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

Performance

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

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

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

Safety

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

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

Transparent Needle Guard protects fingers.

Convenience

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

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

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

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

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

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

Carrying Handles add to convenience—help you avoid mishaps.

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Radio-Pharmaceutical Products Division
North Chicago, IL60064
Ion chamber detectors may sometimes lie — when they drift out of calibration. New England Nuclear's gamma reference sources can keep them honest.

If the ion chamber detector is going to lie to you, find out before you select your dosage level. Check first with one of our gamma reference sources in a standard vial, so convenient that calibration can easily become a habit. Three sources for three energy ranges: $^{57}$Co (low), $^{137}$Cs (medium), and $^{60}$Co (high). $^{133}$Ba also available in a four-vial kit and all sources available individually.

Discover spurious readings before they spoil your studies. Send for complete information on our gamma reference source sets for ion chamber detectors.
There's a new way to say simultaneous acquisition and processing.

CINE 200.

And CINE 200 means even more. Simultaneous acquisition from two imaging devices. Clinically useful routines. Human engineering. And prices that put these capabilities within the range of your budget.

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Our MODUMED SYSTEM offers:
- Single camera acquisition
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MDS-supplied hospitals around the country are adding to their clinical efficiency and throughput by the use of the MODUMED SYSTEM.

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MODUMED SYSTEM

Medical Data Systems' modular approach to nuclear medicine computer systems. The MODUMED SYSTEM consists of “basic” systems and five option packages.

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SAVE TIME AND ELIMINATE COMPUTATIONAL ERRORS
The CXC-9 Computer is programmed to provide the information that you need rapidly and quietly. Its control panel is designed for operator use to human engineering standards. A "BY-THE-NUMBERS" step by step computational procedure is so straightforward that operator or slide rule errors are virtually eliminated.

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The CXC-9 computes patient dose correctly the first time and every time that it is used. Consequently, the handling of radioactive material, either in stock bottle or syringe, is kept to a minimum with a corresponding reduction in exposure.

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The stand-alone CXC-9 Dose Computer provides the complete analytical work-up for Radio-Pharmaceutical dose management required by the exacting standards of Nuclear Medicine.

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Total dose from your present Calibrator (or recall Tc-99m value from memory); stock volume, and the required dose..... The CXC-9 Dose Computer instantly displays the exact volume of dose for patient administration.

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Only Clincom is specifically designed to improve on the image of the world's most experienced scintillation camera. Clincom is fully compatible with Pho/Gamma—forming an integrated unit of unprecedented versatility in data storage, playback, and manipulation at the push of a button. It includes many "firsts"—in both today's and tomorrow's nuclear medicine procedures—to aid the physician in his particular diagnosis. To name a few Clincom enhancements of Pho/Gamma...

**Simplified Acquisition**—Mounted on top of Pho/Gamma's console, the Acquisition Panel easily facilitates camera/Clincom control by the technician. All operating parameters including date, patient identification number, collimator used, framing rates, and patient orientation are pushbutton selected. Furthermore, the acquisition of data begins when the Pho/Gamma's "Start" button is activated.

**Image Processing**—All processing controls are located on the Physician's Viewing Console. The Analysis Scope displays either current data being received from Pho/Gamma, or stored images developed from Clincom's wide-ranging diagnostic procedures. The Text Scope continuously logs (in everyday clinical language) all information on the desired study. Both the processed image and the text may be photographed with a synchronized camera for storage in patient records.

**Permanent Storage**—Data is stored on the master tape and later may be transferred to cartridge tape for inexpensive, long-term storage. Self-checking features are incorporated to prevent unintentional data erasure.

"Powerful" Software—Clincom will remember, with the help of the "Capture Procedure" pushbutton, an entire sequence of data operations. A program thus generated is simply recalled with fingertip control. In addition, Clincom offers a wide range of on-line and off-line programs for future research and clinical needs.

**Remote Viewing**—Clincom can be placed up to 200 feet from the Pho/Gamma Console. This allows the physician to process studies in any area removed from the patient's presence.

