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.

Irosorb-59 is available to all doctors, hospitals and clinical laboratories—AEC licensing is not required.
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 $^{131}$ T3 test in terms of simplicity, convenience and elimination of errors characteristic of the erythrocyte procedure."

"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."

Triosorb is available to all doctors, hospitals and clinical laboratories—AEC licensing is not required.

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®.
"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." 

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."

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.

Using the principle of saturation analysis for measuring total serum thyroxine, the following results have been reported:

"When T₄ and PBI values were compared, a good correlation (r=0.823) was obtained with a higher diagnostic accuracy for the T₄ determination. All euthyroid individuals with PBI's elevated due to iodine had T₄ values in the normal range. The T₄ level correlated well with the clinical status in hypothyroid subjects receiving T₄ or hyperthyroid subjects receiving various forms of therapy."

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

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

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.

Tetrasorb-125 is available to all doctors, hospitals and clinical laboratories—AEC licensing is not required.


Announcing Tetrasorb-125
T-4 Diagnostic Kit
Abbott Laboratories, 2, rue Thalberg, 1201 Geneva, Switzerland
Lung scan demonstrating abnormal perfusion of right lung, female patient, age 58; courtesy Washington University School of Medicine. (AP view at left; PA view at right.)

Proven Advantages of Lung Scanning

"... indicate the site and magnitude of pulmonary arterial obstruction before this is recognizable radiographically."¹

"... delineate normally vascularized pulmonary tissue and assess the pulmonary vascularization of roentgenographically obvious abnormalities ..."²

"... estimating the differences in pulmonary arterial perfusion between regions of the same lung."³

"... locates the nonfunctional or avascular region and thus supplements conventional pulmonary function tests and can replace differential bronchopulmography."⁴

"... estimation of regional pulmonary function, particularly in patients with emphysema, bronchiectasis, and chronic pulmonary tuberculosis."⁵

LUNG SCANNING

with MAA I 131

Aggregated Radioiodinated (I 131) Serum Albumin (Human)

Controlled Particle Size...

A KEY TO GOOD SCAN RESOLUTION

Proper control of aggregate particle size is essential to obtaining good scan resolution. To assure this control, Mallinckrodt/Nuclear has instituted special production techniques which effectively minimize the number of small particles that do not contribute scanning information because they clear the arteriole — capillary bed too rapidly.

This "controlled uniformity" makes a positive contribution to good scan resolution, providing highly efficient temporary deposition of the scanning agent in the capillary field.

MAA I 131 is available in convenient source sizes as small as 500 microcuries. It may be used with reliance on its proven safety, shown by thousands of scans in hospitals all over the country. Lung excretion half-time is approximately 1 – 6 hours, and urinary excretion of 50 to 80% of the injected dose occurs in approximately 24 to 48 hours.

Mallinckrodt/Nuclear (formerly Nuclear Consultants) produces a complete line of radiopharmaceuticals for scanning, diagnostic tests and therapy. For further information: call collect to the Mallinckrodt/Nuclear laboratory nearest you.


Photomicrograph of MAA I 131 aggregates

Radiopharmaceuticals

Box 10172, Lambert Field • St. Louis, Missouri 63145

Laboratories:

Atlanta (404) 767-9446 • Chicago (312) 625-3930
Cleveland (216) 267-5566 • Los Angeles (213) CH 5-7693
New York (212) 939-5222 • St. Louis (314) AX 1-0540

Specifications

Sterile, non-pyrogenic aqueous suspension of heat produced aggregates of albumin, 90% of which are between 10 and 90 microns in size, and none larger than 150 microns.

Concentration is approximately 500 μC/ml and specific activity approximately 500 μC/mg at time of calibration.

Contraindications

Radiopharmaceuticals are contraindicated in pregnancy and during lactation and in persons less than 18 years old unless, in the judgment of the physician, the situation requires their use. In acute cor pulmonale, the procedure may be hazardous due to the temporary small additional mechanical impediment to pulmonary blood flow.

Side Effects

The results of extensive clinical studies with MAA I 131 have shown it to be extremely well tolerated. However, the literature does reveal one case in which administration of the product was associated with the death of a patient seriously ill with extensive adenocarcinoma involving the lungs. Anaphylactic reactions have not been reported, but the possibility of such reactions attendant to the introduction of serum albumin into the patient's immunological system should be considered.
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 meningioma), 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.

