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RADIOCHEMICAL QUALITY CONTROL OF KITS LABELLED WITH ^{99m}Tc PRODUCED AT IPEN-CNEN/SP

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These radiopharmaceuticals are routinely used in Nuclear Medicine Laboratories. A large number of these employ tin (II) reagents to reduce Tc (pertechnetate-VII) to a lower valence state, thereby making it more able to complex forming reactions. The miniaturized chromatography system of ^{99m}Tc labelled compounds, using Whatman 3MM (8 x 1cm) as a support and 30% NaCl; 0,9% NaCl; 85% MeOH and buffer phosphate as a solvents, permits to assay the radiochemical purity in few minutes after preparation. In addition, this method introduced in routine work not only determines reduced ^{99m}Tc (pertechnetate) but also determines reduced ^{99m}Tc unbound to the radiopharmaceuticals (hydrolyzed reduced ^{99m}Tc). The lyophilized kits for labelling with ^{99m}Tc produced in routine at IPEN-CNEN/SP are: MDP, DTPA, HSA, GHA, HIDA, Pyro, MAA, MIAA, Sulfur Colloid, Dextran-500, Cit. Sn and Fitate. Radiochemical quality control of these kits were performed at the first day after preparation and during 12 months for determining their validity for use. All preparation showed high yield of labelling (95-99%) during this period of time.