

2020 Oncology Pharmacy Preparatory Review and Recertification Course

Learning Objectives

After participating in this CPE activity, learners should be able to:

Breast Cancer

ACPE #: 0204-9999-20-922-H01-P

- Design an appropriate patient-specific treatment, supportive care, and monitoring plan taking into consideration efficacy and safety outcomes from clinical trials and current treatment guidelines for patients with breast cancer.
- Discuss short- and long-term treatment goals, including post-therapy and survivorship, with a patient with breast cancer and her or his caregiver.
- Determine appropriate pharmacotherapy for a patient with breast cancer based on genomic test results
- Identify appropriate diagnostic and prognostic tests related to breast cancer.
- Select relevant information and guidance for the public regarding breast cancer-related issues (e.g., cancer risk factors, prevention, screening).

Gynecologic Malignancies

ACPE #: 0204-9999-20-914-H01-P

- Design an appropriate patient-specific treatment, management, and monitoring plan taking into consideration efficacy and safety outcomes of clinical trials and current treatment guidelines for a patient with a gynecologic malignancy.
- Discuss short- and long-term goals including post-therapy and survivorship, with a patient with a gynecologic malignancy and her caregiver
- Compare and contrast the efficacy and toxicity of different routes of drug administration, including IP chemotherapy, in the treatment of ovarian cancer.
- Select relevant information and provide guidance for the public regarding gynecologic malignancy-related issues (e.g., risk factors, prevention and screening) for gynecologic malignancies.

Prostate Cancer

ACPE #: 0204-9999-20-916-H01-P

- Design an appropriate patient-specific treatment, supportive care, and monitoring plan taking into consideration efficacy and safety outcomes from clinical trials and current treatment guidelines for patients with prostate cancer.
- Identify appropriate diagnostic, prognostic, and monitoring tests for a patient with prostate cancer.
- Discuss short- and long-term treatment goals, including post-therapy and survivorship, with a patient with prostate cancer and his caregiver.
- Select relevant information and guidance for the public regarding prostate cancer-related issues (e.g., risk factors, prevention, screening).

Pediatric Malignancies and Supportive Care

ACPE #: 0204-9999-20-926-H01-P

- Design an appropriate patient-specific treatment, supportive care, and monitoring plan taking into consideration efficacy and safety outcomes from clinical trials and current treatment guidelines for pediatric patients with cancer.
- Assess the prognostic impact of relevant cancer-related molecular biology testing for a pediatric patient with cancer.
- Discuss with a pediatric patient who has cancer and his or her caregiver the short- and long-term treatment goals, including post-therapy and survivorship.
- Assess the impact of pharmacogenomics on the efficacy and toxicity of relevant anticancer and supportive-care agents for a pediatric patient with cancer.
- Assess the regulatory, ethical, and patient rights issues related to conducting research, including informed consent and confidentiality.

Upper Gastrointestinal and Hepatocellular Carcinomas

ACPE #: 0204-9999-20-924-H01-P

- Design an appropriate patient-specific treatment, management, and monitoring plan taking into consideration efficacy and safety outcomes from clinical trials and current treatment guidelines for patients with esophageal, gastric, or hepatic malignancies.
- Assess the impact of pharmacogenomics on the efficacy and toxicity of relevant anticancer agents used for gastrointestinal malignancies.
- Devise and communicate appropriate plans for preventing, monitoring, and treating radiation recall and other complications of radiation therapy.

Bladder, Renal Cell, and Testicular Cancers

ACPE #: 0204-9999-20-929-H01-P

- Design an appropriate patient-specific treatment, supportive care, and monitoring plan taking into consideration efficacy and safety outcomes from clinical trials and current treatment guidelines for patients with bladder, renal cell, or testicular carcinoma.
- Discuss short- and long-term goals, including post-therapy and survivorship, with a patient with bladder, renal cell, or testicular carcinoma and his or her caregiver.
- Develop an appropriate plan for preventing, monitoring, and treating adverse reactions associated with the treatment with tyrosine kinase inhibitors and mTOR inhibitors.

Melanoma and Non-Melanoma Skin Cancers

ACPE #: 0204-9999-20-915-H01-P

- Design an appropriate patient-specific treatment, supportive care, and monitoring plan taking into consideration efficacy and safety outcomes from clinical trials and current treatment guidelines for patients with melanoma or non-melanoma skin cancer.
- Identify relevant cancer-related molecular biology testing for a patient with melanoma or non-melanoma skin cancer.
- Discuss short- and long-term goals, including post-therapy and survivorship, with a patient with melanoma or non-melanoma skin cancer and his or her caregiver.
- Select relevant information and guidance for the public regarding melanoma and non-melanoma skin cancer-related issues (e.g., risk factors, prevention, screening).
- Develop an appropriate plan for preventing, monitoring, and treating adverse reactions associated with the treatment of melanoma and non-melanoma skin cancers, including thyroid level monitoring for chemotherapy agents, immune-mediated toxicities, and toxicity from BRAF inhibitors.

