

National Board of Examinations

Question Paper Name :	DrNB Medical Oncology Paper1
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DrNB Medical Oncology Paper1

Group Number :	1
Group Id :	327187176
Group Maximum Duration :	0
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Show Attended Group? :	No
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Group Marks :	100
Is this Group for Examiner? :	No

DrNB Medical Oncology Paper1

Section Id :	327187179
Section Number :	1
Section type :	Offline
Mandatory or Optional :	Mandatory

Number of Questions :	10
Number of Questions to be attempted :	10
Section Marks :	100
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	327187183
Question Shuffling Allowed :	No

Question Number : 1 Question Id : 327187280 Question Type : SUBJECTIVE

Correct Marks : 10

- a) Briefly describe the NTRK pathway and its role in cancer. [4]
- b) List the cancers wherein NTRK pathway has a role to play. [3]
- c) Name the drugs which act on NTRK and list their major side effects. [3]

Question Number : 2 Question Id : 327187281 Question Type : SUBJECTIVE

Correct Marks : 10

- a) List various genetic mutations implicated in hereditary ovarian cancer. [2]
- b) Explain relevance of somatic and germline mutations in the setting of a newly diagnosed case of ovarian cancer. [3]
- c) List the drugs effective in hereditary ovarian cancer, their side effects and degree of efficacy. [5]

Question Number : 3 Question Id : 327187282 Question Type : SUBJECTIVE

Correct Marks : 10

- a) What are the differences between a phase 2 vs phase 3 vs phase 4 clinical trial in the context of anti-cancer drugs? [5]
- b) What are the advantages and disadvantages of "accelerated approval" of anticancer drugs. Explain with examples where this has succeeded and where it has failed? [5]

Question Number : 4 Question Id : 327187283 Question Type : SUBJECTIVE

Correct Marks : 10

- a) What is meant by haploidentical stem cell transplantation in terms of HLA matching? [2]
- b) What is donor specific anti-HLA antibody testing and its relevance? [3]
- c) Explain if in a family where both parents and all siblings (one male and one female) are potential haploidentical donors, how will you choose the donor for a patient who has to undergo a haploidentical stem cell transplant for relapsed acute myeloid leukemia. [5]

Question Number : 5 Question Id : 327187284 Question Type : SUBJECTIVE

Correct Marks : 10

- a) Sacituzumab: Explain its mechanism of action, administration, side effects and approved indications. [5]
- b) Describe mechanism of action of Selinexor, its uses and side effects. [5]

Question Number : 6 Question Id : 327187285 Question Type : SUBJECTIVE

Correct Marks : 10

- a) A 30-year-old male presents with retroperitoneal lymph node enlargement and backache. Biopsy is suggestive of poorly differentiated malignant tumor. Discuss differential diagnosis. [3]
- b) Briefly describe role of immunohistochemistry in final diagnosis. [3]
- c) What are basket trials and explain this in the context of anticancer agents with an example? [4]

Question Number : 7 Question Id : 327187286 Question Type : SUBJECTIVE

Correct Marks : 10

- a) What is stereotactic body radiotherapy (SBRT) and stereotactic radiosurgery? [2]
- b) Explain advantages of SBRT and its indications. What are its side effects? [5]
- c) What are advantages of proton therapy over intensity modulated radiotherapy? [3]

Question Number : 8 Question Id : 327187287 Question Type : SUBJECTIVE

Correct Marks : 10

- a) What is pharmacogenomics? Explain role of pharmacogenomics in cancer management with two examples. [4]
- b) Outline mechanism of hypercalcemia in multiple myeloma. [3]

c) Briefly discuss (with rationale) management of hypercalcemia in a 50 year old lady with breast cancer who has a serum creatinine of 3.0 mg/dl. [3]

Question Number : 9 Question Id : 327187288 Question Type : SUBJECTIVE

Correct Marks : 10

a) What is radiofrequency ablation? Briefly mention its indications in cancer management? [4]

b) Criteria for high risk B-cell Acute Lymphoblastic Leukemia (ALL). [3]

c) Role of monoclonal antibodies in treatment of ALL. [3]

Question Number : 10 Question Id : 327187289 Question Type : SUBJECTIVE

Correct Marks : 10

a) Role of ROS1 pathway and effective drugs in relation to this pathway in management of lung cancer. [5]

b) Briefly discuss adjuvant hormonal therapy in postmenopausal women with breast cancer. [5]