camera



ADAC announces the unveiling of its new POLARIS™, an extended arm reach gamma camera. This new camera is approved by the FDA and is ideal for patients transported on a gurney. The POLARIS is fully capable of planar and small organ imaging and can be operated with a PC-DOS based computer or, for more advanced image processing, a PEGASYS configuration. The POLARIS is the newest addition to the ADAC line of gamma cameras which include the GENESYS, DUAL GENESYS, CIRRUS, ARGUS and TransCam. This moderately priced camera is ideally suited to the needs of a distinct niche user. **ADAC Laboratories, 540 Alder Dr., Milpitas, CA 95035.**

RADOSE Software Package

Victoreen, Inc. recently introduced Radose, an easy to use, menu-driven, PC-based software package that computes and logs radiation doses due to diagnostic x-ray and nuclear medicine procedures. The package utilizes an operator-entered and maintained patient database. Initially, patient records, including demographic information and radiographic procedures history, are entered into the database. Based on the entered data, radiation doses to various organs are calculated and stored in the patient file. When additional procedures are performed on the patient, the operator selects the specific procedure from lists of common procedures. Radose then estimates the organ dosage and logs the data in the patient file. Radose calculates doses for lungs, bone marrow, thyroid, testes, ovaries, breasts and uterus. The total dose accumulations are calculated and may be displayed and printed. **Victoreen, Inc., 6000 Cochran Rd., Cleveland, OH 44139-3395. (216) 248-9300. Fax: (216) 248-9301.**

Instrument Catalog

The ninth edition of Canberra's Instrument Catalog is now available from Canberra Industries. This new edition features sections on applications and technical reference; detectors and accessories; modular electronics (NIM); multichannel analyzers; advanced spectroscopy systems; and specialty instruments and counters. Also included are many new products such as the Genie-ESP, Genie-PC, Alpha Sentry Continuous Air Monitor, computer programmable signal processing ICB NIM, the HT-1000 High Throughput Alpha Beta Counter, a new series of ADCs, two new analog multiplexers, a new digital stabilizer and a new spectroscopy analyzer. **Canberra Industries, Inc., Sales Dept., 800 Research Pkwy., Meriden, CT 06450-9983. (203) 238-2351. Fax: (203) 235-1347.**

Pak-More

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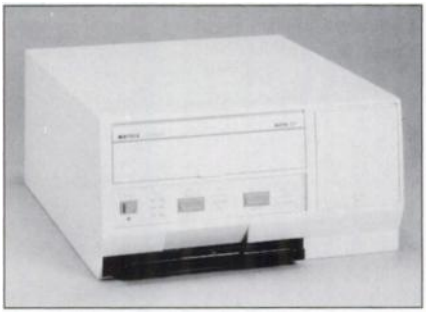

Agfa Technical Imaging Systems has announced the release of the Matrix CCM-600, a new film recorder designed specifically to meet the hardcopy requirements of diagnostic ultrasound departments. Agfa's Matrix CCM technology eliminates the need for complicated controls. The digital image control system automatically adjusts brightness and contrast. This insures consistent high quality, drift-free operation. The user only needs to set the desired black and white levels. Key features include folded optics with resolution in excess of 500 lines per inch; an access cover to prevent accidental change to set-up and mode control functions; a flat-faced monitor with 1100-line center resolution; built-in service software and an automatic self-test. Back-lit error message indicators can be readily seen even in a dimly lit ultrasound examination room. **Agfa Technical Imaging Systems, 100 Challenger Rd., Ridgefield Park, NJ 07660-2199. (201) 440-2500. Fax: (201) 342-4742.**

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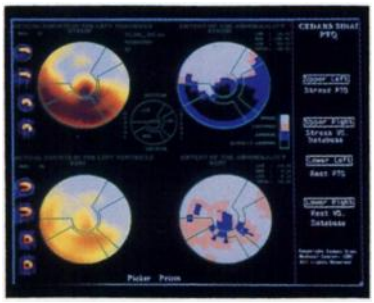

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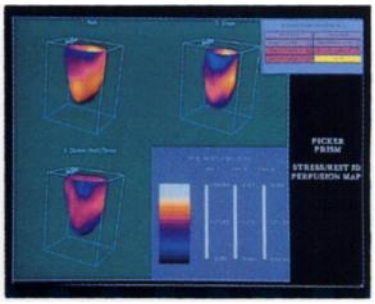

