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.
Thyroid testing—
As easy as throwing in the sponge!

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."\(^1\)

"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."\(^2\)

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."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.

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

"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."3

"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.

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


Announcing Tetrasorb-125 T-4 Diagnostic Kit

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Abbott Laboratories, S.A., 2, rue Thalberg, 1201 Geneva, Switzerland
Write for Bulletin CS, describing the Model CS-15 cyclotron and outlining applications in nuclear medicine, activation analysis, radiation effect studies and physics research and teaching.

THE CS-15 30-INCH CYCLOTRON

Guaranteed Performance: 50 microamperes of 15 MeV protons  50 microamperes of 8 MeV deuterons  50 microamperes of 20 MeV helium-3 ions in well defined external beams.

Measured currents have exceeded these ratings and, in addition, helium-4 ions have been accelerated to 16 MeV.

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Simple Operation and Maintenance. Stabilized power supplies and simplified controls assure steady operation hour after hour. Controls are fully interlocked for protection of equipment and personnel. The unique "lift-top" construction provides maximum access to the machine for routine maintenance.

Fully Equipped. The Model CS-15 is a complete accelerator with a helium-3 recovery system and internal beam probe included as standard equipment. In addition, The Cyclotron Corporation provides supervision of your installation and trains your technicians.

Write for Bulletin CS, describing the Model CS-15 cyclotron and outlining applications in nuclear medicine, activation analysis, radiation effect studies and physics research and teaching.

950 Gilman Street, Berkeley, California 94710
The increasing importance of technetium-99m as a scanning agent in modern diagnosis needs no elaboration. But the degree of efficiency is inevitably linked with fast, reliable delivery - and also with availability of technetium-99m at all times, so that separate ordering is not required for each referral. With Stercow 99m ordering is simplicity itself - just a phone call to the nearest Duphar representative. All orders are despatched promptly during the weekend - pre-calibrated for the first day of use, usually Monday at 18.00 hrs M.E.T. An elution efficiency of approximately 80% is guaranteed. Further details will gladly be given 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 revolutionary 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

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The Echo-Trace II has extremely high sensitivity for making quick, accurate midline verification. A Polaroid camera and adaptor provide fast, easy recording of traces. Write today for brochure E-T II giving complete information about the Metrix Echo-Trace II. It is an accurate and entirely reliable instrument, yet priced for economy—$2250.

With a weight of only 17 pounds, this fully transistorized instrument is easily portable and convenient to use in office, clinic and hospital. Operation is particularly easy. One knob is the only control you touch under most conditions. This single adjustment gives effective compensation for the differences in attenuation among different subjects.

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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—

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**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.
MALLINCKRODT / NUCLEAR'S
NEW

Trilinear Chart of the Nuclides

by Marshall Brucer, M. D.
Characteristics of all the presently known nuclides (January 1968) are presented for the first time in easy-to-use trilinear chart form. Eight colors are used to simplify interpretation.

The chart shows:
- approximately 1800 nuclides
- half-life ranges by color code
- stable nuclides
- special charting of uranium, thorium, neptunium, and actinium series
- α, β, γ, and major γ emissions, with energy and percent abundance

This new chart is displayed at the 15th Annual Meeting of the Society of Nuclear Medicine. It is available in two forms: as a 48-page booklet with the "Vignettes in Nuclear Medicine," available separately without charge; and as a 54" x 38" wall chart ready for mounting. The wall chart is available for a handling charge of $2.00. Check or money order must be sent with your request.

COLOR CODE
Indicating Half-Life
- Seconds
- Minutes
- Hours
- Days < 10
- Days > 10
- Megayears
- Stable

Chart section shown is 2x size used in booklet.
Spark Chamber Camera

The Commissariat à l'Energie Atomique spark chamber camera provides rapid photos of radioisotope distribution in vital organs. With excellent resolution characteristics and extremely simple operation, this instrument is ideal for obtaining instantaneous distribution patterns of short-lived radioisotopes at very low cost.

The photographs below illustrate the use of this device in thyroid tumor location, using iodine-125.

