

The Royal College of Radiologists

THE FACULTY OF CLINICAL ONCOLOGY

TO: TRAINING PROGRAMME DIRECTORS REGIONAL POST-GRADUATE EDUCATION ADVISERS

COLLEGE TUTORS

EXAMINATION CANDIDATES

FIRST EXAMINATION FOR THE FELLOWSHIP IN CLINICAL ONCOLOGY AUTUMN 2015

The Examining Board has prepared the following report on the Autumn 2015 sitting of the First Examination for the Fellowship in Clinical Oncology. It is the intention of the Specialty Training Board that the information contained in this report should benefit candidates at future sittings of the examinations and help those who train them. This information should be made available as widely as possible.

Dr Seamus McAleer

Medical Director, Education and Training

FIRST EXAMINATION FOR THE FELLOWSHIP IN CLINICAL ONCOLOGY EXAMINERS' REPORT – Spring 2015

The pass rates achieved at the Spring 2015 sitting of the First Examination for the Fellowship in Clinical Oncology are summarised below.

	All Candidates		UK-trained Candidates		UK First Attempt Candidates	
Overall	34/99	34.3%	29/65	44.6%	15/46	32.6%
Cancer Biology & Radiobiology	53/83	63.9%	39/57	68.4%	36/54	66.7%
Clinical Pharmacology	42/94	44.7%	34/62	54.8%	25/52	48.1%
Medical Statistics	39/92	42.4%	34/61	55.7%	30/51	58.8%
Physics	59/95	62.1%	42/62	67.7%	35/52	67.3%

This examiners' report does not provide an in depth breakdown of performance on individual questions but is intended to guide trainers and candidates by highlighting particular areas of concern. Candidates are reminded that it is recommended that all modules are attempted at the first sitting, to maximise chances of success over the total of four permitted attempts.

Cancer Biology

Generally questions on DNA repair mechanisms, cell cycle, oncogenes and tumour suppressors were well answered. Overall the examiners were happy with the performance of the examination.

Radiobiology

Overall, most candidates did well on the radiobiology questions. Candidates need to be aware of the difference between the origin of chromosomal and chromatid-type aberrations. Generally there is a good understanding of how to interpret cell survival experiments, but candidates found some calculations more challenging. There was good understanding of the relationship between dose fractionation and late toxicity. There was some lack of knowledge on the anatomical location of stem cells. There appeared to be a good understanding of basic haemopoiesis. There was a lack of understanding of the origin of the oxygen effect.

Clinical Pharmacology

Overall this module performed less well than previous sittings but pass rates amongst UK candidates remained good. Questions that were not answered well covered a broad range of topics and candidates are advised to focus on the mechanism of drug action, intrathecal therapy and pharmacokinetics.

Medical Statistics

Candidates found the exam challenging as reflected in the low pass rate. Questions that were not answered well related to survival analysis, in particular Cox regression. Candidates need to pay attention to the application of techniques and need to be prepared to do simple calculations. Knowledge of clinical trial design and governance remains patchy.

Physics

Overall, candidates performed well. Suggested areas for improvement:

- Fundamentals of percentage depth dose curves and changes that occur with variation in different parameters.
- Effects of scatter including Equivalent Square principles.
- Specialist techniques such as TBI and Radiosurgery
- Beam attenuation in tissue and tissue inhomogeneity
- Definitions of DVH parameters
- Characteristics of sealed and unsealed sources
- IRMER