

ELUTEK™ TECHNETIUM Tc 99m GENERATOR

A New Addition to Abbott's Radio-Pharmaceutical Products Line

Performance

Built-in 500 ml. saline supply provides 15 to 16 milkings per week.

You have clear, clean eluate from first use. Highly concentrated serial elutions can be made daily.

Low aluminum levels. A special process reduces aluminum levels to make them all but undetectable by normal lab methods. Less trace impurities permit wide diagnostic usage.

Safety

At least 1½ inches of lead lines generator column. Quick milking time lessens exposure.

See-Thru Elution Shield further reduces radiation exposure and simplifies milking. Volume can be measured without lifting vial from elution shield. (Shield is available with first generator.)

Transparent Needle Guard protects fingers.

Convenience

Compact, pre-assembled, and ready to use. Attach needle and you're ready to elute. Saline solution is an integral part of the generator.

Storage compartment on top contains six 30-ml. elution vials, needles, labels, and instructions.

Self-align milking port. Place elution shield in port, and both needle and evacuated vial are automatically aligned.

Pushbutton Elution. Press down to open valve, and a slight turn locks it for automatic elution.

Automatic Disposal Service. Used generators are no longer a problem. Abbott's Elutek service program helps you dispose of them quickly and easily.

Molybdenum and Technetium-99 Decay tables are on front label—can be seen at a glance.

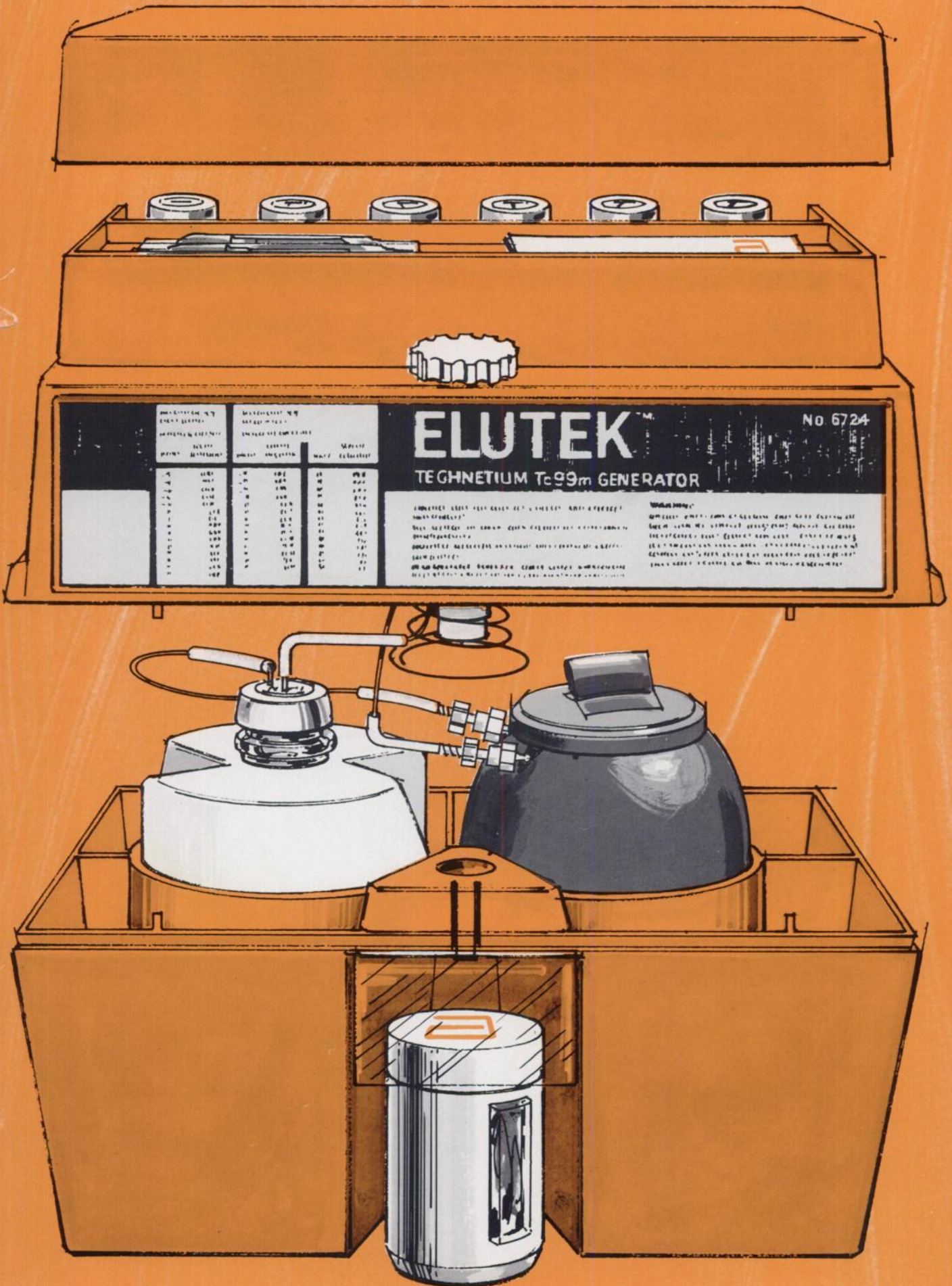
Carrying Handles add to convenience—help you avoid mishaps.

303427

TM—Trademark

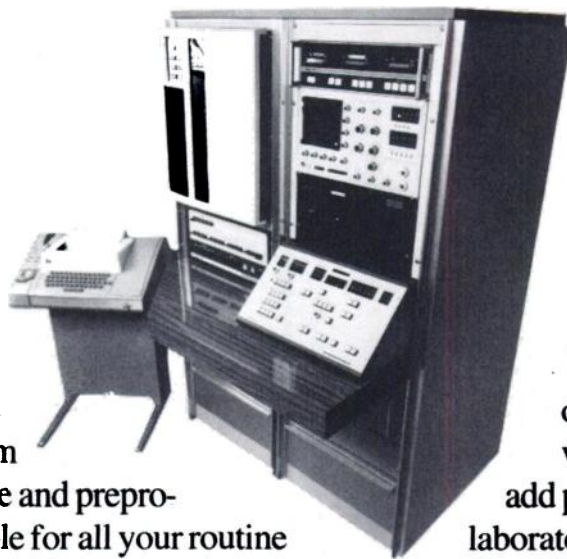
Abbott Laboratories
Radio-Pharmaceutical Products Division
North Chicago, IL60064





How many data systems perform simultaneous real time image processing and general laboratory computation?

Just one.



With the Intertechnique Cinescintigraphy system you have a simple-to-use and preprogrammed system suitable for all your routine clinical imaging needs. And at the same time a powerful general purpose computer for radio-immunoassay determinations and other laboratory applications. Competitive systems promise this dual versatility, but Raytheon delivers.

For image data processing you can choose between a hard-wired function approach

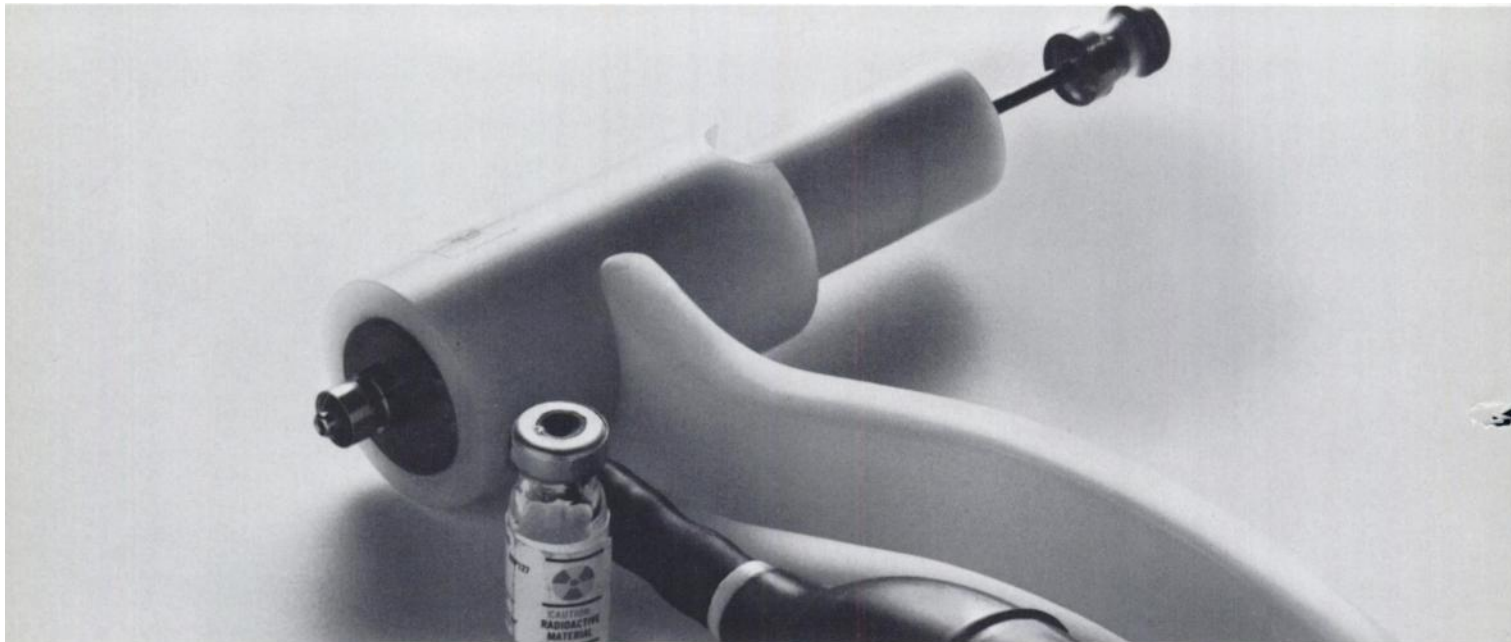
or utilize the clinically proven software. What's more, you can easily add programs specific to your clinical and laboratory requirements with LEM — our user-oriented language.

If it all sounds too good and simple to be true, challenge us. Call or write for more details on how our system can satisfy your present and future needs. Raytheon Company, Medical Electronics, 40 Second Ave., Waltham, Mass. 02154. Tel. (617) 899-5949.

RAYTHEON

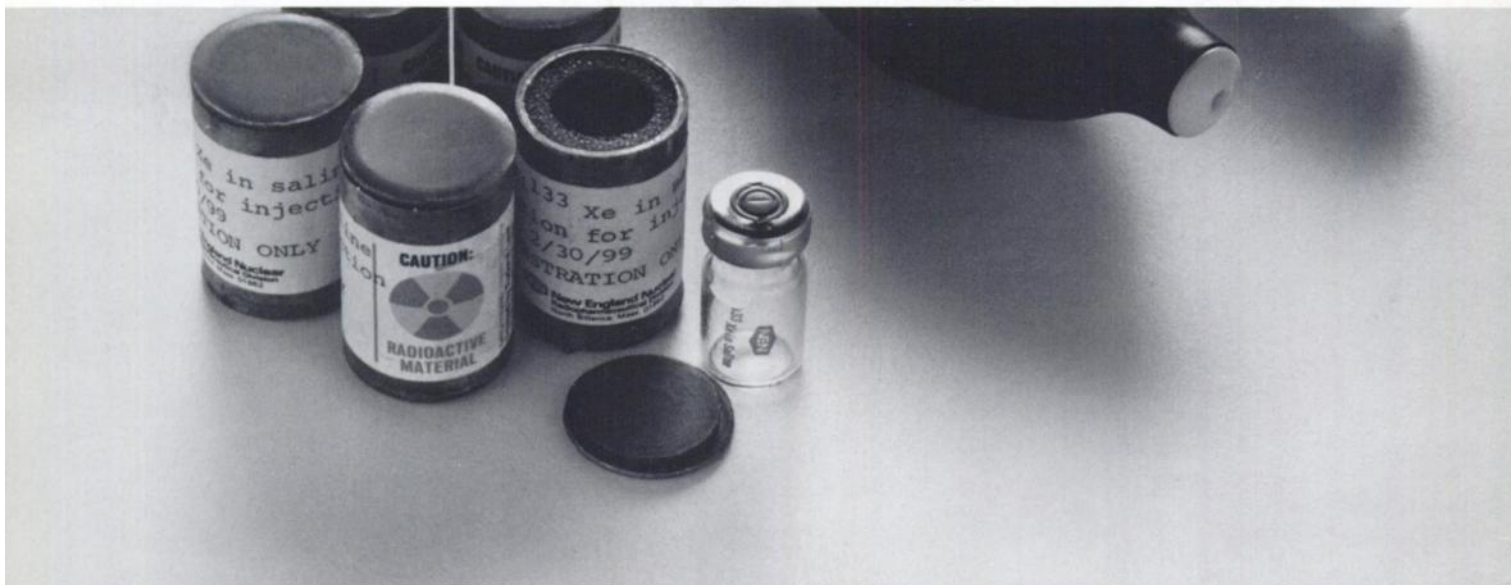
Xenon-133 Gas

Convenient Calidose system delivers xenon-133 gas from precalibrated vials of 10-100mCi



Xenon-133 Solution

Xenon-133 dissolved in isotonic saline solution in precalibrated single-dose vials



Your Choice

NEN New England Nuclear
Radiopharmaceutical Division

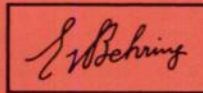
Atomlight Place, North Billerica, Mass. 01862
Telephone (617) 667-9531

Canada: NEN Canada Ltd, Dorval, Quebec. Tel: (514) 636-4971
Europe: NEN Chemicals GmbH, D6072 Dreieichenhain, Siemensstrasse 1,
Germany. Tel: Langen (06103) 8353