Clincom... the image processing system for Pho/Gamma. Find out how Clincom can specifically meet your clinical and diagnostic needs. Contact your Searle Radiographics (formerly Nuclear-Chicago) sales engineer, or write to us for your free brochure.

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ALBUMIN MICROSPHERES (HUMAN) FROM THE 3M BRAND ALBUMIN MICROSPHERE 99mTc-LABELING KIT

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LUNG IMAGES
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USE 99m Tc ALBUMIN MICROSPHERES

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

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

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

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

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

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

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

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

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

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

1. Data on file at the 3M Company and the Bureau of Biologics.
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Telex: 848475.
Also at: Nuclear Enterprises GmbH, Schwanthalerstrasse 74,
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Choice of 12 Ultra-Technekow® Generators

<table>
<thead>
<tr>
<th>MOLY</th>
<th>FISSION MOLY</th>
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<tr>
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<tr>
<td>500 mCi</td>
<td>Cat. No. 011</td>
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</table>

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The Graphic scanner team is not one man who sells you an instrument and then forgets you. We provide the assistance of a radio-pharmaceutical representative, nuclear instrument consultant and field service engineer. They are ready to help even when everything is running smoothly. Our team is capable and willing to help you set-up a new department. They can assist in licensing procedures, thorough training of technicians, including new diagnostic procedures and techniques.

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<th>Product</th>
<th>Approval</th>
<th>Quantity</th>
<th>Price</th>
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<tr>
<td>DTPA Kit</td>
<td>AEC Approved</td>
<td>10 vials</td>
<td>$30</td>
</tr>
</tbody>
</table>

- Excellent brain images minutes following i.v. injection and no blocking agents required for any view.

- True chelate allowing GFR measurements and superior kidney imaging.

<table>
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<tr>
<th>Product</th>
<th>Approval</th>
<th>Quantity</th>
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<tr>
<td>Diphosphonate Kit</td>
<td>IND 8926</td>
<td>10 vials</td>
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<tr>
<td>Sodium Phytate Kit</td>
<td>IND 9464</td>
<td>10 vials</td>
<td>$40</td>
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- Liver Imaging—Safe, Effective, Rapid, No Heating Step

Shelf-life for above kits — greater than 6 months.

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Saves you up to 90% in Film Costs ... and at least 30% in Time

The new Model RSI-36 Rapid Sequence Imager operates with any Gamma camera to permit low cost, highly flexible formatting for either static or dynamic studies. This single unit allows you pushbutton selection of any of four, automatically-framed formats on a single (11" x 14") X-Ray film:

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- 36-Picture Rapid Flow (6:1 minification with 35mm images)

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To learn more about the new RSI-36 Rapid Sequence Imager, or to arrange a demonstration, please write or call:

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IC-1 INTENSITY COMPUTER

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The new Model IC-1 Intensity Computer removes the guesswork from exposing your Gamma camera. It assures that the exposure will be Right—the first time and every time after that—even if the camera itself experiences electronic drift. The IC-1 is ideal for Flow Studies since consistently proper exposure eliminates the probability of repeat scans—thereby saving both valuable time and money—not to mention patient inconvenience.

Typical IC-1 benefits include:
- Right exposure every time
- Independent of input power variations
- Eliminates repeat scans
- Eliminates need for 3-lens camera
- Permits 3X-4X larger image on single lens Polaroid

- Simplified, pushbutton operation
- Eliminates need to reset focus
- Eliminates astigmatism on Gamma camera
- Reduces costs of operation

The IC-1 Intensity Computer is virtually fool-proof. Even a new operator can get the exposure right the very first time. The operator merely depresses a few plainly-marked pushbuttons to select: Type of Organ to be studied ... Number of Counts to be accumulated ... Relative Size of the patient ... Type of Film to be used (Polaroid, X-Ray, 35mm) ... and the number of pictures to be taken (if the unit is used in conjunction with the Model RSI-36 Rapid Sequence Imager*). That's it! Efficient. Easy to use. The right exposure each each time.

