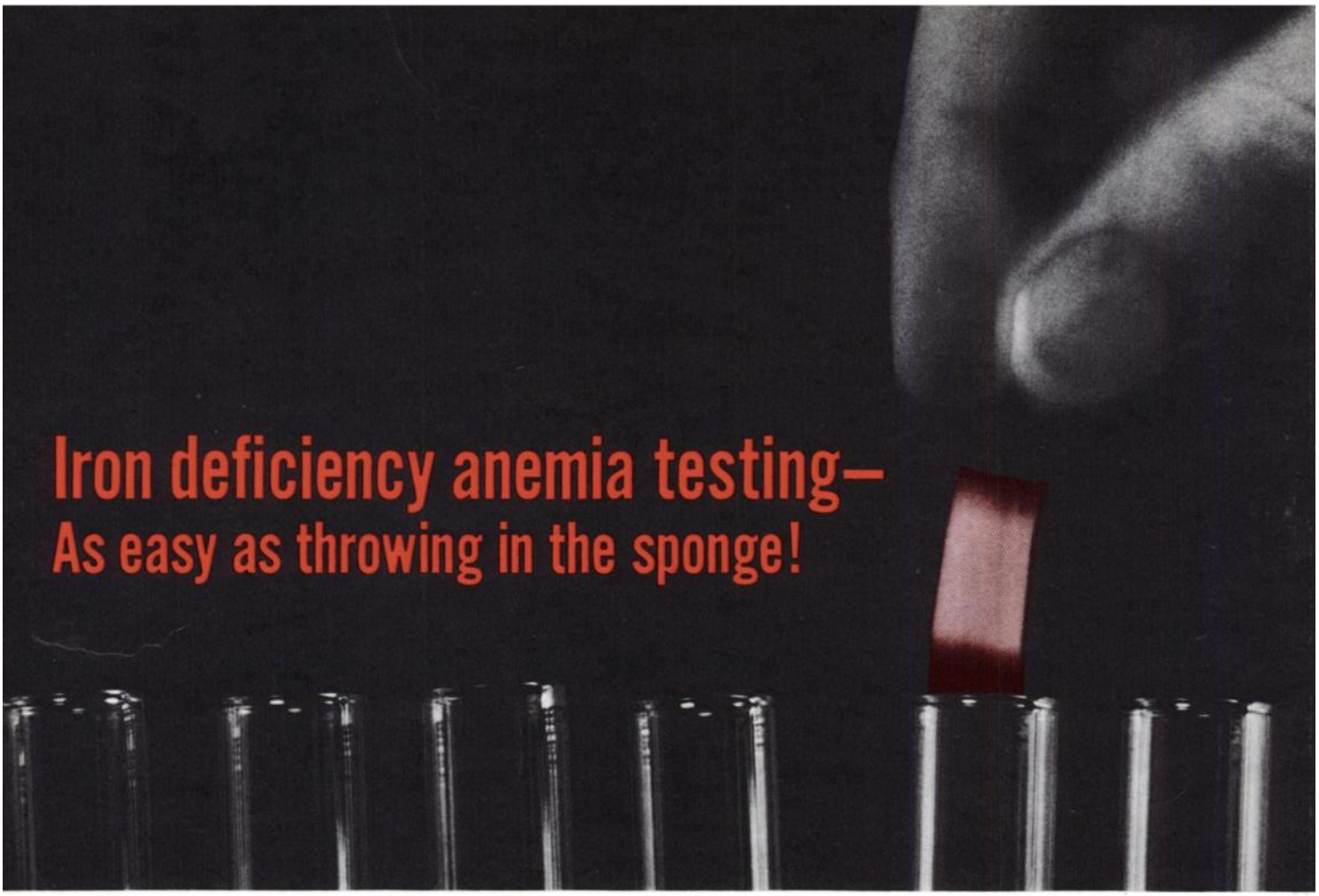


Irosorb-59 is the second in a series of **in vitro** radio-pharmaceutical tests developed by Abbott Laboratories. **The Irosorb-59 Sponge offers a remarkable degree of accuracy and simplicity that makes routine screening a practical matter.**

Accuracy: The diagnostic accuracy of the test is unsurpassed in measuring latent iron-binding capacity. What's more, unlike other methods, it can be used following the administration of a hematinic.

Speed: Irosorb-59 can be washed quickly, there being only 3 washes. No incubators or shakers are needed.

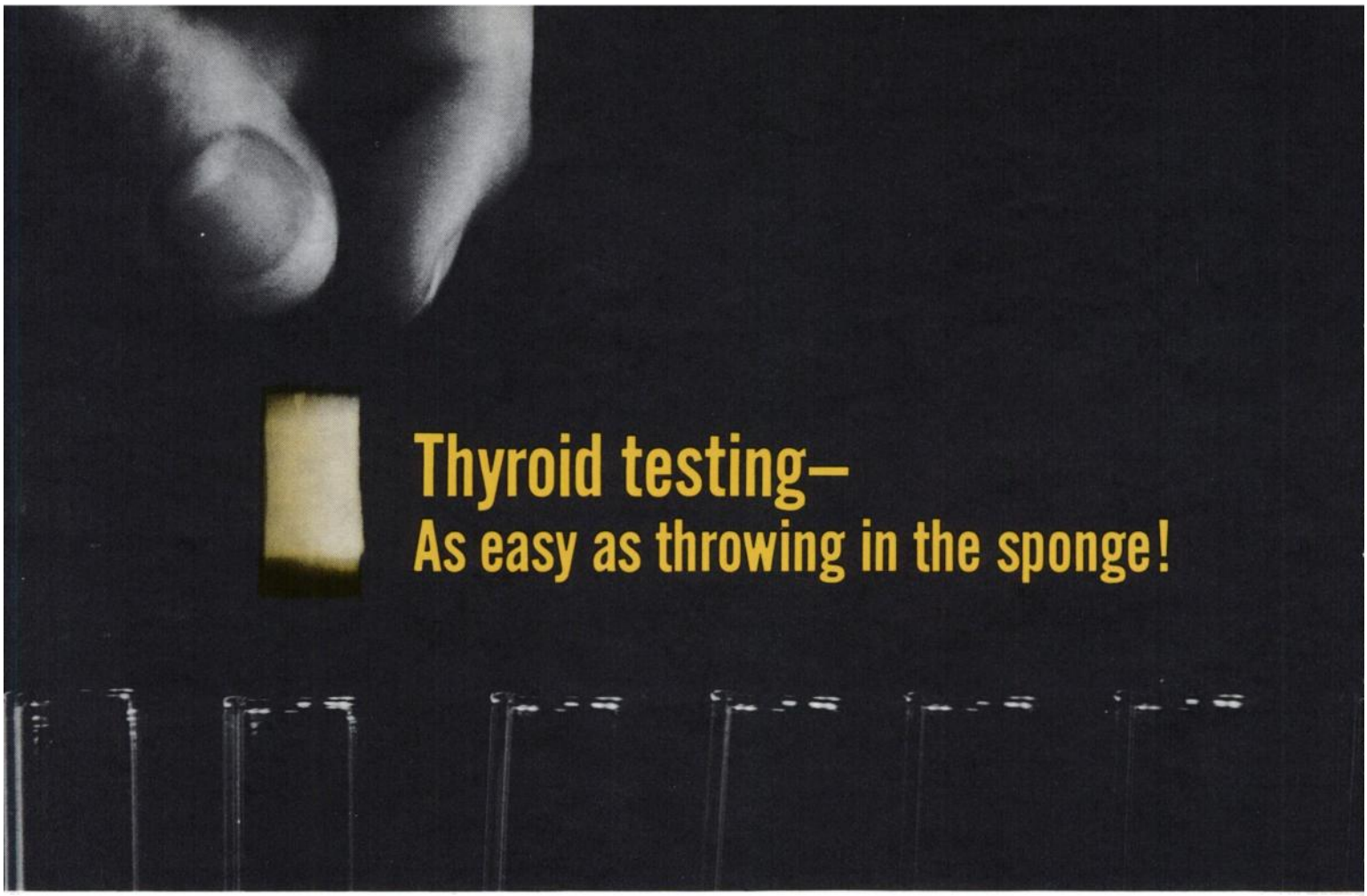
Convenience: Irosorb-59 is in a disposable kit form ready for immediate use at room temperature.

Safety: No dilution or pipetting of radioactive material is necessary. Since the patient receives no radioactive materials, the test can be used in children, pregnant women, or in adults without any hazard of radioactivity.

Flexibility: The test does not require the presence of the patient for the determination of the radioactivity. Serums can be frozen and saved until a sufficient number has been collected to run a rack full of tubes at one time, or serum samples can be mailed to personnel performing the test.

709418

IROSORB-59®
DIAGNOSTIC KIT
ABBOTT LABORATORIES NORTH CHICAGO, ILLINOIS
Abbott Laboratories, S.A., 2, rue Thalberg, 1201 Geneva, Switzerland



The Triosorb Sponge is an in vitro test providing accuracy, speed and convenience.

Accuracy: Because factors such as red blood cells and exogenous iodine have been eliminated from consideration in the Triosorb Test, it is unsurpassed in accuracy.

Speed: With only 3 washes and no need for double pipettings, shakers, or incubators, the Triosorb Test can be more rapidly performed than any other T-3 test.

Convenience: Available in a disposable kit ready for immediate use at room temperature. There is no dilution or pipetting of radioactive materials with Triosorb. It is the simplest and most convenient thyroid function test to perform.

