



### TCK 38

## KIT FOR THE PREPARATION OF STANNOUS PYROPHOSPHATE INJECTION FOR IN-VIVO LABELLING OF RBC WITH $^{99m}\text{Tc}$ (DIAGNOSTIC - FOR INTRAVENOUS USE)

The kit for the preparation of Sn-PyP (Stannous Pyrophosphate) is a single component kit for in-vivo labelling of red blood cells (RBCs) with  $^{99m}\text{Tc}$ . On reconstituting the kit, as per specified recipe, stannous pyrophosphate solution obtained is sterile, pyrogen free and suitable for i.v. administration.

The passage of  $^{99m}\text{Tc}$  labelled RBCs through the cardiopulmonary cycle of blood is monitored.

- ☐  $^{99m}\text{Tc}$  labelled RBCs are used in cardiology for
  - Assessment of cardiac function using multi gated acquisition study (MUGA).
  - Quantitative regional ejection fraction of left ventricle and its regional wall motion.
  - Regional ejection fraction of right ventricle, during first pass.
- ☐  $^{99m}\text{Tc}$  -RBCs are also used for
  - Detection of site of gastro intestinal bleeding.
  - Blood pool imaging of liver – to distinguish hemangioma from other space occupying lesions.

### DESCRIPTION OF THE KIT

Each kit consist of a single vial.

Each vial contains 12 mg of sodium pyrophosphate, 4 mg of stannous chloride dihydrate and 1 mg of ascorbic acid in freeze-dried form.



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### Reconstitution of Stannous Pyrophosphate Injection

1. Allow the kit vial to attain ambient temperature.
2. Transfer 3.5 ml of 0.9% sodium chloride injection aseptically to kit vial and the lyophilised mass is reconstituted by gentle and thorough mixing.
3. The preparation is now ready for administration to patients. The reconstituted solution shall be preferably used within 30 min of reconstitution.

#### \* Protocol for In-vivo labelling of RBC with <sup>99m</sup>Tc

1. Administer 1ml of the solution to the patient. (i.e. each kit vial can be used for 3 patients).
2. After 20-30 min administer 15 mCi (555 MBq) of sodium pertechnetate <sup>99m</sup>Tc injection.
  - The in-vivo labelling of patient's RBC is reported to follow nearly immediately. The cardiac imaging studies can be commenced soon thereafter.

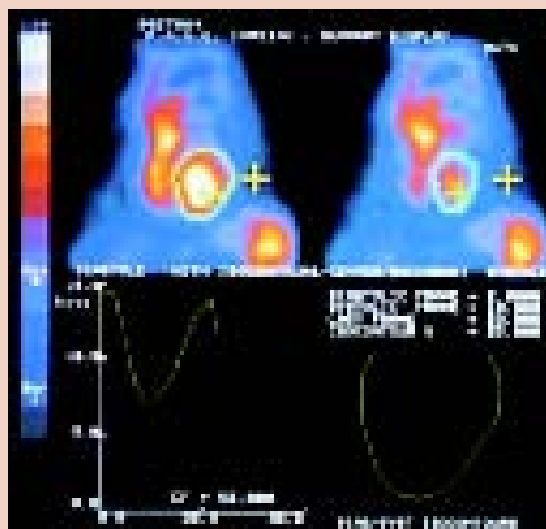
#### Caution:

- Sodium pertechnetate <sup>99m</sup>Tc injection should not be directly added to the contents of the kit vial for preparing <sup>99m</sup>Tc labelled pyrophosphate compound.
- This kit vial is not suitable for preparation of <sup>99m</sup>Tc-pyrophosphate used for imaging bones and myocardial infarcts.

(\*For actual formulation, follow Product Recipe)

### DOSAGE AND ADMINISTRATION

Reconstituted Sn-PyP kit solution : 1ml  
<sup>99m</sup>Tc-sodium pertechnetate solution : 15 mCi (555 MBq).



For placing the orders and further details please contact  
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