

Suggested Protocol for Pre-Perfusion and Post-Perfusion Studies for the Medi/Nuclear Radioaerosol Delivery System

Pre-Perfusion

1. Follow package insert instructions.
2. Use ^{99m}Tc - DTPA in a 15-20 mCi/mL concentration.
3. Inject a 2 mL volume into the nebulizer.
4. Have the patient inhale until approximately 1 mCi ^{99m}Tc - DTPA is deposited in the patient's lungs. (Depending on the model unit and using a 2 mL volume with a concentration of 20 mCi/mL the dosing time should be within 1.5 to 4 minutes). The approximate dosing time for each unit is: Insta/VentTM Plus 1-1.5 minutes, Insta/VentTM 2-3 minutes, Aero/VentTM Plus 3-4 minutes, Aero/VentTM MAX 1.5-2.5 minutes, and Aero/VentTM Jr 1.5-2.5 minutes.

Post-Perfusion

1. Use a reduced perfusion dose of approximately 1 mCi ^{99m}Tc -MAA.
2. Ensure that the ^{99m}Tc -DTPA is in a 30-40 mCi/mL concentration.
3. Inject a volume of 2 mL into the nebulizer.
4. Inhale patient until count rate in the patient's lungs has increased to 2-3 times the residual from the perfusion study. (When using a concentration of 30 mCi/mL, approximately 3.5 minutes of patient breathing time should deposit approximately 3 mCi ^{99m}Tc - DTPA in the lungs.)

Note: Always check your NRC or agreement state license to see if special licensing is required for inhalation lung studies or for the increased dosage required for post-perfusion inhalation lung studies. As with the use of any radioactive material always observe proper radiation safety precautions.