"The resin sponge (Triosorb) technique is superior to the erythrocyte method for performing the I^{131} T3 test in terms of simplicity, convenience and elimination of errors characteristic of the erythrocyte procedure."[1]

"The T-3 uptake test was vastly improved by a resin-sponge . . . (Triosorb) . . . which is offered as a replacement for the red cells as well as for the loose granular resin which varies from day to day."[2]

1. McAdams, G. B., and Reinfrank, R. F., J. Nuclear Med., 5:112, 1964.
2. Manfredi, O. L., et al., J. Nuclear Med., 7:72, 1966.

802457

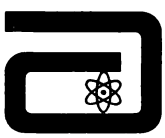
TRIOSORB®-131
TRIOSORB-125
T-3 DIAGNOSTIC KIT
ABBOTT LABORATORIES NORTH CHICAGO, ILLINOIS
Abbott Laboratories, S.A., 2, rue Thalberg, 1201 Geneva, Switzerland

Announcing

TETRASORB™-125

T-4 DIAGNOSTIC KIT

On the opposite page,
Abbott announces its
3rd "sorb" product–
Tetrasorb-125.
Please lift this page
for information about
Triosorb® and Irosorb-59®.



This sponge puts the squeeze on the PBI!

"For many years the protein-bound iodine (PBI) has been used as an indirect index of the level of thyroid hormones; however, in an appreciable number of cases it does not provide an accurate measurement, because compounds containing iodine or mercury are present."[1]

It is now generally recognized that a quantitative **direct measurement** of thyroid hormones in serum is the most valuable single laboratory aid in assessing thyroid function.

"Using a resin-sponge and thyroxine tagged with I-125, a simple method was developed to determine serum thyroxine."[2]

That method is Tetrasorb-125, the first diagnostic kit offering a direct measurement of thyroid function by determining serum thyroxine. Hypothyroid patients show a decrease in serum thyroxine while hyperthyroid patients show an increase.

Tetrasorb-125 is based on the principle of saturation analysis for measuring total serum thyroxine (T-4). Prior to the availability and convenience of the Tetrasorb-125 Kit, these results were reported for the T-4 test:

"When T_4 and PBI values were compared, a good correlation ($r=0.823$) was obtained with a higher diagnostic accuracy for the T_4 determination. All euthyroid individuals with PBI's elevated due to iodine had T_4 values in the normal range. . . . The T_4 level correlated well with the clinical status in hypothyroid subjects receiving T_4 or hyperthyroid subjects receiving various forms of therapy."[1]

"Unlike the protein-bound iodine determination, this technique is entirely unaffected by iodine or mercury, an important advantage from the clinical point of view."[3]

"These results proved that this method could be used as a routine clinical diagnostic test in place of the determination of PBI."[4]

By requesting both Tetrasorb-125 (a direct measure of thyroid activity) and Triosorb® (an indirect measure of thyroid activity) for his patient, the physician is provided with more information than ever before possible.

1. Murphy, B. P. and Pattee, C. J., J. Clin. Endocr., 26:247, 1966. 2. Kaplan, B. C., AAAS Meeting, Dec., 1966.
3. Murphy, B. P., J. Lab. & Clin. Med., 66:161, 1965. 4. Nakajima, H., et. al., J. Clin. Endocr., 26:99, 1966.

Announcing **TETRASORB™-125**

T-4 DIAGNOSTIC KIT

ABBOTT LABORATORIES NORTH CHICAGO, ILLINOIS

Abbott Laboratories, S.A., 2, rue Thalberg, 1201 Geneva, Switzerland

Simplicity?

Simplicity!

Only one preparatory step: Remove The Lid!

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New England Nuclear Corp.
NEN Pharmaceutical Division
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IN EUROPE: NEN Chemicals GmbH
6072 Dreieichenhain, Germany

we wouldn't leave "well enough" alone!

improved Albumotope®—LS

Aggregated Radio-Iodinated (I^{131}) Albumin (Human) for Lung Scanning

introduced by Squibb...
improved by Squibb

■ **Reduced Protein Content**
Squibb has reduced the amount of protein by 50% while maintaining good lung scans.

■ **Reduced Supernatant Activity**
Squibb has sharply reduced the amount of radioactivity in the supernatant, decreasing the possibility of liver interference with the lung scan.

■ **Reduced Unbound Iodine**
Squibb has substantially reduced the amount of unbound iodine 131, effectively reducing the problem of blood background radioactivity.

Albumotope—LS—a good example of Squibb leadership in radiopharmaceutical research and development. Some people won't leave "well enough" alone.

Contraindications: Radiopharmaceuticals should not be administered to pregnant women or to persons under the age of 18 years unless the indications are very exceptional. Because iodide is excreted in human milk, aggregated radioalbumin should not be administered to nursing mothers.

Side Effects and Precautions: There have been no reported cardiovascular or other untoward effects attributable to Albumotope—LS. Extensive clinical use of Albumotope—LS has not borne out the hypothetical possibility that particles of large size might induce deleterious cardiovascular or cerebrovascular effects. The product appears to possess no antigenic properties. One patient with a known history of angioneurotic edema, who had been given Lugol's solution in conjunction with aggregated radioalbumin similar to Albumotope—LS, developed urticaria.

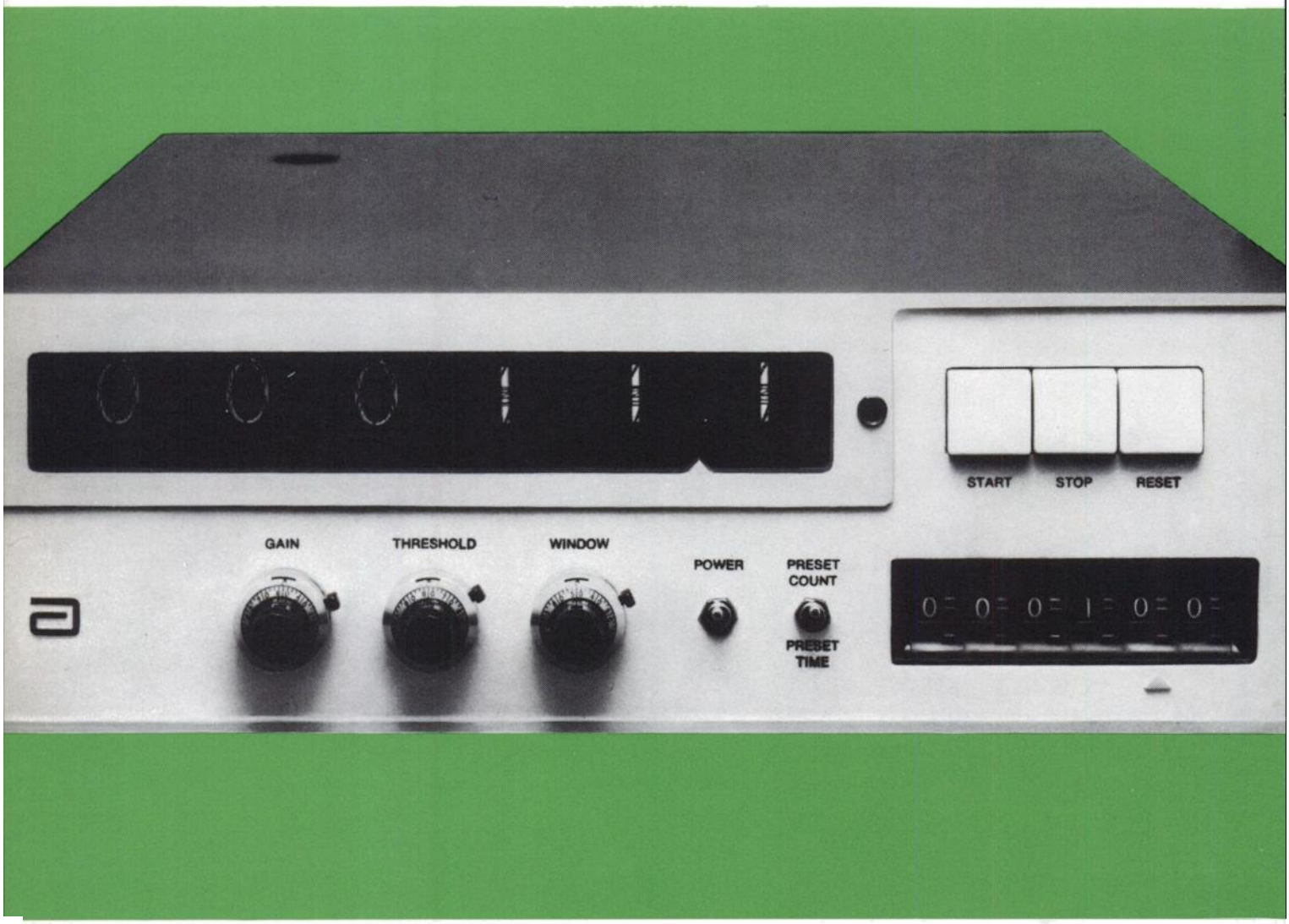
For full prescribing information, see package insert.

Available: As a sterile, nonpyrogenic, aqueous suspension. Each cc. contains approximately 0.5 mg. aggregated human serum albumin labeled with iodine 131. Not less than 90% of the aggregates are between 10 and 90 microns and none are more than 150 microns in size. The preparation also contains 0.9% (w/v) benzyl alcohol as a preservative. The potency ranges from 250 to 450 microcuries per cc. on date of assay.

Medotopes®

SQUIBB Division of Nuclear Medicine
East Brunswick, New Jersey 08816

Abbott Laboratories is now



This is the LOGIC™ Well Counter– only inches larger than this page (12¼″ x 4 1/16″ x 13″ to be exact)

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in Nuclear Instruments

The LOGIC Series—the most compact counting systems ever designed—is available now in 3 models.

