

PHOSPHOTEC®

Technetium Tc 99m-Pyrophosphate-Tin Kit

DESCRIPTION: Phosphotec provides all the nonradioactive components required to prepare a sterile, pyrogen-free technetium Tc 99m-pyrophosphate-tin complex. Each reaction vial contains 40 mg. sodium pyrophosphate (equivalent to 23.9 mg. anhydrous sodium pyrophosphate) and 1 mg. stannous fluoride. When sterile, pyrogen-free Sodium Pertechnetate Tc 99m is added to the reaction vial, a technetium Tc 99m-pyrophosphate-tin complex is formed.

INDICATIONS AND USAGE: Technetium Tc 99m-Pyrophosphate-Tin complex may be used as a bone imaging agent to delineate areas of altered osteogenesis.

CONTRAINDICATIONS: None known.

WARNINGS: This product should not be administered to patients who are pregnant or to nursing mothers unless the benefits to be gained outweigh the potential hazards. Ideally, examinations using radiopharmaceuticals, especially those elective in nature, of a woman of childbearing capability should be performed during the first few (approx. 10) days following the onset of menses.

It has been reported that false-positive or false-negative brain scans may result when brain scans using sodium pertechnetate Tc 99m are performed after a bone scan has been done using an agent containing stannous ions, e.g., a pyrophosphate bone agent. This is thought to be due to the interaction of Tc 99m with stannous ions inside red blood cells. Therefore, in those cases where both brain and bone scans are indicated, the brain scan should be performed first, if feasible. Alternatively, another brain imaging agent, such as Tc 99m DTPA, may be employed.

The contents of the Phosphotec reaction vial are intended only for use in the preparation of Technetium Tc 99m-Pyrophosphate-Tin solution and are **not** to be directly administered to the patient. Any sodium pertechnetate ^{99m}Tc solution which contains an oxidizing agent is **not** suitable for use with Technetium Tc 99m-Pyrophosphate-Tin Kit. The contents of the kit are not radioactive. However, after sodium pertechnetate ^{99m}Tc is added, adequate shielding of the final preparation must be maintained.

PRECAUTIONS: Technetium Tc 99m-Pyrophosphate-Tin solution, as well as other radioactive drugs, must be handled with care and appropriate safety measures should be used to minimize radiation exposure to clinical personnel. Also, care should be taken to minimize radiation exposure to the patients consistent with proper patient management.

Both prior to and following administration of Technetium Tc 99m-Pyrophosphate-Tin solution, the patient should be encouraged to drink fluids and to void as often as possible thereafter to minimize radiation exposure to the bladder and background interference during imaging.

Technetium Tc 99m-Pyrophosphate-Tin solution must be used within 12 hours of reconstitution.

Adequate reproductive studies have not been performed in animals to determine whether this drug affects fertility in males or females, has teratogenic potential, or has other adverse effects on the fetus. This drug should be used in pregnant women only when clearly needed. It is not known whether this drug is excreted in human milk. As a general rule, nursing should not be undertaken while a patient is on the drug since many drugs are excreted in human milk.

Safety and effectiveness in children have not been established.

ADVERSE REACTIONS: No adverse reactions specifically attributable to the use of Technetium Tc 99m-Pyrophosphate-Tin have been reported.

For full prescribing information see package insert.

HOW SUPPLIED: In a kit containing five reaction vials (5 ml. size).

SQUIBB HOSPITAL DIVISION

E. R. Squibb & Sons, Inc.

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Placement

RADIOISOTOPE TECHNICIAN SUPERVISOR—

Milwaukee County Medical Complex, 8700 W. Wisconsin Ave., Wauwatosa, WI 53226
Perform and direct the technical and administrative functions of the clinical nuclear medicine laboratory. Duties include planning, assigning, and scheduling the work of technicians and other personnel; participating in teaching activities; coordinating a nuclear medicine technology training program; and, assist in developing and performing highly technical in vitro and in vivo procedures and related computer applications. This position requires an accredited bachelor's degree, registration eligibility for registration as a nuclear medicine technologist with the A.R.R.T. or the A.S.C.P.; and, 2 years' paid experience as a nuclear medicine technologist, 1 year of which must have been in a teaching or supervisory capacity; 4 years' experience as a nuclear medicine technologist in addition to the required experience may substitute for the required degree. Milwaukee County residence required within 6 months of appointment. Monthly salary range \$1,132 to \$1,309. Excellent benefits. Civil service application form available from: Milwaukee County Civil Service Commission, 901 N. 9th St., Milwaukee, WI 53223. We are an equal opportunity employer and encourage minorities and women to apply.