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- Greater source positioning accuracy than ever before.
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TETRA-COUNT has only 3 steps. None involve critical timing, temperature control or alcohol extraction. Speed!

Using TETRA-COUNT, a single test can be run in just 20 minutes, 65 tests in less than 3 hours, 120 tests in less than 5 hours. Automating the counting step? With TETRA-COUNT you count the column eluate, not the column, not a sponge. Weigh your present T-4 test against TETRA-COUNT, and, if you would like more information, call Howard Willner at: (415) 234-4130. He's Bio-Rad's T-4 specialist.

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Maxiscan permits skeletal surveys within a range of 2 feet wide and 6 feet 8 inches long. The image, minified to fit 14 x 17 inch film, permits location and diagnosis of bone metastases, without a series of small area scans.

For any single organ, select full size view or minifications of 2:1, 3:1, 4:1, or 5:1. Up to four scans may be displayed on one film, with precise quadrant placement and no image overlap.

During any scanning procedure, Maxiscan minimizes patient movement. Two probes, top and bottom, cover the required isoresponse of the body without turning the patient. The patient table smoothly rolls out to permit changing of the lower probe collimator. The upper probe angulates through 270°, locks in place for safe, convenient collimator interchange. Upper or lower collimators take only seconds to change. The unit's optional vertical plane scanning permits studies with patients seated upright, as well as vertex views of the brain with patients reclining normally.

All scans may be viewed with a choice of image display: standard film photorecording or GE's optional Videodisplay unit.
Videodisplay Processor
To view and quantify patient count information in black and white or fully functional color, Maxiscan can be combined with GE’s Videodisplay and Processing Unit. Images are displayed on a video monitor; count data is stored in the unit’s electronic memory, and can be manipulated to enhance desired details and to aid interpretation and diagnosis. Enhanced VDP data may be played back to Maxiscan and recorded on 14 x 17 inch film. Scans can also be recorded on cassette tape for off-line playback and teaching purposes. Count information, obtained from any scanner or camera, can be transmitted from one VDP to another over regular telephone lines.

Here's the information hospitals are getting with Maxiscan...
These reproductions of scans, from clinical examinations, illustrate the range of diagnostic information possible with Maxiscan and the Videodisplay Processor. A GE motion picture demonstrates the full capability of both units. Ask your GE representative to schedule a desk top showing, at your convenience.

These three images, from a single whole body scan, demonstrate how manipulation of data stored in the VDP electronic memory can enhance desired details and aid diagnosis. The isotope used was $^{99m}$Tc Polyphosphate. At left, an anterior view displays raw, unmanipulated data from the memory. At right, smoothed data is shown with a Y axis electronic slice through the area of suspicion. The count profile superimposed over this image and shown separately, center, confirms greater uptake on the right side. The photorecorded image showed only a suspicion of greater isotope uptake.

In a case of suspected pericardial effusion, a transmission scan (left) of the chest was obtained using an Iodine 131 source. An emission scan (center) of the same region was simultaneously obtained with the same probe, 15 minutes after an intravenous injection of $^{99m}$Tc labeled albumin. The heart and liver are outlined. Note how the intracardiac activity (central area of center scan) fails to fill the large mediastinal shadow (central blue area of left scan). This discrepancy, between heart size and that of the mediastinum, is more easily seen when these two scans are superimposed (right); a technic easily accomplished on the VDP. The resulting diagnosis, a large pericardial effusion which appears to be predominantly left-sided, was confirmed by the aspiration of 1800 ml. of fluid from an encysted pericardial effusion.

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Introduction
The Multi-Imager System is designed for use with scintillation cameras to provide dynamic flow, static, and physiological function synchronized studies. The system operates by altering the CRT deflection signals, changing the size, location, and duration of the image on the display scope. Frame advance is achieved electronically, yielding sequential exposures with essentially no data loss.