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- Dependability (pre-tested for 40 hours)
- Portability (25-35 lbs.)
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ABBOTT LABORATORIES NORTH CHICAGO, ILLINOIS

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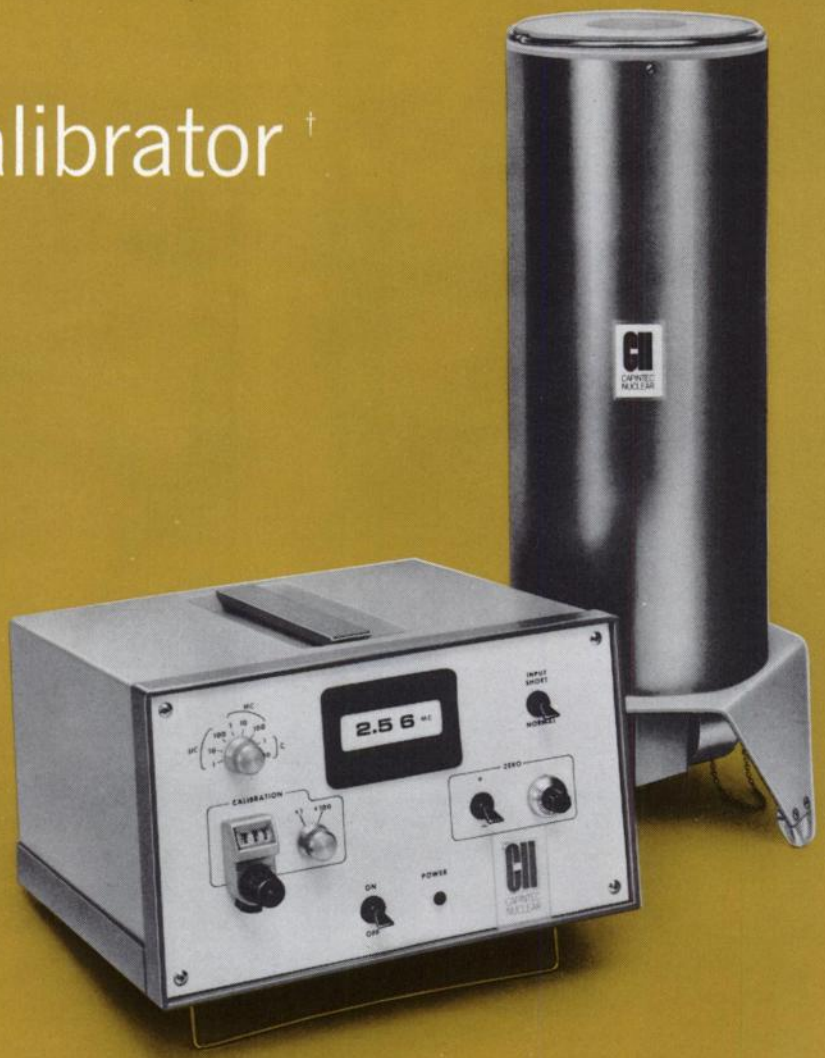
Introducing Capintec...

and the CRC-2 Calibrator †



This may be the first you have heard of us, but you'll be hearing a lot from CAPINTEC in the future. Good things. Important, new things. About the products and services we offer to nuclear medicine, nuclear research and the nuclear industry.

CRC-2? Just about the finest ever in radioisotope calibrators, affording simplicity, accuracy and unmatched flexibility. The special construction features of the CRC-2 Calibrator mean complete geometry-independence, complete electronic stability. And because it has the largest well size of any calibrator now available (3" x 12"!), it will accommodate virtually any volume in virtually any type of container. Turn one knob, and there's an instantaneous digital readout — in microcuries, millicuries or curies — of the total activity (gammas and betas) of any isotope, from the lowest energy to the highest you might want to use — from 0.1 microcuries to 10 curies. No need for meticulous placement within the well. No dilutions. No calculations. No adjustments.

Verify radiopharmaceutical doses; assay generator eluates; determine the activity of an entire generator, if you want. With the new CRC-2 Calibrator, from CAPINTEC.

For further information, write or call collect: CAPINTEC INC., 63 East Sandford Blvd., Mt. Vernon, N. Y. 10550; (212) 752-2440.

CAPINTEC NUCLEAR

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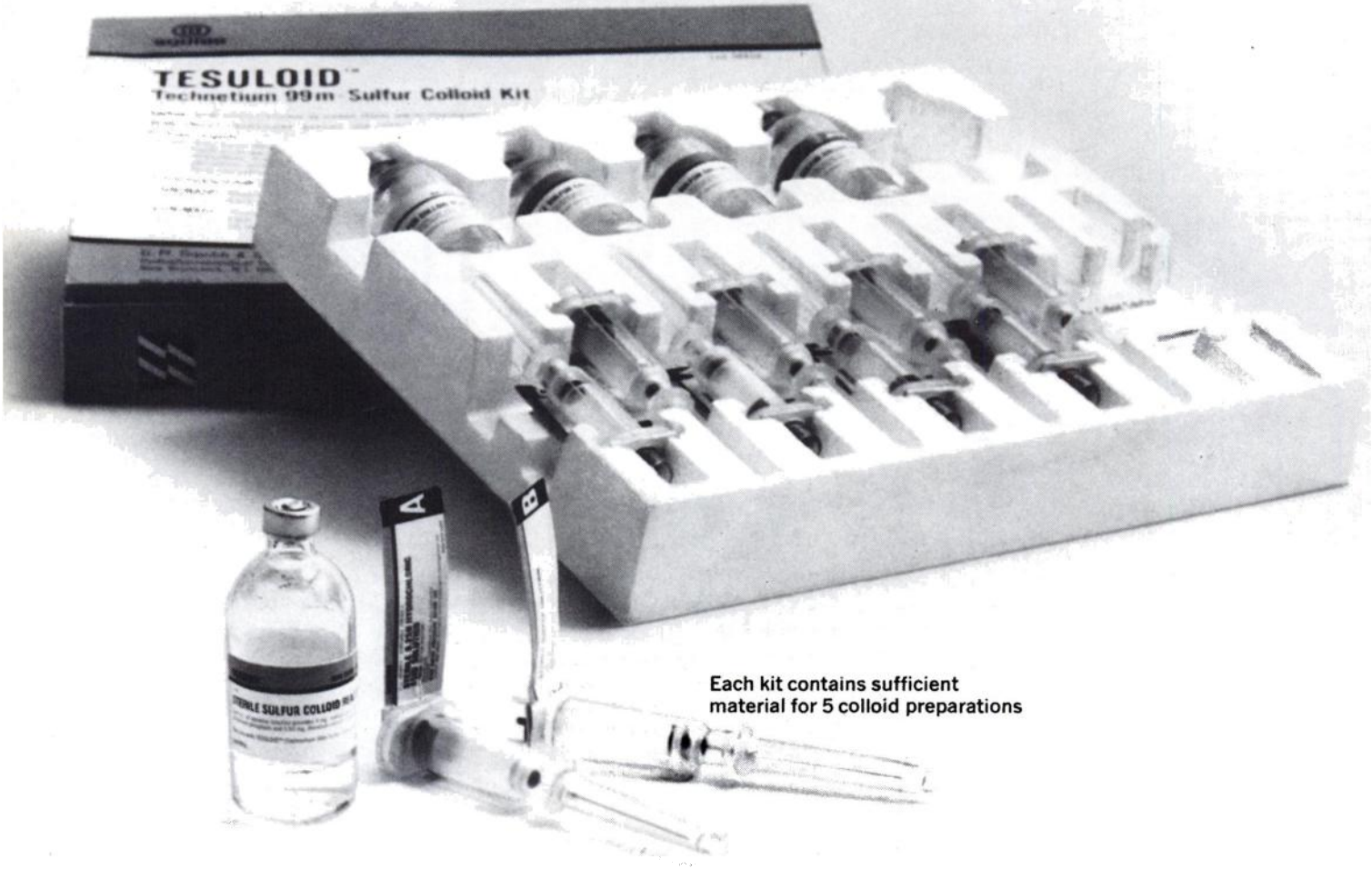
today be independent!

make your own ^{99m}Tc Sulfur Colloid when you want it...when you need it



Each kit contains sufficient material for 5 colloid preparations

New Tesuloid™

Technetium 99m–Sulfur Colloid Kit

...utilize ^{99m}Tc eluate from your sterile generator
...make as many doses as you want when you want
...keep dollar loss from product decay to a minimum
...more convenient and economical
...store kit anywhere – it's not radioactive*
...colloid contains no dextran...no rhenium

Package contains:

5 vials (3 cc. each) Sterile Sulfur Colloid Reaction Mixture. Each cc. of aqueous solution provides 4 mg. sodium thiosulfate, 3 mg. gelatin, 8.5 mg. potassium phosphate and 0.93 mg. disodium edetate. Contains no preservative.

5 UNIMATIC® Disposable Syringes (2 cc. each) of Sterile 0.25N Hydrochloric Acid Solution. Each cc. of aqueous solution provides 9 mg. hydrochloric acid.

5 UNIMATIC Disposable Syringes (2 cc. each) of Sterile Buffer Solution. Each cc. of aqueous solution provides 35 mg. sodium biphosphate and 10 mg. sodium hydroxide.

Warning: Solutions of sodium pertechnetate ^{99m}Tc withdrawn from the generator should always be adequately shielded. Early elutions from the generator are highly radioactive.

Precaution: Radiopharmaceuticals should not be administered to pregnant women or patients under 18 unless the information to be gained outweighs the hazards.

*However, adequate shielding of the Technetium 99m—Sulfur Colloid solution should be maintained.

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Improved reliability, even better performance.

Ohio Nuclear's new Model 84FD Dual Five, is the only scanner employing reliable, digital logic, computer-type electronics.

Speeds up to 750 cm./minute produce simultaneous, opposed view photoscans in less than half the time required by other scanners.

