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 2018

The Examining Board has prepared the following report on the SPRING 2018 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 Frances Yuille
Medical Director, Education and Training

FIRST EXAMINATION FOR THE FELLOWSHIP IN CLINICAL ONCOLOGY EXAMINERS' REPORT – SPRING 2018

The pass rates achieved at the SPRING 2018 sitting of the First Examination for the Fellowship in Clinical Oncology are summarised below.

	All Candidates		UK-trained Candidates		UK First Attempt Candidates	
Overall*	74/142	52.1%	37/60	61.7%	6/10	60%
Cancer Biology & Radiobiology	50/93	53.8%	25/32	78.1%	11/14	78.6%
Clinical Pharmacology	57/97	58.8%	29/33	87.9%	8/11	72.8%
Medical Statistics	69/121	57.0%	32/45	71.1%	10/12	83.3%
Physics	62/115	53.9%	28/43	65.1%	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, hypoxia, oncogenes and angiogenesis were well answered. Overall, the examiners were happy with the performance of the examination.

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 Immunobiology as it relates to cancer therapy
- Candidates are reminded that they are required to have in-depth knowledge of mechanisms involved in programmed cell death including the p53 pathway
- Candidates are reminded that they are required to have in-depth knowledge of cancer cell signalling pathways

Radiobiology

Overall candidates performed well, demonstrating a good understanding of radiobiology in most areas.

Improvements in understanding are required in the following areas:

- Combination of drugs with radiotherapy
- Normal tissue complications.
- Basis of tissue organisation relating to serial and parallel organs.
- Details of acute radiation syndrome resulting from whole body exposures.
- Management of interruptions to treatment.
- Radiobiological calculations using the Linear Quadratic model.
- Understanding of variation in linear energy transfer with radiation quality.

Candidates are reminded to read the question carefully and choose the ‘single best answer’.

Clinical Pharmacology

Overall candidates performed well. The Examination Board were pleased to note that questions about targeted agents and immunotherapy were answered well. The questions about the clinical pharmacology of analgesics performed poorly, and candidates are advised to ensure they have knowledge of supportive treatments. Candidates need to be familiar with common drug interactions.

Medical Statistics

Overall, students demonstrated a very good understanding of applied medical statistics and its underlying principles, reflected in a high proportion of correctly answered questions. In particular, students were confident in distinguishing different variable types and could interpret their appropriate graphical representation. Students further calculated relevant statistics from diagnostic accuracy tables with ease. Areas for improvement include a deeper understanding of statistical terminology and practices, such as the rationale behind randomisation in research and the meaning of confidence intervals around an estimate.

Physics

Exam results showed good discrimination in candidate performance across the syllabus. Candidates did well with questions relating to equations and the use of data in treatment dosimetry but poorly with questions testing the underpinning scientific knowledge of the same subject. Candidates need to be able to answer qualitative as well as quantitative questions on these subjects and be able to apply their knowledge to clinical scenarios.

Furthermore, candidates demonstrated some misunderstanding of ICRU50 reference point recommendations and the practical aspects of in vivo dosimetry. However, questions relating to radioactive source decay were answered well.

For future sittings, candidates should be aware of the new legislation relating to medical use of radiation (specifically IRR17 and IRMER18).