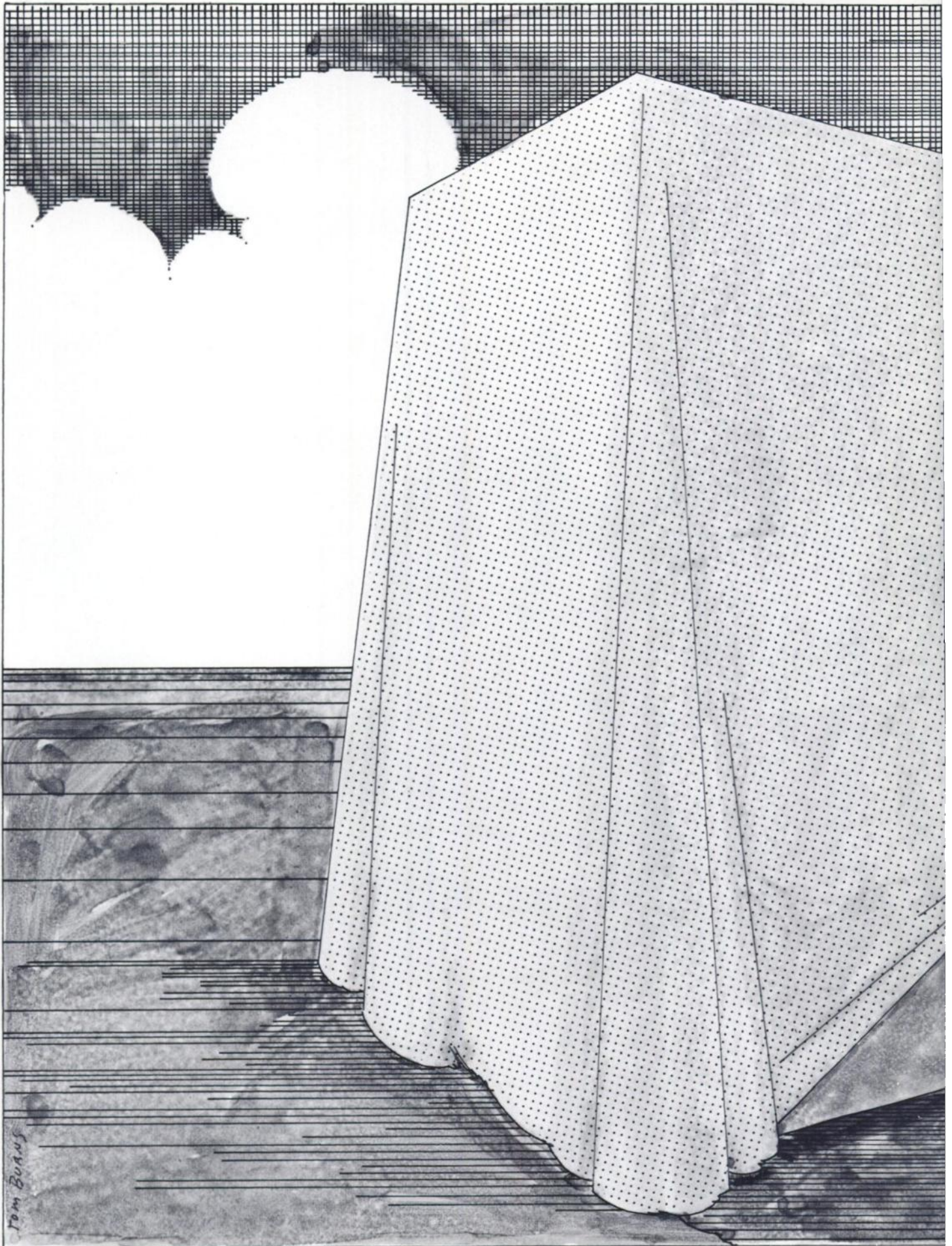
Radio
pharmaceuticals

HOECHST

throughout
the world



For further information and service
please contact the Farbwerke Hoechst AG
subsidiary in your country





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MDS Module: Any in a series of customized units
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We start with our basic system and provide increasing
sophistication with Modules that meet your evolutionary growth.
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Simultaneity is the simultaneous acquisition and processing
of patient data; the simultaneous use of two cameras; and the
basis for our new Modular approach in Nuclear Medicine.

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to finish before you begin the next. You double the
efficiency of a standard nuclear medicine computer
system, and add a new dimension to cost justification.

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Catalog No. 090



Technetium 99m Sulfur Colloid

Kit for preparation of
Technetium 99m Sulfur Colloid

CAUTION:

READ ENTIRE PROCEDURE BEFORE USE

Mallinckrodt Chemical Works
St. Louis, Missouri 63103

PACKAGE CONTAINS

from Mallinckrodt...

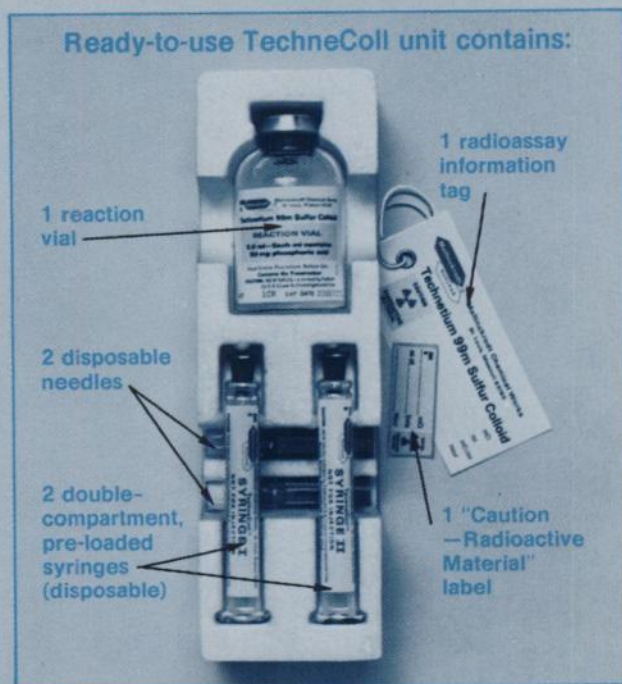
new convenient kit for preparation of Technetium-99m Sulfur Colloid

Now you'll find it easy to prepare technetium-99m sulfur colloid in your own laboratory. This new kit was designed to help you—to make the procedure as reliable as possible—to provide you with a finished product having consistently high quality.

The Mallinckrodt/Nuclear TechneColl™ Kit offers exclusive convenience in use:

- Dispenser package makes the preparation units readily available.
- Viewing aperture shows when it's time to reorder.
- Each preparation unit is complete and self-contained, to eliminate possible mixing of components.
- Unique two-compartment syringes permit separate storage of reagents for maximum stability.
- Mallinckrodt/Nuclear's formulation allows use of the kit with any commercially available generator.

Try this new kit now in your own laboratory (subject to necessary licensing). Ask your Mallinckrodt representative for a demonstration.



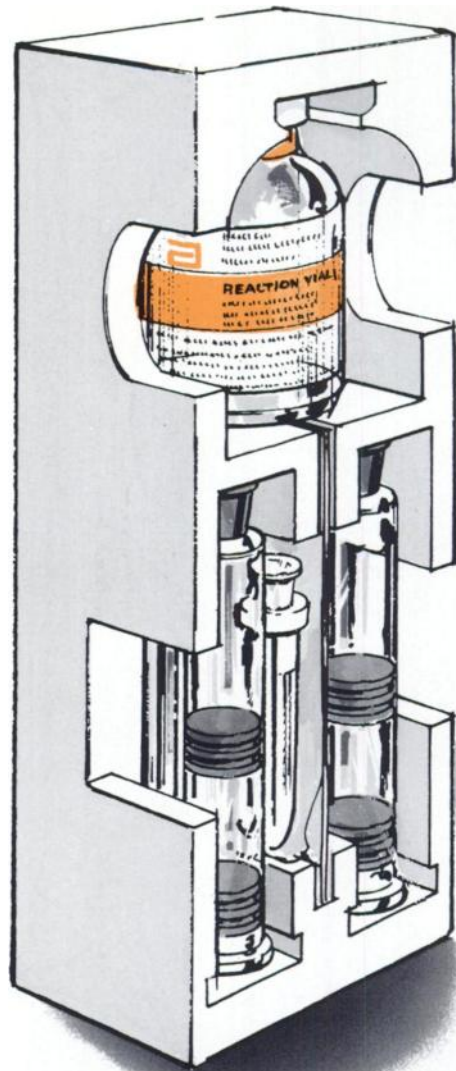
Mallinckrodt

NUCLEAR

RADIOPHARMACEUTICALS
Mallinckrodt Chemical Works
Box 10172 • Lambert Field
St. Louis, Missouri 63145

COLLOKIT™

Kit for preparation of Technetium Tc 99m Sulfur Colloid



**...for tagged sulfur colloid
with clarity—no flocculent
precipitate**

All kit components are individually wrapped, fully labeled, and packaged in order of use.

Disposable two-compartment syringes protect stability, and reduce steps in processing.

To sum up: with Collokit, preparation is easier, faster, and there's less chance of error.

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Abbott Laboratories
Radio-Pharmaceutical Products Division
North Chicago, IL60064

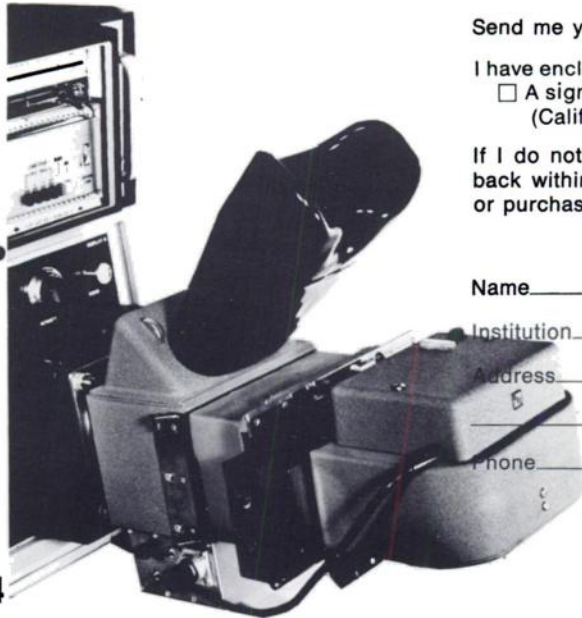


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Our 70 mm Camera with integral timer and automatic data chamber offers all you need in a 70 mm Camera at minimum cost.

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Send me your 70 mm Camera plus one roll of film.

I have enclosed: A check for \$1,995.00
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**BREAKTHROUGH
IN ACCURACY OF
HEROIN
DETECTION...**

Abuscreen™
Radioimmunoassay for Morphine

ABUSCREEN™ Radioimmunoassay for Morphine is a specific and unusually sensitive test for the presence of morphine and its analogs in biological specimens.

The test procedure is based on the competitive binding to antibody of radiolabeled antigen* and unlabeled antigen, in proportion to their concentration in the solution. Unlabeled antigen displaces radioactive antigen from the limited antibody present.

An unknown specimen is added to a test tube containing known amounts of morphine antiserum and radiolabeled antigen. Following precipitation and centrifugation, the supernatant fluid is transferred to test tubes for counting in a scintillation counter. A positive specimen is identified when its radioactivity is equal to or greater than that of the positive control.

Results can be quantified by comparing counts per minute (CPM) obtained from dilutions of the unknown specimen with the average CPM obtained from dilutions of the morphine positive control, plotted as a standard curve.

*Either tritium- or iodine-labeled antigen available

COMPARISON OF MORPHINE SCREENING PROCEDURES

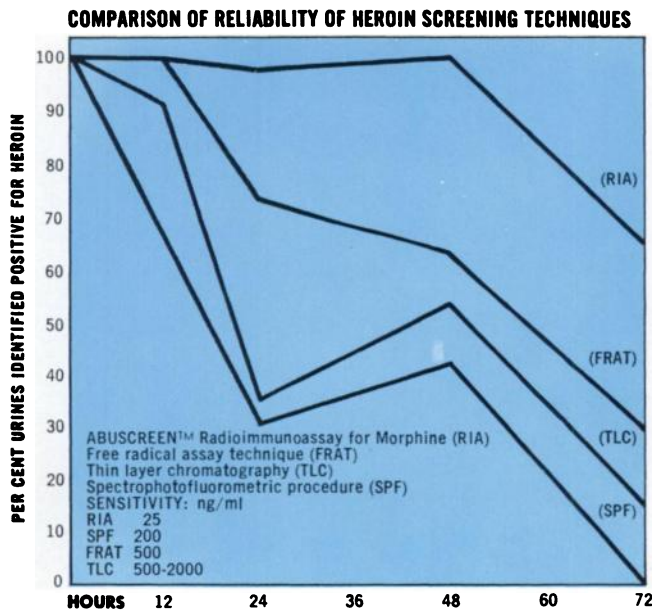
	ABUSCREEN™ Radioimmunoassay	Thin Layer Chromatography (TLC)	Free Radical Assay Technique (FRAT)	Automated Fluorescent Assay	Gas Chromatography
Recommended Level of Sensitivity	¹²⁵ I-labeled antigen 40 ng/ml ³ H-labeled antigen 60 ng/ml	1,000 ng/ml	500 ng/ml	200 ng/ml	500 ng/ml
Labor Thruput (specimens per person per 7½ hour shift)	475 per day*	60/day	500/day†	260/day	60/day
Labor Cost	\$0.15	\$1.17	\$0.15	\$0.27	\$1.17
Instrument Capacity (based on one shift)	500/day	—	450/day*	260/day	20/day
Treatment of Test Specimen	none	pH adjustment extraction hydrolysis column purification concentration	oxidation	none	pH adjustment multiple (~8) extractions hydrolysis

*Exclusive of sample identification and labeling and evaluation of results.

†Manufacturer's claim.

PROVEN: GREATER RELIABILITY THAN COMMONLY USED SCREENING TECHNIQUES

In a study* comparing the reliability of ABUSCREEN™ Radioimmunoassay for Morphine† with three other primary screening procedures, urine samples from 72 known addicts who admitted to heroin use were analyzed by all four methods. Test results are summarized in the accompanying graph.



- **specific heroin assay**—The test utilizes an immunological reaction, and thus is specific for morphine and its analogs, minimizing the problem of false positives.

- **highly sensitive heroin-assay**—The test utilizes a radiochemical method, and thus is highly sensitive, making false negatives rare.

- **results achieved rapidly**—The procedure is simple and rapid, needs no hydrolysis or other pretreatment of urine, and does not require highly skilled personnel. Easily adapted to automated processes, it can be used for large- or small-scale screening as well as *stat* testing.

- **provides objective results**—The nature of the test procedure eliminates subjectivity in interpreting results.

*Catlin, D. H.: Paper presented at the 30th International Congress on Alcoholism and Drug Dependence, Amsterdam, Sept. 4-9, 1972.

†In this study, tritium-labeled morphine was used. Reevaluation of the study, using the same antiserum lot and ¹²⁵I morphine, produced similar results.

THE PRIMARY SCREEN FOR HEROIN ABUSE

Abuscreen™

Radioimmunoassay for Morphine

ROCHE

ROCHE DIAGNOSTICS
 Division of Hoffmann-La Roche Inc.
 Nutley, New Jersey 07110

Please have a salesman contact me to discuss
 Abuscreen™ Radioimmunoassay for Morphine

Please ship _____ kits

¹²⁵I label
 ³H label
 One Kit (100 tubes) . . . \$100.00
 I am interested in contract pricing

Name _____

Title & Field of Interest _____

Laboratory _____

Address _____

City _____ State _____ Zip Code _____

Telephone _____

AEC or Agreement State License No. _____

NEW

Radioimmunoassay Test Sets

Three complete sets — Available exclusively from Wien Laboratories

Each set contains all reagents* and antibodies needed for complete serum value determinations. And these sets are uniquely designed to assure you of more accurate results with less complicated procedures.