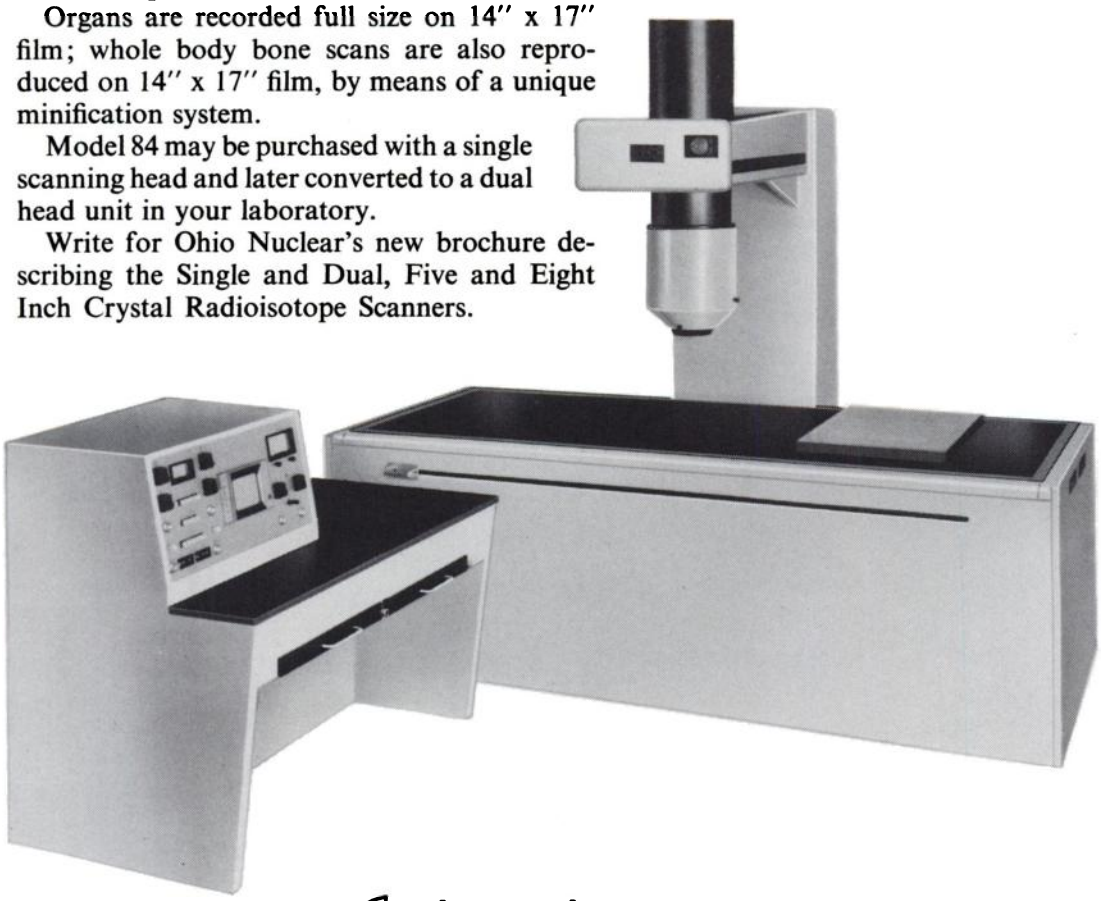
Scan progress is visually monitored on a storage cathode ray tube, which retains the organ image until manually erased.

Simplified pushbutton controls are conveniently located on the desk console. Photo Intensity Computer (PIC) circuit provides consistent, comparable maximum film density at the push of a button. Selectable levels of contrast enhancement and background erase accommodate individual preference.

Organs are recorded full size on 14" x 17" film; whole body bone scans are also reproduced on 14" x 17" film, by means of a unique minification system.

Model 84 may be purchased with a single scanning head and later converted to a dual head unit in your laboratory.

Write for Ohio Nuclear's new brochure describing the Single and Dual, Five and Eight Inch Crystal Radioisotope Scanners.



ohio-nuclear, inc.

1725 Fall Avenue, Cleveland, Ohio 44113 (216) 621-8142

A recommended course of action for the buyer of radiopharmaceuticals:

1 **INTROSPECTION. Think for a moment. What's your prime concern when you're ready to buy radiopharmaceuticals? Purity? Stability? Availability? Service? Which of these are important to you? Sort them out. Write them down. Give them an order of importance.**

No matter what your analysis reveals, Amersham/Searle Corporation is more than likely to have the solutions. Our range of compounds is wide—from arsenic-74 to xenon-133. Imaging agents for in-vivo investigations. Compounds for in-vitro studies. All with purity and stability of the highest order. All for prompt delivery.

2 **INVESTIGATION. Next, look into the credentials of the suppliers of radiopharmaceuticals. What have they done? What are they doing—in research, in involvement with the field of nuclear medicine itself?**

When you look into Amersham/Searle, the facts are these: A company formed as a joint venture of The Radiochemical Centre, Amersham, England, and G. D. Searle & Co. An organization capable of drawing on the resources of The Centre for radiopharmaceutical research and manufacture. A manufacturer able to utilize the resources of G. D. Searle & Co., a firm long experienced in pharmaceutical research. And a resourceful enterprise capable as well of benefiting from an exchange of information with Nuclear-Chicago Corporation (a Searle subsidiary), designers and manufacturers of nuclear instrumentation.

3 **INFORMATION. Ask to see all available information on the compounds you're interested in. What does the supplier have to say about the radiopharmaceutical? How is it said?**

A Radiopharmaceutical Bulletin from Amersham/Searle is a detailed compilation of facts on every aspect of the compound offered. Clinical information. Biochemical and chemical data. Complete specifications. And extensive bibliographies. Every radiopharmaceutical we make gets the same treatment in our Bulletins.

4 **DECISION: Once you have decided on your probable source of radiopharmaceuticals, make your move. Ask for proof of performance.**

Your phone call or written request to Amersham/Searle will start things moving. We will send complete data on any radiopharmaceutical or attempt to answer any and all questions that go beyond such data. And we'll send you a list of our Telex-connected sales offices. After all, you would expect our actions to speaker louder than our words.

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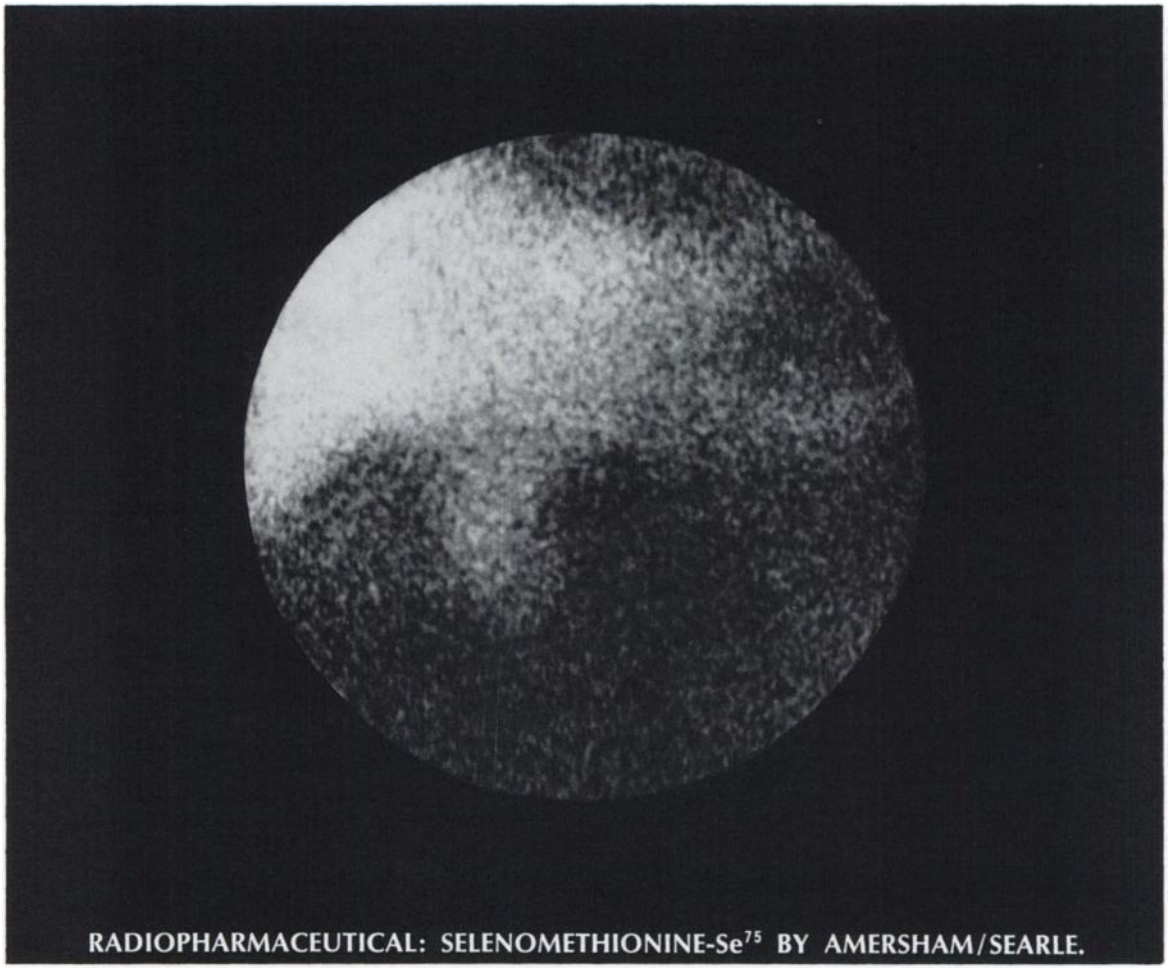
Amersham/Searle

AMERSHAM/SEARLE CORPORATION:
AN ACTIVITY OF G. D. SEARLE & CO. AND THE RADIOCHEMICAL CENTRE

Portrait of a Pancreas.



