

HONG KONG COLLEGE OF RADIOLOGISTS

Higher Training (Nuclear Medicine)

Subspecialty Training in Nuclear Oncology

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

1. Introduction

- 1.1 Nuclear oncology has been established as a major investigative and therapeutic tool around the world, as a result of a gradual change in the realization of the importance of functional imaging, early detection of cancer, prognostication and the prediction of response to therapy, and the importance of distinguishing viable tumour tissue from dead tumours during the follow-up period after treatment.
- 1.2 PET/CT has become an important nuclear medicine imaging modality for oncology patients. Trainees are required to master the technology in addition to other oncological radioisotope imaging techniques. The training will be covered by the mandatory subspecialty training on PET/CT.
- 1.3 Radioguided surgery is another important aspect of clinical nuclear oncology which has, in many ways revolutionized surgery in a number of cancers, e.g. breast cancer, melanomas and colonic cancer.
- 1.4 This subspecialty training provides the trainee with special expertise to practice nuclear oncology procedures.

2. Objectives

The aim of the subspecialty training in nuclear oncology is to ensure a trainee at the end of training period to have:

- 2.1 Detailed understanding of indications for the specific nuclear oncology procedures, the safe use of radionuclides, basics of instrumentation and image processing, methods of quality control and image interpretation,
- 2.2 Capability of independent practice in a wide range of diagnostic nuclear oncology procedures, inclusive of (but not limited to) the examination category listed in the Training Requirement below.
- 2.3 Capability of independent practice of radionuclide therapy, including initial evaluation for indication, justification, administration, and therapeutic applications of radiopharmaceuticals and administrable or implantable medical devices, dosimetry, radiation protection and follow-up after therapy
- 2.4 Ability to manage clinical consultation related to the subspecialty.
- 2.5 Competence in clinical rounds and meetings.

3. Training Requirements

3.1 TRAINING CENTRE REQUIREMENTS

3.1.1 Gamma camera with the capability in performing planar dynamic and static studies, whole body imaging, SPECT, SPECT/CT acquisition.

3.1.2 Well established oncology department in the hospital.

3.2 TRAINER REQUIREMENTS

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

3.3 DURATION OF TRAINING

The recommended duration of training is six months (minimum 3 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 / department on sessional basis is advisable if exposure to some of the studies is inadequate or unavailable.

3.5 MINIMUM NUMBER OF EXAMINATIONS REQUIRED

The minimum workload of a trainee for 6 month of higher subspecialty training in nuclear oncology is 400 (200 for 3-month training). The minimum number for each individual examination category is as follows (pro-rata for 3-month training):

Examination Category	RIS Coding	Requirement
Ga-67 / Tl-201 / Tc-99m MIBI / I-131-MIBG / In-111-pentetreotide / Tc-99m(V)-DMSA scintigraphy	9710, 9713, 9714, 9720, 9723, 9730, 9711, 9715, 9770	10
I-131 scintigraphy	9712, 9722	50
SLN / ROLL procedures	9731, 9732, 9733	35
Tc-99m-MDP/HDP scintigraphy (for oncological indications)	9910-9941	150
Radionuclide therapies	9T21-9T91	35

3.6 CLINICAL MEETINGS, PRESENTATIONS AND PUBLICATIONS

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

3.7 ADDITIONAL NOTES

This is not a standalone nuclear oncology training program. The studies, including the number and contents of nuclear oncology cases performed in Basic and General Higher Nuclear Medicine training programs, have to be fulfilled before the candidate is entitled to have finished the Nuclear Oncology Subspecialty training.

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