### Examination of Front and Profile of Thyroid Gland
- **24 hours after injection of 50µc^{123}I**
- **15µc^{123}I** in gland at examination
- **12,000 sparks collected in each view**

### Thyroid Photo showing slight Hypothyroidism
- **10µc^{123}I** in gland
- **15,000 sparks collected**

### Thyroid Photo of subject with Pulmonary Metastases
- **13µc^{123}I** in gland
- **12,000 sparks collected**

#### Right Profile
- **6 min. 16 sec. collection time**
- Note cold nodule in inferior pole of right lobe

#### Front
- **4 min. 35 sec. collection time**

#### Left Profile
- **7 min. 32 sec. collection time**

#### Front
- **5 min. collection time**

#### Front
- **4 min. 55 sec. collection time**
- Note suspect area in inferior pole of left lobe

---

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2. Goldenrod Showboat
3. Old Cathedral
4. Jefferson National Expansion Memorial—Gateway Arch
5. Old Courthouse
6. Busch Stadium
7. Campbell House
8. Carl Milles Fountain
   Aloe Plaza—Union Station
9. Memorial Plaza
   (Kiel Auditorium)
10. Eugene Field House
11. Falstaff Museum of Brewing
12. Anheuser-Busch Brewery
13. St. Louis University
14. Forest Park
15. Jefferson Memorial
   (Lindbergh's trophies)
16. Municipal Opera
   (“Annie Get Your Gun” June 26-30)
17. Art Museum
   (Statue of St. Louis)
18. St. Louis Zoo
19. McDonnell Planetarium
20. Chase-Park Plaza Hotel
21. Shaw's Garden—Climatron
   (Missouri Botanical Garden)
22. Grant's Farm
23. University of Missouri
   (St. Louis Campus)
24. Lambert-St. Louis Municipal Airport
25. Washington University
26. Museum of Science and Natural History

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The new Dynapix was designed for the busy Radioisotope Department.

(Too demanding of information to sacrifice imaging quality for the sake of speed. And vice versa.)

To date the Radioisotope Department with a large patient load and the need for maximum information per picture has really had only two kinds of choices: either (1) good images, slowly achieved, or more recently (2) higher speeds at the expense of picture quality. But since neither choice is quite appropriate to the need, there now comes a third option, the Dynapix. Design goals: maximal information/minimum time. Is this actually possible? Isn't compromise inevitable?

A totally new approach obviated the need for compromise. The Dynapix is a completely unique radioisotope imaging device which has, among other things, ten (10!) scintillation detectors working in concert, each detector with its own focusing collimators, each detector with its own electronics. The practical import of this?

High speed
Since each of the ten scintillation detectors has its own electronics, the whole assembly can count many times faster than a single detector of any size. There is no faster detection system now.
available; clinical scans take from a fraction of a minute to a few minutes. Ideal for recording dynamic processes or for multiple views. Minimizes discomfort to patient by reducing time of immobilization.

High imaging quality
Dynapix pictures yield maximum information to the clinician. Since each crystal has its own focusing collimators (choice of three), spatial resolution equivalent to that of conventional scanners can be obtained without the "out of focus" problem of large single crystals. The Dynapix features contrast enhancement which produces 64 grey shades proportional to the counting rate above background.

Large scanning field
The scanning field is a full 10" x 20" which effectively permits imaging of most organs in a single scan or high-speed whole body scanning with several adjacent scans. This field size is at least 2½ times larger than that of other high-speed instruments and has no distortion at the edges.

Other important features, briefly
(1) Three types of data readout provide maximum flexibility: TV screen, Polaroid camera (positive or negative film), and scaler.
(2) Magnetic tape storage of total data for rapid playback at variable data enhancement settings.
(3) Easy to use: experienced workers in this field can be getting usable Dynapix scans on the day of installation.
(4) The Dynapix produces pictures which are familiar and can be easily related to one's prior experience.

Finally
The Dynapix has been proven in major clinical installations. This enables us to provide proof of the many claims above. Accordingly, the object of this entire presentation is to solicit such challenges, and to leave you with the simple message: Dynapix provides maximum information/minimum time: Now demand proof by requesting data file 114R
ANNOUNCEMENT TO AUTHORS

PRELIMINARY NOTES

Space will be reserved in each issue of THE JOURNAL OF NUCLEAR MEDICINE for the publication of one preliminary note concerning new original work that is an important contribution in Nuclear Medicine.