RADIOPHARMACEUTICAL: SELENOMETHIONINE-Se^{75} BY AMERSHAM/SEARLE.

There are many problems inherent in diagnosing diseases of the pancreas by standard radiographic techniques. Further, laboratory determinations are often inconclusive.

Question: Can pancreatic pathology be ruled out as a possible diagnosis short of exploratory surgery?

Answer: Amersham/Searle Corporation now offers the clinician selenomethionine-Se^{75}—a diagnostically reliable imaging agent, especially when used with the gamma scintillation camera for rapid, continuous scintiphotography.

Amersham/Searle's selenomethionine-Se^{75} is of unsurpassed purity and stability. And these qualities are vital to your selection of a drug for your patients. Here are the important specifications for selenomethionine-Se^{75} as supplied by Amersham/Searle:

Stability: Little evidence of radiation decomposition after storage for up to 4 months at room temperature in concentrations of 1 mCi/ml.

Radiochemical purity: >95%.

Chemical purity: >90%.

For further clinical, biochemical, and technical information on L-selenomethionine-Se^{75} (sterile aqueous solution) please write for *Radiopharmaceutical Bulletin RP-1*. Or call us directly.

Indications: Pancreas imaging. **Contraindications:** Radioisotopes should not be administered to patients under 18 years of age, or to pregnant or nursing women, unless invaluable diagnostic information cannot be otherwise obtained. **Precautions:** Observe appropriate radiation-safety procedures at all times. **Availability:** Sterile aqueous solution. Specific activity ranges from 1 to 6 mCi/mg. Radioactivity concentration approximately 250 μCi in 1 ml.

Scintiphoto courtesy D. Bruce Sodee, M.D., Doctors Hospital, Cleveland, Ohio.

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You don't even have to throw in a sponge. ☐ *What's more, CHARCOAT T-3 tests take only thirty minutes — start to finish — without complicated setups. You do everything in one little two-part vial.* ☐ *Merely pipette 0.5 ml of patient serum into each test vial, invert, incubate, centrifuge, and count the supernatant.* ☐ *But don't take our word for how simple and economical CHARCOAT T-3 kits are. Put one to the test. A standard kit (13 test vials) is only $20, and just a phone call away. Moreover, the extra long shelf-life of the CHARCOAT T-3 test kit makes quantity discount purchases practical.* ☐ *Ask about our Automatic T-3 Computer. Easy to use—no calculations. $1680 sale or lease.*

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complexity


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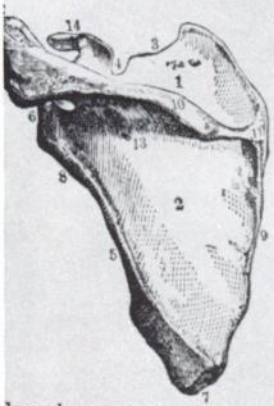
CAUTION
RADIOACTIVE MATERIAL

ska″fo-hi″dro-sef′ah-le).

scaphoides; Gr. *skaphē* aped like a boat; navic- es: the outer bone of the ones. 3. A bone on the efore the astragalus and ie.

is). Inflammation of the **s.,** osteochondrosis of

scapulae [L.]. The shoul- ular bone in the back of



Scapula, posterior view: 1, praspinous fossa; 2, infra- nous fossa; 3, superior mar- ; 4, scapular (coracoid) ch; 5, axillary margin; 6, noid cavity; 7, inferior an- ; 8, neck of the scapula; 9, tebral margin; 10, spine; 11, triangular commencement, on which the tendon of the pezius muscle moves; 12, omion; 13, arterial foramen; coracoid process (Leidy).

ula + Gr. *ektomē* exci- val of the scapula or a

p″u-lo-an-te′re-or). De- fetus in transverse pre- la directed anteriorly.

kap″u-lo-klah-vik′u-lar). and the clavicle.

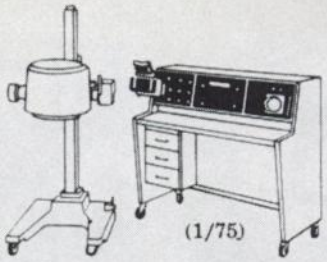
-din′e-ah) [*scapula* + Gr. egion of the shoulder.

u-lo-hu′mer-al). Pertain- ie humerus.

pek″se) [*scapula* + Gr. tion of fixing the scapula cases of myopathy.

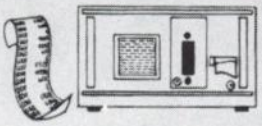
p″u-lo-pos-te′re-or). De-

scintillation camera (sĭn′tĭ-lā′shŭn kăm′ĕr-ă). The Pho/Gamma® III manufactured by Nuclear-Chicago Corporation. Provides in-vivo visualization and recording of radioisotope distribution in body organs through a variety of readout techniques.

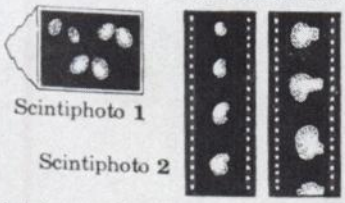


(1/75)

scintidigit (sĭn′tĭ-dĭj′ĭt). Digitized record, on paper tape of total number of counts accumulated during each Pho/Gamma III examining period. Produced by high-speed digital printer accessory.



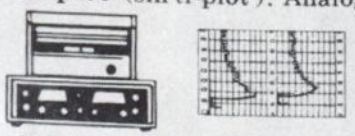
scintiphoto (sĭn′tĭ-fō′tō). Photographic recording of radioisotope distribution in body organs, as displayed on Pho/Gamma III oscilloscope. Scintiphotos can be either **1.** individual, self-developing pictures exposed during total examination period and processed by triple-lens camera supplied with Pho/Gamma III, or **2.** serial, time-lapse pictures made throughout examination period on 35mm film by optional automatic time-lapse camera available for Pho/Gamma III.



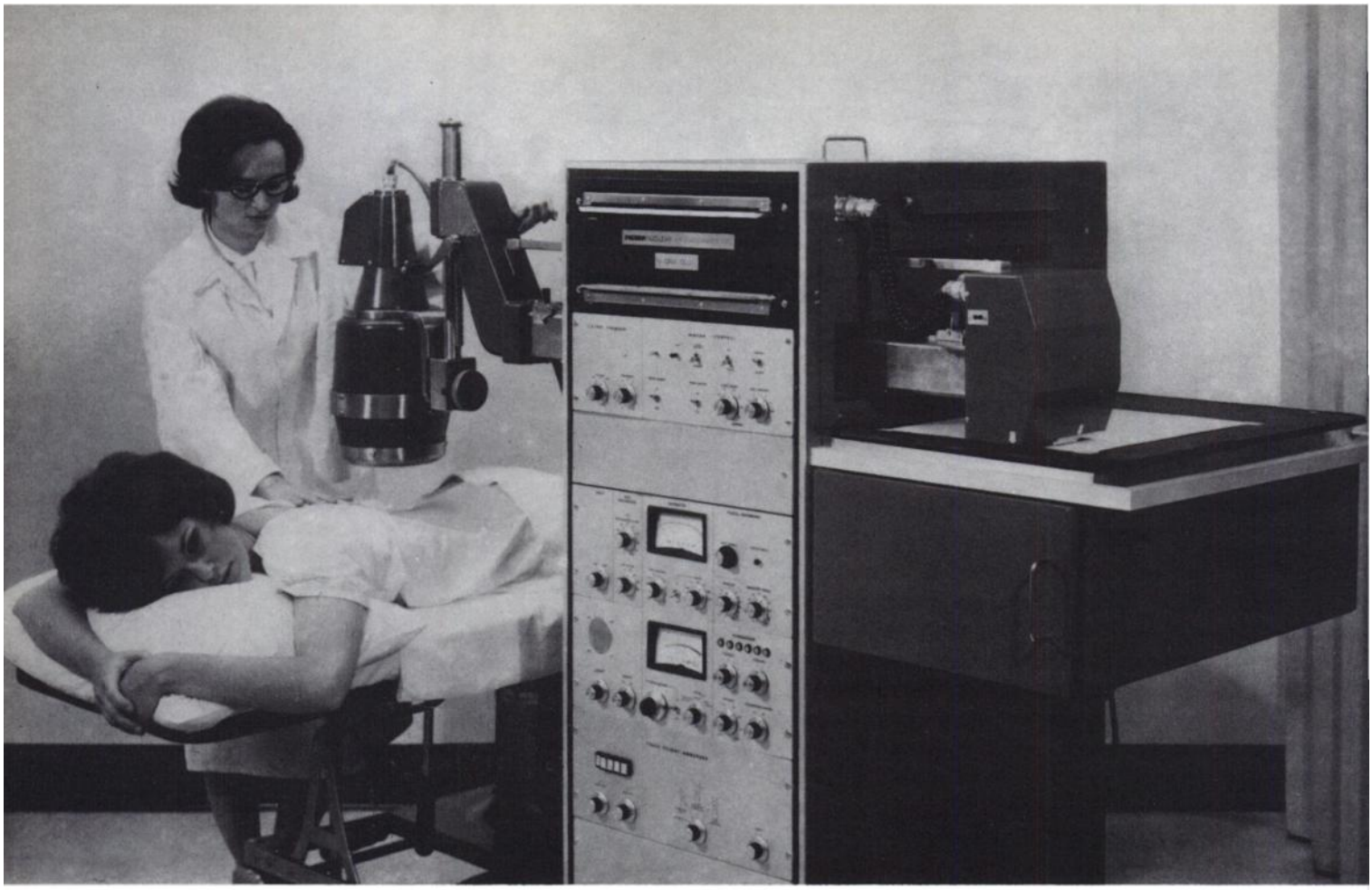
Scintiphoto 1

Scintiphoto 2

scintiplot (sĭn′tĭ-plŏt′). Analog record, on chart paper, of radioisotope distribution, as visualized by Pho/Gamma III. Used especially for renal studies, when Pho/Gamma III detector is operated in divided-crystal mode. Produced by dual-channel ratemeter/dual-pen recorder accessory combination.



scintitape (sĭn′tĭ-tāp′). Magnetic-tape recording of Pho/Gamma III data. Produced by magnetic tape system accessory. Clinical information is transferred to tape by system's multidimensional analyzer. Tape is manipulated by system's tape transport. Taped data can be **1.** played back for photographic recording from analyzer's scope as digital scintiphotos (DSP), or **2.** fed to an off-line computer for automatic processing and analysis.



