

Computerized Management and Traceability System for Hospital Radiopharmacies

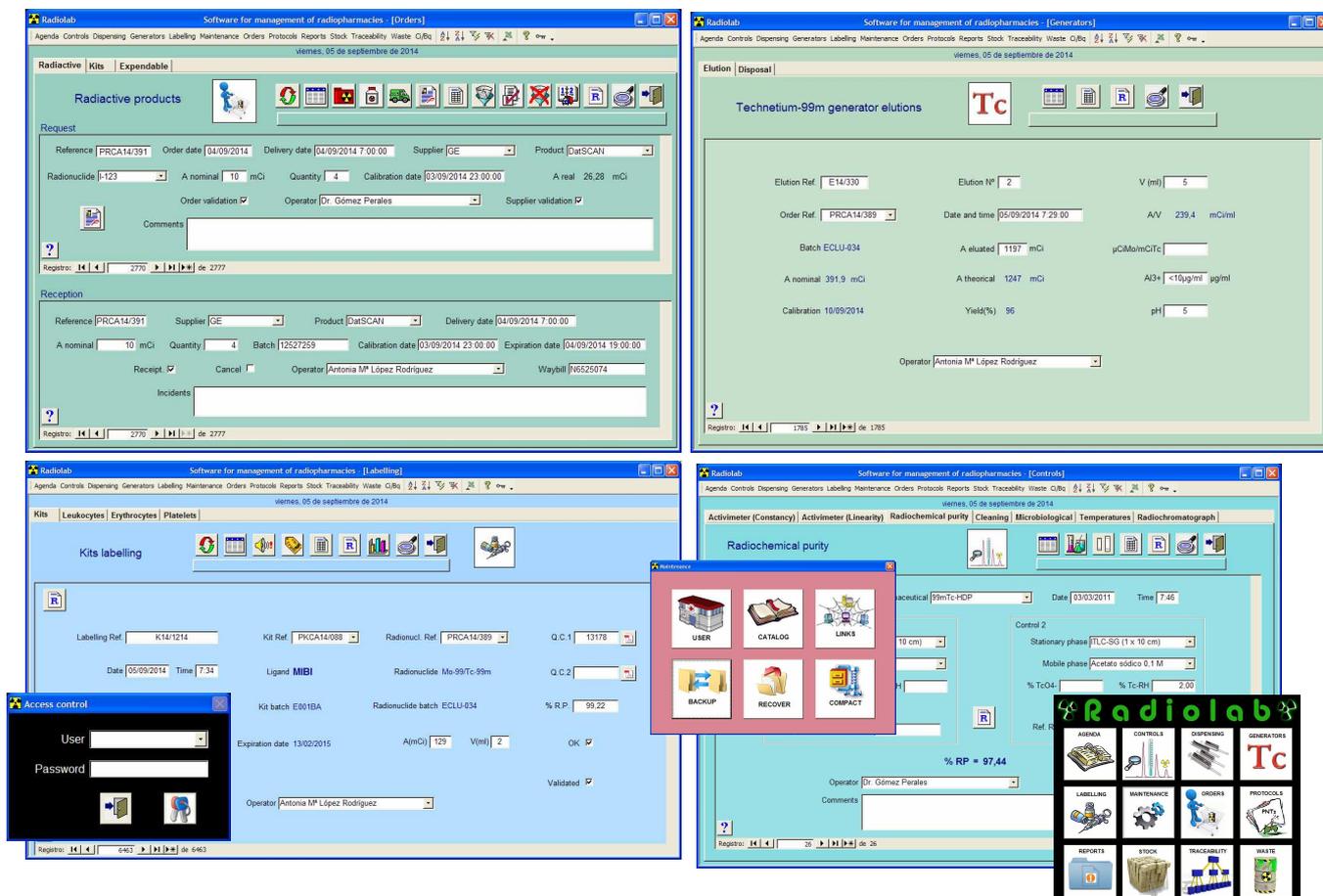
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Objective: The aim of this project was to develop a software for comprehensive management and traceability of hospital radiopharmacies.

Method: The computer application was developed in Microsoft Visual Basic for Applications (VBA) programming language, and with linked and interrelated tables of Microsoft Access.

Results: We have developed a software (Radiolab) with 12 modules. The Orders module helps to manage the issuing and receiving of orders (radioactive, cold kits and disposable material). The Stock module gives information about the stock of radionuclides and cold kits. The Generator module is used for the management of elutions of Tc-99m generators and its withdrawal from the radiopharmacy. The Labelling module is used to record kits labelling and *in vitro* cells labelling. The Control module is used to register several controls, such as the stability and linearity of activimeters, radiochemical purity of radiopharmaceuticals, microbiological, temperature and radiochromatograph. The Dispensing module is used to manage the dose dispensing of radiopharmaceuticals. The Waste module gives information about the activities of the radioactive waste for each radionuclide. The Traceability module allows traceability reports issued by patient name, radiopharmaceutical reference, radiotracer batch, generator batch and kit batch. The Protocols module allows the management of standard operating procedures of radiopharmacy. The Reports module serves for monitoring incidences of the radiopharmacy. The Maintenance module enables to backup the database, restoring the database from its backup, updating the radiopharmaceuticals catalogue, entering the user data and the staff of the radiopharmacy, compacting the database and setting for net working. In addition, the software has an access control, an agenda and a radioactive units converter.



Conclusion: The software Radiolab is a useful tool for the comprehensive management and traceability of hospital radiopharmacies. Radiolab is available at www.radiopharmacy.net.