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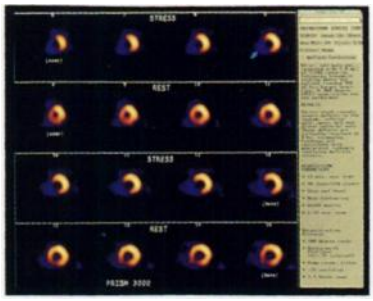
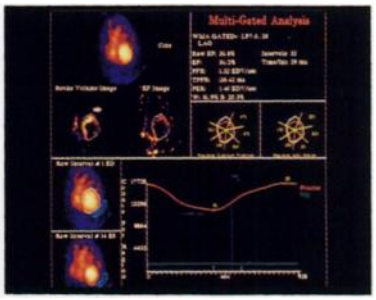
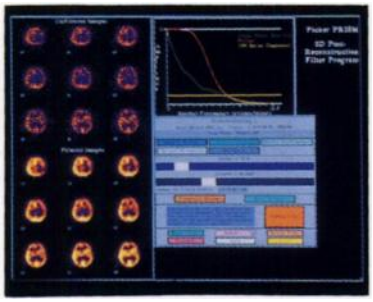


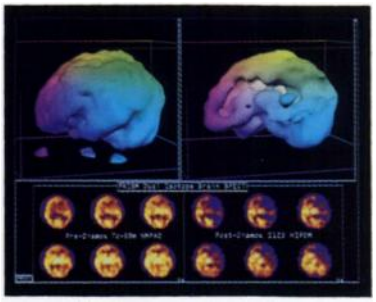
Oblique cardiac slices at stress and re-distribution



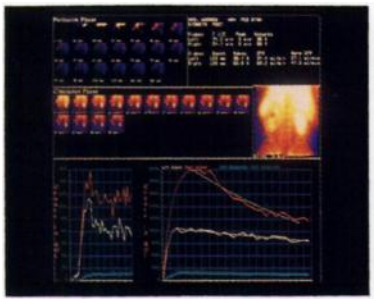
MGA+ (multi-gated analysis) Program



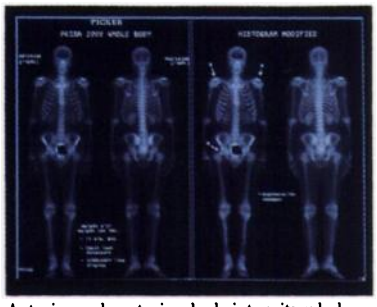
3-D Post-Reconstruction Filter Program



Dual Isotope 3-D images and slices



Renogram analysis time activity curves



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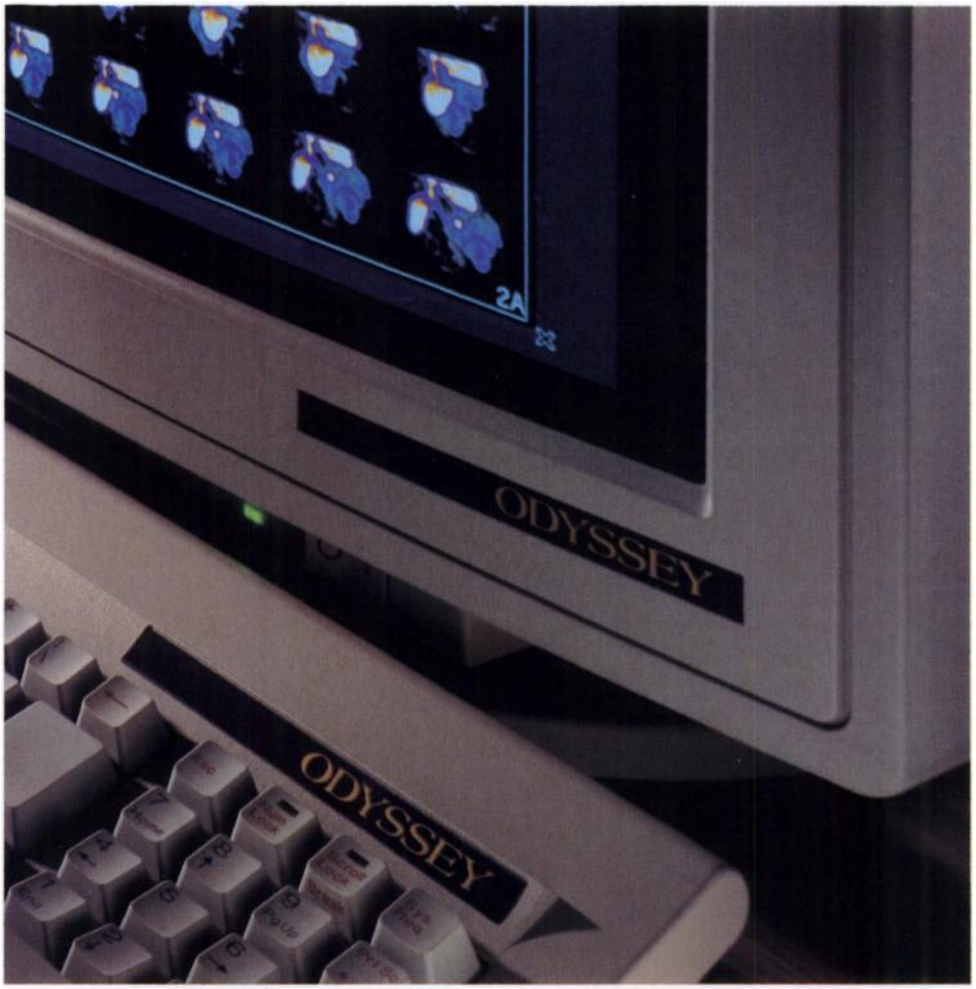