Selection of the preliminary note shall be on a competitive basis for each issue. One will be selected after careful screening and review by the Editors. Those not selected will be returned immediately to the authors without criticism. Authors may resubmit a rejected or revised preliminary note for consideration for publication in a later issue. The subject material of all rejected manuscripts will be considered confidential.

The text of the manuscript should not exceed 1,200 words. Either two illustrations, two tables or one illustration and one table will be permitted. An additional 400 words of text may be submitted if no tables or illustrations are required. Only the minimum number of references should be cited.

Manuscripts should be mailed to the Editor, Dr. George E. Thoma, St. Louis University Medical Center, 1504 South Grand Blvd., St. Louis, Missouri 63104. They must be received before the first day of the month preceding the publication month of the next issue, e.g., preliminary notes to be considered for the January issue must be in the hands of the Editor before December 1.
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DECRY SCHEME Sn^{113m}→Sn^{113}

390 kev γ 1 113 Sn* (stables)

Pyrogen-tested

DECRY SCHEME Y^{97}→Y^{97a}

483 kev γ

1.08 mev γ

DECRY SCHEME W^{188}→Re^{188}

51 kev β

2.13 mev β

E.C.

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The analyzer also encodes the data, in computer-compatible form. And then transfers the data to the second console (above 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.
Please

Do not ask our representatives for a "sneak preview" of our exciting new isotope-imaging device until we officially unveil this brand new addition to our line at the Society of Nuclear Medicine meeting in St. Louis on June 27, 1968.

Thank you

(If you just can't come to the unveiling, attach your name and address to this page and mail it to Picker Nuclear, 1275 Mamaroneck Avenue, White Plains, N. Y. 10605. We'll get the story to you as promptly as possible. But after June 27th.)
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 4½” x 13” to be exact)
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These features are achieved by a unique arrangement of Caesium 137 sources and lead attenuators above and below the irradiation chamber. Shielding in the Gammacell 20 is designed to keep external radiation below levels required by international and U.S.A. requirements. Caesium 137 sources, doubly encapsulated in stainless steel, are installed prior to shipment. They cannot move and are not accessible to operating personnel. Source capacity is 2000 curies delivering a dose rate of 7 x 10³ r/hr., with dose uniformity over the sample chamber of plus or minus 4%.

Unit can be set up in any area and used immediately. No additional shielding required—simple, pushbutton operation, completely reliable, the GAMMACELL 20 provides a new and broader scope of activity for the research biologist.

For complete information, please write to P.O. Box 93, Ottawa, Canada.

Atomic Energy of Canada Limited
Commercial Products
I'm a T3 molecule

I have been pipetted rotated frozen swizzled & agitated

But now I live in the gentle world of I.S.G.

About the GENTLE WORLD OF ISO SERA GRAPHIC ANALYSIS: The entire T-3 procedure is done in the special I.S.G. syringe. No pipetting, rotation, or special temperature control is required. The I.S.G. syringe takes 30 minutes incubation at room temperature. The I.S.G. kit includes a solid standard allowing each test syringe to be used for actual testing. You can do the I.S.G. T-3 test on any scintillation well counter or you can get our I.S.G. analyzer that provides meter and strip chart read out for your permanent record. Would you like to know more about the gentle world of I.S.G.? We're on the beach at South Laguna...where are you?

BIO NUCLEAR LABORATORIES
3235 South Coast Highway • South Laguna 92677 • (714) 499-4176

An approach toward excellence in medicine
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
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.
Liver scanning is employed to help determine the size, position, shape and functional integrity of the liver. Space-occupying lesions of the liver from all causes usually can be detected and diagnosed. Scanning is especially useful when serologic or other laboratory tests are equivocal or not useful.

Colloscan-99m offers major advantages over earlier medical isotopes:
1. It provides very high counting rates that can be readily detected.
2. It is easily collimated and shielded.
3. And because of its short half life (about 6 hours) and fast clearance, the patient receives minimum radiation.

For these reasons, technetium sulfide Tc 99m has been called the agent of choice.1,2

It is important to note that Colloscan-99m is formulated with low molecular weight dextran (dextran 40)—and not clinical dextran (dextran 75).

