


Name of Policy: <u>Immediate Use of Radiopharmaceuticals</u> Policy Number: 3364-106-N28 Department: Heart Station Approving Officer: Chief Operating Officer - UTMC Responsible Agent: Director Cardiovascular Services Scope: University of Toledo Medical Center Heart Station	 THE UNIVERSITY OF TOLEDO MEDICAL CENTER Effective Date: 2/1/2022 Initial Effective Date: 2/1/2022
<input checked="" type="checkbox"/> New policy proposal <input type="checkbox"/> Major revision of existing policy	<input type="checkbox"/> Minor/technical revision of existing policy <input type="checkbox"/> Reaffirmation of existing policy

(A) Policy Statement

The licensed, Registered Nuclear Medicine Technologist will handle all radioactive single use unit doses as immediate use.

(B) Purpose of Policy

The policy establishes the authorization and proper immediate use practice handling sterile radiopharmaceutical single use unit doses.

(C) Procedure

1. All Radiopharmaceuticals will be delivered from a compliant Radiopharmacy as sealed, single use, UNIT DOSES for immediate use.
2. **Manipulations** for any unit doses (e.g. decreasing the dosage, needle changes) or dispensing for one patient (e.g. withdrawing a dose) is allowed. If withdrawing a dose, any remaining residual activity must be immediately discarded in a lead lined sharps container or returned to the Radiopharmacy in sealed lead PIGS and not utilized for any other patient.
3. Unit doses must be used within 1 hour of first puncture or exposure of any critical site involved (syringe tip, needle hub or needle) to ambient air, whichever is first.
4. All components involved (e.g. Tc-99m sodium Pertechnetate syringe or vial, diluent vial) must be discarded within 1 hour of being punctured or after use for a single patient administration, whichever is first.
5. **Dose Pooling** (combining doses from two or more syringes to meet one patient’s need) may be performed as immediate use. Any residual activity that remains must be immediately discarded in a lead lined sharps container or returned to the Radiopharmacy in sealed lead lined PIGS.
6. **Dose Splitting** (splitting a unit dose for administration to more than one patient) may NOT be performed as immediate use.
7. Radiation safety precautions must be followed when handling and injecting Radiopharmaceuticals. syringe shields must be used and protective clothing (e.g. lab coats, gloves) must be worn. Universal precautions, hand hygiene, and sterile techniques must be followed.
8. **Ambient Atmosphere** (PYP Vials)
 - o Non-patient care space, functionally separate (not necessarily a different area) from the patient care area, (radiopharmaceutical handling space, hot lab in a hospital).
 - o A designated area for medication preparation that is clean and free of clutter.
 - o Low traffic area (limited number of people going in and out or moving around).
 - o Critical sites (e.g., vial stoppers) must be wiped with sterile 70% IPA and must be allowed to dry before piercing critical sites.

