



FINAL EXAMINATION FOR THE FELLOWSHIP IN CLINICAL ONCOLOGY

Candidate Reference Sheet

This reference sheet is for candidate use during the single best answer (SBA) question papers. It provides information about normal ranges for investigations, frequently used abbreviations and standard chemotherapy regimes.

NORMAL RANGES

Haematology

Full blood count	
Haemoglobin (Hb)	13.0–18.0 g/dL (males) 11.5–16.5 g/dL (females)
MCV	80–96 fL
MCH	28–32 pg
MCHC	32–35 g/dL
White cell count (wcc)	4–11 × 10 ⁹ /L
Neutrophils (neut)	1.5–7 × 10 ⁹ /L
Lymphocytes	1.5–4 × 10 ⁹ /L
Monocytes	< 0.8 × 10 ⁹ /L
Platelet count (plt)	150–400 × 10 ⁹ /L
Erythrocyte sedimentation rate (ESR)	0–20 mm/first hour
D-Dimer screen	< 0.5 mg/L
Activated partial thromboplastin time (APTT)	30–50 seconds
Prothrombin time (PT)	12–13 seconds

Biochemistry

Sodium (Na)	137–144 mmol/L
Potassium (K)	3.5–4.9 mmol/L
Urea (U)	2.5–7.5 mmol/L
Creatinine (Cr)	60–110 µmol/L
Corrected calcium (Ca)	2.2–2.6 mmol/L
Phosphate (PO ₄)	0.8–1.4 mmol/L
Albumin (alb)	37–49 g/L
Total bilirubin (bil)	1–22 µmol/L
Alanine aminotransferase (ALT)	5–35 U/L
Aspartate aminotransferase (AST)	1–31 U/L
Alkaline phosphatase (alkP)	45–105 U/L
Gamma-glutamyl transferase (γGT)	4–35 U/L

Lactate dehydrogenase (LDH)	10–250 U/L
Magnesium (Mg)	0.75–1.05 mmol/L
Fasting glucose (Glc)	3.0–6.0 mmol/L

Tumour Markers

Alphafetoprotein (AFP)	< 10 kU/L
CA 125	< 35 U/mL
CA 15–3	< 35 U/mL
CA 19–9	< 33 U/mL
Carcino-embryonic antigen (CEA)	< 10 µg/L
Human chorionic gonadotrophin (βHCG)	< 5 U/L
Prostate specific antigen (PSA)	< 4 µg/L

Endocrinology

Calcitonin	< 27 pmol/L
Growth hormone	
Basal, fasting and between pulses	< 1 mU/L
After hypoglycaemia	> 40 mU/L
Parathyroid hormone (PTH)	0.9–5.4 pmol/L
Prolactin	< 360 mU/L
Thyroglobulin (Tg)	< 3 µg/L
Thyroid stimulating hormone (TSH)	0.4–5 mU/L
Thyroxine (T4)	58–174 nmol/L
Free T3	5–10 pmol/L
Free T4	10–22 pmol/L

Miscellaneous

Immunoglobins	
IgG	6.0–13.0 g/L
IgA	0.8–3.0 g/L
IgM	0.4–2.5 g/L
IgE	<120 kU/L
β2–micro globulin	<3 mg/L
C-reactive protein	<10 mg/L
Glomerular filtration rate (GFR)	70–140 mL/min
Plasma osmolality	278–305 mosmol/kg
Urine osmolality	350–1000 mosmol/kg
Urine specific gravity	1.002–1.028
Cerebrospinal fluid (CSF)	
Opening pressure	50–180 mm H ₂ O
Total protein	0.15–0.45 g/L
Albumin	0.066–0.442 g/L
Glucose	3.3–4.4 mmol/L
Cell count	≤ 5/mL
Lymphocytes	60–70%
Monocytes	30–50%
Neutrophils	none
Follicle stimulating hormone (FSH)	
	1.0–8.0 IU/L (males)
	1.0–11.0 IUL (females)

