ONCOLOGY I

Learning objectives of Early and Locally Advanced Breast Cancer.

1. Distinguish between women at various risks of breast cancer recurrence and apply differences to management strategies accordingly.
2. Develop evidence-based treatment plans for the management of early and locally advanced breast cancer.
3. Assess the role of neoadjuvant and adjuvant chemotherapy in early and locally advanced breast cancer.
4. Apply pharmacokinetic and pharmacodynamic principles and analyze clinical controversies in the management of specific patient populations with early and locally advanced breast cancer.
5. Analyze clinical data for the use of tamoxifen and aromatase inhibitors as nonadjuvant and adjuvant treatments of early and locally advanced breast cancer.
6. Contrast the adverse effects and indications of chemotherapy and hormonal agents in the management of women with early and locally advanced breast cancer.
7. Devise management strategies for adverse events associated with adjuvant chemotherapy and hormonal therapy for women with early and locally advanced breast cancer.

Learning objectives of Metastatic Breast Cancer

1. Given an individual's medical history, distinguish whether chemotherapy or hormonal therapy should be used to treat the patient's metastatic breast cancer.
2. Develop a treatment approach using hormonal therapy for recurrent, hormone-positive metastatic breast cancer.
3. For a given patient with metastatic breast cancer, design an optimal chemotherapeutic regimen to manage the disease.
4. Assess the role of biologic therapies (single and combined therapy) in the treatment of metastatic breast cancer.
5. Analyze bisphosphonate use in the treatment of bone metastases in patients with metastatic breast cancer.

Learning objectives of Pharmacogenomics

1. Distinguish between the different types of mutations (e.g., single nucleotide polymorphisms, repeat polymorphisms) associated with variations in therapeutic response and toxicity in patients who receive anti-cancer drugs.
2. Predict response and tolerability to anti-cancer drugs based on genetic and nongenetic factors.

3.   Interpret pharmacogenetic data with respect to selecting appropriate anti-cancer drug therapy.
4.   Modify the treatment regimen for a patient with cancer using pharmacogenetic information.
5.   Assess how the use of pharmacogenetic data can improve therapeutic outcomes associated with anticancer drugs.