

The checklist below is based on this IAEA virtual course in Radiopharmacy.

Checklist 2. Describes the labeling procedure

1. Calculate the required volume of the eluate needed
2. Disinfect gloves
3. Disinfect the rubber closure of the shielded Tc99m eluate vial (use forceps)
4. Take a new swab and clean the opened labeling vial
5. Disinfect the surface of the sterile saline solution
6. Unwrap and assemble syringe and needle (sterile)
7. Put the syringe in the syringe shield
8. Remove the sheath (without touching plastic (luerlock) cone), put it in the sheath holder
9. Insert the needle through the rubber closure of the shielded Tc99m eluate vial
10. Invert the vial and syringe, make sure that the needle is below the level of the liquid in the vial
11. Draw back the volume of Tc99m calculated as needed for the preparation
12. Before removing the needle from the vial, turn vial and syringe the right way up
13. Replace the sheath on the needle
14. Put the syringe upwards and remove large air bubbles
15. Measure the dose, use tongs to put the syringe in the dose calibrator
16. Put the syringe back in the syringe shield
17. Open the ampule of the saline injection (if not done before)
18. Remove the sheath (without touching plastic (luerlock) cone), put it in the sheath holder
19. Place the needle in the ampule, draw up enough volume so the volume corresponds to that needed for the preparation
20. Remove the needle from the ampule and put the sheath back on
21. Put the syringe upwards and remove large air bubbles
22. Insert the needle through the center of the shielded labeling vial
23. Push the contence of the syringe in the vial
24. Release the plunger if the pressure in the vial increases, allow air back into the syringe
25. Equilibrate (if necessary, a number of times)
26. When the pressure in the vial is the same as in the syringe, remove the needle from the kit vial
27. Sheath the needle and put in the radioactive waste container
28. If required, invert the kit vial several times (Shielded! Also on top!)
29. Measure the dose and label the kit
30. Incubate before use if necessary
* If, at any time, there was a droplet of liquid visible in the needle cap, it has been replaced.

The steps marked in blue pay special attention to working under aseptic conditions.

The steps marked in purple pay special attention to radioation protection.