1. Aldosterone Test Set

requires paper chromatography purification

2. Estradiol-Estrone Test Set

requires column chromatography separation

3. Circulating T₃-I¹²⁵ Test Set

a direct serum assay (no extraction) with a simple, 4-hour procedure

- greatly simplified assay techniques
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- same-day results
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| <input type="checkbox"/> T ₃ -I ¹²⁵ Test Set | <input type="checkbox"/> Digitoxin Test Set |
| | <input type="checkbox"/> Testosterone Test Set |
| | <input type="checkbox"/> Corticoid Test Set |

Individual Antibodies:

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> Digoxin | <input type="checkbox"/> Triiodothyronine |
| <input type="checkbox"/> Testosterone | <input type="checkbox"/> Thyroxine |
| <input type="checkbox"/> Digitoxin | |

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Department _____

Affiliation _____

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*except solvents and liquid scintillation cocktail

NOTE: radioactive substances tagged with tritium (³Hydrogen), except T₃.



Wien Laboratories, Inc.

Succasunna, New Jersey 07876

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PRACTICAL, EASY-TO-USE,
UNBREAKABLE, SAFE, LIGHTWEIGHT
REDUCES EXPOSURE FROM ^{99m}Tc
BY A FACTOR OF 40



Twist lock and internally mounted stainless steel spring holds syringe firmly in place — prevents syringe shimmy or wobble.

Lead sleeve encased in nickel plated brass.

Exposed end of syringe barrel to view with withdrawal of blood.

07-003 Pro-Tec Syringe Shield 3cc — \$29.50

07-005 Pro-Tec Syringe Shield 5cc — \$34.00

LEAD SHIELDED SYRINGE HOLDER

For syringes that contain radioisotopes. Accommodates syringes from 2cc to 20cc, or a syringe in a PRO-TEC shield. Entire unit is sheathed in steel.



MODEL #	HT.	I.D.	O.D.	WT.	PRICE
09-220	6.5"	7/8"	1.75"	6 lbs.	\$14.95

SPECIAL OFFER

Purchase any 3 Pro-Tec syringe shields and receive a syringe holder for **Free**.

* Pat. Applied For

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Atomic Products Corp.

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When is a Dosecalibrator also a Dosecomputer?



When it's a RADX Mark V.

The RADX Mark V was designed specifically for Nuclear Medicine departments, with digital read-out and an oversize well-type ionization chamber for high statistical accuracy. No geometric errors. Impervious to barometric pressure changes.

Only the RADX Mark V dosecalibrator measures the activity of radionuclides from 1 μCi to 1000 mCi, then computes the exact volume needed for patient injection.

Programming the Mark V for various isotopes is error-free. You simply plug in a module for the isotope you are assaying. The Mark V may be customized to your specific needs by acquiring only the modules corresponding to the isotopes you are currently using. However

additional modules may be added at any time. Updating is simple and economical.

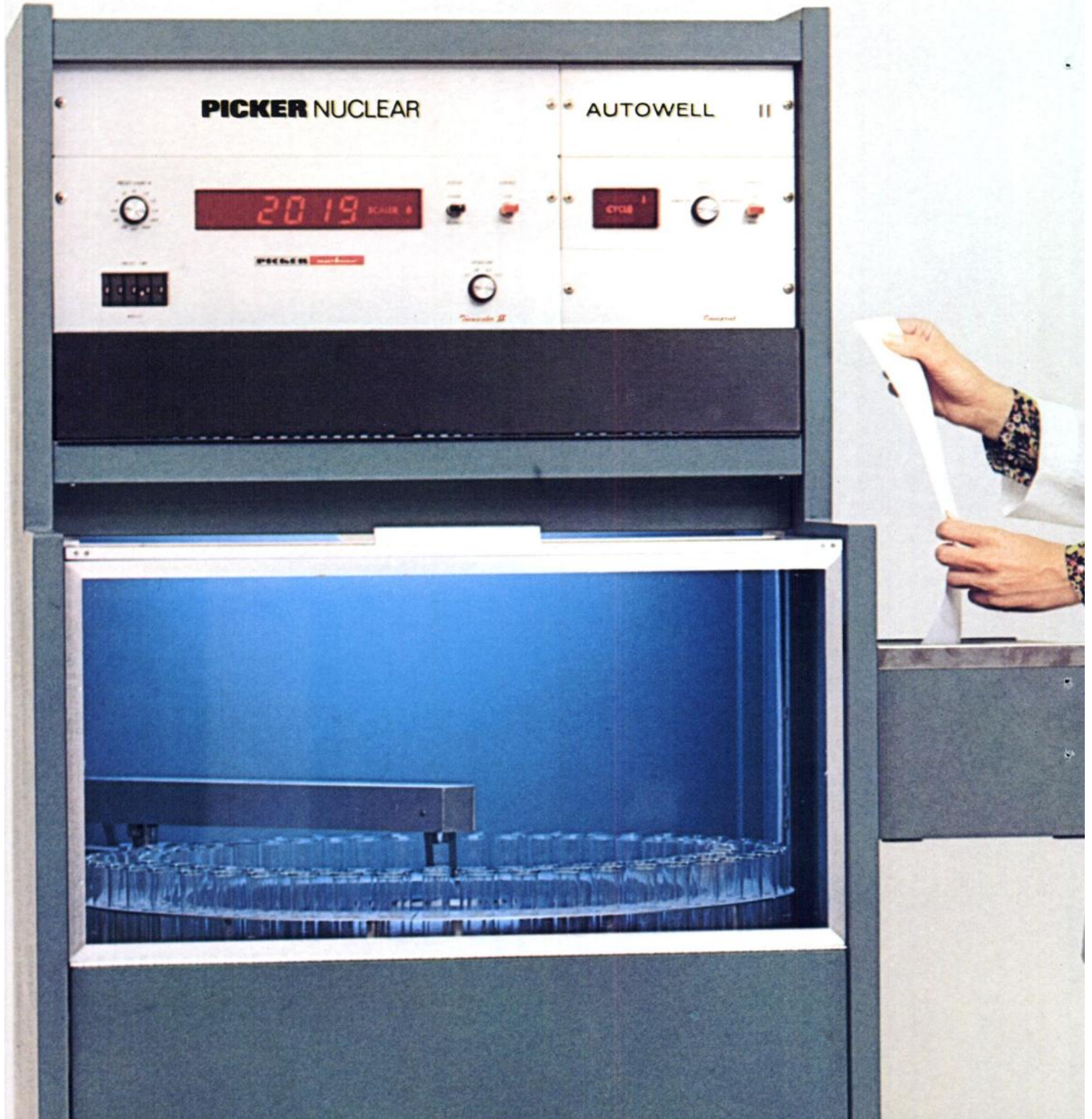
And as if all of this were not enough, RADX recognizes that a day without your Mark V is like a day without sunshine. If during the warranty period, your Mark V does not perform within stated specifications, RADX will air express you a loaner to use while yours is being repaired—at no charge.

Then consider that the Mark V costs much less than other dosecalibrators that do not provide all of these features. Now call RADX.

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“The Radioim



radioimmunoassayer”

(Also known as: the Picker Autowell II.)

What is the Autowell II?

An automated gamma radioassay system ideal for the radioimmunoassay of many things. Digoxin and digitoxin. Plasma cortisol. Human placental lactogen. Cyclic AMP. Renin activity. Human growth hormone. Insulin. And a host of other applications are now under development in both the clinical and research areas.

Why so much interest in radioimmunoassay?

It's a new analytical tool that provides quite remarkable advantages in specificity, sensitivity, and speed.

What do I need to get into radioimmunoassay?

Usually the individual kits provide all the required reagents. But not, of course, the necessary instrumentation. That's where "The Radioimmunoassayer" comes in. It's the gamma radioassay system for most radioimmunoassays.

What else should I know about the Autowell?

Briefly: it's a system offering high efficiency, reliability, and ease of operation in the automated radioassay of 100 solid or liquid gamma-emitting samples.

Does Autowell II have other applications?

Yes, T₃, T₄, TBI, plasma disappearance studies, red cell survival studies, fat metabolism studies, iron-binding capacity measurements, blood volume measurements, Schilling tests.

What support can I expect from Picker?

Plenty. Picker has the most extensive *local* sales and service staff in the entire industry. There are, for example, now over 750 Picker Service Engineers functioning in North America alone. We don't abandon you.

And now?

For additional information on "The Radioimmunoassayer" and our flexible lease plans, please call your local Picker representative or write Picker Corporation, 595 Miner Road, Cleveland, Ohio 44143.

PICKER

Clinical Newsletter

from Bio-Rad

Straight talk about a new T-3 test

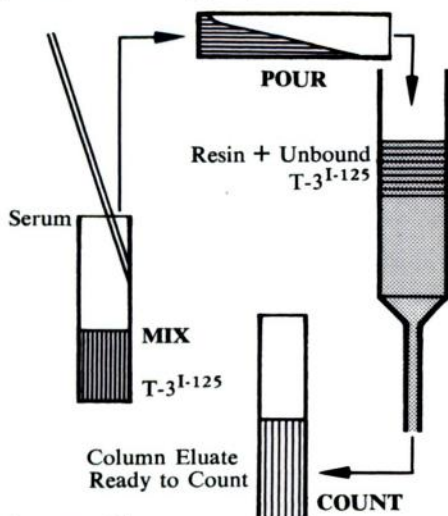
Bio-Rad's new TRI-COUNT T-3 combines simplicity, reproducibility and low cost.

Bio-Rad recently introduced a new T-3 by column test called **TRI-COUNT** that combines simplicity and reproducibility at a price you may find hard to believe. We accomplished all this by utilizing the same ion exchange technology as the Bio-Rad T-4 by Column Test. We kept the test as simple and uncomplicated as possible, building the reproducibility into the test itself rather than depending on operator technique.

Simplicity

TRI-COUNT T-3 has only three quick steps: mix, pour and count.

The sample is first mixed with radioactive T-3 buffer solution and allowed to stand at room temperature 15 minutes or more. The time is not critical. If the operator can't get to the next step for an hour it won't make any difference in the final results. Next, the mixture is poured into the **TRI-COUNT T-3** column and the eluate collected. Finally, the eluate is counted to determine T-3 value. That's all there is. No centrifugation, no incubation, no precise timing. It's a simple matter of mix, pour, count.



Low Cost

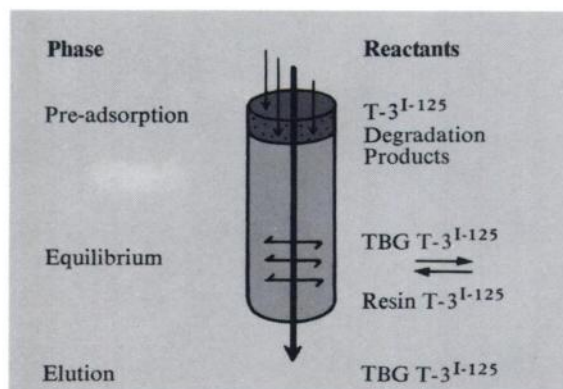
We set out to design the simplest and most reproducible T-3 test possible. When the laboratory results were fully evaluated and the test's simplicity became readily apparent, the low cost came as no surprise. Actually laboratories save money two ways with **TRI-COUNT T-3**: They save money when they buy it and they save time when they use it. An individual test can be performed in only 20 minutes and 20 tests can be completed in just 40 minutes.

Reproducibility

TRI-COUNT T-3 has the highest degree of reproducibility of any T-3 test now on the market. There are three major reasons for this.

1. The **close control** of the ion exchange resin manufactured by Bio-Rad specifically for this T-3 test.
2. The **simplicity** of the test that practically eliminates any effect of differences in operator technique.
3. The elimination of hormone degradation products as a cause for error. The **TRI-COUNT T-3** column is designed to adsorb hormone degradation products and separate them from the equilibration reaction.

None of this "just happened". It was all designed into the test at the start to reduce and eliminate potential errors before they occurred.



BIO-RAD Laboratories

NM

32nd & Griffin Avenue, Richmond, CA 94804.
Phone (415) 234-4130.

- Send introductory offer at \$39.95 (50 tests).
 Send more information.

Name _____ Title _____

P. O. _____ Institution _____

Address _____

City _____

State _____ Zip _____

The DI 750 Multi-Format Camera System

The nucleus of our system is the Electronic Programmer. It alters the deflection signals normally used to displace the CRT beam. The image displayed is manipulated in size, location, duration and number. The CRT image moves, not the camera



film. That's the essence of our system. Making it "multi-format" and revolutionary. Use the 750-01 Programmer with your existing cameras. Select 1 through 16 frames per film, manually or electronically advanced on the CRT. The size can range from full display (full use of CRT diameter) to 1/16th. Add our 750-02 8 x 10 X-ray Camera which records as many as 16 frames of dynamic flow information on each sheet of 8 x 10 film. Or the 750-03 Back which permits simultaneous

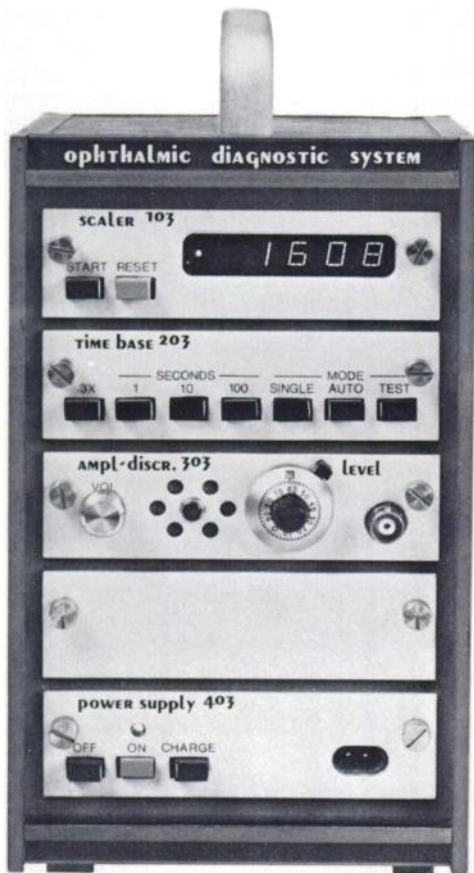
recording on 4 x 5 cut film, Polaroid, and/or microfiche. Using the microfiche camera back, as many as 80 frames can be placed on a single microfiche 4 x 5" film, then enlarged for reading with the 750-04 desk top viewer.

