

GALLIUM LABELLING USING RADIONUCLIDE GENERATORS FROM DIFFERENT SUPPLIERS

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Introduction

The implementation of ^{68}Ga radiolabeling represents a **significant investment** for healthcare facilities. This constraint drives radiopharmacy units to optimize the labeling process. To do so, it has become common practice **to pool the eluates from two generators**, usually of the **same reference**. This increases the available activity for radiolabeling and thus the number of patients treated per session. In our radiopharmacy unit, we combine the eluates from **two ^{68}Ga generators of different references and technologies**.

Objective

- TO PRESENT OUR METHOD
- TO ASSESS ITS RESULTS IN REGARD OF THE LABELLING CONDUCTED

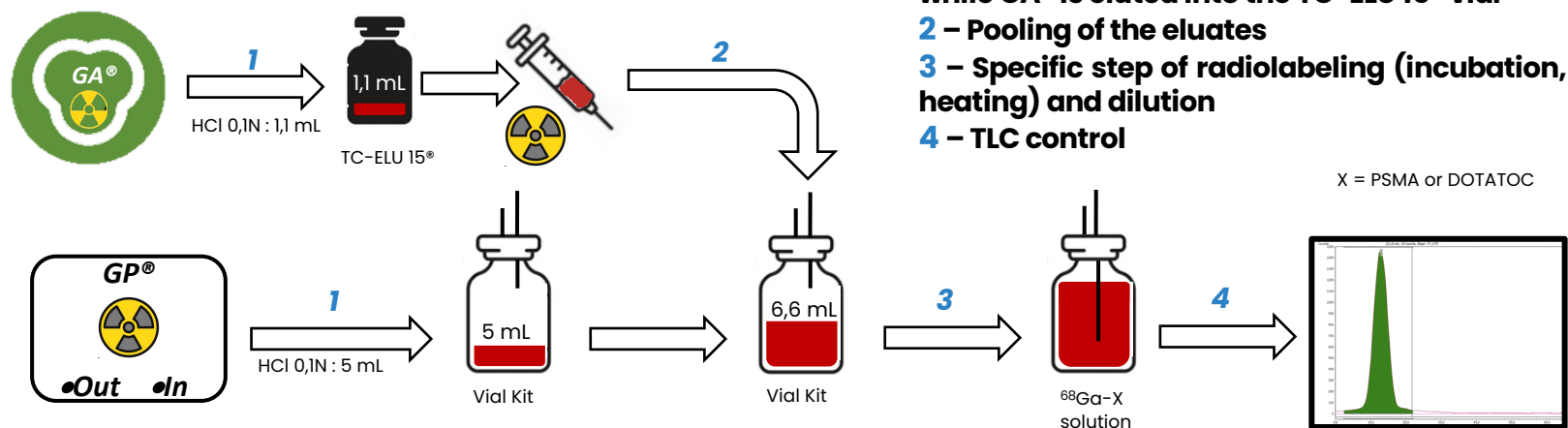
Material – Radionuclide generators and corresponding medical devices

- **GALLIAPHARM**[®] (GP[®], ECKERT & ZIEGLER): 1 0.22m filter, 1 acid-resistant needle, 1 2-pieces 20mL syringe, 1 female to female connector, 1 air intake needle
- **GALLIAD**[®] (GA[®], IRE-Elit): specific tubing, 1 acid-resistant needle, 1 2-pieces 2mL syringe, 1 TC-ELU 15[®] vial

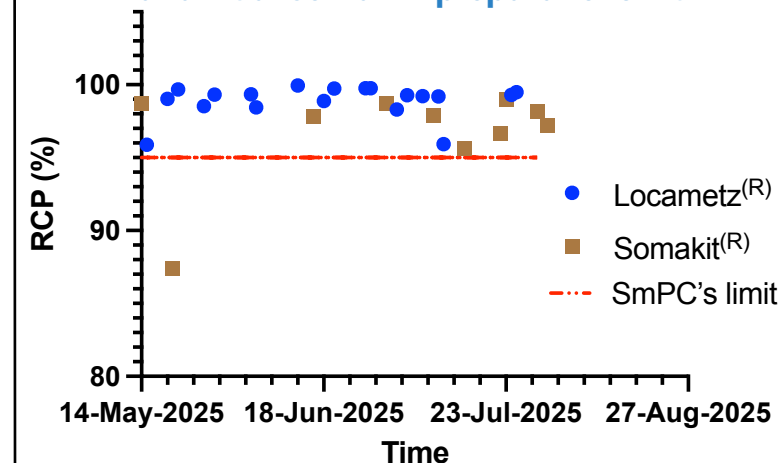
Radiochemical purity (RCP) was assessed through thin-layer chromatography (TLC) in accordance with the kit's summary of product characteristics

Results

(1) Radiolabeling process



(2) Control chart based on ^{68}Ga -Locametz[®] and ^{68}Ga -Somakit[®] preparations' RCP



Discussion

Such a process is actually **unseen**. This work proves that it is **possible to extend the combination of eluates to generators of different technologies** and obtain RCPs that comply with the specifications of commercially available kits.

This process allows for an **increase in the number of patients** per session and **greater profitability** of radiolabeling.