Clinical Oncology
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 SPRING 2023

The Examining Board has prepared the following report on the SPRING 2023 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 Rachel Cooper
Medical Director, Education and Training

FIRST EXAMINATION FOR THE FELLOWSHIP IN CLINICAL ONCOLOGY EXAMINERS' REPORT – SPRING 2023

The pass rates achieved at the SPRING 2023 sitting of the First Examination for the Fellowship in Clinical Oncology are summarised below.

	All Candidates		UK-trained Candidates		UK 1st attempt Candidates	
Cancer Biology & Radiobiology	109/157	69%	37/51	73%	22/31	71%
Clinical Pharmacology	121/164	74%	40/50	80%	27/34	79%
Medical Statistics	85/151	56%	35/48	73%	28/35	80%
Physics	97/159	61%	33/54	61%	18/29	62%

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 six permitted attempts.

Cancer Biology and Radiobiology

Candidates performed well on the principles of tumour biology, radiation induced genomic instability, mismatch repair and clinical aspects of radiobiology.

Candidates should focus their revision on the genetics of malignant and normal cells, innate and adaptive immunity, immune editing and tolerance. Interpretation of tumour control probability vs normal tissue toxicity should be revised, as well as measure of radiosensitivity.

Clinical Pharmacology

Questions regarding toxicities were answered well. Mode of action questions were answered well for newer agents, but less so for traditional cytotoxics. Questions relating to supportive medications continue to be less well answered. Pharmacokinetic questions were also challenging.

Medical Statistics

Examiners were pleased to observe good overall performance over the breadth of the curriculum. Areas that require ongoing attention include familiarity with the design and analysis of clinical trials, particularly safety data monitoring. The examiners wish to remind candidates that knowledge of the appropriate statistical test to be used continues to remain relevant.

Physics

Candidates showed lack of clarity in answering questions related to the penumbra of treatment fields. Trainees should deepen their understanding of the factors affecting the penumbra of photon and other treatment beams. It is important to understand how the linear accelerator architecture affects the geometry of the penumbra and factors that affect the dose in this region. With increasingly greater emphasis on particle therapy and advanced techniques, candidates should develop clearer understanding of these and how they differ from standard photon beam treatments.
The examiners would advise trainees to work closely with medical physics colleagues to develop a greater practical understanding of the various elements covered in the FRCR part 1 physics curriculum. Candidates should ensure they understand the impact of inhomogeneity corrections on calculated doses in different tissues. They should also have an appreciation of linear energy transfer.