For further information, write or call

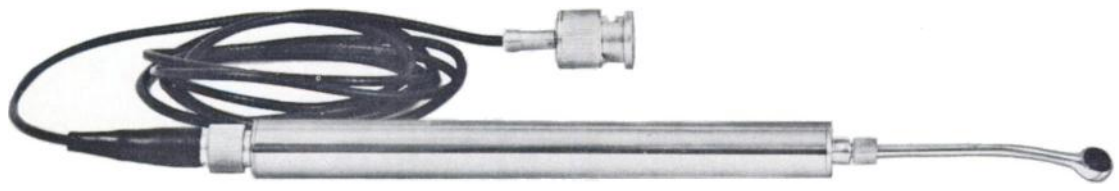
Dunn Instruments

1280 Columbus Avenue, San Francisco, Ca. 94133 / Phone (415) 776-7033

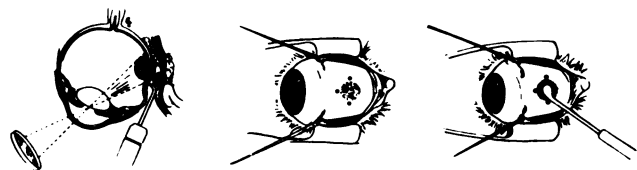




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New solid-state detector improves reliability over previous nuclear geiger tube systems.



*As developed for the U.S.A.E.C., Division of Biology and Medicine, under contract AT (04-3) -627 with Solid State Radiations Inc., Los Angeles, Calif.
 **As developed by the Departments of Radiology, Ophthalmology and Physics of Emory University, Atlanta, Ga.

For complete details, ask for Bulletin 110-B



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 35 URBAN AVE. • WESTBURY, N.Y. 11590 • (516) 333-9344

RADIOIMMUNOASSAY ...IS FOR EVERYBODY



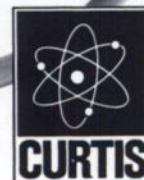
Curtis Nuclear Corporation's RIA diagnostic test kits are ideal for Pediatrics (HGH, Vitamin B12) to Geriatrics (Digoxin, Insulin, Vitamin B12). Micro sera sampling plus a highly specific polymerized protein antibody run at room temperature, reduces total test time without altering the precision, specificity, accuracy or reproducibility of the test.

Curtis instruments, pipettes and lyophilized serum standards further insure reliable test results.

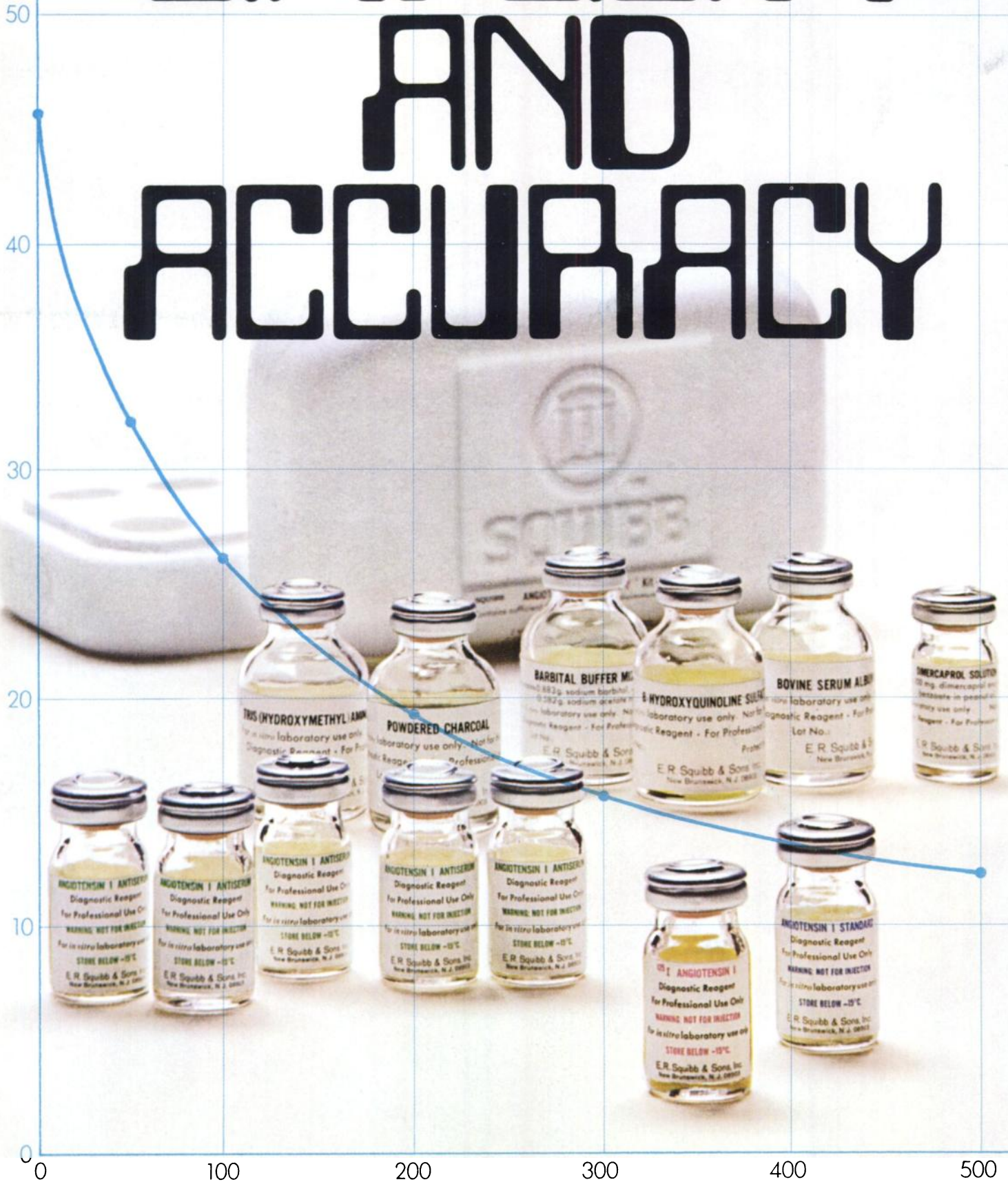
Regardless of the family needs, Curtis has radioimmunoassay diagnostic test kits for the assessment of hematological and hormonal problems.

Curtis Nuclear Corporation

1948 East Forty-Sixth Street, Los Angeles, California 90058 Telephone (213) 232-3531
Three Westchester Plaza, Elmsford, New York 10523 Telephone (914) 592-4060



SIMPLICITY AND ACCURACY



Isn't that what
you want
when you measure
plasma renin
activity?

Designed for precision and accuracy

Three important features of the Immutope Kit assure reliable, reproducible results in determination after determination. First, a special formulation makes the Angiotensin I Standard stable. Second, standardization is protected by a built-in iodine scavenger. Third, *all* the reagents in the Immutope Kit are stable (when properly stored) and all are matched — specifically formulated and tested to assure compatibility.

Designed for simplicity

Usual work time is significantly reduced because the reagents are premeasured. Because there's no need to run repeat blanks. No ice baths required as with another similar kit...all

Angiotensin I Immutope procedures, except for incubations, are done at room temperature. No need to make up fresh reagents every time a series is run...properly stored, the diluted ¹²⁵I Angiotensin I solution lasts for a week, the Tris Acetate Buffer with BSA for a month, and the remaining reagents for three months.

Low cost of individual determinations

The Angiotensin I Immutope Kit doesn't need expensive accessory equipment. It has a big capacity of 500 determinations, only 12 of which need be used for standards — and none of which need be run as reagent blanks. All the required reagents are provided in one complete, reasonably priced kit, for a low cost per individual determination.

for determination of plasma renin
activity by radioimmunoassay

ANGIOTENSIN I IMMUTOPE™ KIT

combines the extreme sensitivity
of radioisotope methodology with
the extreme specificity of
immunologic techniques

(SQUIBB radioimmunoassay kits are identified by the trade name, IMMUTOPE.)

Medatopes®

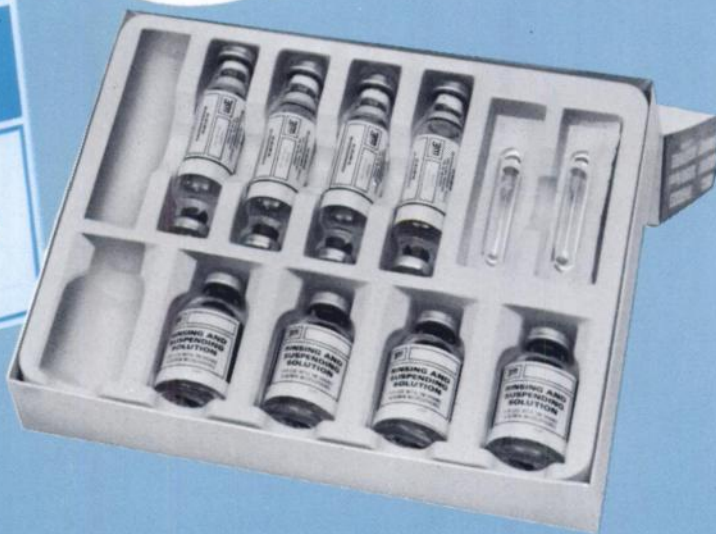


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USE ^{99m}Tc ALBUMIN MICROSPHERES

- **Uniform Shape and Size**

Perfectly spherical, the 3M Albumin Microspheres are uniformly sized to 15-30 microns in diameter. This uniformity, coupled with an extremely low tendency to agglomerate, results in truer images of lung perfusion. The result — no hot spots or extra-lung activity.

- **Integral, yet Biodegradable**

Each Albumin Microsphere is a single homogeneous sphere of albumin — they won't disintegrate in the vial or syringe. Yet, microspheres readily clear from the lung. Pulmonary clearance half-times are long enough for multiple view imaging but are still short enough to allow daily imaging, if required. Microscopic analysis of lung tissue in the mouse showed 99 percent of the administered microspheres were gone after 29 hours.¹

1. Data on file at the 3M Company and the Bureau of Biologics.

- **Eliminate Interference from "Free" Technetium**

"Free" isotope need no longer interfere with the scan. The unique filter construction of the Microsphere Labeling Vial allows the free isotope to be removed, leaving just labeled microspheres for suspension.



- **Stable Kit**

Currently the expiration date of each kit is *6 months* after the date of manufacture. You can stock the kit and have it available for immediate use. Even a department doing a moderate amount of lung imaging can take advantage of quantity discounts.

- **Each Lot FDA Approved**

Thoroughly tested by 3M, each lot is checked by the Bureau of Biologics, FDA, and approved for shipment. This provides a double-check of sterility, lack of pyrogens, and all the important performance parameters of the kit.

INDICATIONS Scintillation imaging of the lungs with ^{99m}Tc -Labeled Albumin Microspheres is indicated as an adjunct to other diagnostic procedures whenever information about pulmonary circulation is desired.

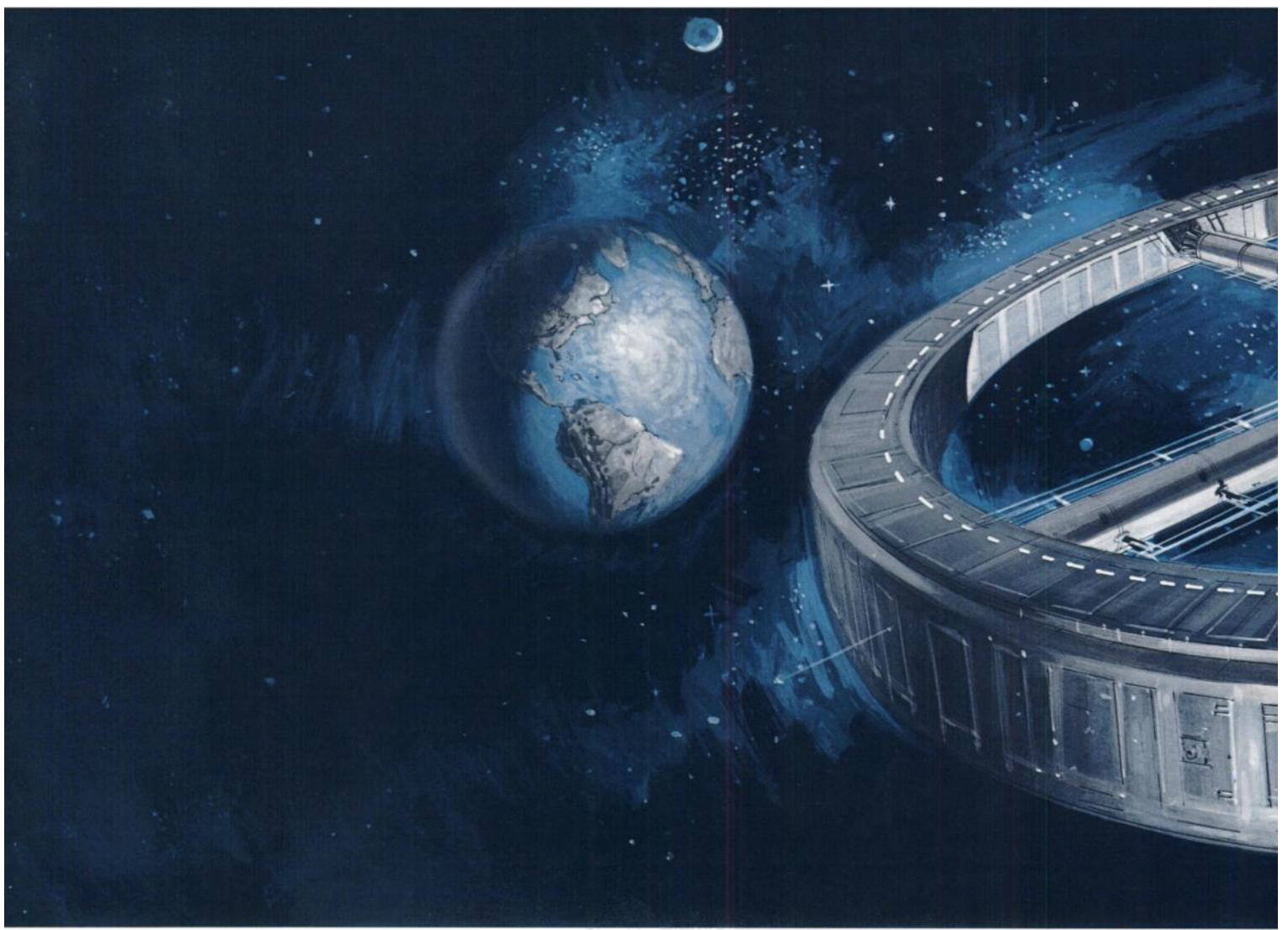
CONTRAINDICATIONS The safety of Albumin Microspheres in patients with a known right-to-left cardiac shunt has not been established and its use in such patients is contraindicated.

SIDE EFFECTS Although no anaphylactoid reactions have been reported in patients following the administration of Albumin Microspheres, the possibility should be considered that hypersensitivity reactions may occur rarely in patients who receive additional doses of the Microspheres.

HOW SUPPLIED Each kit contains five labeling units. Each labeling unit contains one day's supply of Albumin Microspheres (5mg — enough for 5 to 7 patients) plus all the reagents necessary to attach technetium to the microspheres.

