



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 2021

The Examining Board has prepared the following report on the AUTUMN 2021 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.

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Medical Director, Education and Training

FIRST EXAMINATION FOR THE FELLOWSHIP IN CLINICAL ONCOLOGY EXAMINERS' REPORT – AUTUMN 2021

The pass rates achieved at the AUTUMN 2021 sitting of the First Examination for the Fellowship in Clinical Oncology are summarised below.

	All Candidates		UK-trained Candidates	
Cancer Biology & Radiobiology	62/96	65%	34/47	72%
Clinical Pharmacology	57/94	61%	33/43	77%
Medical Statistics	40/82	49%	31/41	76%
Physics	40/88	46%	25/45	56%

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

The examiners were generally happy with candidate performance in Cancer Biology and Radiobiology. Candidates appeared to have prepared well for this module.

The examiners would like candidates to focus on the importance of having sufficient knowledge on the different mechanisms of cell death and chromatin structure. As in the previous examination, knowledge about the tumour suppressor protein p53 was below expectations. Revision on this subject is advised. The examiners would also like to stress the relevance of the role of the immune system in cancer progression, as questions in this area were poorly answered.

Improvements in knowledge and understanding are required in the following areas:

- Chromosomal aberrations and non-lethal damage.
- Definitions and characteristics of stochastic and deterministic effects.
- Radiation syndromes relating to whole body exposures.
- Interpretation of cell survival curves and the principles of target theory.

Clinical Pharmacology

Overall, the performance of candidates in this module was good.

Questions about the mechanism of actions of supportive medications, immunotherapy and pharmacokinetics were well answered. Questions about the newer targeted drugs and the toxicities of cytotoxic drugs were less well answered.

In addition, questions regarding the toxicity and indications of some of the supportive medications used, were not consistently well answered though this has improved overall from previous sittings.

Candidates are advised to increase their knowledge of drug-drug and drug-radiotherapy interactions. Candidates are also advised to be more aware of the interactions of anti-cancer medications with strong inhibitors & inducers of the cytochrome system, as there appeared to be a degree of difficulty in answering questions related to these topics in general.

Medical Statistics

The pass rate for this module was comparably lower to previous sittings. The abstract style questions were generally answered very well, in spite of the increased length of these questions. However, candidates are reminded that the examination still requires understanding of fundamental principles of, and tests in, statistical methodologies, for example positive and negative predictive values, regression models and factors that can affect these. Candidates are advised to understand how clinical trials are designed, in particular Phase I clinical trials, and when they are typically offered to patients.

Physics

Overall, candidates performed well and showed good knowledge across a broad area of the curriculum. Areas that require particular attention include a basic understanding of protons and proton beam properties, including the Bragg peak. This is a particular area of the curriculum that course organisers can focus on. Other areas that deserve attention include description of beam geometry, and electron beam therapy.