Dynamic flow study applications
The Multi-Imager System allows selection of 4, 16, or 36 frame format dynamic flow studies. The three formats vary in the size of the image being recorded and the maximum number of available frames:

<table>
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<th>11&quot; x 14&quot; X-ray film</th>
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The maximum size frame diameter is 3.5", 2.0", and 1.3" respectively. The exposure time per frame is adjustable from 0.1 second to 10 minutes. The frame advance dead time of the system is less than 1/1,000th of a second. A remote foot operated start switch is also available.

Static study applications
A one frame format allows recording of a life size 10" diameter image on 11" x 14" X-ray film. In addition, the dynamic flow study frame formats can be operated manually, advancing the frame after each view is recorded. In the 4 frame format four static views can be recorded on a single sheet of 11" x 14" X-ray film, each view image having a diameter of 3.5". In the 16 frame format a sixteen view bone study can be recorded on a single sheet of 11" x 14" X-ray film, each view image in the correct anatomical orientation, with a diameter of 2.0".

Physiological trigger accessories
Unlike a motorized camera, the Multi-Imager System can not only advance frames, but also return to re-expose frames. Physiological trigger accessories are available that allow synchronization of recorded data with the patient's cardiac or respiratory cycle. The cardiac function system records the systolic image data in one frame and the diastolic image data in a second frame, alternating exposures between the two frames synchronous with the patient's cardiac cycle. The respiratory function system is useful to minimize respiration motion artifacts in liver and lung studies. Through use of a chest expansion transducer, one frame records the inspiration plateau image data, the second frame records the expiration plateau image data, and the third frame records the image data between the two plateaus. The exposures are cycled through the three frames synchronous with the patient's respiratory cycle.

Photographic recording options
An 11" x 14" format X-ray film camera and a 4" x 5" format scope camera are available for use with the Multi-Imager System.
It's the 750-01 Electronic Programmer, one-half of the radically new 750 Multi-Format Camera System. The half that makes our system the only oscilloscope camera appropriate for all your needs. Our Programmer electronically minifies the image displayed on the CRT. It manipulates the image in size, location, duration and number. Select 1 through 16 frames per film, manually or electronically advanced on the CRT. The size can range from full display, (full use of the CRT diameter), to 1/16th. Because our system moves the image on the CRT and not the film, there are no moving parts. Hence, the 750 is highly reliable and easy to operate.

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Approximately one-half of the program will consist of invited speakers discussing specific topics on "Controversy in Nuclear Medicine." The remainder of the meeting will include a technologist program and simultaneous presentations of submitted papers.

Abstracts are now being accepted for the scientific program of the Central Chapter, SNM Fall meeting. Original contributions in any aspect of nuclear medicine will be welcomed.

Submitted abstracts should be 300 or less typed words. Each abstract must contain the name(s) of the author(s), the institution(s), and the mailing address of the author presenting the paper. Underline the name of the author presenting the paper.

DEADLINE FOR ABSTRACT SUBMISSION IS SEPT. 1, 1973

Send the abstract to:

Henry N. Wellman, M.D.
Chairman, Program Committee
Nuclear Medicine Division
Indiana University Medical Center
Indianapolis, Indiana 46202

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For registration and program information contact:

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High-speed scintiphotography generates lots of film—fast. Filing and organization problems come right along with it. RADX plastic film holders mount, organize and protect 35mm or 70mm film—in tough, durable transparent plastic. Easy to mount. Easy to view. Easy to file. The 35mm size holds three 6-frame film strips in a 5” x 8” holder. The 70mm size holds five 5-frame strips in a 14” x 17” holder. By the carton or by the case.

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Immediate delivery,
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**Angiotensin I[^125I]RIA kit**

Recent published reports[^1]^[2] have outlined the problems associated with radioimmunoassay for plasma renin activity. NEN has considered these problems carefully in developing this kit. As a result we believe it offers greater sensitivity and reproducibility than other commercially available Angiotensin I RIA kits.

---

**New England Nuclear**
**Biomedical Assay Laboratories**
15 Harvard Street, Worcester, Mass. 01608
Telephone (617) 791-0211
**When you spend $20,000 for a DataSystem, what should you be getting?**

**Resolution.** All three modes are built in and operator selected.
- 128 x 120 (16K) matrix (8 bits deep), or
- 64 x 60 (4K) matrix fields (12 bits deep), or
- 32 x 30 (1K) matrix fields (12 bits deep).