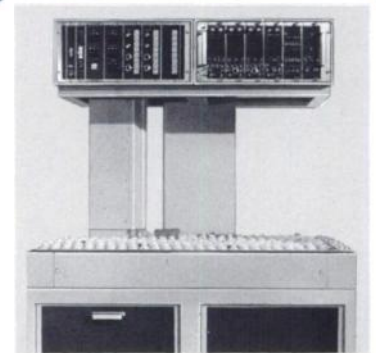
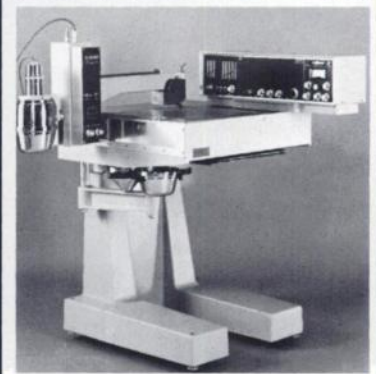
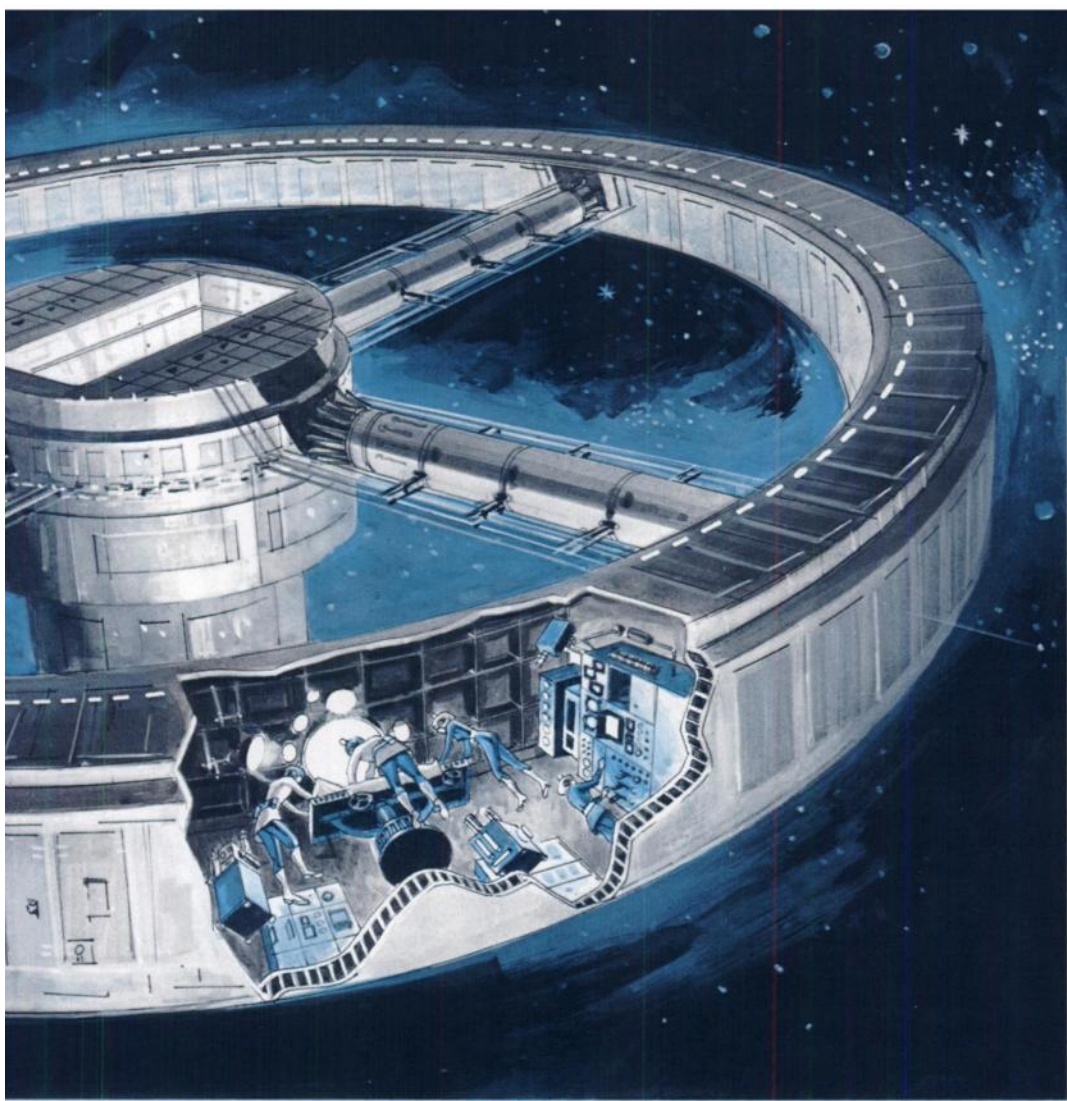
For detailed information about Microspheres and the 3M Brand Albumin Microsphere ^{99m}Tc -Labeling Kit, write: **Nuclear Products for Medicine**, 3M Company, 3M Center, St. Paul, Minnesota 55101, or phone TOLL FREE (800) 328-1671.

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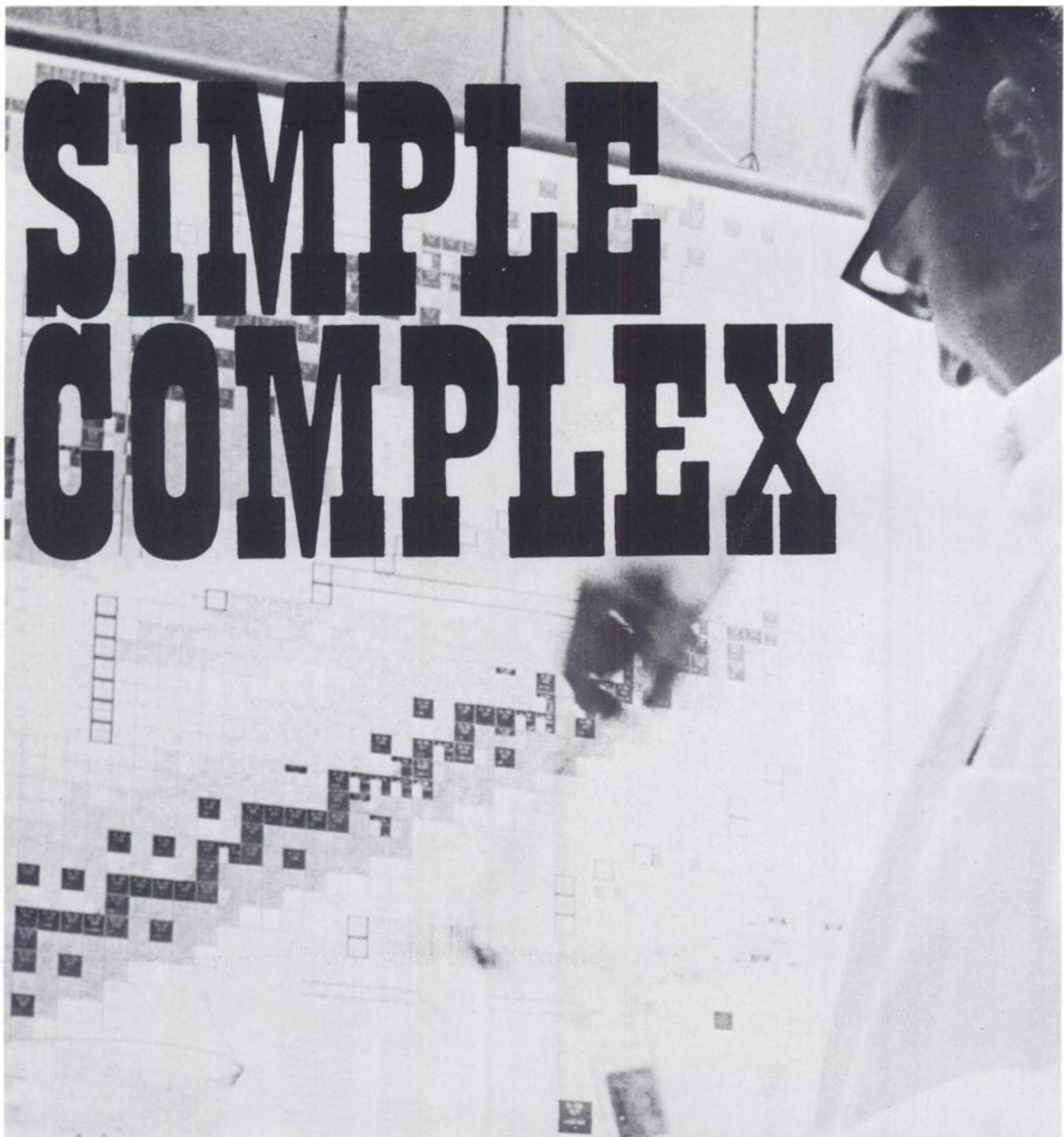
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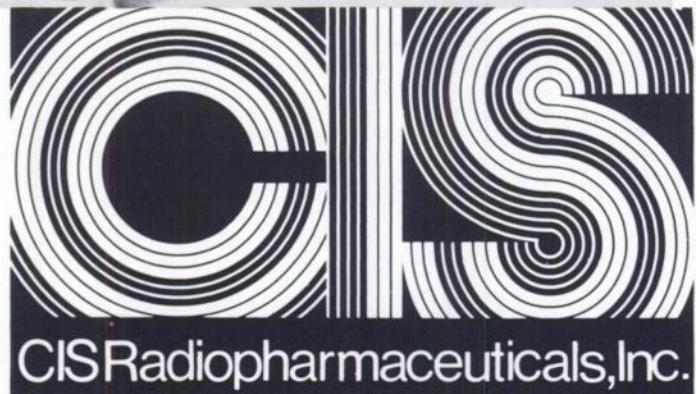
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*Eckelman, Richards, Hauser and Atkins, J. Nuclear Medicine 12, 699 (1971)



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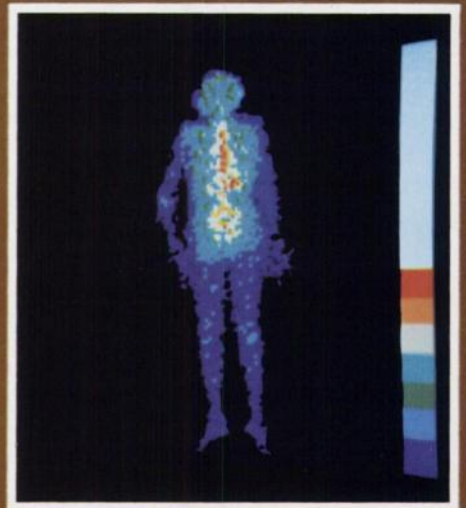
minimum of patient movement.