The case for the classical radioisotope scanner, or...

Why does Picker keep refining and improving its basic rectilinear scanner (Magnascanner® 500), when it also has a most sophisticated high-speed scanner (Dynapix®), and two exceptional cameras (Dynacamera™ and Magnacamera®)?

Because: despite the rapid forward thrust of progress —which we ourselves aid, abet, foster and contribute to —nothing we or anyone else has done has obsoleted the basic rectilinear scanner. What basic scanners do, nothing does better, and few do as well. Examples?

For a small hospital starting a diagnostic radioisotope laboratory with a small patient load and a modest budget, there is nothing quite as appropriate as a scanner. Hence, four out of five nuclear medicine departments get started with a Magnascanner and there are now over 2500 in use throughout the world. Similarily, a Magnascanner is a most relevant choice for larger hospitals in need of an instrument with the highest resolution for diagnostic confirmation. A basic scanner like the Magnascanner is still the best device available for static-imaging applications by virtue of its very high resolution, large field of view, wide energy range, contrast enhancement, wide choice of focusing collimators, and modest cost.

None of this should imply that the Magnascanner is an untouched island in the stream of progress. Today's instrument is generations away from yesterday's. Note: (1) maximum scan speed has been increased from 200 cm/min to 500 cm/min; (2) detector can be positioned by a control on the detector head itself, and a ratemeter on the detector head facilitates and speeds location of "hot" and "cold" spots; (3) a new color photo recording system is available in addition to black and white photorecording, multicolor dot recording, and Teledeltos black dot recording; (4) push button energy window selection (in addition to manual selection) for the most common radioisotopes used in diagnosis.

And Now the Dual Magnascanner®—This instrument is essentially identical to the Magnascanner® 500 except that it has two separate opposed detectors which acquire information independently. AP and PA, or RL and LL rectilinear scans can be performed simultaneously. This capability minimizes the need for patient re-positioning and reduces the scanning time by half.

Further information is available—Please write for detailed information on the Magnascanner® 500 and the Dual Magnascanner to Picker Nuclear, 1275 Mamaroneck Avenue, White Plains, N.Y. 10605. Please request file 235R.

PICKER

What's Canberra Doing in Nuclear Medicine?

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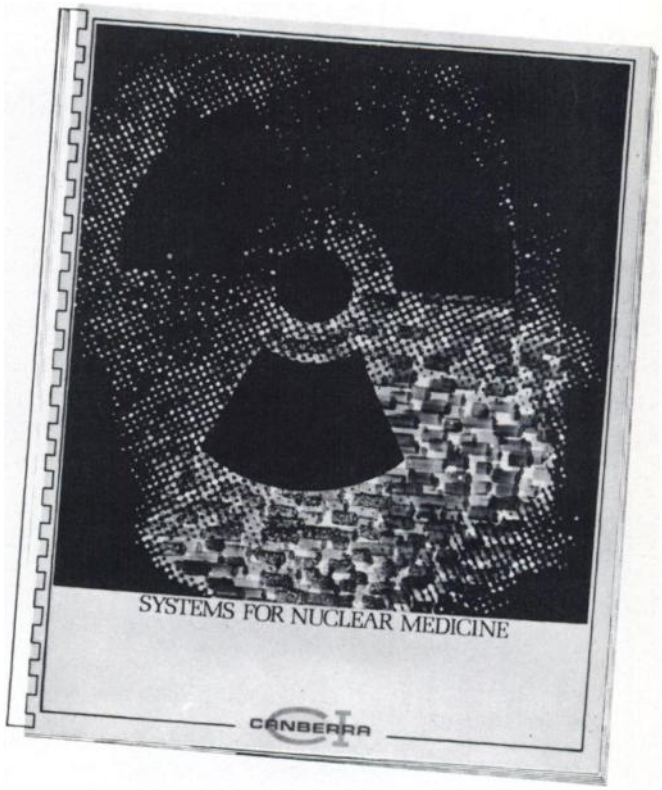

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Digital data recording for your present or future scanner. Single or dual head. Multicrystal linear or whole body scanners. Multiple isotope scanning. Magnetic or paper tape. Computer compatible.

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It is the most advanced radiation therapy device presently available. It is self-contained and does not require a special shielded room . . . it is portable and designed for bedside, outpatient or clinical use . . . it is low cost and brings radiation therapy to a greater number of patients . . . it offers a variable dose rate and permits the therapist versatility in treatment . . . it is new and described better in our comprehensive technical bulletin.

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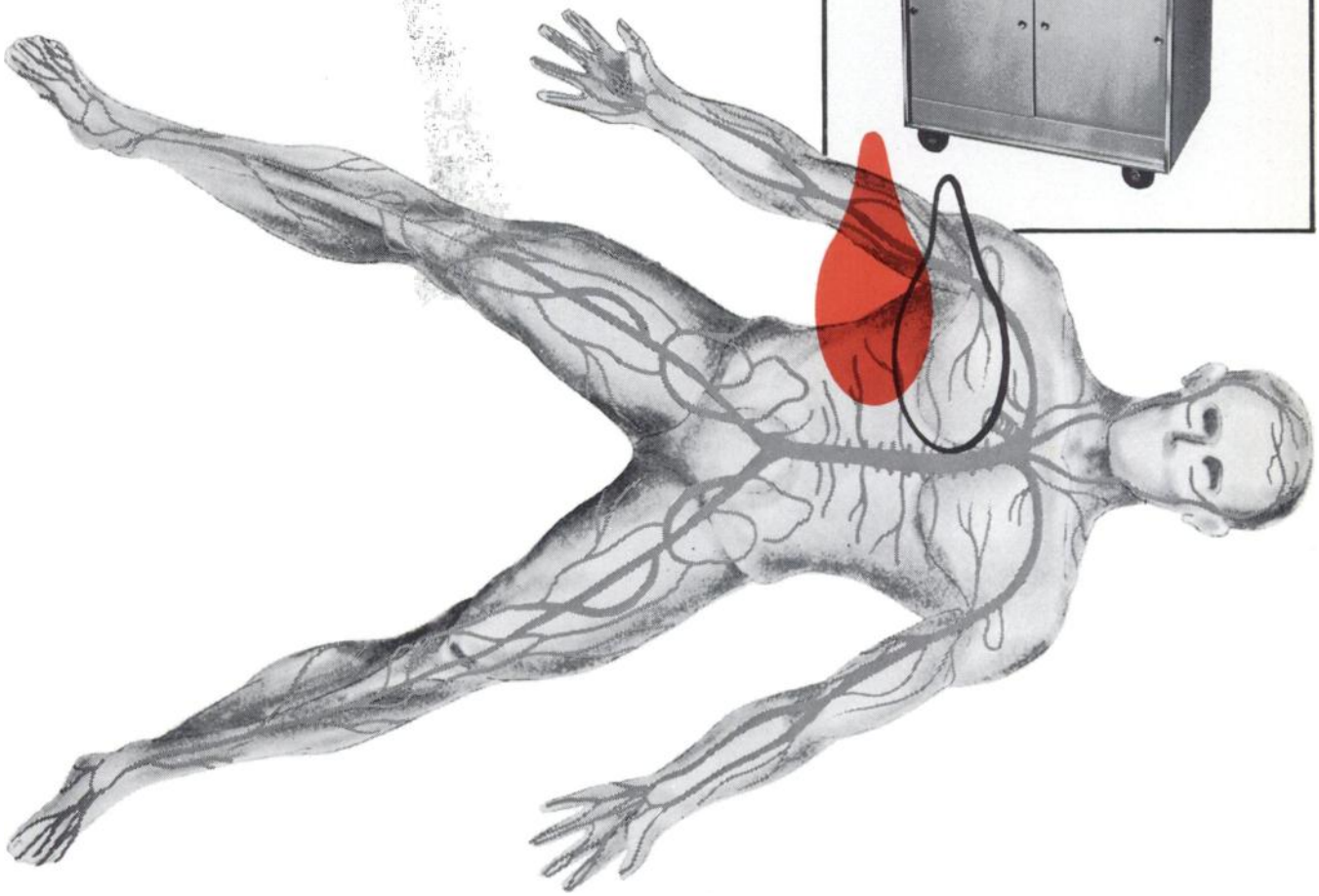

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Ultra-TechneKow® Generator

Simplest way to produce sodium pertechnetate Tc99m
No assembly, no clamps, no generator manipulation.

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3. Press plunger down so needle pierces diaphragm on evacuated vial; turn plunger slightly to lock in position. Milking will proceed automatically.
4. Release plunger to stop milking process. (Vial is now ready for calibration.)

*One needle serves for a full week. For sterility between milkings, retract needle and apply sterile needle cover.