**Fast Framing.** Dynamic studies are recorded as follows:
- Speed
  - 16 frames/sec
  - 5 frames/sec
  - 1 frame/sec
- Resolution
  - 32 x 30 (1K)
  - 64 x 60 (4K)
  - 128 x 120 (16K)

Available options provide:
- 39 frames/sec
  - 32 x 30 (1K)
- 13 frames/sec
  - 64 x 60 (4K)
- 3 frames/sec
  - 128 x 120 (16K)

**Digital Computer Compatibility.** Nine track 800 bpi magnetic tape.

**Isometric Displays.** View isometrics, profile histograms, and isotope uptake at camera console.

**Contrast Enhancement/Background Erase**

**Regions of Interest.** Two—rectangular. Operator selects size and position. Counts read out on display, along with area.

**Display.** Non-flickering interactive display continually refreshed from core memory.

**Alphanumeric Display.** Patient study number always displayed on left of image. Six digit time of storage (in hundredths of a second) and dynamic study frame number displayed on right; or six digit count and four digit area within an area of interest (or the total count of the area) can be displayed on the right.

**Slices.** Two slices along either the X or Y axis can be defined independently & observed on the isometric view.

**Options Available.** Black and White video displays, 9" and 14" diagonal, with 64 shades of gray, flicker free; Isometric display, 14" and 5" diagonal, sixteen shades of green; Color display, 12" diagonal, 16 or 8 colors; switch selectable; Color and B&W simultaneous display; Field uniformity correction; Statistical Smoothing; Chart Recorder for plot of profiles set by slices, or plot of dynamic study count versus time; Fast Framing Tape; Added Memory; 16 Extended Rectangular Areas; Irregular Areas; Interfaces; B&W or Color Polaroid Capability.

**Want More Information?** Write for our DataSystem brochure and our Product Bulletin — Series 150 DataSystem Description. Visit an installation . . . we'll arrange it. And talk to us. We have something better. The complete DataSystem. From Ohio-Nuclear.

**Ohio-Nuclear, Inc.**

6000 Cochran Road • Solon, Ohio 44139
PHONE (216) 248-8500 • TWX NO. 810-427-2996

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Gone is the guesswork when you photoscan with Pho/Dot. Because Pho/Dot incorporates a number of significant advances in electromechanical design and engineering, to bring you the highest order of fidelity and convenience in clinical isotope scanning. To name a few advances... Patient Positioning — The hospital cart or bed can be positioned under or to the side of the scanning platform—permitting scanning in a room only 7 ft. wide!

Scan Area — Any area up to 40 cm. maximum—for both dot and photographic recording! (Limits of scan are easily set by means of lockable mechanical stops on centimeter-graduated scales.)

Maximum Tap Rate — Tapper is capable of operating at 70 pulses per second, continuously! (Occasional higher repetition rates will not jam the tapper.)

Quick-Change Collimators — Collimators are stored in a lazy susan tray below the scanning head—the 4-collimator capacity tray easily swings into position for collimator changing.

Digital Response — Both the photorecording and dot recording systems feature a digital response that: 1) with no suppression, produces a sharp-isotope image on the film—thanks to the digitized photo-producing light source and the precision lens system in the photorecording system, and that, 2) allows you to operate on a one-dot per one-count basis over a count-rate range of 0-4,000 counts per minute! Thanks to the exclusive Rapi/Dot™ tapper. (With this system you can obtain a tap scan that provides a sharp, continuous-tone reproduction of the isotope pattern!)

Enough to whet your interest? If you'd like to learn more about all the features of this truly unusual instrument that's 'way ahead of its time... more like 2002 A.D. than 1973... contact your Searle Radiographics (formerly Nuclear-Chicago) sales engineer or write to us for our free Pho/Dot brochure.

Searle Radiographics Inc. (Formerly Nuclear-Chicago)
Subsidiary of G. D. Searle & Co.
2000 Nuclear Drive
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We have built a unique system to acquire, playback and analyze Gamma-Camera studies.