Research Design, Statistics, and Evaluating Oncology Literature

ACPE #: 0204-9999-20-912-H04-P

- Evaluate the oncology literature, including study design, methodology, statistical analysis, and applicability of the results to clinical practice for oncology patient population.
- Interpret the validity and results of various types of oncology studies (e.g., meta-analyses, noninferiority trials).
- Identify potential sources of bias and evaluate the appropriateness of conclusions drawn based on outcomes in an oncology study report.
- Select an appropriate statistical test (parametric or nonparametric) for use in evaluating findings from an oncology study based on the type of data (i.e., nominal, ordinal, continuous).
- Interpret sensitivity, specificity, positive and negative predictive values, measures of effect, correlation, and regression for an oncology study.
- Critique the validity and interpret the results of various types of oncology studies (e.g., meta-analyses, noninferiority trial).

Adult Acute Leukemias and Myelodysplastic Syndromes

ACPE #: 0204-9999-20-928-H01-P

- Design an appropriate patient-specific treatment, supportive care, and monitoring plan taking into consideration efficacy and safety outcomes from clinical trials and current treatment guidelines for adults with acute leukemia or myelodysplastic syndrome.
- Assess the prognostic impact of relevant cancer-related molecular biology testing for an adult with acute leukemia or myelodysplastic syndrome.
- Develop an appropriate plan for preventing, monitoring, and treating adverse reactions from pharmacotherapy for acute leukemia and myelodysplastic syndrome in an adult, including tumor lysis syndrome, neurotoxicity, differentiation syndrome, and cardiac toxicity from arsenic trioxide, and other agents as appropriate.
- Determine appropriate pharmacotherapy for acute leukemia or myelodysplastic syndrome in an adult based on genomic test results.

Lymphomas

ACPE #: 0204-9999-20-925-H01-P

- Design an appropriate patient-specific treatment, supportive care, and monitoring plan to include effectiveness, toxicities and outcomes, based on the most current guidelines for patients with lymphoma.
- Assess the prognostic impact of relevant cancer-related molecular biology testing.
- Develop an appropriate plan for preventing, monitoring, and treating adverse reactions associated with pharmacotherapy for lymphoma and other cancers, including chemotherapy-induced pulmonary toxicities and extravasation.

Chronic Leukemias

ACPE #: 0204-9999-20-917-H01-P

- Design an appropriate patient-specific treatment, supportive care, and monitoring plan taking into consideration efficacy and safety outcomes from clinical trials and current treatment guidelines for patients with chronic leukemia.
- Assess the prognostic impact of relevant cancer-related molecular biology testing in a patient with chronic leukemia.
- Determine appropriate pharmacotherapy based on genomic test results in a patient with chronic leukemia.
- Develop an appropriate plan for preventing, monitoring, and treating infusion-related reactions from monoclonal antibodies used in the treatment of hematologic malignancies
- Develop an appropriate plan for preventing, monitoring, and treating adverse reactions associated with pharmacotherapy for the treatment of cancers, including toxicities from tyrosine kinase inhibitors used to treat hematologic cancers.

Hematopoietic Stem Cell Transplantation

ACPE #: 0204-9999-20-921-H01-P

- Design an appropriate patient-specific treatment, supportive care, and monitoring plan taking into consideration efficacy and safety outcomes from clinical trials and current guidelines for patients undergoing hematopoietic stem cell transplantation (HSCT).
- Apply appropriate strategies to prevent toxicity from chemotherapy agents employed in HSCT conditioning regimens, and differentiate between myeloablative, non-myeloablative, and reduced-intensity HSCT conditioning regimens.
- Create a plan for prevention and management of acute and chronic graft-versus-host disease (GVHD) using appropriate systemic and ancillary therapies.
- Discuss short- and long-term treatment goals, including post-therapy and survivorship, with the patient undergoing HSCT and his or her caregiver.

Lung Cancer

ACPE #: 0204-9999-20-923-H01-P

- Design an appropriate patient-specific treatment, supportive care, and monitoring plan taking into consideration efficacy and safety outcomes from clinical trials and current treatment guidelines for patients with lung cancer.
- Identify relevant cancer-related molecular biology testing for patients with lung cancer.
- Assess the impact of pharmacogenomics on the efficacy and toxicity of relevant anticancer and supportive-care agents for a patient with lung cancer.
- Select relevant information and guidance for the public regarding lung cancer-related issues (e.g., risk factors, prevention, screening).
- Develop an appropriate plan for preventing, monitoring, and treating adverse reactions associated with pharmacotherapy for lung cancer..
- Develop a prevention and management strategy for chemotherapy-induced nausea and vomiting for patients with any type of cancer.