ABBREVIATIONS

4DCT	four-dimensional computed tomography
5-FU/5FU	5-fluorouracil
5-HIAA	5-hydroxyindoleacetic acid
^{99m} Tc	technetium-99m
¹³¹ I	iodine-131
ACE	angiotensin converting enzyme
ACTH	adrenocorticotrophic hormone
ADH	antidiuretic hormone
AFP	alphafetoprotein
AIDS	acquired immune deficiency syndrome
ALL	acute lymphoblastic leukaemia
AP	anteroposterior
APC	adenomatous polyposis coli
AUC	area under the curve
BCG	Bacillus Calmette-Guèrin
bd	twice daily
BP	blood pressure
bpm	beats per minute
BRCA	breast cancer gene
BSO	bilateral salpingo-oophorectomy
CA 125	cancer antigen 125
CCNU	lomustine
CD20	cluster of differentiation marker 20
CDX2	caudal-related homeobox 2
CEA	carcinoembryonic antigen
CHART	continuous hyperfractionated accelerated radiotherapy
CIN	cervical intraepithelial neoplasia
CK20	cytokeratins-20
CK7	cytokeratins-7
CLL	chronic lymphocytic leukaemia
CNS	central nervous system
COPD	chronic obstructive pulmonary disease
CPR	cardiopulmonary resuscitation
CRM	cross reactive material
CRP	C-reactive protein
CT	computed tomography
CTPA	computed tomography pulmonary angiogram
CTV	clinical target volume
DCIS	ductal carcinoma in situ
DEXA	dual energy X-ray absorptiometry
DLCO	diffusing capacity of lung for carbon monoxide
DMSA	dimercaptosuccinic acid
DTIC	dimethyl triazeno imidazole carboxamide
DVT	deep vein thrombosis
EBRT	external beam radiotherapy
EBUS	endobronchial ultrasound
ECG	electrocardiogram
ECOG	Eastern Co-operative Oncology Group
EDTA	⁵¹ Cr-ethylenediamine tetra-acetic acid

EGFR	epidermal growth factor receptor
EMG	electromyography
ENT	ear, nose and throat
ER	oestrogen receptor
ERCP	endoscopic retrograde cholangiopancreatography
ESR	erythrocyte sedimentation rate
EUA	examination under anaesthesia
FBC	full blood count
FDG	fluoro-2-deoxy-D-glucose
FEV1	forced expired volume in one second
FIGO	International Federation of Gynecology and Obstetrics
FISH	fluorescence in situ hybridisation
FNA	fine needle aspiration
FSD	focus skin distance
FVC	forced vital capacity
GCS	Glasgow coma scale
GCSF	granulocyte colony stimulating factor
GH	growth hormone
GIT	gastrointestinal tract
GP	general practitioner
GTV	gross tumour volume
HAART	highly active antiretroviral therapy
HCG	human chorionic gonadotrophin
H&E	haematoxylin and eosin
HER2	human epidermal growth factor receptor
HHV	human herpesvirus 8
HIFU	high intensity focussed ultrasound
HIV	human immunodeficiency virus
HMB-45	human melanoma black-45
HPV	human papillomavirus
ICU	intensive care unit
ICRP	International Commission on Radiological Protection
ICRU	International Commission on Radiation Units and Measurements
IDH1	isocitrate dehydrogenase 1
IHU	ImmunoHistoChemistry
IMRT	intensity modulated radiotherapy
INR	international normalised ratio
IPSS	International Prostate Symptom Score
IR(ME)R	<i>The Ionising Radiation (Medical Exposure) Regulations 2000</i>
ISS	International Staging System
IV	intravenous
KRAS	K rat sarcoma
kV	kilovoltage
LCA	leucocyte common antigen
LDH	lactate dehydrogenase
LDR	low dose rate
LCIS	lobular carcinoma in situ
LFTs	liver function tests
LH	luteinising hormone
LHRH	luteinising hormone-releasing hormone