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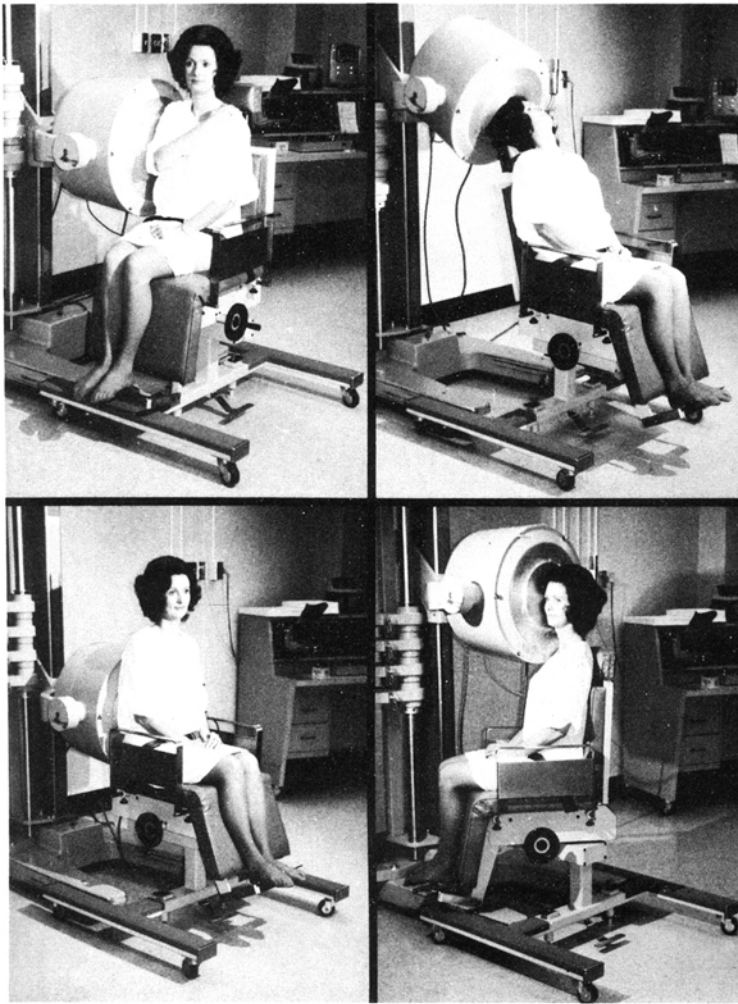
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Requests for further information (include C.V. and reference list) should be directed to:

Joseph P. Kriss, M.D.

**Director, Division of Nuclear Medicine
Stanford University Medical Center
Stanford, CA 94305**



PROCTER & GAMBLE

OSTEOSCAN[®]

(5.9MG DISODIUM ETIDRONATE, 0.16MG STANNOUS CHLORIDE)

SKELETAL IMAGING AGENT



Brief summary of Package Insert. Before using, please consult the full Package Insert included in each kit.

DESCRIPTION

Each vial of OSTEOSCAN contains 5.9 mg disodium etidronate and 0.16 mg stannous chloride as active ingredients. Upon addition of ADDITIVE-FREE ^{99m}Tc-pertechnetate, these ingredients combine with ^{99m}Tc to form a stable soluble complex.

ACTIONS (CLINICAL PHARMACOLOGY)

When injected intravenously, ^{99m}Tc-labeled OSTEOSCAN has a specific affinity for areas of altered osteogenesis. Areas of bone which are undergoing neoplastic invasion often have an unusually high turnover rate which may be imaged with ^{99m}Tc-labeled OSTEOSCAN.

Three hours after intravenous injection of 1 ml ^{99m}Tc-labeled OSTEOSCAN, an estimated 40-50% of the injected dose has been taken up by the skeleton. At this time approximately 50% has been excreted in the urine and 6% remains in the blood. A small amount is retained by the soft tissue. The level of ^{99m}Tc-labeled OSTEOSCAN excreted in the feces is below the level detectable by routine laboratory techniques.

INDICATIONS

OSTEOSCAN is a skeletal imaging agent used to demonstrate areas of altered osteogenesis.

CONTRAINDICATIONS

None.

WARNINGS

This radiopharmaceutical should not be administered to patients who are pregnant or lactating unless the information to be gained outweighs the potential hazards.

Ideally, examinations using radiopharmaceuticals, especially those elective in nature, of a woman of childbearing capability should be performed during the first few (approximately 10) days following the onset of menses.

Radiopharmaceuticals should be used only by physicians who are qualified by specific training in the safe use and handling of radionuclides produced by nuclear reactor or particle accelerator and whose experience and training have been approved by the appropriate government agency authorized to license the use of radionuclides.

The ^{99m}Tc-generator should be tested routinely for molybdenum breakthrough and aluminum. If either is detected, the eluate should not be used.

PRECAUTIONS

Both prior to and following ^{99m}Tc-labeled OSTEOSCAN administration, patients should be encouraged to drink fluids. Patients should void as often as possible after the ^{99m}Tc-labeled OSTEOSCAN injection to minimize background interference from accumulation in the bladder and unnecessary exposure to radiation.

As in the use of any other radioactive material, care should be taken to insure minimum radiation exposure to the patient, consistent with proper patient management, and to insure minimum radiation exposure to occupational workers.

ADVERSE REACTIONS

None.

DOSAGE AND ADMINISTRATION

The recommended adult dose of ^{99m}Tc-labeled OSTEOSCAN is 1 ml with a total activity range of 10-15 mCi. ^{99m}Tc-labeled OSTEOSCAN should be given intravenously by slow injection over a period of 30 seconds within eight (8) hours after its preparation. Optimum scanning time is 3-4 hours postinjection.

The patient dose should be measured by a suitable radioactivity calibration system immediately prior to administration.

NUCLEAR MEDICINE RESIDENCY-MEDICAL COLLEGE OF WISCONSIN—Two year integrated program including 710-bed VA General Hospital, 600-bed County Medical Complex and two large community hospitals. Several cameras each interfaced to computer. Ultrasound training included. Positions available in July, 1977. Nondiscrimination in employment. Contact: Robert C. Meade, M.D., Chief, Nuclear Medicine Service, VA Center, Milwaukee, WI 53193. (414) 384-2000 Ext. 2138

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ATLANTA GEORGIA—Nuclear Medicine Technologist, registered or registry eligible. Imaging only. Join the staff of Grady Memorial Hospital, outstanding non-profit medical, emergency, and educational complex serving 2-county metropolitan area, affiliated with Emory University School of Medicine. Salary commensurate with experience. Excellent employee benefits. Call or write: Miss Jane Fleming, Personnel "A", **GRADY MEMORIAL HOSPITAL**, 80 Butler Street, S.E., Atlanta, Georgia 30303. An Equal Opportunity Employer,