Lower Gastrointestinal and Pancreatic Cancers

ACPE #: 0204-9999-20-927-H01-P

- Design an appropriate patient-specific treatment, supportive care, and monitoring plan taking into consideration efficacy and safety outcomes from clinical trials and current treatment guidelines for patients with lower gastrointestinal (GI) or pancreatic cancers.
- Discuss short- and long-term treatment goals, including post-therapy and survivorship, with a patient with lower GI or pancreatic cancers and his or her caregiver.
- Assess the impact of pharmacogenomics on the efficacy and toxicity of relevant anticancer and supportive-care agents for a patient with lower GI or pancreatic cancers.
- Select relevant information and guidance for the public regarding lower GI and pancreatic cancer-related issues (e.g., risk factors, prevention, screening).
- Develop an appropriate plan for preventing, monitoring, and treating adverse reactions associated with pharmacotherapy for lower GI or pancreatic cancers, including chemotherapy-

induced diarrhea, hand-foot syndrome, hand foot skin reaction, neurotoxicity from oxaliplatin, and dermatologic toxicities from epidermal growth factor receptor inhibitors.

Head, Neck and Adult Central Nervous System (CNS) Malignancies

ACPE #: 0204-9999-20-930-H01-P

- Design an appropriate patient-specific treatment, management, and monitoring plan taking into consideration efficacy and safety outcomes from clinical trials and current treatment guidelines for patients with head, neck, adult central nervous system (CNS), or thyroid cancers.
- Select relevant information and guidance for the public regarding head and neck cancer-related issues (e.g., risk factors, prevention, screening).
- Develop an appropriate plan for preventing, monitoring, and treating adverse reactions associated with the treatment of cancers including cancer cachexia, mucositis, and xerostomia.

Cancer-related Infectious Diseases

ACPE #: 0204-9999-20-931-H01-P

- Design an appropriate patient-specific management and monitoring plan to address potential infection-related problems that may arise during or following cancer treatment based on the current guidelines for treating cancer-related infectious diseases.
- Discuss short- and long-term treatment goals, including post-therapy, with a patient with a cancer-related infectious disease and his or her caregiver.

Oncology Practice Management

ACPE #: 0204-9999-20-920-H04-P

- Evaluate oncology pharmacy services for compliance with established regulations, professional practice standards, and procedures for handling and disposal of hazardous drugs.
- Select quality-improvement activities that enhance the safety and effectiveness of the medication-use processes in oncology patient care.
- Explain national accreditation and federal regulatory requirements for the care of cancer patients receiving chemotherapy or other hazardous drugs.
- Explain medication reimbursement and patient assistance programs to optimize drug availability for oncology patients.
- Evaluate policies and procedures related to conducting research involving of investigational drugs, including drug management in patients with cancer.

Multiple Myeloma

ACPE #: 0204-9999-20-918-H01-P

- Design an appropriate patient-specific treatment, supportive care, and monitoring plan taking into consideration efficacy and safety outcomes from clinical trials and current guidelines for patients with multiple myeloma.

- Evaluate oncology pharmacy services for compliance with established REMS regulations and standards.
- Develop an appropriate plan for preventing, monitoring, and managing common problems associated with the treatment of cancers, including bone metastases in multiple myeloma patients and thromboembolism, hypercalcemia of malignancy, and spinal cord compression in all oncology patients.

Adult Sarcoma

ACPE #: 0204-9999-20-919-H01-P

- Design an appropriate patient-specific treatment, management, and monitoring plan taking into consideration efficacy and safety outcomes from clinical trials and current treatment guidelines for adult patients with sarcoma.
- Adjust treatment and monitoring plans as needed based on tumor genetics and pharmacokinetics of anticancer and supportive-care agents (e.g., methotrexate).
- Develop an appropriate plan for preventing, monitoring and managing common problems associated with the treatment of adult patients with cancer including neurotoxicity from ifosfamide and hemorrhagic cystitis.

Pharmacogenomics in Oncology

ACPE #: 0204-9999-20-913-H01-P

- Identify appropriate considerations for genetic interpretation in both the germline and somatic settings utilizing a variety of next generation sequencing techniques.
- Apply the results from somatic genetic testing into therapeutic recommendations based on prognostic, predictive and patient characteristics.
- Recognize the place in therapeutic decision making for companion diagnostic testing.