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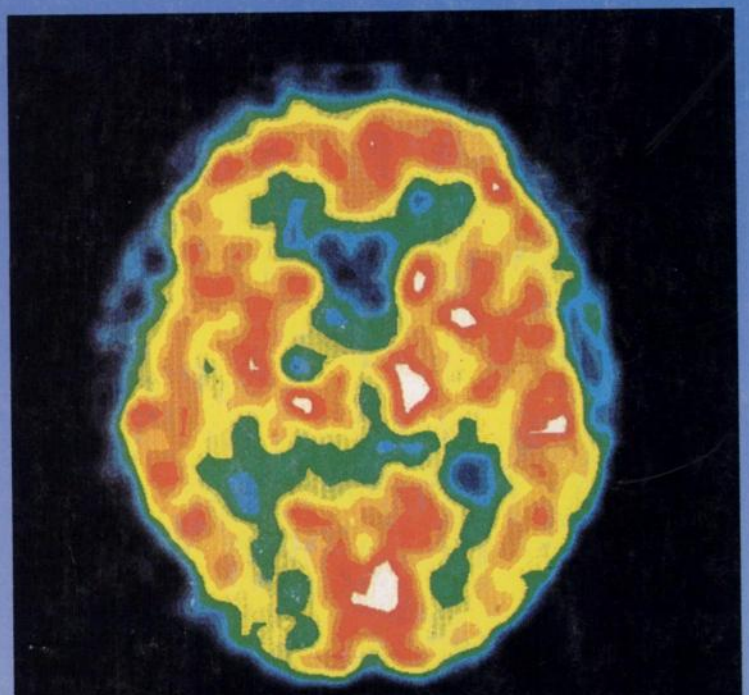

Marked focal hypoperfusion from infarction to left ventral thalamus in patient with aphasia and mild hemiparesis. Note concomitant reduction of tracer uptake in ipsilateral caudate nucleus and insular cortex due to an effect of disconnection. From Dept. of Neurology, Univ. Graz, Austria (Doz. Dr. F. Fazekas)

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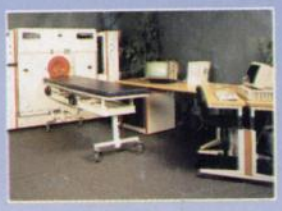

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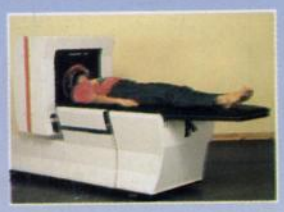

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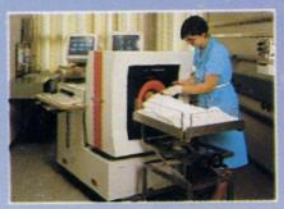
Mobile dynamic SPECT



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