Abstract
Radiopharmaceuticals play a critical role in modern medicine primarily for diagnostic purposes, but also for monitoring disease progression and response to treatment. As the use of image has been increased, so has the use of prescription medications. These trends increase the risk of interactions between medications and radiopharmaceuticals. These interactions which have an impact on image by competing with the radiopharmaceutical for binding sites for example can lead to false negative results. Drugs that accelerate the metabolism of the radiopharmaceutical can have a positive impact (i.e. speeding its clearance) or, if repeating image is needed, a negative impact. In some cases, for example in cardiac image among patients taking doxorubicin, these interactions may have a therapeutic benefit. The incidence of drug-radiopharmaceuticals adverse reactions is unknown, since they may not be reported or even recognized. Here, we compiled the medical literature, using the criteria of a systematic review established by the Cochrane Collaboration, on pharmaceutical-drug interactions to provide a summary of documented interactions by organ system and radiopharmaceuticals. The purpose is to provide a reference on drug interactions that could inform the nuclear medicine staff in their daily routine. Efforts to increase adverse event reporting, and ideally consolidate reports worldwide, can provide a critically needed resource for prevention of drug-radiopharmaceuticals interactions.

Keywords
Radiopharmaceuticals, radiopharmacy, drug interaction, systematic review.