Patent Applied For

The Mallinckrodt / Nuclear Ultra-TechneKow Generator is so modern, so simple to operate that any other system is antiquated, old fashioned, obsolete.

You receive the complete, plastic-enclosed Ultra-TechneKow Generator each week. No need to handle the generator or make tubing connections. When generator is exhausted, dispose of entire unit or return to Mallinckrodt for disposal.

Available in 4 activities:
50 mc 100 mc 200 mc 300 mc

Ask your Mallinckrodt/Nuclear Salesman for full information, or mail in the coupon.

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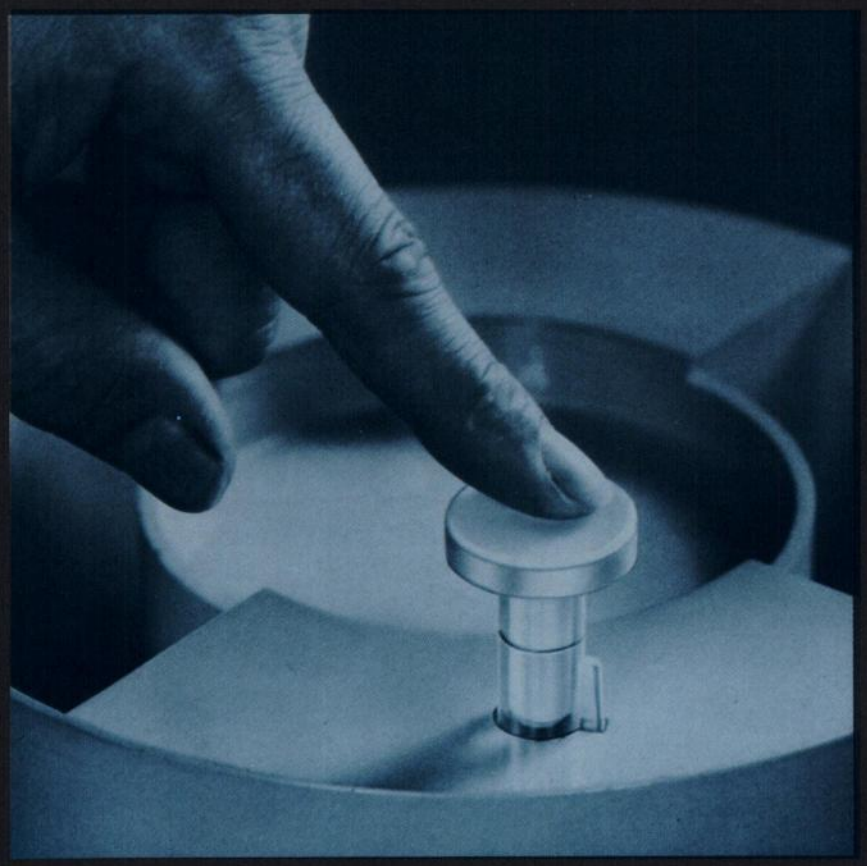

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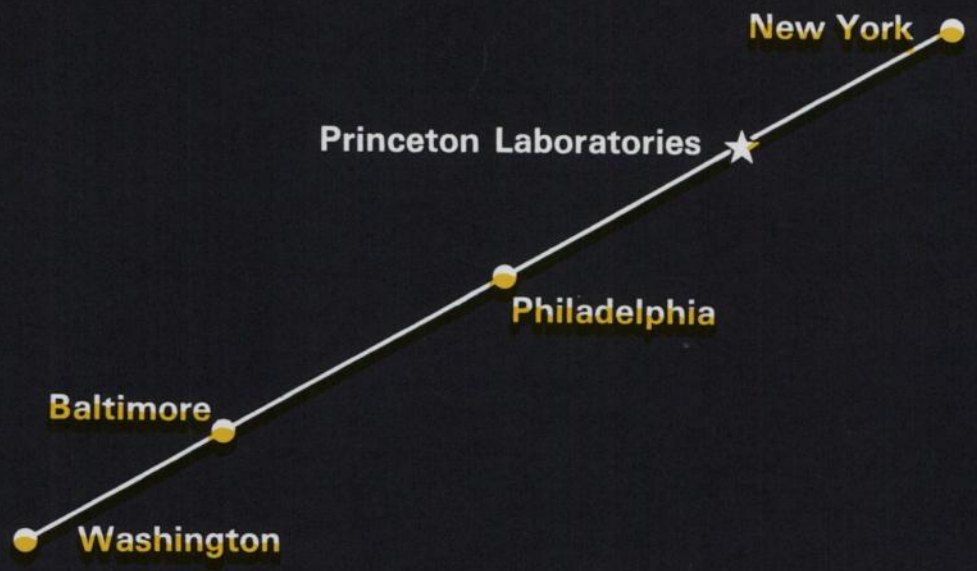

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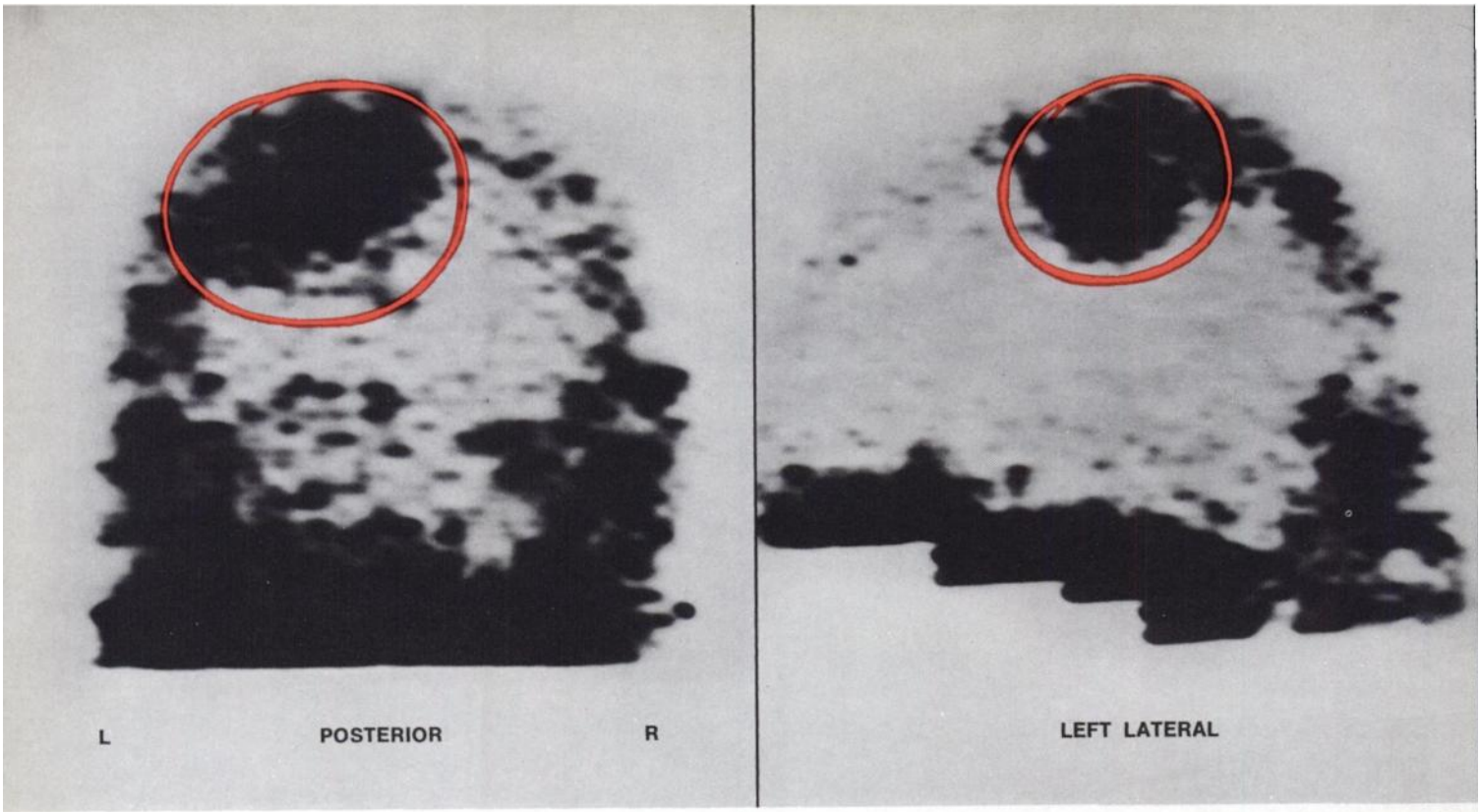

In suspected brain pathology, find out fast with **Pertscan**-99m

For brain scanning, Pertscan-99m provides more information with less radiation to the patient than any other related cerebral test—whether other radioisotopes or x-rays. And you get each projection fast—as little as 2 minutes with a camera, 15 minutes or less with rectilinear scanners.

A 54-year-old man was hospitalized with progressive weakness of the right side, followed by seizures of the right side (Jacksonian seizures). Brain scans showed an abnormal concentration of isotope in the left parasagittal area. Surgery revealed a meningioma, which was removed, and the patient recovered.

The 2 scans above, showing the marked abnormal uptake (which turned out to be a menigioma), were made with Pertscan-99m. This product is shipped Monday through Friday—and Sunday. Thus, brain scans can be scheduled 6 days a week—Monday through Saturday.

INDICATIONS: Adjunctive diagnostic aid in detecting and localizing intracranial neoplastic (primary or metastatic) and non-neoplastic lesions.

CONTRAINDICATIONS: Radio-pharmaceutical agents should not be administered to pregnant women or to persons less than 18 years old unless the indications are very exceptional.