Our Image Recorder is the only instrument capable of reproducing Gamma-Camera studies with the original image quality and the option of increasing or reducing the duration of the study without degradation of information inherent in digital systems.

Our system consists of the Image Recorder, the Dual Channel Ratemeter/Recorder, the Variable Persistence Monitor and the Dual Area Generator.

Our Image Recorder utilizes standard ¼ inch audio tape as its recording medium, resulting in a savings in money, time and storage space.

Areas of interest are presented brightly outlined on otherwise normal camera image for easy first-try area placement.

The R.B.E. system components are simple to operate and have proven to be effective and consistent in clinical use. Tapes are machine to machine compatible and the system can operate independently for teaching and training purposes.

We, of course, guarantee service on a 24-hour basis. You can purchase our system in total as well as in components, according to your individual requirements. Our total system price $24,350.00.

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

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Availability of this product may be subject to national regulations.

For early detection of post-operative deep vein thrombosis

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For Technetium-99m
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  More comfortable and easier to use.
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High-density lead glass
Disposable syringe

Model 56-272 56-273
Capacity 2% to 3 cc 2½ to 3 cc
Weight 3.2 oz. 4.6 oz.
Price $38.00 $38.00

*U.S. Patent 3,596,859
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LOGIC® SCINTILLATION WELL COUNTER
- Saves time and money.
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1. Add serum and distilled water to vial.
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Fast: Ten tests in 20 minutes.
Safe: No pipetting of radioactive materials.
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The XYZ-101 Imaging table combines vertical motion with X & Y movement of the table top for maximum versatility with all cameras and scanners. And since it is entirely manually operated, it requires no heavy, complicated hydraulic systems, motors, or electrical connections. As a result it is surprisingly low priced at $1,295.00

Other tables for Nuclear Medical Applications

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<tr>
<th>Table</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>XY-101</td>
<td>Permits 10&quot; of table top travel in both X and Y directions with graduated calibration scales for accurate re-positioning.</td>
<td>$995.00</td>
</tr>
<tr>
<td>EZ-101</td>
<td>Can be raised or lowered to exact height desired for patient transfer and gamma imaging.</td>
<td>$825.00</td>
</tr>
<tr>
<td>SC-101</td>
<td>Provides general purpose utilization.</td>
<td>$395.00</td>
</tr>
</tbody>
</table>

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Statics

Abnormal Liver Scan — ant. view (Metastatic Disease)
Study Time — 224 sec.
Isotope — 4mCi 99mTc Sulfur Colloid
Total Counts — 2,676,795

Abnormal Brain Scan — right lat. view (CVA)
Study Time — 80 sec.
Isotope — 12mCi 99mTc
Total Counts — 806,699

Abnormal Liver Scan — ant. view
Study Time — 320 sec.
Isotope — 2mCi 99mTc
Total Counts — 445,502

Brain-Bone Scan — left lat. view (abnormal foci in the convexity and orbit)
Study Time — 240 sec.
Isotope — 6mCi Tc Polyphosphate
Total Counts — 222,926

Normal Thoracic and Lumbar Spine Scan
— post. view
Study Time — 480 sec.
Isotope — 6mCi Tc Polyphosphate
Total Counts — 1,000,733

Dynamics

Abnormal Cerebral Blood Flow — post. view (decreased perfusion left cervical area)
Accumulation Interval — 0.5 sec.
Display Interval — 2 sec.
Peak Counts per sec. — 17,283
Isotope — 15mCi 99mTcO4-

Normal Cardiac Blood Flow — ant. view
Accumulation Interval — 0.1 sec.
Display Interval — 1.0 sec.
Peak Counts per sec. — 78,147
Isotope — 15mCi 99mTcO4-

Normal Left Ventricular Quantitative Histogram
Each double vertical line represents a 1.0 sec. time interval.
The entire histogram is 10.0 sec. long and consists of 100, 0.1 sec. count accumulations. This area-of-interest histogram took less than 1.0 min. to produce from end-of-study.
Note — definition of sinus rhythm of left heart.