LLETZ	loop excision of the transformation zone
LVEF	left ventricular ejection fraction
MALT	mucosa associated lymphoid tissue
MDRD	modification of diet in renal disease
MDT	multidisciplinary team
MeV	megavoltage
MGMT	O ⁶ -methylguanine DNA-methyltransferase
MIBG	meta-iodobenzyl guanidine
MPD	mid-plane dose
MPNST	malignant peripheral nerve sheath tumour
MRC	Medical Research Council
MRI	magnetic resonance imaging
MSH	mutS homolog
MST	morphine sulphate slow release tablets
MSU	urine microscopy and culture
MUC2	mucin 2
MUGA	multiple gated acquisition
NHL	non-Hodgkin's lymphoma
NHS	National Health Service
NICE	National Institute for Health and Clinical Excellence
NNT	needed to be treated
NPI	Nottingham Prognostic Index
NRAS	neuroblastoma RAS
NSCLC	non-small cell lung cancer
NSE	neuron specific enolase
OAR	organ at risk
od	once daily
OGD	oesophagogastroduodenoscopy
OPG	orthopantomogram
PA	posteroanterior
PCA	Purkinje cell antigen
PCI	prophylactic cranial irradiation
PEG	percutaneous endoscopic gastrostomy
PET	positron emission tomography
PICC	peripherally inserted central catheter
PNET	primitive neuroectodermal tumour
PR	progesterone receptor
PSA	prostate specific antigen
PTV	planning target volume
PUVA	psoralen and ultraviolet-A
PV	per vaginal
qds	four times daily
REAL	Revised European-American Lymphoma classification
RECIST	Response Evaluation Criteria In Solid Tumours
SABR	stereotactic ablative body radiotherapy
SCF	supraclavicular fossa
SIADH	syndrome of inappropriate antidiuretic hormone
SIN	squamous intra-epithelial neoplasia
SR	sustained release

SSD	source-skin distance
STIR	short tau inversion recovery
SUV	standardised uptake value
SVCO	superior vena cava obstruction
TAH	total abdominal hysterectomy
tds	three times daily
TLD	thermoluminescence dosimetry
TNM	tumor, node, metastasis staging
TRUS	transrectal ultrasound
TSH	thyroid-stimulating hormone
TTF-1	thyroid transcription factor 1
TURBT	transurethral resection of bladder tumour
U&Es	urea and electrolytes
VATS	video assisted thoracoscopic surgery
VIN	vaginal intra-epithelial neoplasia
WHO	World Health Organisation

CHEMOTHERAPY REGIMES

ABVD	doxorubicin, bleomycin, vinblastine, dacarbazine
AC	doxorubicin, cyclophosphamide
BEP	bleomycin, etoposide, cisplatin
CAP	cyclophosphamide, doxorubicin, cisplatin
CAPOX	capecitabine, oxaliplatin
CAV	cyclophosphamide, doxorubicin, vincristine
CHOP	cyclophosphamide, doxorubicin, vincristine, prednisolone
CMF	cyclophosphamide, methotrexate, 5-fluorouracil
CVP	cyclophosphamide, vincristine, prednisolone
ECF	epirubicin, cisplatin, 5-fluorouracil
ECX	epirubicin, cisplatin, capecitabine
EOX	epirubicin, oxaliplatin, capecitabine
EP	etoposide, cisplatin
ESHAP	etoposide, methylprednisolone, a steroid, cytarabine (Ara-C), cisplatin (platinum)
FEC	5-fluorouracil, epirubicin, cyclophosphamide
FEC-T	fluorouracil, epirubicin, cyclophosphamide, sequential Taxotere
FOLFIRI	folinic acid, 5-fluorouracil, irinotecan
FOLFIRINOX	folinic acid, 5-fluorouracil, irinotecan, oxaliplatin
FOLFOX	5-fluorouracil, leucovorin, oxaliplatin
MVAC	methotrexate, vinblastine, doxorubicin, cisplatin
PCV	procarbazine, CCNU, vincristine
R-CHOP	rituximab, cyclophosphamide, doxorubicin, vincristine, prednisolone
R-CVP	rituximab, cyclophosphamide, vincristine, prednisolone
TIP	paclitaxel, ifosfamide, cisplatin
VAC	vincristine, dactinomycin, cyclophosphamide