**Pertscan™-99m**
**SODIUM PERTECHNETATE Tc 99m**

*Also available:*

**Pertgen™-99m**
**TECHNETIUM 99m GENERATOR KIT**

**ABBOTT LABORATORIES NORTH CHICAGO, ILLINOIS**

Abbott Laboratories, S.A., 2, rue Thalberg, 1201 Geneva, Switzerland
Abbott announces
Macroscan™-131
AGGREGATED RADIO-IODINATED (I\textsuperscript{131}) ALBUMIN (HUMAN)

If it’s a pulmonary problem, Macroscan-131 pictures it!

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 degree of focal lack of perfusion.

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 to the lungs.

CONTRAINDICATION: Radio-pharmaceutical agents should not be administered to pregnant women, nursing mothers, 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.
We won't try to persuade you that one isotope of mercury is "better" than another. Your preference is no doubt based on your own convincing experience. Perhaps you use both, depending on circumstances. No argument there, either. But we would like to point out that both of NEISLER'S radioactive mercury products—

- provide high specific activity—the total mercury dose is therefore low, and diuresis and renal toxicity are kept to a minimum;
- are aqueous solutions, formulated without propylene glycol, and thus carry no risk of red blood cell destruction at the site of injection;
- are unsurpassed in chemical purity, stable and precipitate-free throughout their useful life;
- are available in NEISLER'S exclusive COMPUTERCAP™. packaging for maximum convenience in the radioisotope laboratory.

**INDICATIONS:** Brain scanning, kidney scanning and kidney uptake studies. **CONTRAINDICATIONS:** Acute nephritis, oliguria, or known sensitivity to mercurial compounds. Should not be administered to patients under 18 years, or to women capable of childbearing, except when necessary diagnostic information cannot be obtained by other types of studies or can only be obtained at a risk greater than the radiation exposure caused by these agents. In uremic patients (B.U.N.>50 mg/100 ml), kidneys may not be visualized by scanning and hepatic radiation dose may be increased. **WARNINGS:** Limit dose to smallest amount consistent with obtaining relevant diagnostic information. **PRECAUTIONS:** Approved radiation safety precautions should be maintained at all times. To reduce radiation to kidneys, a nonradioactive mercurial diuretic may be administered prior to brain scans, but should not be given before kidney studies. **ADVERSE REACTIONS:** No serious reactions reported to date; however, patients should be carefully observed. Physicians should consult product package insert before administering. For further information, write: NEISLER LABORATORIES, INC., Subsidiary of UNION CARBIDE CORPORATION, Radiopharmaceutical Dept., P.O. Box 433, Tuxedo, N.Y. 10987.
There's nothing new about Dual Head Scanners...
We've made them for six years.

Six years of proven clinical effectiveness with Dual Head Scanners, has brought one fact to light... don't plan the obsolescence of your radioisotope scanner before you purchase one.

The Model 54FD Dual Five is the only scanner available that provides scallop-free photoscans. The 500 cm./min. maximum scan rate produces two opposed, simultaneous photoscans before most other units have barely completed the first view. An exclusive miniscan system allows a whole body scan to fit on a single 14" x 17" film. A self-contained patient couch affords the patient comfort, with no need for additional movement.

The Model 54 may be purchased as a single head unit, and can be converted to a Dual Head unit right in your department.

Optional accessories include an inexpensive positron counting circuit and a two-isotope subtraction circuit.

Write for the NEW Dual and Single Head, Five and Eight Inch Radioisotope Scanner Brochure.
You are now looking at 1200 feet of liver, kidney ...

...brain, heart, lung, pancreas, thyroid, and placenta studies.
A reality because Nuclear-Chicago now offers a Magnetic Tape System for the Pho/Gamma® III Scintillation Camera.

You are, of course, looking at a reel of magnetic tape. It's the newest storage medium for data on the distribution of radionuclides in body organs, as processed by our Pho/Gamma III.

The tape is put through its paces on the tape transport in our new Magnetic Tape System. The clinical information itself is transferred to the tape from the Pho/Gamma III by our multidimensional analyzer.

All of this means that you can perform a multitude of studies, on a variety of organs, under many different conditions, at any time. And you can record your data permanently, on tape, for later analysis.

Then, you can play back the tape and, by means of the multidimensional analyzer, manipulate the data or re-orient it on a scope display for photographic recording. Or you can delineate the data and read it out digitally.

Alternatively, if you have access to an off-line computer, you can feed the taped data to it and take full advantage of the benefits of computer-processing of clinical information. Which means automatic analysis, correlation, and much more in a properly programmed computer.

