

## Reduced Particles MAA Worksheet

Patient's Name \_\_\_\_\_

MR# \_\_\_\_\_

1. Dilute MAA vial with 5 mL of saline. Withdraw a 1 mL aliquot and place it in a 30 mL sterile empty vial.

Calculate the total # of particles in the 1 mL aliquot:

Total particles in vial = \_\_\_\_\_

$\frac{\text{Total \# Particles in MAA Kit}}{5\text{mL}} = \# \text{ Particles/mL}$ $\frac{\text{_____}}{5\text{mL}} = \text{_____} \text{ Particles/mL}$
---

2. Calculate total volume needed to make the kit of reduced particles (all contents go into a 30 mL sterile vial)

$\frac{\# \text{ Particles in 1 mL (step 1)}}{\# \text{ of Particles required for Pt}} = \text{Total volume required}$ $\frac{\text{_____}}{\text{_____}} = \text{_____ mL}$
--

3. Calculate the activity of <sup>99m</sup>Tc required for patient dose. See [dose ranges](#).

Dose in mCi x total volume (activity x volume (step 2) define total <sup>99m</sup>Tc in mCi.

Adult dose is usually 3.5 mCi, however, pediatric dose must be acquired by the physician.

Total activity is then determined below:

$\text{_____ mCi} \times \text{_____ mL} = \text{_____ mCi-mL volume needed}$
---

4. From the elution vial add the required <sup>99m</sup>Tc activity to the 30 mL vial and note its volume.

$\text{Volume of } ^{99\text{m}}\text{Tc added to 30 mL vial} = \text{_____ mL}$
--

5. Incubate for 15 minutes. Smaller particle amount may require up to 30 minutes incubation.

6. Calculate the volume of normal saline needed in the 30 mL vial.

$\text{_____ mL (Total Volume)} - [\text{_____ mL} + 1.0 \text{ mL}] = \text{_____ mL}$
---