

Introduction

Advancements in nuclear medicine have provided remarkable opportunities for the diagnosis and treatment of diseases. One of the key components of these advancements is radiopharmaceuticals, which play a crucial role in disease detection and patient treatment management. However, the accuracy of measuring the injected activity is essential for their effectiveness. To ensure precise activity estimation before administration to a patient, radionuclide calibrators are used. Therefore, it is crucial that this equipment meets its performance requirements.

In Iran, there are 227 nuclear medicine centers equipped with SPECT and SPECT/CT devices and 18 PET/CT imaging centers that provide nuclear medicine diagnostic and therapeutic services. These centers receive services from Pars Isotope Company, the only one in charge of the production, distribution and development of radiopharmaceuticals in the country. According to these statistics, the ratio of nuclear medicine centers per million population is equivalent to 3.05 centers. This indicator represents the population's level of access to nuclear medicine services and the distribution of these centers throughout the country(Figure 1).