The man who knows all about all of the above topics is your Nuclear-Chicago sales engineer. Ask him about the Magnetic Tape System—and about our other new accessories for the Pho/Gamma III, as well. Or simply write to us.
This vial contains the finest T-3 thyroid function test available.

TriIONEX®
From the most experienced T-3 test manufacturer.

Curtis Nuclear Corporation

Eliminate strict test scheduling
• Samples may be counted anytime after 2 hours. • Time and temperature does not affect accuracy — corrections are not required. • Less than 2 minutes of technologist time is required per sample. • No washings or double counting each sample.

EXCELLENT CLINICAL CORRELATION
• No. A.E.C. LICENSING REQUIRED. • Long vials for easier sample handling. • Less than 2 minutes of technologist time is required per sample. • No washings or double counting each sample.

CONVENIENCE
• T-3 values may be reported in percent, percent normal or thyro-Binding-Index.

TriIONEX® kits are convenient packets containing all the necessary chemical reagents and throw-away containers to perform the popular T-3 thyroid test.

TriIONEX® filled vials and normal control serums are available in bulk form, at a reduced price, for the high volume customer.

Continuous use and research since 1962, has proven the Curtis TriIONEX® and matched controls unsurpassed in accuracy and reliability.

Let Curtis help you with your T-3 program. Delivery on time anywhere in the free world.

Curtis Nuclear Corporation
1948 East 46th Street, Los Angeles, California 90058 • Phone (213) 232-3531
...more than 90 radionuclides, over 120 radioisotopic forms. Reactor and accelerator-produced. Prompt shipment from stock, guaranteed quality, no handling charges. Write or call for your copy.
Four radioisotope generators

**Indium-113m**
Choice of two models
Standard and low-volume
Pyrogen-tested
*Patent pending

**Strontium-87m**
Short-lived bone-seeking radionuclide
Two-week useful life (Yr)
Supplied with pre-weighed eluting agent
Pyrogen-tested

**Rhenium-188**
For therapeutic applications
Chemistry similar to technetium-99m

**Gallium-68**
1.89 mev positrons
0.51, 1.08 mev gammas

DECAY SCHEME Sn**113**: 
Sn**113**: (stable)

DECAY SCHEME Y**90**: 
Y**90**: (80 h)

DECAY SCHEME W**188**: 
W**188**: (85d)

DECAY SCHEME Ge**68**: 
Ge**68**: (68m)

All units individually leak-tested prior to shipment.
Elution yield guaranteed and demonstrated.
Write for full technical data.

New England Nuclear Corp.
575 Albany Street, Boston, Mass. 02118
Tel. (617) 426-7311 Telex: 094-6582
IN EUROPE: NEN Chemicals GmbH
6072 Dreieichenhain, Germany
This simple, self-contained unit provides sterile, pyrogen-free technetium-99m quickly, safely, reliably.

2. Sterile — Every generator is autoclaved before shipment and each eluate is forced through a final 0.22 micron sterilizing filter as an extra precaution. Further: user is notified before calibration time if there is any bacterial or mycotic growth.
3. Pyrogen-free — Every generator is tested for pyrogenicity before shipment.
4. Technetium — As the pertechnetate ion. And we guarantee the amount of technetium obtainable from each generator. No vagueness about “yield”.
5. Quickly — The entire elution and assay process takes only a few minutes. And speaking of time: because of a simple, logical sequence, and a profusely illustrated, refreshingly simple instruction manual, only a few minutes are needed to master the entire procedure — even without any relevant prior experience.
6. Safely — Patient safety derives from points 2 and 3 above and this: every elution is easily and precisely checked for possible molybdenum breakthrough; simple, accurate radioassay materials are included for testing all elutions. Hospital personnel safety is related to point 5 above since speed reduces exposure, and: the generator never leaves its 3/4” lead shield or its 6 inch diameter can; and the construction is unbreakable.
7. Reliability — Semi-automatic operation eliminates the risk of improper elution with the wrong solvent, the wrong volume of solvent, or at the wrong rate.

Write for full information and prices.

New England Nuclear Corp.

575 Albany Street, Boston, Mass. 02118, Tel. (617) 426-7311 Telex: 094-6582

IN EUROPE: NEN Chemicals GmbH, 6072 Dreieichenhain, Germany
One imaging system can “see” more patients per day than any other device. One high-speed imaging system consistently yields high-resolution, maximum information images.

One such system has a field large enough to do even lungs or liver in a single view. One such system is versatile enough to let you use all available isotopes for imaging every organ. Just one. DYNAPIX®.