PRECAUTIONS: Care should be taken to ensure minimum radiation exposure to the patient as well as all personnel; to prevent extracranial contamination because this can lead to erroneous interpretation; and to differentiate areas of abnormal activity from areas of normal vascular activity. 804464

Pertscan™-99m
SODIUM PERTECHNETATE Tc 99m

Also available:

Pertgen™-99m
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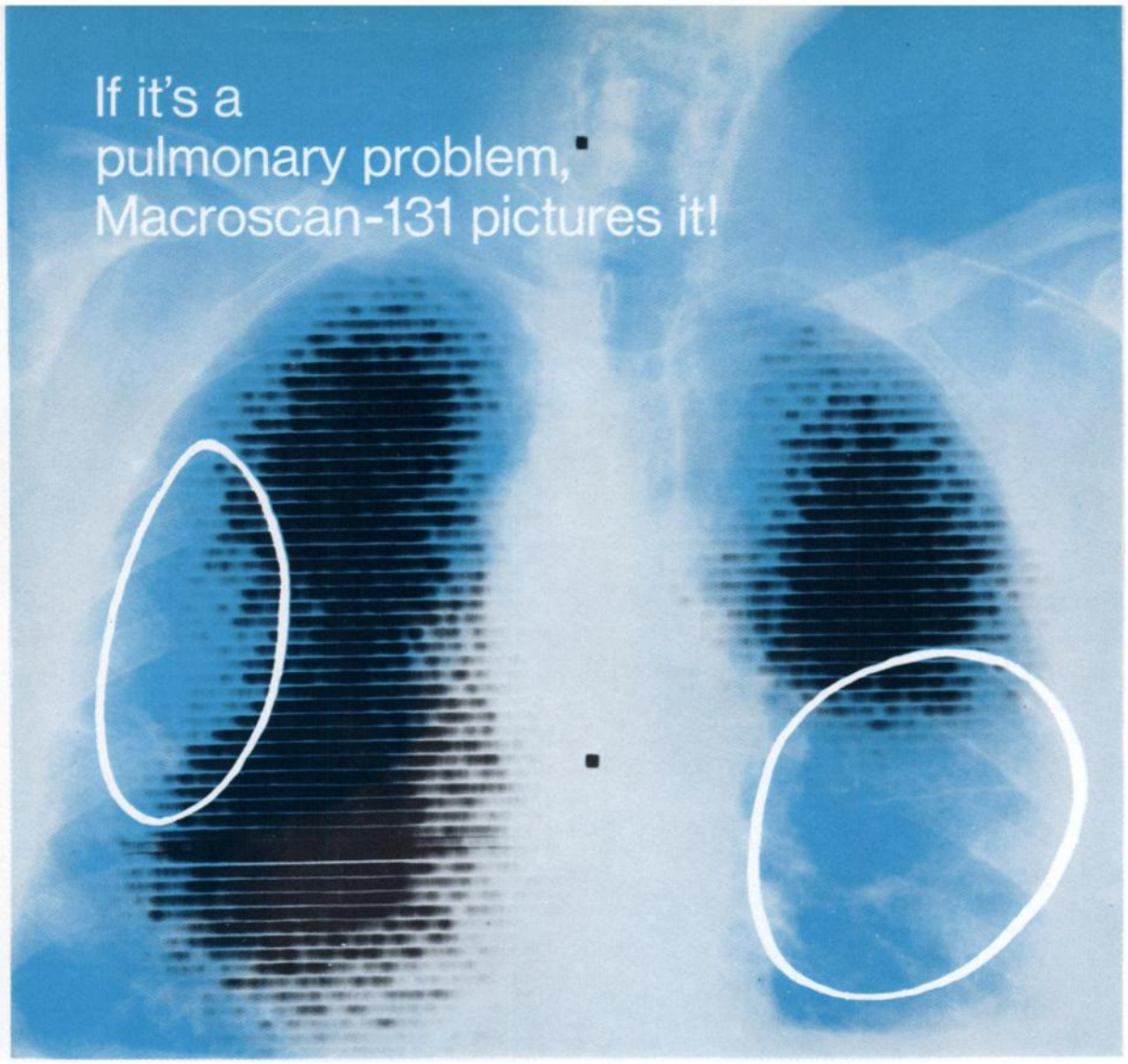

A 70-year old man was admitted unconscious to the intensive care unit. Studies failed to reveal evidence of a myocardial infarction and the X-ray was not revealing. A pulmonary infarct was suspected and this diagnosis was established by a lung scan.

His posterior view scan above, showing diminished uptake in the left lingula and right lower lobe, was made with Macroscan-131. This product has many diagnostic uses:

Pulmonary embolism, suspected: To confirm (or rule out) its occurrence.

Chronic pulmonary tuberculosis: To estimate unilateral and regional function and perfusion of the lungs.

Emphysema: To evaluate the decreased regional blood flow that occurs with obstruction of vessels.

Pneumonitis: To evaluate the decreased regional blood flow that occurs without obstruction of vessels.

Lung Tumors: To evaluate the regional ischemia resulting from compression or obstruction of pulmonary arteries.

Surgery and/or other therapy for lung disorders: To evaluate the effectiveness of therapeutic measures.

Macroscan-131 is sterile and non-pyrogenic. It is ready to use and should not be heated prior to use.

INDICATIONS: For scintillation scanning of the lungs to evaluate total, unilateral, and regional arterial perfusion of the lungs.

CONTRAINDICATIONS: Radio-pharmaceutical agents should not be administered to pregnant women or to persons less than 18 years old unless the indications are very exceptional.

PRECAUTIONS, SIDE EFFECTS: Care should be taken to administer the minimum dose consistent with safety and validity of data. The possibility of an immunological response to albumin should be kept in mind when serial scans are performed. There is a theoretical hazard in acute cor pulmonale, because of the temporary small additional mechanical impediment to pulmonary blood flow. A possible case of urticaria has been related to a similar preparation. The thyroid gland should be protected by prophylactic administration of concentrated iodide solution. 903116

Macroscan™-131

AGGREGATED RADIO-IODINATED (I^{131}) ALBUMIN (HUMAN)

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World's Leading Supplier of Radio-Pharmaceuticals
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The tiny

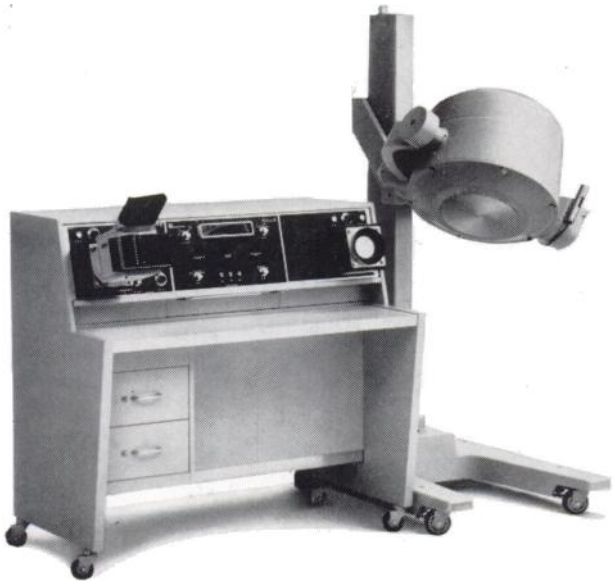
difference.

Unlike other scintillation cameras, Baird-Atomic's Autofluoroscope features computer-type memory. And that's saying a lot.

It says our non-volatile magnetic core memory can store raw digital data for each picture element. And *restore* image plane uniformity. It lets you flag any areas of the picture for numerical integration in dynamic studies. It permits fast storage on magnetic tape to provide more data points in dynamic studies. It lets you play back patient data in its original form at any time. Instantly. And because of magnetic core memory, the picture has the same integrity as the raw data. The fact is, magnetic core storage makes the Autofluoroscope a fundamentally more practical and objective tool. What's more, it's faster and easier to use in all procedures than other cameras. So if you're going to buy or lease an imaging device, you should talk to Baird-Atomic before you make your final decision. You owe it to yourself to fully understand why the tiny difference will make such a big difference to your program. Naturally, if you're not already thinking about the Autofluoroscope, we may not change your mind. But we'll give you a tough decision to make. Call for an appointment. 33 University Road, Cambridge, Massachusetts 02138, Telephone: 617 864-7420. Baird-Atomic Europe, The Hague, The Netherlands. Baird-Atomic Limited, Hornchurch, England.

BA BAIRD-ATOMIC

Now—the Pho/Gamma® III Scintillation Camera talks to computers.



And listens.

How? With our new computer-compatible Magnetic Tape System.

The two instrument consoles shown directly above constitute our Magnetic Tape System. In the console on the right is our multidimensional analyzer. It connects to the Pho/Gamma III Scintillation Camera. This combination provides analog-to-digital conversion of data on the location and distribution of gamma-emitting radioisotopes in body organs.

The analyzer also encodes the data, in computer-compatible form. And then transfers the data to the second console (left), the magnetic tape transport.

So much for theory. Application is where the Magnetic Tape System pays off. Because the taped data on a multitude of clinical organ studies can now be fed to a programmed off-line computer.

Which then does what a computer is meant to do—analyze, correlate, and manipulate data. To let you find out more, in more ways. New ways.

Of course you can play back the tape. And re-display and re-orient the data on the analyzer's scope. Then photograph the scope display. Or read out the data on a digital printer. Or—well, you're sure to find more to do with data in a convenient, permanent taped form.

But first you should talk to your Nuclear-Chicago sales engineer about the Magnetic Tape System for Pho/Gamma III. And about our other new Pho/Gamma III accessories (fast digital printer, chart recorder, and 35-mm automatic time-lapse camera, among others). Or, if you'd like, write directly to us.

Research in the Service of Mankind

NUCLEAR-CHICAGO CORPORATION

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