

HONG KONG COLLEGE OF RADIOLOGISTS

Higher Subspecialty Training in Nuclear Oncology

*[This document should be read in conjunction with the **Guidelines on Higher Specialist 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 realisation of the importance of functional imaging, early detection of cancer, prognostication and the prediction of response to therapy, and the importance of distinguishing viable from non-viable tumour tissue during the follow-up period after treatment.
- 1.2 PET/CT is an important Nuclear Medicine imaging modality in Oncology. Trainees are required to master the technology in addition to other oncological radionuclide imaging techniques. PET/CT training is therefore required under the Nuclear Oncology subspecialty training. The minimum case requirement should be additional to that of the mandatory PET/CT subspecialty training.
- 1.3 Radioguided surgery is another important aspect of clinical Nuclear Oncology which has, in many ways revolutionised 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 Requirements 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 Presence of an Oncology Department in the hospital.

3.2 TRAINER REQUIREMENTS

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

3.3 DURATION OF TRAINING

The recommended duration of training is 6 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 months of higher subspecialty training in Nuclear Oncology is 400 (200 for 3-month training). The minimum number for each individual examination category is recommended as follows (pro-rata for 3-month training):

| Examination Category | RIS Coding | Requirement |
|---|---|----------------------|
| Ga-67 / Tl-201 / Tc-99m MIBI / I-123 or I-131-MIBG / In-111-pentetate / Tc-99m(V)-DMSA scintigraphy | 9710, 9711, 9713-9715, 9720, 9723, 9730, 9770 | 10 |
| I-123 or I-131 scintigraphy | 9712, 9722 | 50 |
| SLN / ROLL procedures | 9731-9734 | 35 |
| Tc-99m-MDP/HDP scintigraphy (for oncological indications) | 9910-9941 | 150 |
| PET/CT (for oncological indications) | 9P43-9P49, 9C43-9C49 | 120 |
| Radionuclide therapies | 9T21-9T91 | 35* |
| Others (e.g. pre- and post-radionuclide therapy scintigraphies) | 9740-9742, 9771, 9799 | Exposure recommended |

*This minimum number may be attained within the Higher Specialist Training in addition to the requirements under General Nuclear Medicine Training.

3.6 CLINICAL MEETINGS, PRESENTATIONS AND PUBLICATIONS

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

3.7 ADDITIONAL NOTES

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

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