First FRCR Examination – Clinical Pharmacology Module List of Anti-Cancer Drugs

For examination sittings from September 2027

The table sets out the list of drugs where detailed specific knowledge will be tested in the clinical pharmacology module of the First FRCR examination. The areas of specific knowledge required, as per Summary of Product Characteristics (SmPC) sections, are set out for each drug example within a class of agent. Please note that other drugs within each class may appear within the examination, but only where the knowledge required relates to class-wide properties that will be shared with the specific drug examples listed below (see example question p11)

Class of agent	Specific drug examples	Specific knowledge expected as per SmPC headings
Cytotoxic agents		
Alkylating agents	• Cyclophosphamide • Ifosfamide • Temozolomide	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties • Pharmacokinetic properties
Anti-metabolites	• Capecitabine • 5- Fluorouracil • Gemcitabine • Methotrexate • Pemetrexed	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties • Pharmacokinetic properties

Cytotoxic agents

Anti-tumour antibiotics	• Bleomycin • Doxorubicin (including pegylated liposomal) • Mitomycin	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties • Pharmacokinetic properties
Plant alkaloids / microtubule inhibitors	• Etoposide • Irinotecan • Paclitaxel • Vincristine	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties • Pharmacokinetic properties
DNA linking agents	• Carboplatin • Cisplatin • Oxaliplatin	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties • Pharmacokinetic properties

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Biological agents & targeted agents		
BCR-ABL inhibitors	• Imatinib	• Posology and method of administration • Contraindications • Undesirable effects • Pharmacodynamic properties
EGFR tyrosine kinase inhibitors	• Osimertinib	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties • Pharmacokinetic properties
EGFR targeted monoclonal antibodies	• Cetuximab	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties • Pharmacokinetic properties
ALK Inhibitors	• Lorlatinib	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties

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BRAF inhibitors	• Dabrafenib	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties
MEK inhibitors	• Trametinib	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties
Multi-kinase inhibitors	• Cabozantinib • Sunitinib	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties
VEGF targeted antibodies	• Bevacizumab	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties

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CD20 targeted agents	• Rituximab	• Posology and method of administration • Contraindications • Undesirable effects • Pharmacodynamic properties
PARP inhibitors	• Olaparib	• Posology and method of administration • Contraindications • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties
CDK4/6 inhibitors	• Abemaciclib	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects
HER-2 targeted agents	• Pertuzumab • Trastuzumab • Trastuzumab deruxtecan	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects
Pan-AKT inhibitors	• Capivasertib	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties

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Bisphosphonates and Bone Protective Agents		
	• Zoledronic acid • Denosumab	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties • Pharmacokinetic properties
Immune Check Point Inhibitors		
Anti-PD1 / PDL-1	• Pembrolizumab	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties • Pharmacokinetic properties
Anti-CTLA4	• Ipilimumab	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties • Pharmacokinetic properties

Hormones/other		
Aromatase inhibitors	• Anastrozole	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties • Pharmacokinetic properties
SERM	• Tamoxifen	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties • Pharmacokinetic properties
Anti-androgens	• Enzalutamide • Bicalutamide	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties • Pharmacokinetic properties

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LHRH agonists	• Goserelin	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties • Pharmacokinetic properties
Others	• Abiraterone • Degarelix • Fulvestrant	• Posology and method of administration • Contraindications • Special warnings and precautions for use • Interactions with other medicinal products and other forms of interaction • Undesirable effects • Pharmacodynamic properties • Pharmacokinetic properties

Example Question

A 73-year-old man with locally advanced NSCLC is on adjuvant durvalumab treatment. Prior to cycle 4, he presents with loose stools and bowel frequency 8 times per day.

His blood tests showed:

Free T4:	24 pmol/L	(ref range: 10.0-20.0)
Random Cortisol:	120 nmol/L	(ref range 9am cortisol: 140-400 nmol/L)

What is the most appropriate immediate action?

1. Commence carbimazole and proceed with durvalumab.

2. Commence hydrocortisone replacement and proceed with durvalumab.

3. Commence loperamide and codeine and proceed with durvalumab.

4. Start methylprednisolone, hold durvalumab restarting when diarrhoea resolved and off steroids.

5. Start reducing dose course of oral prednisolone and permanently discontinue durvalumab.