Performance

These curves provide a useful calibration of System Seventy. The observed count rate for 15 mCi of 99mTc for the 1.0, 1.5, and 2.5-inch thick collimators is 230,000, 150,000, and 45,000 cps respectively.

The count-rate curve obtained from a mono-crystal camera using the high-resolution collimator shows an efficiency about equal to that of the 2.5-inch thick collimator at low count rates and exhibited a saturation rate of about 40,000 cps. The same saturation rate has also been observed with the other collimators available for this type of system.

The efficiencies of the parallel-hole collimators are such that the saturation rate of 230,000 cps is observed with 15, 45, and 180 mCi of 99mTc with the 1.0, 1.5, and 2.5-inch thick collimators respectively.
System Seventy
or...

(how the unique combination of a programmed computer and a matrix detector allow you to practice the NOW and FUTURE art of nuclear medicine consistently, simply and reproducibly.)

Diagnostic Superiority
That's what you're really looking for. We routinely obtain 3-4mm. static resolution scans — regardless of energy. Dynamic studies can now be accomplished at high frame rates with count/unit time accumulations (at low dose rates) that are not achievable on any other gamma camera, and the results can be displayed or printed-out in histogram or numerical form within seconds of the end-of-study. That's diagnostic superiority!

Operation Simplicity
Our unique “back-lit” front panel reduces each operation to a logical-computer assisted-series of steps. Select the mode; i.e. Static/ Dynamic, and only those buttons or controls necessary to complete the study will be illuminated. That's operation simplicity!

New Standard!
The New Standard in diagnostic nuclear medicine. The only words that can describe a camera that is easy to use, delivers the greatest patient throughput, and provides the most technically superior diagnostic data while doing it.

No ONE of these terms really describes SYSTEM SEVENTY.

SYSTEM SEVENTY offers the highest spatial resolution, and that's why our static images are the best. This means that you can choose to increase patient throughput by selecting the best clinical measurement which optimizes spatial resolution and efficiency.

The system’s high count rate capability (>200,000 cps) enhances the time resolution of dynamic studies which is a scientific necessity to achieve diagnostically meaningful evaluations of physiological time parameters. Stop thinking about the eventual possibility of more meaningful dynamic procedures and do them now, with SYSTEM SEVENTY.

And, the operational functions we've wired into the system and the software support we provide leave very little for you or your technician/operators to learn in putting SYSTEM SEVENTY to work and realizing the technically superior results.

So, looking back on them, certainly ALL of those terms apply, though no one of them really does SYSTEM SEVENTY justice.

BAIRD-ATOMIC
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Pho/Gamma can do more because we've taken the three most important qualities that make a scintillation camera great—sensitivity, uniformity, and high resolution—and included an exclusive fourth:

**Clinical Versatility.**
Our Pho/Gamma System is available with a complete range of instruments to perform today's clinical procedures, and to facilitate the work of those who are making the future of medicine happen. Among these capability-expanders are: Various, specialized collimators which allow you to choose the optimum resolution and sensitivity you need for each study, because two or three collimators can not meet the exacting requirements of every clinical application. The Tomocamera™ for imaging organs in 4 separate and variably selectable focal planes at one time. An Anatomical Marker which electronically provides direct transfer of anatomical landmarks to all film readouts and system accessories, and eliminates the need for cumbersome radioactive markers. A Clinical Data System (CDS-4096) to perform functional data manipulation and present the processed results as unambiguous, easily interpreted results for more accurate and faster interpretation. A Data-Store/Playback System which allows you to digitally capture the scintillation events, play the results back at your convenience, study, step-by-step, the nuclide distribution in the organ, and interpret the study with information that might have been missed on the initial scintiphoto study—and many more features, including the totally variable area of interest capability—all at the push of a button on the master console.

Pho/Gamma. Everything about it sounds like 2002 A.D., but it’s here now for you to use. Contact your Searle Radiographics (formerly Nuclear-Chicago) Sales Engineer, or write to us for further information.

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