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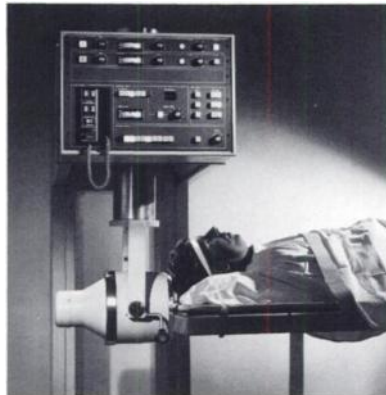
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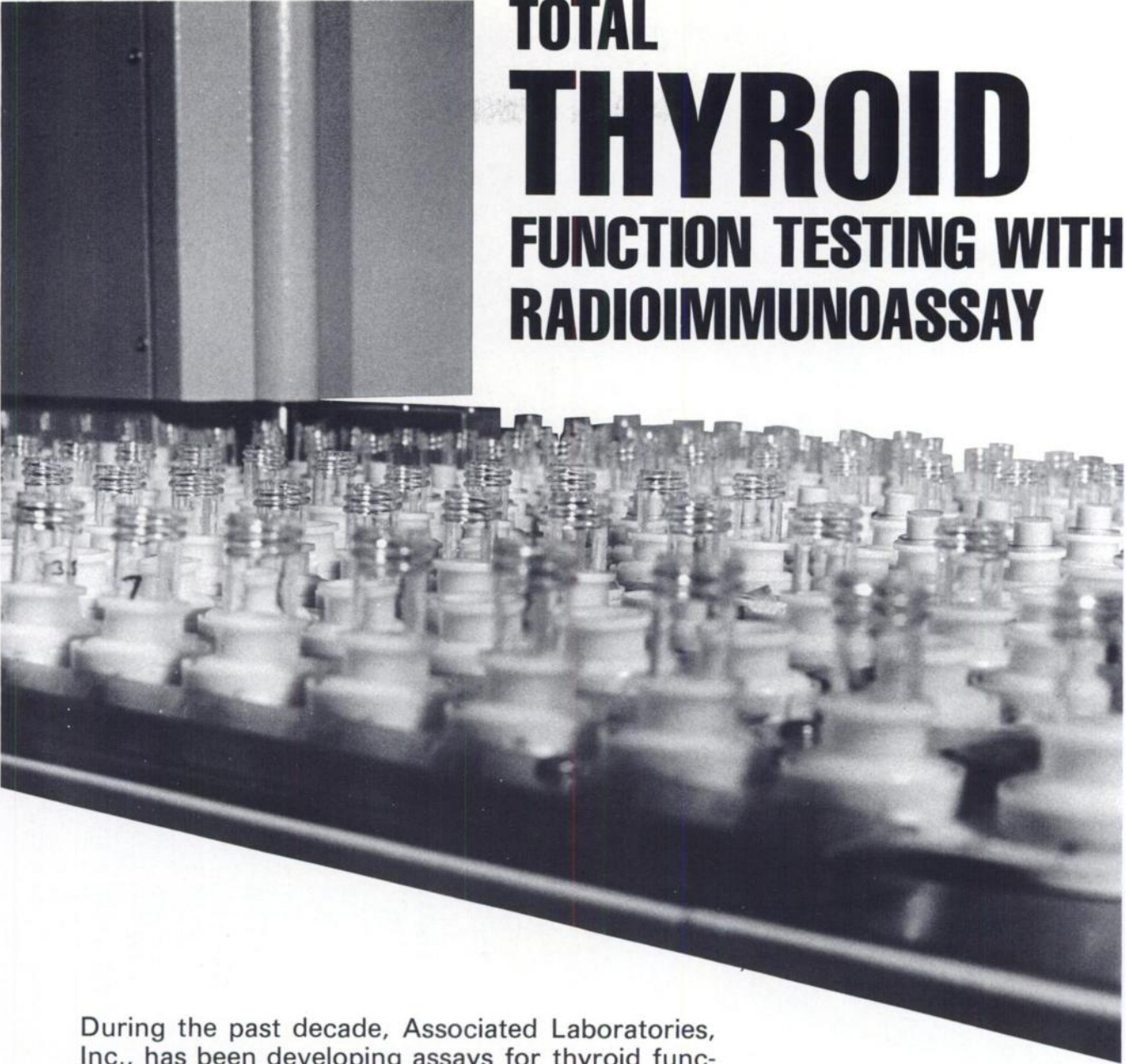
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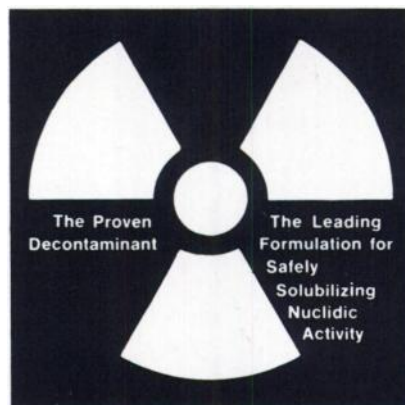
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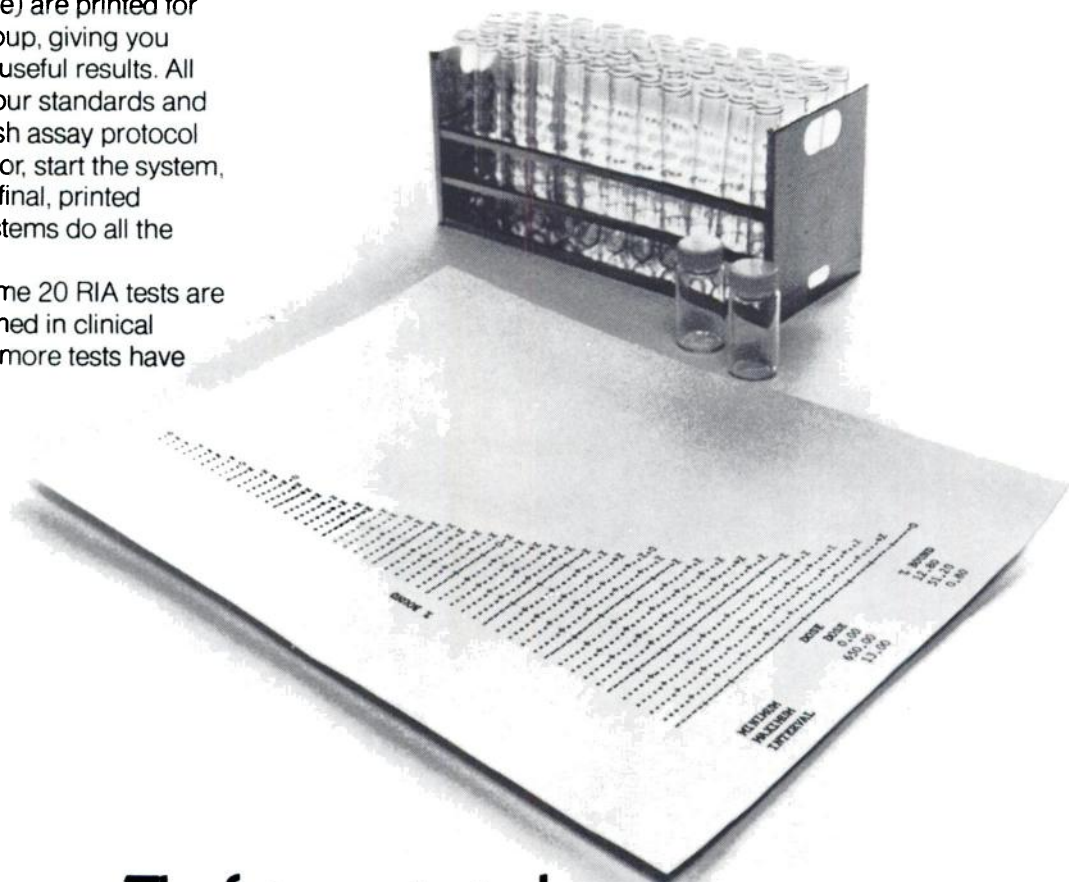
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By D. BRUCE SODEE, M.D., F.A.C.P., F.A.C.G.; and PAUL J. EARLY, B.S. May, 1972. 516 pages plus FM I-XII, 7" x 10", 402 illustrations. Price, \$23.50.

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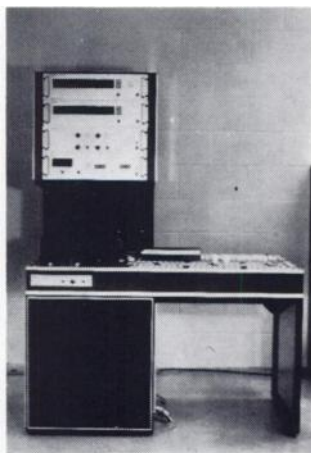


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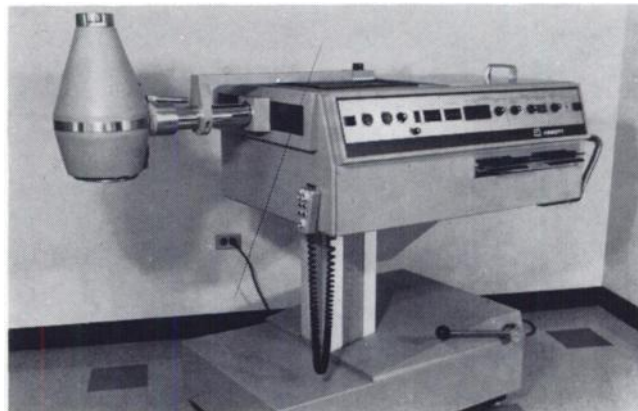
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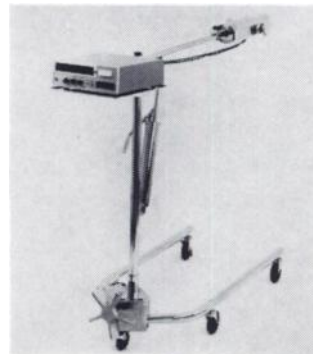
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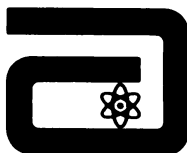


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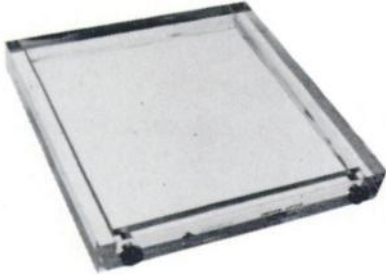


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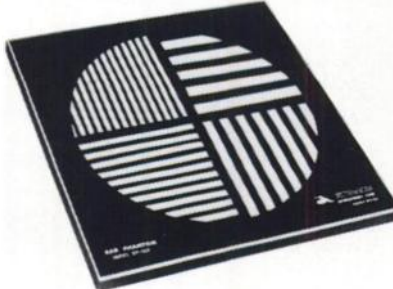
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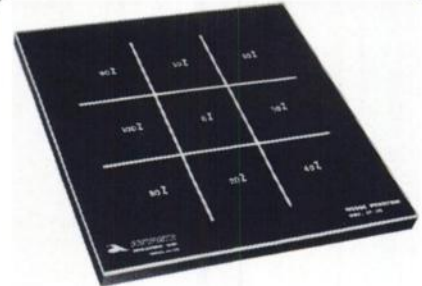
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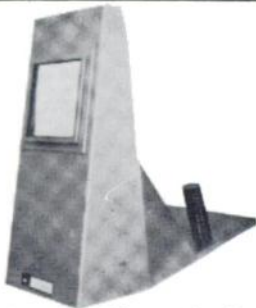
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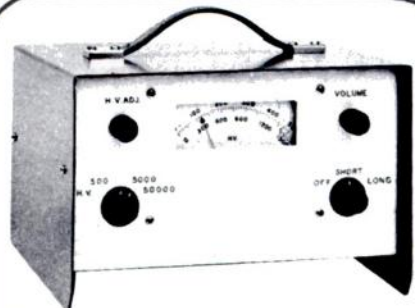
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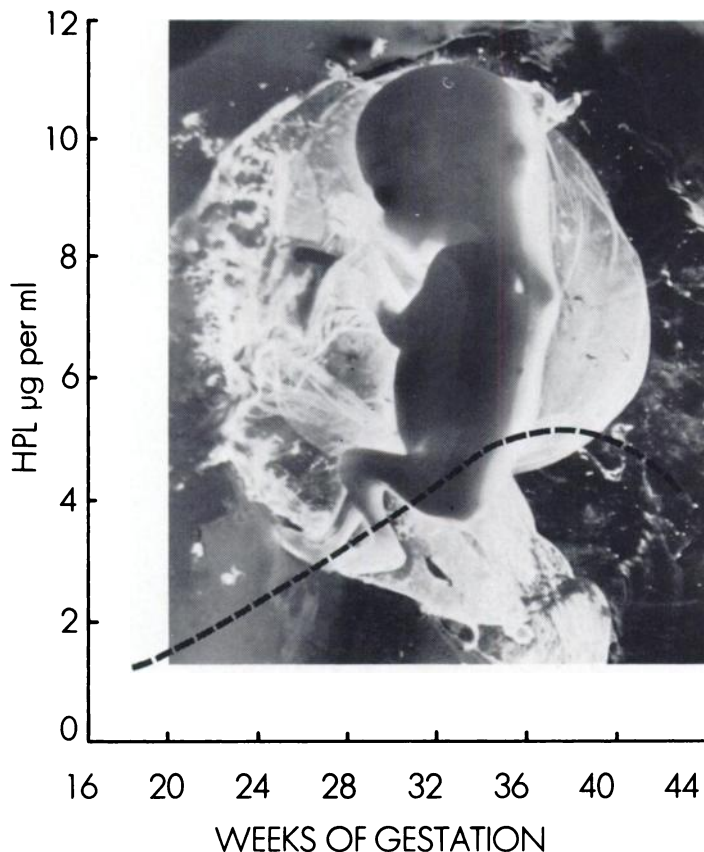
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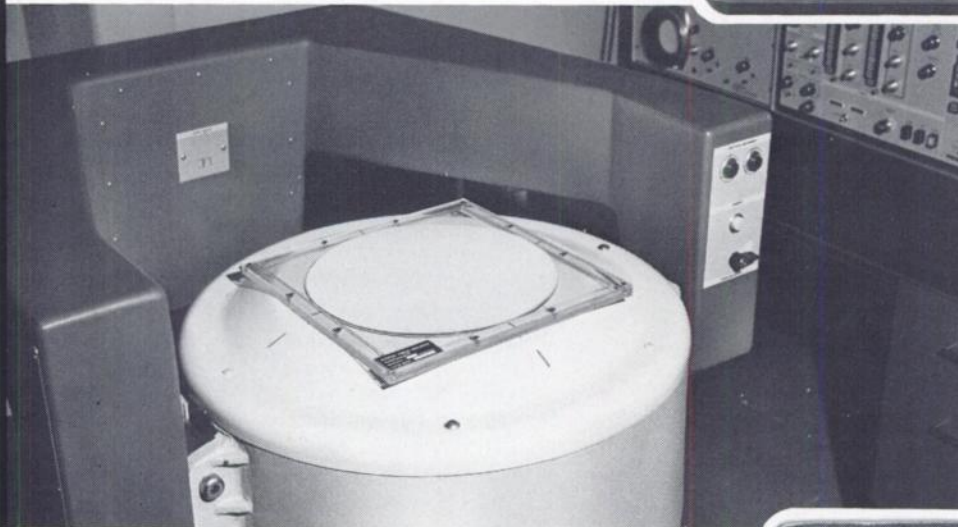


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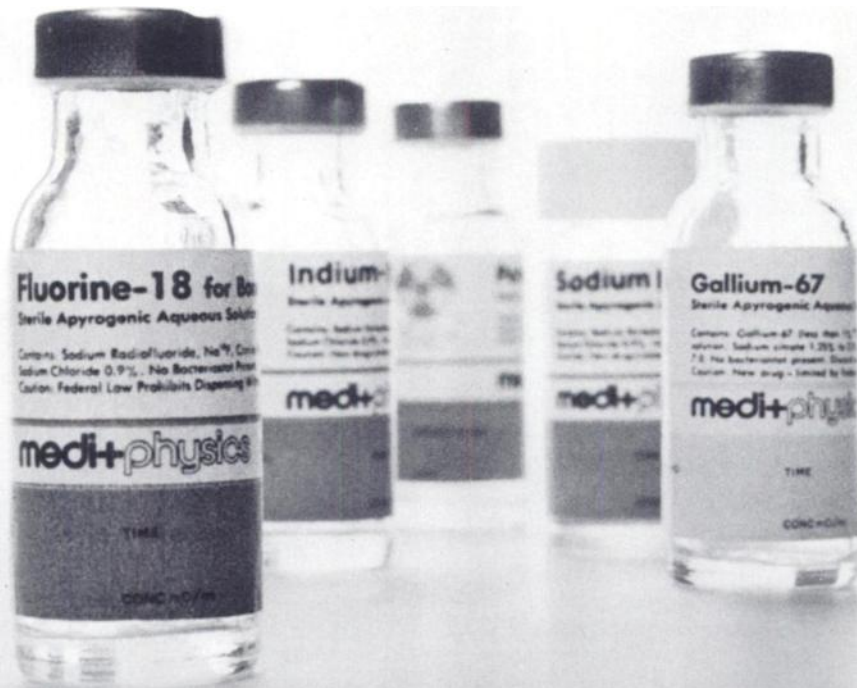
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PHYSICIAN, CHIEF, NUCLEAR MEDICINE for new department to be activated at 396-bed general medical hospital; salary range from \$27,708-31,383 based on qualifications; licensure any state; excellent fringe benefits; located 35 miles from university and metropolitan setting; attractive community environment, non-discriminatory employment. Contact: Chief of Staff, VA Hospital, Butler, Pa. 16001.

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NUCLEAR MEDICINE RESIDENCY. Position available for July 1, 1973 and 1974, in two-year residency program. Fully integrated programs with Medicine, Radiology, and Pathology exist for applicants without prior residency training. Contact: John C. Harbert, M.D., Georgetown University Hospital, 3800 Reservoir Rd., N.W. Washington, D.C. 20007. Phone: 202/625-7492.

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INTERNIST, AMERICAN BOARD OF Nuclear Medicine certified, seeks full-time staff position in Clinical Nuclear Medicine. Box 402, Society of Nuclear Medicine, 211 East 43 Street, New York, N.Y. 10017.

PHYSICIST, PH.D., SEVERAL YEARS experience in various phases of nuclear medicine. Desires research, staff, teaching or radiation safety position. Box 403, Society of Nuclear Medicine, 211 East 43 Street, New York, N.Y. 10017.