Which of these capabilities would you be willing to do without on a day-in, day-out basis? The DYNAPIX—now well-proven for both high-speed static imaging and intermediate speed dynamic function studies—eliminates the need to sacrifice any of them. Write for the detailed DYNAPIX story.

(The DYNAPIX is one of a broad line of Picker Nuclear instruments serving every isotope-imaging need.)
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complexity
simplicity!

TECHNETOPE II

SQUIBB
Introducing new Technetope II
Squibb Technetium 99m
STERILE GENERATOR

A FAR SIMPLER GENERATOR . . .
Hooks, hangers, and handles complicate assembly, so you won’t find any on Technetope II. It’s so simple that, after the usual aseptic techniques, assembly consists basically of two insertions into the generator column. Then attach an eluent bottle, an evacuated collecting vial, and milk. That’s simplicity.

. . . DESIGNED WITH "T.D.S." IN MIND
Time: Technetope II simplicity reduces assembly time...keeping radiation exposure to a minimum. However, proper radiation safety precautions should be maintained at all times.
Distance: Technetope II allows you to keep your distance. You don’t have to be constantly near the generator because it is self-milking. And eluate collection is made at the side of the unit—away from an unsheilded port.
Shielding: Technetope II has another half-value layer of lead shielding—without adding a cumbersome dispenser, additional cost, or special contract.

In addition, Technetope II is readily adaptable to tandem milking which provides high concentrations of 99mTc per ml.—another Squibb first and exclusive.

Technetope II (Squibb Technetium 99m) Sterile Generator provides a means of obtaining a sterile, non-pyrogenic supply of Technetium 99m (99mTc). 99mTc, the short-lived daughter (T½ = 6 hours) of Molybdenum 99 (99Mo, T½ = 67 hours), is obtained from the generator by periodic elution. The amount (in millicuries) of 99mTc obtained in the initial elution will depend on the original potency of the generator, while the activity obtained from subsequent elutions will depend on the time interval between elutions.

Warning: Proper radiation safety precautions should be maintained at all times. The column containing 99Mo need not be removed from the lead shield at any time. The radiation field surrounding an unshielded column is quite high. Solutions of 99mTc withdrawn from the generator should always be adequately shielded. The early elutions from the generator are highly radioactive. For radiation protection, a lead shield for the collecting vial is included with Technetope II.

For additional information on this advanced generator or the tandem milking technique, please use the coupon below.

---

I would like to receive full information on:
☐ Technetope® II (Squibb Technetium 99m)
   Sterile Generator
☐ Tandem Milking with Technetope II

Please attach this coupon to your letterhead and mail to Medotopes Customer Service Dept., P.O. Box #7, East Brunswick, N. J. 08816.

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Medotopes®
Squibb Division of Nuclear Medicine
East Brunswick, New Jersey 08816
The most important announcement from Abbott Radio-Pharmaceuticals since Abbott’s entry into the nuclear field.
Abbott Laboratories is now

This is the LOGIC™ Well Counter—only inches larger than this page (12¼” x 4⅛” x 13” to be exact)
The LOGIC Series—the most compact counting systems ever designed—is available now in 3 models.

The LOGIC Counting Systems offer:
- Compactness (micrologic integrated circuitry)
- Dependability (pre-tested for 40 hours)
- Portability (25-35 lbs.)
- Versatility (choice of 3 models)
- Quality (backed by Abbott)
The already simple Tresitope test is now more simple

Easily performed in any hospital or office laboratory with ordinary isotope facilities, the Tresitope T3 test has been uncomplicated, rapid and inexpensive enough to be used as a general screening procedure. Now, however, the 10-test Tresitope Diagnostic Kit has been modified to permit washing of the resin powder by suction methods as well as by the older manual-pressure technique, thus simplifying the test even further.

the first kit to use $^{125}$I

Squibb has utilized $^{125}$I rather than $^{131}$I to label liothyronine in the Tresitope Diagnostic Kit because two properties of $^{125}$I contribute to longer shelf life. First, $^{125}$I has a longer half-life than $^{131}$I (60 days versus about 8 days for $^{131}$I) and second, $^{125}$I emits no beta rays to affect the stability of liothyronine.

reliability with economy

In addition, the Tresitope Diagnostic Kit utilizes resin powder, which avoids the difficulty of preparing different batches of resin sponges with identical properties. And the technique is consistently reliable, thus representing an important refinement in T3 testing.

