TCK 16

KIT FOR THE PREPARATION OF $^{99m}$Tc-PHYTATE
(DIAGNOSTIC- FOR INTRAVENOUS USE)

The kit for $^{99m}$Tc-Phytate is a single component kit. On reconstituting the kit, as per specified recipe, $^{99m}$Tc-Phytate solution formed is sterile, pyrogen free and suitable for i.v. administration.

$^{99m}$Tc- Phytate forms in- vivo colloid with calcium present in the blood. It is taken up by liver similar to $^{99m}$Tc-Sulphur colloid. The advantage of $^{99m}$Tc-Phytate is that it provides uniform sized colloid particles in a single step reaction from a lyophilized kit formulation.

- $^{99m}$Tc-Phytate is used as liver imaging agent for:
  - Delineation of space occupying lesions in liver.
  - Work up of patients in oncology: Assessment of metastases in liver – helpful in staging primary malignancy.
  - Differentiation of fatty infiltration in liver in conjunction with sonography.
- $^{99m}$Tc-Phytate is also administered orally for estimation of esophageal transit and gastro esophageal reflux (quantitative).

DESCRIPTION OF THE KIT

Each kit consists of a single vial.

Each vial contains 10 mg of sodium phytate and 1 mg of stannous chloride dihydrate in freeze-dried form.
**99mTc-Phytate Formulation***

1. Allow the kit vial to attain ambient temperature.
2. Add 2-3ml of sterile sodium pertechnetate (Na\(^{99m}\)TcO\(_4\)) in 0.9% sodium chloride solution containing the required activity of \(^{99m}\)Tc and mix well.
3. Allow it to stand for 5-10 min.
4. The preparation is now ready for use.

(*For actual formulation, follow Product Recipe)

**DOSAGE AND ADMINISTRATION**

The suggested dose range per patient for i.v. administration of \(^{99m}\)Tc- Phytate is about 3-4 mCi (111-148MBq).

* Since it forms colloid in-vivo with calcium (present in blood), it should be used with caution in patients having calcium deficiency or other such conditions.