

HONG KONG COLLEGE OF RADIOLOGISTS

Higher Training (Nuclear Medicine)

Subspecialty Training in Positron Emission Tomography / Computed Tomography

[This document should be read in conjunction with the *General Guidelines on Higher Training (Nuclear Medicine)*]

1. Introduction

- 1.1 Positron Emission Tomography is a major functional imaging tool applicable in particular oncology, cardiology, neurology and infection / inflammation imaging. CT scan can provide fast attenuation correction and anatomical details.
- 1.2 This subspecialty training provides the trainee with special expertise to practice clinical PET/CT.
- 1.3 The subspecialty training in PET/CT would be an integral part of Higher Training (Nuclear Medicine) and each trainee is required to have minimum of six-month mandatory subspecialty training in PET/CT

2. Objectives

The aim of the subspecialty training in PET/CT is to ensure a trainee at the end of training period to have:

- 2.1 Detailed understanding of indications for the clinical PET/CT examination, the production and safe use of PET tracers, patient preparation for different PET procedures, basics of instrumentation and data processing, methods of quality control and image interpretation.
- 2.2 To understand the principle and basic skills of helical / spiral and multi- detector CT and CT anatomy in various parts of the body.
- 2.3 To have knowledge of related radiation risk and protection, and to minimize or optimize the radiation dose in PET/CT scanning.
- 2.4 To prescribe, perform and interpret PET/CT studies using state-of-art equipment and technique, including optimal utilization of IV contrast.
- 2.5 Hands-on supervised experience with an appropriate number of the procedures.
- 2.6 Ability to manage clinical consultation related to the subspecialty.
- 2.7 Competence in clinical rounds and meetings.
- 2.8 Exposure to PET/MR is optional but preferred.

3. Training Requirements

3.1 TRAINING CENTRE REQUIREMENTS

3.1.1 Modern PET/CT scanner with an annual caseload of more than 2000.

3.1.2 Physicist, Scientific Officer support.

3.1.3 Cyclotron facility and radiopharmacy are optional.

3.2 TRAINER REQUIREMENTS

As specified in the General Guidelines on Higher Training (Nuclear Medicine).

3.3 DURATION OF TRAINING

This duration of this mandatory subspecialty training is six months, which can be continuous or separated into two three-month training period.

3.4 DUTY SESSIONS

3.4.1 No less than four sessions per week specific for the subspecialty.

3.4.2 Attachment to another centre on sessional basis is advisable if exposure to specific examination categories is inadequate or unavailable.

3.5 MINIMUM NUMBER OF EXAMINATIONS REQUIRED IN 6 MONTHS

The minimum workload of a trainee for 6 month of higher subspecialty training in PET/CT is 500. The minimum number for each examination category is as follows:

Examination Category	RIS coding	Requirement
Oncology	9P43-9P49, 9C43-9C49	450
Infection and Inflammation, Neurology & Cardiology	9P13, 9P19, 9P20, 9P29, 9P30, 9P31, 9P39, 9C13, 9C19, 9C30, 9C31, 9C39	50

3.6 CLINICAL MEETINGS, PRESENTATIONS AND PUBLICATIONS

As specified in the General Guidelines on Higher Training (Nuclear Medicine).

3.7 ADDITIONAL NOTES

3.7.1 Trainees should be encouraged to have adequate exposure on non-oncological cases. Elective rotation to other PET centres for such exposure is recommended.

- 3.7.2 Trainees should have a thorough understanding concerning the routine oncology as well as some non-oncological PET/CT preparatory protocols.
- 3.7.3 Trainees should have a thorough knowledge on PET tracer radiopharmaceuticals and various imaging protocols and patient preparation.
- 3.7.4 This is not a standalone training programme. PET/CT studies, including the number and contents, performed in rest of Nuclear Medicine specialty training have to be fulfilled before the candidate is qualified to have finished the PET/CT Subspecialty training.
- 3.7.5 Trainees are required to receive this mandatory Subspecialty Training in PET/CT in an accredited centre only, which may necessitates reciprocal rotation of trainees among different training centres.

Revised version endorsed by HKAM Council on 15 December 2016 and effective from 1 July 2017