Finally, because constant agitation, centrifugation and multiple pipettings are not required in the Squibb Tresitope procedure, large expenditures for additional equipment to perform the test are not necessary. And, in addition to the 10-test kit, a Quantity Pack of 100 tests is available at even greater savings.

Note: While the resin uptake test is a very useful aid in the evaluation of thyroid function, it should not be used as the sole basis for such an evaluation. In any patient, the clinical state is probably the best indication of thyroid status, and any laboratory test must be interpreted with caution when test results do not agree with clinical evidence.

Precautions: Use appropriate radiation precautions in handling, identifying and discarding all radioactive material. Remember that minute amounts of radioactivity remain on components used in the test, including the polystyrene platform when it is used in performing the test, and particularly when the Tresitope Suction Method is used for a number of tests.

Tresitope® Diagnostic Kit

Squibb Resin Uptake Kit with Liothyronine $^{125}$I Buffer Solution

For evaluating thyroid function

Squibb Division of Nuclear Medicine
East Brunswick, New Jersey 08816
For high-definition diagnostic scans of brain lesions, thyroid, lungs, kidneys, liver, spleen and other organs.

High-definition scans are an essential in the fast-developing field of radio-diagnosis. Particularly so in the localisation of brain lesions and the scanning of thyroid, kidneys, liver, spleen and other human organs. Good scan resolution is one of the major contributions of the technetium-99m yielded by Stercow 99m - an advanced-design sterile generator by Duphar.

Supplies are despatched during the weekend pre-calibrated for the first day of use, usually Monday at 18.00 hrs M.E.T. - and an elution efficiency of approximately 80% of the technetium-99m in the Stercow is guaranteed. Further, milking is a simple, safe and speedy operation. Full details of Stercow 99m and the uses of the scanning agent technetium-99m will gladly be sent on request. Samples are available free of charge. Stercow 99m is manufactured by Duphar to the very high quality standards necessary for nuclear pharmaceuticals. A new design of sterile generator, it is available in three types with 150, 300 or 450 mc of the parent radioisotope Mo99. Complete elution with 15, 20 or 30 ml. When milked in the approved manner, the resultant technetium-99m is sterile, non-pyrogenic and hence ready for immediate use - either orally or intravenously.

The Duphar Shielded Stercow Milking System gives additional safety and efficiency in the elution operations.

Nuclear pharmaceuticals

Contact our local representative or write direct to
N.V. Philips-Duphar
Cyclotron and isotope laboratories
Petten - Holland

Labelled Compounds C 14, H 3 - Enriched Compounds D, C 13, N 15, O 18 - Nuclear Chemicals - Nuclear Products for Industry
The last decade was just the beginning

MEDOTOPES (Squibb Radiopharmaceuticals) recently celebrated a tenth anniversary. In the new field of nuclear medicine, 10 years is a long time. Yet, in a sense, the first decade was only setting the stage for new progress on the horizon.

It seems only a short time ago that radioisotopes were only a laboratory novelty instead of the integral part of medicine that many are today. In 1964, when Squibb dedicated its new plant and laboratories devoted exclusively to radiopharmaceuticals, it was an important milestone in a pioneering effort to provide the best research, production, and distribution facilities available. Yet routine use of many radiopharmaceuticals in clinical medicine has only just begun, and Squibb is determined to maintain its leadership in this new field. But what are some of the unique aspects of progress in Medotopes?
the unique 5-day precalibration plan If you are still ordering radioisotopes separately after each referral, you will want to know about a unique Medotopes service that makes piece-meal ordering a thing of the past. Nuclear medicine has now reached the stage where many radiopharmaceuticals should be integrated into the mainstream of medical and hospital practice and be on hand immediately upon patient referral. Since most active laboratories can now estimate what their approximate weekly diagnostic needs will be, the unique 5-day precalibration plan allows them to order everything in one shipment to arrive on a given day. Thus, when the patient is referred, the diagnostic agent is already on hand and the test can be run immediately. Moreover, there is only one shipping charge and Squibb bears the cost of radioactive decay over weekends.

the unique "prefill" program When you use a parenteral antibiotic, hormone preparation or other drug, you expect it to meet high testing standards for sterility and lack of pyrogenicity. Why not a radiopharmaceutical? The Squibb "prefill" program anticipates and programs radiopharmaceutical parenteral production so that sterility and pyrogen test data are "in house" before the material is released. Thus, Squibb manufacturing practices assure—with "prefill" radiopharmaceuticals—the same high standards you would expect in any parenteral preparation. Is radioactivity any excuse for less than the best quality control? Not at Squibb.