STUDENT WITH BACHELORS Degree in Science from the Pennsylvania State University, graduating in May from Temple University School of Pharmacy with a specialty in radiopharmaceuticals seeking a position in hospital environment or related area. Completely mobile. Contact Steven Dessel, 9215 Blue Grass Road, Philadelphia, PA 19114, 215-677-7765.

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PHYSICIAN, TRAINED IN INTERNAL medicine and completing residency in June '73, seeks full-time staff position in clinical nuclear medicine. Box 404, Society of Nuclear Medicine, 211 East 43rd Street, New York 10017.

PHYSICIST, PH.D. NUCLEAR PHYSICS, experience and training in nuclear medicine, teaching nuclear medicine residents and technologists, radiological physics, isotope production, animal studies, research, computers, electronics. Seeks position in nuclear medicine. Box 405, Society of Nuclear Medicine, 211 East 43rd Street, New York 10017.

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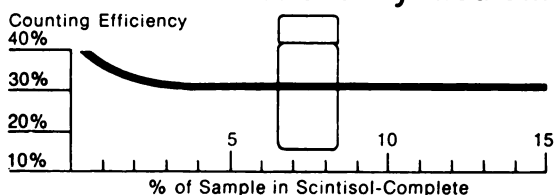
Recent Advances in Nuclear Medicine

A Course on "Recent Advances in Nuclear Medicine" will be held August 20 through August 24, 1973 at Colby College in Waterville, Maine. For the fifth consecutive year, the course will be directed by Dr. Henry N. Wagner, Jr. This year, advances in the broad field of Nuclear Medicine, as well as in-depth discussions of basic principles will be presented. In particular, in-vitro procedures, clinical imaging procedures, and newer aspects of instrumentation will be emphasized.

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For further information, contact

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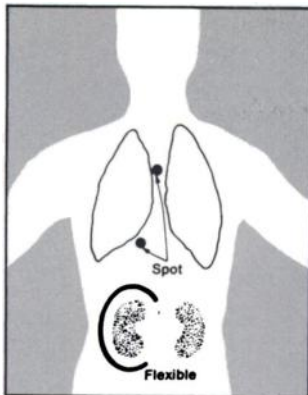
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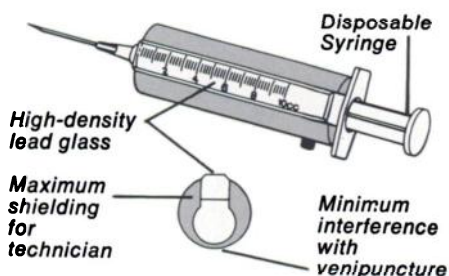
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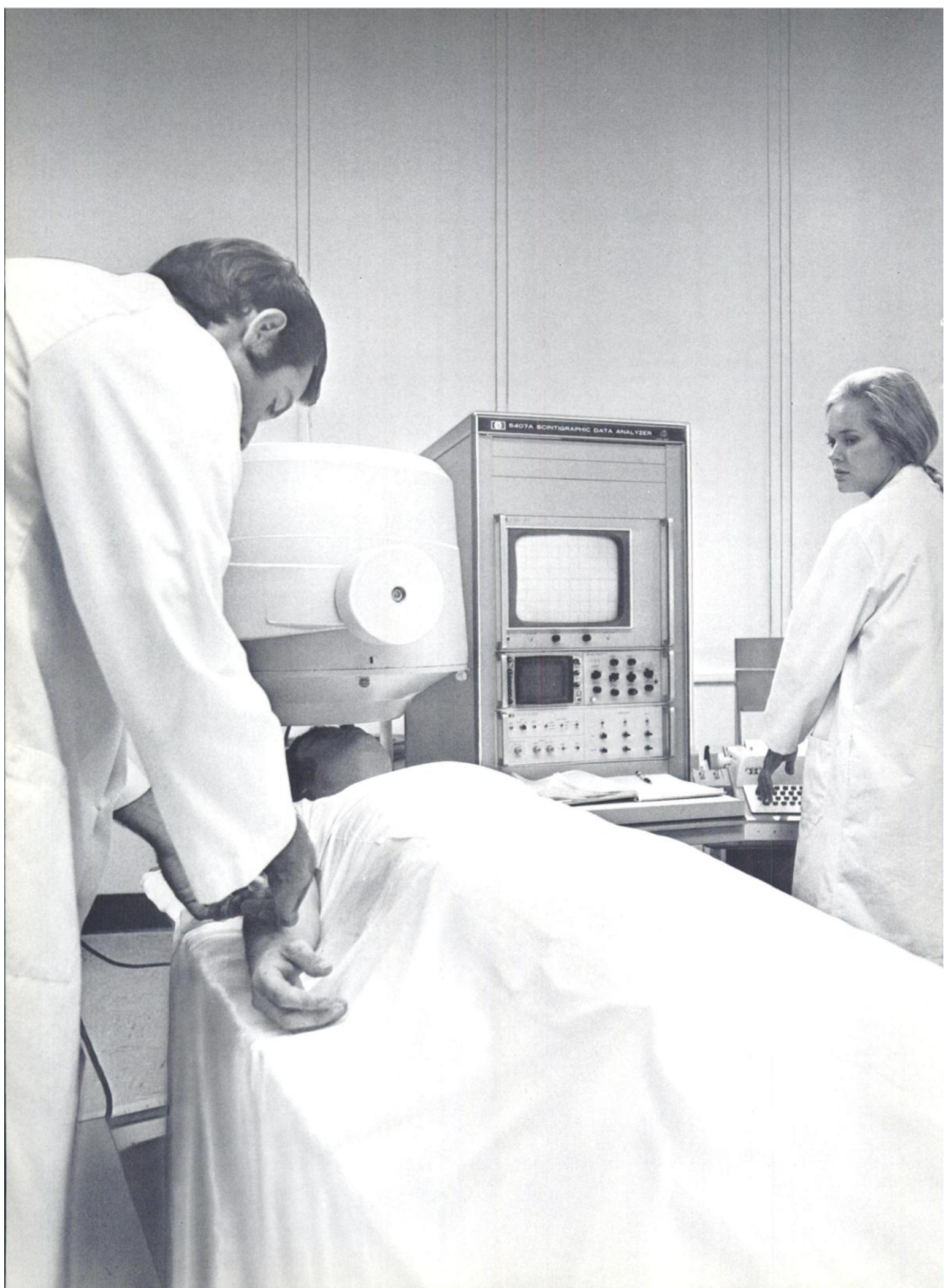


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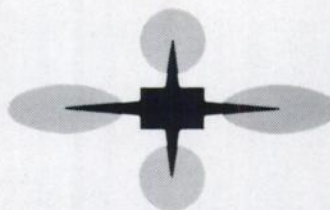
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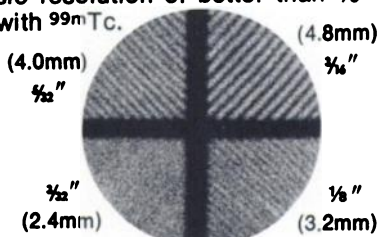
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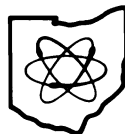
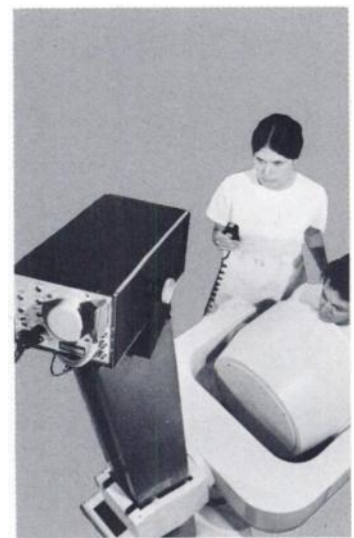
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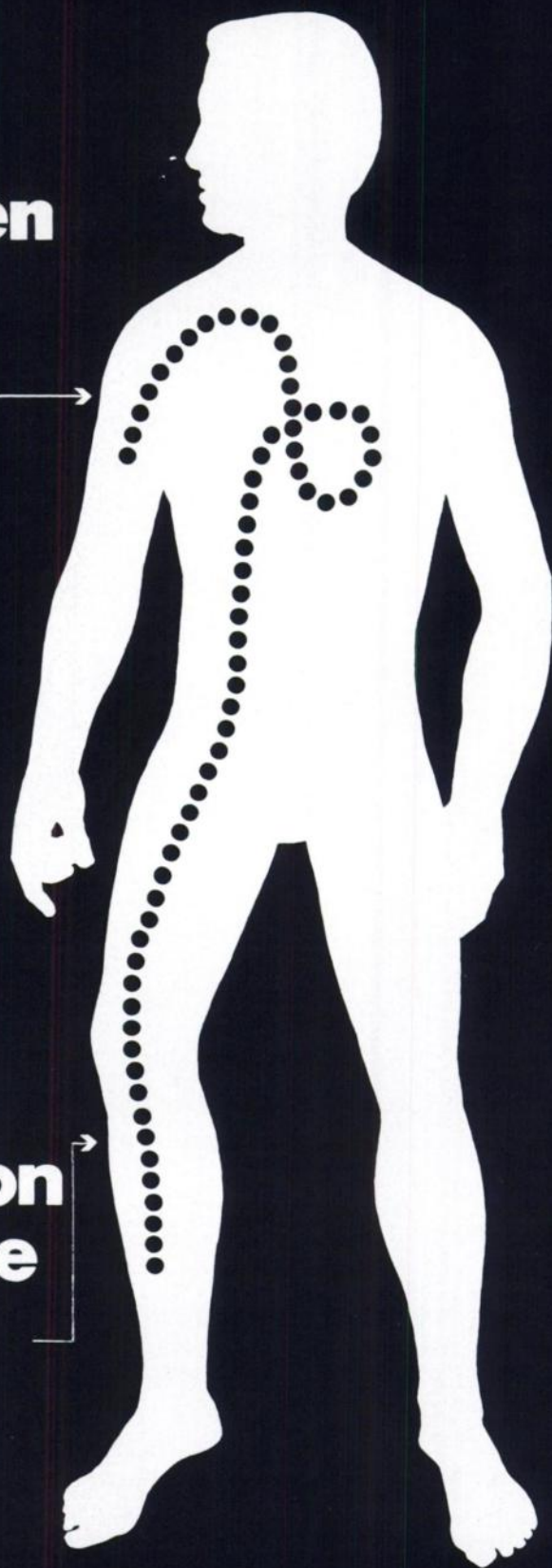
- 90% of iodinated fibrinogen is available for coagulation.
- prepared from a restricted pool of donors, screened to minimize the possibility of transmission of serum hepatitis.
- can be used for monitoring treatment of thrombus as well as detection.
- more convenient than phlebography—can be used for routine screening by ward staff.
- available from stock.

Post-operative deep vein thrombosis of the leg can give rise to many serious sequelae, including fatal pulmonary embolism, yet in many cases there are no clinical signs of the thrombus, itself. Labelled fibrinogen, administered by intravenous injection, becomes incorporated in the thrombus, and can be followed by daily scanning of each leg (using a hand held Isotope Localization Monitor). The area of maximum radiation intensity indicates the size and site of the thrombus. This simple daily procedure can be easily carried out at the patient's bedside.

Full information on the material and the technique is available from The Radiochemical Centre.

Availability of this product may be subject to national regulations.

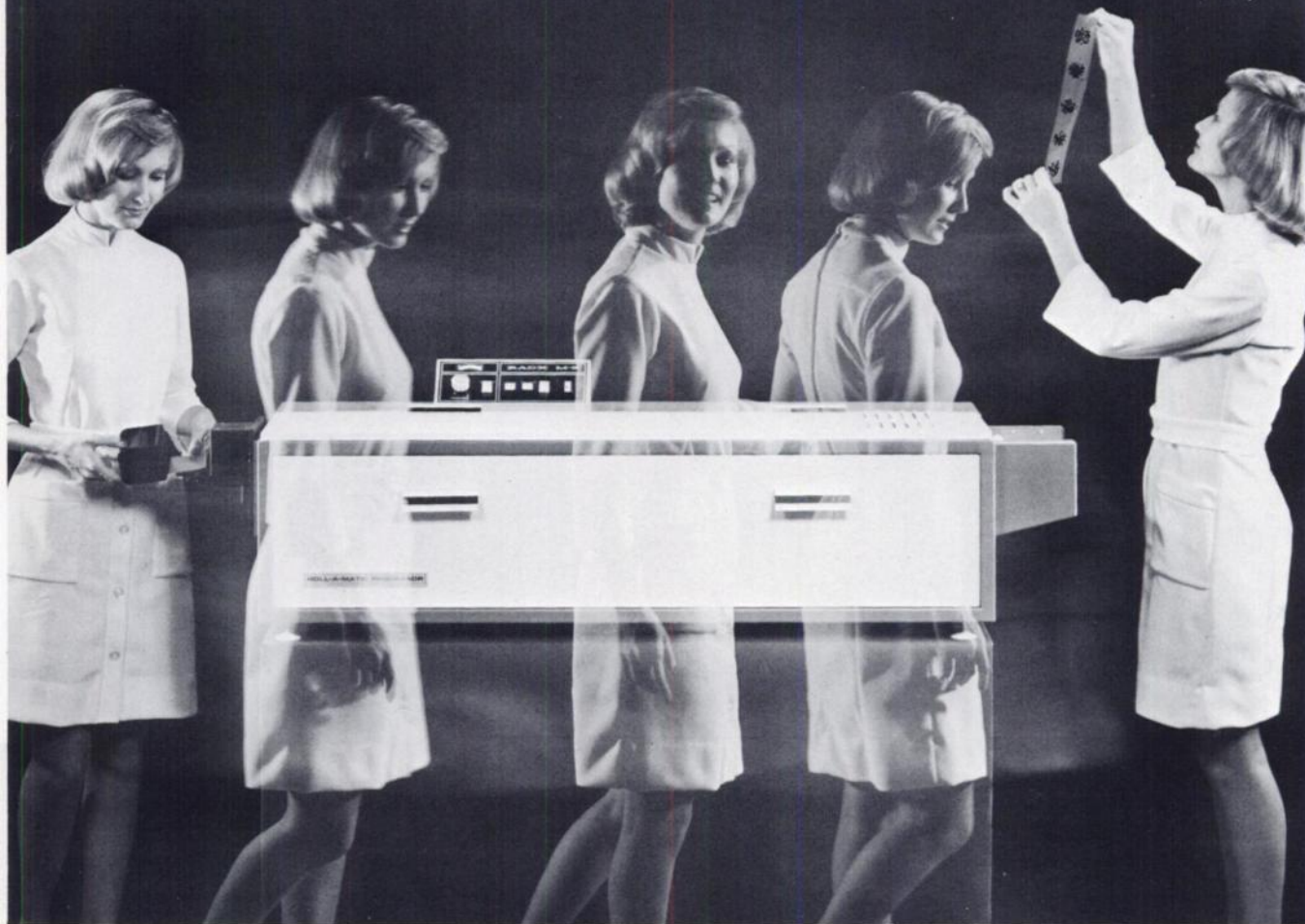
For early detection of post-operative deep vein thrombosis