Colloscan-99m is a sterile, non-pyrogenic, colloidal solution that can be administered as received—no preparation is necessary. It is shipped 6 days a week—Monday through Friday and Sunday.

INDICATIONS: For indirect visualization of the liver, spleen, and bone marrow.

CONTRAINDICATIONS: Radio-pharmaceutical agents should not be administered to pregnant or lactating 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 to all personnel. Physicians administering this agent should be prepared for emergency resuscitation in the event of an anaphylactoid reaction. The absence of a lesion in the scan does not necessarily denote the absence of lesions.

ADVERSE REACTIONS: In more than 200 patient studies, there were 2 reported instances of hypotension requiring prompt supportive treatment.

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where people count!

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You can also count on Tracerlab people for the safest, most reliable radioactive sources in the world — a wide selection of stock or custom types for standardization and analysis. For dependable products and services in the life sciences and health physics, including a broad range of radioanalytical services, come to Tracerlab — where people count!

TRACERLAB
A Division of Laboratory For Electronics, Inc.
WALTHAM, MASSACHUSETTS 02154
A new Squibb radiopharmaceutical offering important advantages in liver scanning

Normal liver scans. Both anterior and posterior scans obtained approximately 15 minutes after injection of 300 µCi of Squibb Aggregated Radio-Iodinated (I^{131}) Albumin. Courtesy of John G. McAfee, M.D.
A new Squibb radiopharmaceutical specifically for liver scanning offers important advantages over radiogold and iodinated rose bengal. New ALBUMOTOPE-H [Squibb Aggregated Radio-Iodinated (I\textsuperscript{131}) Albumin (Human) for Liver Scanning] is a Squibb "first" and the latest addition to the broad line of radiopharmaceuticals available under the Medotopes\textsuperscript{®} label.

**excellent liver scans**
Albumotope-H appears to be free of a major disadvantage of I\textsuperscript{131} rose bengal. As rose bengal is rapidly excreted in the bile, a constantly varying amount is present in the liver during the 40 to 60 minutes of the scanning procedure.\textsuperscript{1} This can produce a wide range of densities.\textsuperscript{2}

**less radiation exposure to patients**
Radiation exposure with Albumotope-H is low because of rapid metabolic degradation in the liver and elimination of the I\textsuperscript{131} label from the body within 72 hours, if thyroid uptake is blocked by prior oral administration of nonradioactive iodine. The calculated radiation dose to the liver has been estimated to be at least 100 times less than that of an equivalent dose of colloidal radiogold-198 and about 3 times less than I\textsuperscript{131} rose bengal.\textsuperscript{3} And the half-life is almost three times that of radiogold-198, simplifying inventory maintenance and handling.

**less chance of toxicity**
Unlike inorganic colloid radiopharmaceuticals, Albumotope-H is metabolized by the body. In contrast to radiogold, there is no accumulation in the reticuloendothelial cells and no alteration in their function or future capacity. This not only means reduced potential for toxicity but also that serial liver scans can be done with the same test agent. Finally, anaphylactoid reactions have not been reported in studies of colloidal Albumin I\textsuperscript{131}. And only a few isolated instances of skin reactions have been reported.\textsuperscript{4}

**contraindications**
Radiopharmaceuticals should not be administered to pregnant women or to persons under the age of 18 years unless indications are very exceptional. Colloidal radioalbumin should not be administered to nursing mothers because iodide is excreted in human milk.

**precautions**
In women of childbearing age, radiopharmaceuticals may be administered during or immediately following a menstrual period to minimize the possibility of administration during pregnancy.

**adverse reactions**
A few isolated instances of generalized urticaria or dermatitis have been reported in patients receiving an aggregated albumin preparation.

**supply**
Albumotope-H is a sterile, aqueous, nonpyrogenic preparation available in vials containing 1 to 10 mg. of heat-aggregated (colloidal) human serum albumin per cc. The preparation also contains 0.9% benzyl alcohol as a preservative.

**references**

**Albumotope\textsuperscript{-H}**
Squibb Aggregated Radio-Iodinated (I\textsuperscript{131}) Albumin (Human) for liver scanning

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[Image: Albumotope-H logo]
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
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We're helping add some new words to the "diagnostic dictionary."