

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 2017**

The Examining Board has prepared the following report on the SPRING 2017 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 – SPRING 2017**

The pass rates achieved at the SPRING 2017 sitting of the First Examination for the Fellowship in Clinical Oncology are summarised below.

	All Candidates		UK-trained Candidates		UK First Attempt Candidates	
Overall*	40/104	38.5%	22/42	52.4%	10/14	71.4%
Cancer Biology & Radiobiology	53/81	65.4%	18/27	66.7%	10/14	71.4%
Clinical Pharmacology	33/78	42.3%	10/21	47.6%	5/11	45.5%
Medical Statistics	26/88	29.5%	14/29	48.3%	9/15	60.0%
Physics	50/80	62.5%	20/27	74.1%	9/13	69.2%

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 candidates' performance in the examination. The examiners closely reviewed questions to determine their relevance to clinical oncology and the curriculum. The following guidance is provided to candidates for improved exam performance with an understanding that they will be questioned in these areas

- Candidates are reminded that they are required to have in-depth knowledge of DNA repair mechanism
- Candidates are reminded that they are required to have in-depth knowledge of mechanisms involved in programmed cell death including apoptosis and autophagy
- Candidates are reminded that they are required to have in-depth knowledge of carcinogenesis and DNA methylation

Radiobiology

Overall candidates performed well, demonstrating a good understanding of radiobiology. Improvements are required in the following areas:

- Origins of radiation induced chromosomal aberrations with respect to cell cycle
- Clinical relevance of radiation induced apoptosis and associated mechanisms
- Descriptors of cell survival curves and how they relate to dose rate.
- Details of acute radiation syndrome
- Factors effecting BED
- Variation in the α/β ratio with cell type

Candidates are reminded to read the question carefully and choose the 'single best answer'

Clinical Pharmacology

Overall the candidates performed satisfactorily in the examination. The candidates scored highly in questions about mechanisms of action of commonly used drugs. The areas that the candidates have performed poorly pertain to newer anti-cancer agents and their mechanism of action. The candidates are advised to review the updated list of anti-cancer drugs and prepare accordingly. Candidates also need to be aware of national guidance regarding systemic anti-cancer treatment, especially with regards to dosing of drugs.

Medical Statistics

Overall, performance at this sitting was disappointing. It is important that the breadth of the curriculum is revised and understood. Areas answered well included: understanding types of data, sampling, screening tests, sensitivity and specificity, p-values, appropriate use of statistical tests, association between variables, and survival analysis. Areas requiring improvement included: understanding the principles of sample size calculations, trials governance, and application of statistical concepts in everyday practice.

Physics

Overall most examination questions were answered well. Examiners made the following comments:

- Candidates should ensure they are able to perform simple monitor unit calculations from data tables
- IRMER roles and responsibilities continue to be poorly understood
- Candidates should improve their knowledge of modern treatment techniques such as IMRT and VMAT