important leadership in product development Squibb leadership in radiopharmaceuticals is nowhere more impressive than in the area of research and development. This leadership led to the development of a sterile, nonpyrogenic generator, a product emulated by other generators that were developed later. Another product has made lung scanning an important clinical procedure. Another permits pancreatic morphology determination in minutes without surgery. Bone metastasis can be demonstrated before it is apparent on X-rays with still another radiopharmaceutical. Now gastrointestinal protein loss can be quantitated quickly and accurately with yet another Medotopes product. These are only a few examples of Squibb's early recognition of the physician's needs and how they were met through active radiopharmaceutical research and development.

important leadership in education Squibb has recognized the acute and continuing need for trained paramedical personnel to safely handle radioisotopes and assist in clinical radioisotope studies. This need is being met by the Squibb radioisotope orientation program held periodically in various parts of the country for hospital pharmacists and technologists. The Squibb radioisotope orientation program is only part of a comprehensive educational program that includes support of clinical nuclear medicine symposia and sponsorship of the Squibb Fellowships in Nuclear Medicine.

technical know-how—yours when you need it The numerous Squibb representatives, your Squibb technical associate and the Squibb Medotopes Customer Service Department all are at your service and ready to be of assistance. Whether you need information on a specific product or procedure, help in solving a technical problem, or assistance in setting up a new laboratory, Squibb men are always on call.

the continuing information program The series entitled Nuclear Notes — from Squibb®, provides periodic reviews of latest technical developments in various areas to help keep you advised of recent advances in radioisotope diagnosis and therapy. A special program entitled Case Histories in Nuclear Medicine is also directed to practicing physicians who do not use radiopharmaceuticals to acquaint them with the diagnostic help that is available to them and their patients. Further, your Squibb technical associate or representative will be happy to show you the variety of materials available for your personal use in introducing nuclear medicine to potential patient-referring colleagues. Included in this service is a large private collection of motion pictures dealing with nuclear medicine, prints of which are available to you for showing.

These are only a few of the many important features and services offered by the Squibb Division of Nuclear Medicine. Your Squibb representative will be happy to give you more details.
The Baird-Atomic Autofluoroscope® can do things that no other scintillation camera can.
Fact: The Baird-Atomic Scintillation Camera is the only Camera that can provide quantitation of patient data with real numbers as read directly from the front panel. You can do cardiovascular dynamics and cerebral blood flow dynamics both visually and quantitatively. And you can do lung, pancreas, thyroid, placenta, and other static analyses. The Autofluoroscope is the only system that can provide permanent patient record storage with instant recall of all the original data in unaltered form. Up to three areas of quantitation can be outlined by a light pen and presented to the multiple pen recorder for a graphic display of total organ activity versus time. It is the only complete instrument having all the high demand computer functions built into the system. Let us prove to you that the Baird-Atomic Scintillation Camera will do everything we say it will. 33 University Road, Cambridge, Mass. 02138, Telephone 617 864-7420 • Baird-Atomic Europe, The Hague, The Netherlands. Baird-Atomic Ltd., Hornchurch, England.
Up to now, whenever you read in the literature of a clinician using a "scintillation camera," the chances are it could mean only one thing. He was using our scintillation camera—the Nuclear-Chicago Pho/Gamma® III Scintillation Camera or one of its predecessors.

That fact prompts us to call Pho/Gamma III the most (if you will) experienced scintillation camera there is. And, as such, it's the instrument of choice for the in-vivo visualization of radioisotopes in body organs.

Note that we've given the current Pho/Gamma detector a significantly increased range of positioning. We've also improved the electronics and arranged everything to fit into a human-engineered desk console.

And, perhaps most importantly, we've made it possible for Pho/Gamma III to be used with an ever-wider array of accessories. Recently added to this array are these: a 35-mm automatic time-lapse camera for sequential scintiphotos, a dual-pen recorder/dual-channel ratemeter for renal studies, our Photo/Scope III attachment for 1-to-1 scintiphotos, and a high-speed digital printer. Plus a magnetic-tape system for data recording and manipulation, as well as computer processing, of clinical information.

The proof of Pho/Gamma's experience is in the hands of your Nuclear-Chicago sales engineer. Please call him or write to us.

You'll find that we're the people who successfully marketed the first and, consequently, the most experienced scintillation camera — the Pho/Gamma III.

And experience, after all, is the best teacher.

Research in the Service of Mankind

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