The Radiochemical Centre Amersham England



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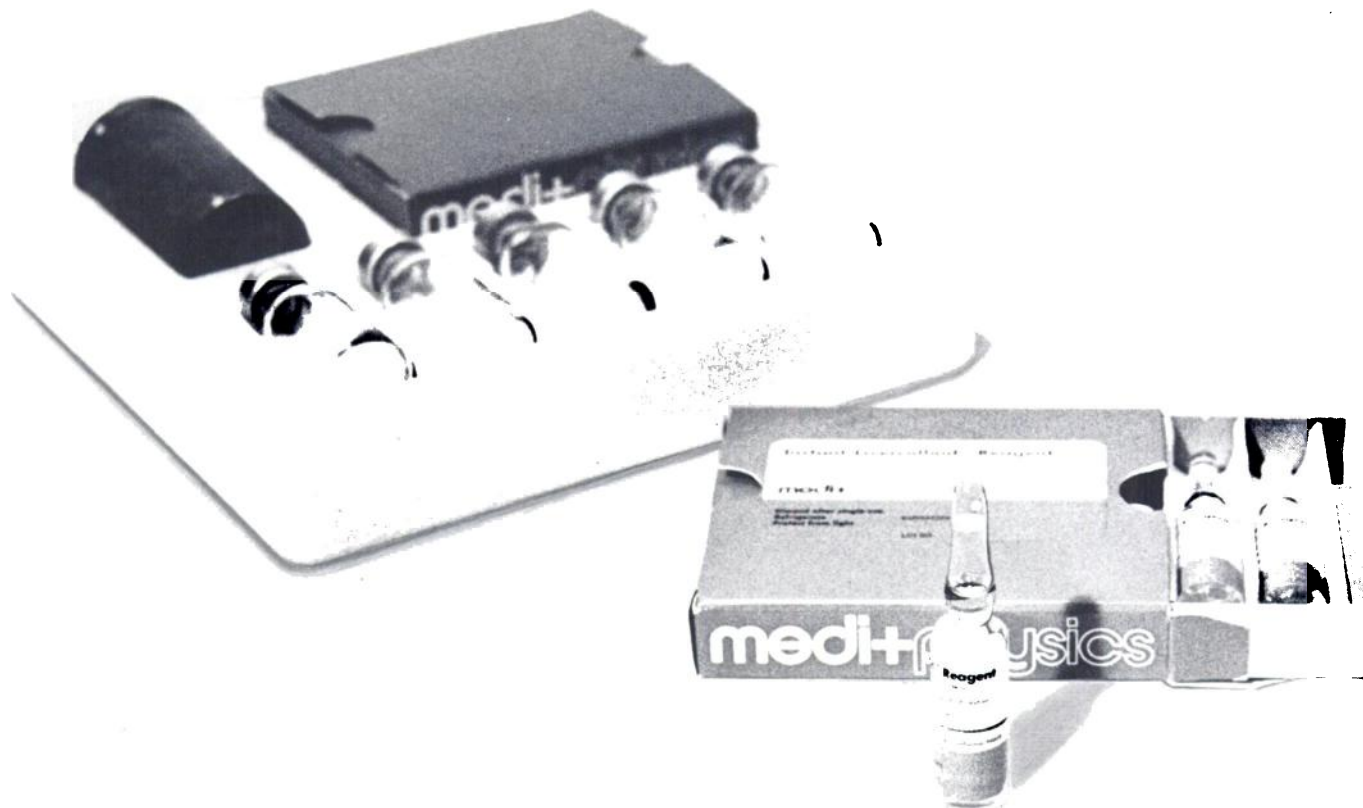
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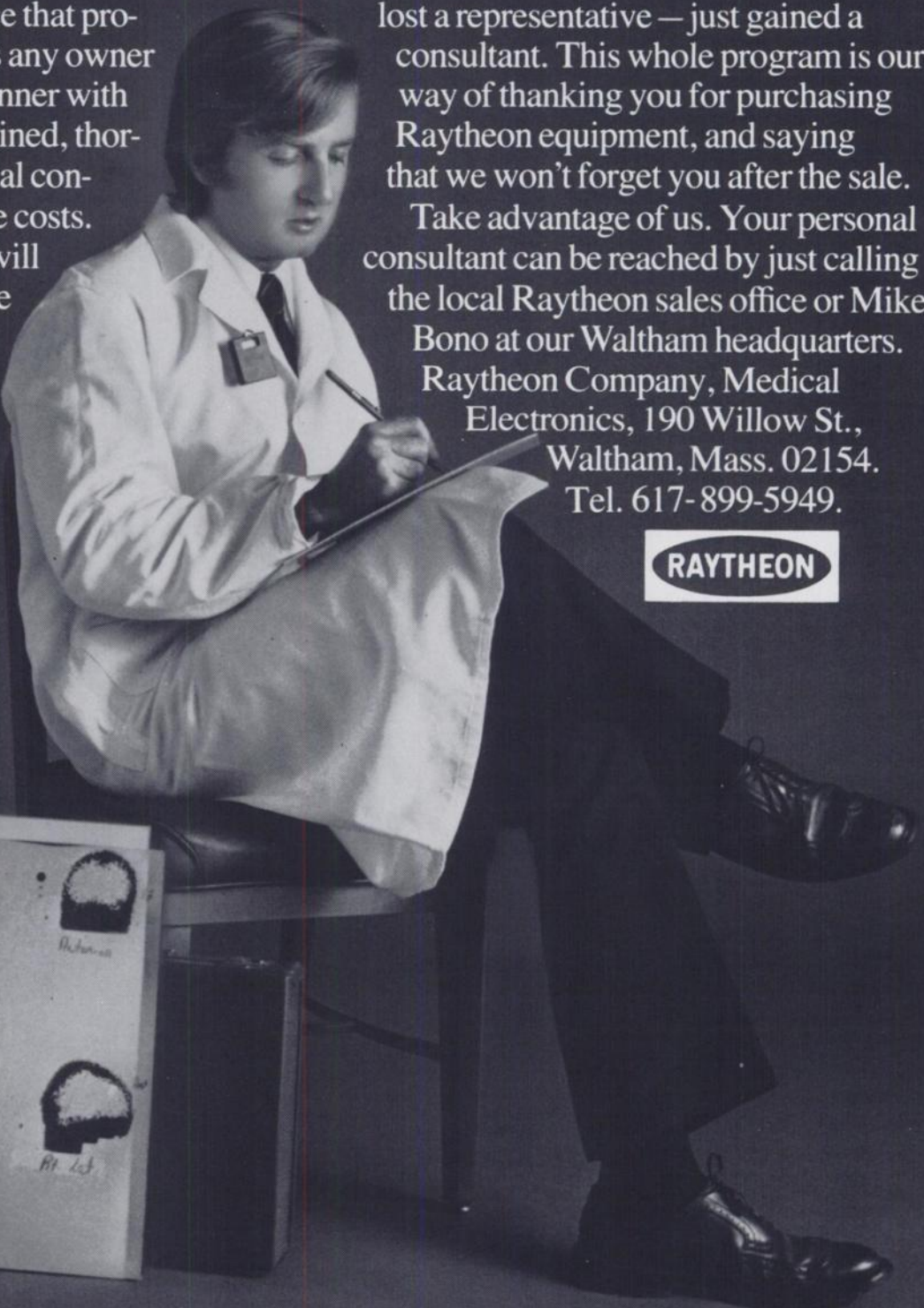
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Detection of Deep Vein Thrombosis

and other in vivo applications



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- COMPACT & PORTABLE
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- UNLIMITED CHANNEL SELECTION
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- CLINICALLY PROVEN FOR OVER ONE YEAR

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High voltage
Threshold
Window
Battery test
Response (fast & slow)
CPS or percent switch
Reset

For DEEP VEIN THROMBOSIS DETECTION, the Model 145 offers the important features of **portability**, standard D cell operation yielding at least 100 hours of uncycled use, **unlimited** channel selection, and **prompt** servicing.

Using I-125 labelled fibrinogen and the Model 145, early detection of deep vein thrombosis of the legs can be accomplished. With the Model 145, the leg is scanned after intravenous injection of the labelled fibrinogen. As a thrombosis develops, the radioactive fibrinogen is detected with the Model 145 and measured directly in percentage, where 100% is determined over the precordial area.

SPECIFICATIONS

RANGE: 30, 100, 300, 1000, 3000 cps
and 0 - 120%

TIME CONSTANT: Fast 2 sec., slow 14 sec.

SIZE: 4½ x 5½ x 8 inches (HxWxL exclusive
of handle).

WEIGHT: 6.5 lbs total

DETECTOR: 1mm x 1 inch NaI (TL) mounted
on PMT and 7 mg/cm² aluminum
window. Optional - 1 inch x 1 inch
NaI (TL) detector with thin window
at extra cost.

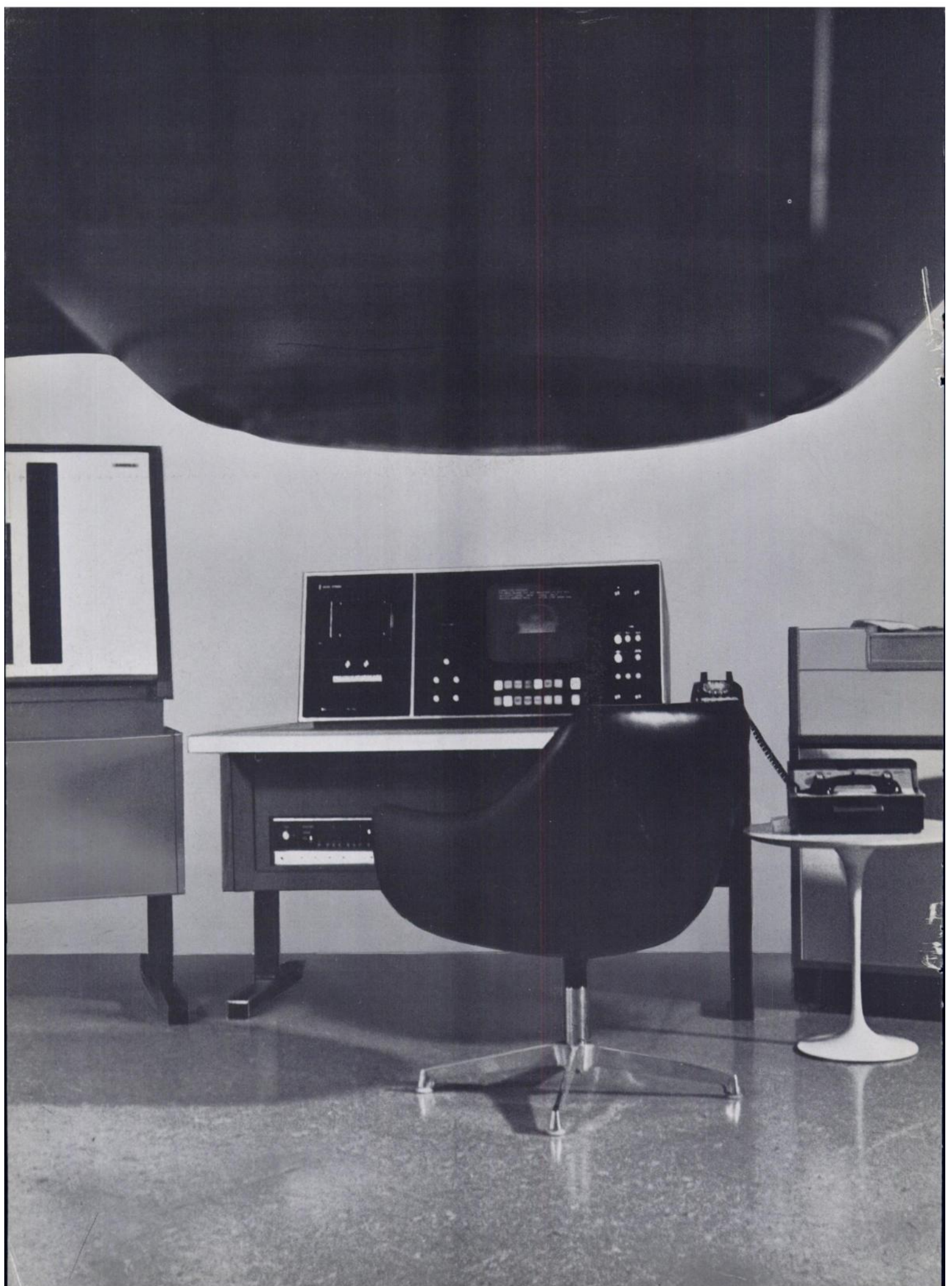
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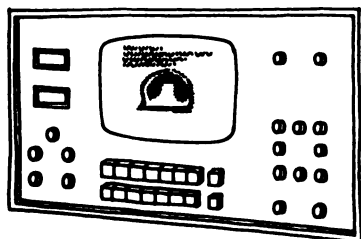


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Faster, more precise interpretation with a surprise tagged on.

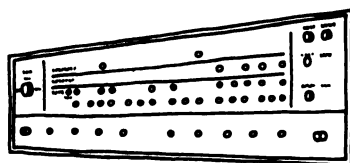
Now you can really do it faster, better, at a much lower cost — without ever having to worry about limitations again.

The Baird-Atomic Scanning Gamma Camera-System Seventy delivers 200,000 observed counts per second, with 3 to 4 millimeters resolution, at any energy.



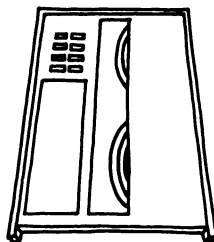
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You might call it a result of our decade of concerned commitment. to the nuclear medical community.



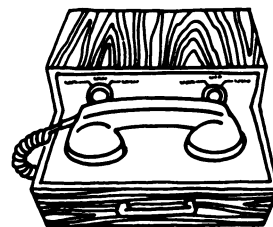
System Seventy uses as its information and data manipulation base the Nova computer. It's part of the whole new image processing console, also featuring a large screen viewing area, drum memory, and the minimum of controls. You simply push STATICS or DYNAMICS and let the computer take events from raw count information to clinical formats, in seconds. It's that easy — for you and your operator.

It's all possible through our comprehensive software packages and programming, eliminating the tedious and time consuming work of conversion to interpretable data.



But that's only our basic System Seventy. As your needs grow, our modular Scanning Gamma Camera will grow with you. Add what you want — unlimited patient record storage and instant retrieval, hard copy electrostatic images in

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We've ensured the clinical usefulness of System Seventy incorporating all those areas of special consideration like data smoothing and automatic non-uniformity correction along with our unique detector, its 294 NaI(Tl) crystals, and the computerized bed programmed to index sixteen times per study, 2.78mm per move — for 4704 true data collection points.

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