

# Oncology Pharmacy Specialty Review Course, Workbook Chapters (No Recert Credit (Cert # L239064)

**Teaser**: This online Specialty Review Course and Workbook package will help you prepare for the Board of Pharmacy Specialty (BPS) examination. With this course, get comprehensive, practical guidance, with a variety of complex cases, including references for further study.

Tag: Certifications; Oncology



ACPE Numbers: Various – see listing below Pre-Sale Date: 03/15/2023 Content Release Date: 03/29/2023 Expiration Date: 02/13/2024 Activity Type: Application-based CE Credits: 26.25 hours (ACPE only) Activity Fee: \$425 (ASHP member); \$625 (non-member)

### Accreditation



The American Society of Health-System Pharmacists is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education with Commendation.



The American College of Clinical Pharmacy is accredited by the Accreditation Council for Pharmacy Education as providers of continuing pharmacy education.

These activities were recorded during a live educational event on March 2-4, 2023, at the ACCP/ASHP 2023 Live Review & Recertification Courses, Dallas, Texas. Learners who claimed credit for the live activities should not claim credit for these home study activities.

### **Target Audience**

These activities are intended for pharmacists who are seeking to update their knowledge and skills commensurate with a board certification examination in the areas listed below.

### **Activity Overview**

This online course provides a robust preparatory curriculum for the pharmacy professional preparing for the Board of Pharmacy Specialties (BPS) Oncology Specialty Certification Examination. Designed based on the domains, tasks, and knowledge statements developed by the BPS for the certification examination, this course will help you prepare for the exam by identifying areas needed for in-depth review of oncology issues by:

- Reviewing pertinent clinical topics and practice skills
- Listing valuable references for further study

This course is **NOT** intended for those obtaining recertification credit. To earn recertification credit, please see courses here: <u>http://elearning.ashp.org/catalog/onc-recert</u>



These activities are part of the ASHP and ACCP professional development program.

## **REVIEW COURSE**

This course consists of 20 activities (see table below) and provides up to 26.25 hours of continuing pharmacy education credit. The Review Course includes case-based presentations for application to real-life scenarios and links to the reference sources, and domains, tasks, and knowledge statements.

Learning Module	ACPE Number	Credit Hours	ACPE Expiration Date
Breast Cancer	0204-9999-23-900-H01-P	2.50 ACPE	03/03/26
Gynecologic Malignancies	0204-9999-23-901-H01-P	1.00 ACPE	03/04/26
Prostate Cancer	0204-9999-23-904-H01-P	1.25 ACPE	03/02/26
Pediatric Malignancies and Supportive Care	0204-9999-23-917-H01-P	1.25 ACPE	03/04/26
Upper Gastrointestinal and Hepatocellular Carcinomas	0204-9999-23-905-H01-P	0.75 ACPE	03/03/26
Bladder, Renal Cell, and Testicular Cancers	0204-9999-23-903-H01-P	1.00 ACPE	03/03/26
Melanoma and Non-Melanoma Skin Cancers	0204-9999-23-906-H01-P	1.00 ACPE	03/02/26
Research Design, Statistics, and Evaluating Oncology Literature	0204-9999-23-907-H04-P	2.00 ACPE	03/02/26
Adult Acute Leukemias and Myelodysplastic Syndromes	0204-9999-23-908-H01-P	1.50 ACPE	03/04/26
Lymphomas	0204-9999-23-909-H01-P	1.25 ACPE	03/04/26
Chronic Leukemias	0204-9999-23-910-H01-P	1.50 ACPE	03/02/26
Hematopoietic Cell Transplantation	0204-9999-23-911-H01-P	1.25 ACPE	03/04/26
Lung Cancer	0204-9999-23-912-H01-P	1.75 ACPE	03/04/26
Lower Gastrointestinal and Pancreatic Cancers	0204-9999-23-913-H01-P	1.25 ACPE	03/02/26
Head, Neck, Adult Central Nervous System (CNS), and Thyroid Malignancies	0204-9999-23-902-H01-P	1.00 ACPE	03/03/26
Cancer-related Infectious Diseases	0204-9999-23-918-H01-P	1.00 ACPE	03/03/26
Oncology Practice Management	0204-9999-23-914-H04-P	2.00 ACPE	03/02/26
Multiple Myeloma	0204-9999-23-915-H01-P	1.50 ACPE	03/03/26
Adult Sarcomas	0204-9999-23-919-H01-P	0.75 ACPE	03/04/26
Pharmacogenomics in Oncology	0204-9999-23-916-H01-P	0.75 ACPE	03/02/26



# Learning Objectives

After participating in these CPE activities, learners should be able to:

## **Breast Cancer**

ACPE #: 0204-9999-23-900-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 #: 0204-9999-23-901-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.
- Select relevant information and provide guidance for the public regarding gynecologic malignancy-related issues (e.g., risk factors, prevention, and screening).

### **Prostate Cancer**

ACPE #: 0204-9999-23-904-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.
- 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 #: 0204-9999-23-917-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 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 regulatory, ethical, and patient rights issues related to conducting research, including informed consent and confidentiality.



# Upper Gastrointestinal and Hepatocellular Carcinomas

ACPE #: 0204-9999-23-905-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.
- Develop an appropriate plan for preventing, monitoring, and treating radiation recall and other complications of radiation therapy.

# Bladder, Renal Cell, and Testicular Cancers

ACPE #: 0204-9999-23-903-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, or testicular carcinomas.
- Discuss short- and long-term treatment goals, including post-therapy and survivorship, with a patient with bladder, renal, or testicular carcinoma and his or her caregiver
- Develop an appropriate plan for preventing, monitoring, and treating adverse reactions associated with tyrosine kinase inhibitors and mTOR inhibitors.

# Melanoma and Non-Melanoma Skin Cancers

ACPE #: 0204-9999-23-906-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.
- 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 cancerrelated 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 #: 0204-9999-23-907-H04-P

- Evaluate the oncology literature, including study design, identification of sources of bias, methodology, statistical analysis, and applicability of results to clinical practice for the oncology patient population.
- Interpret the validity and results of various types of oncology studies (e.g., meta-analyses, noninferiority trials).
- Interpret findings from the use of study endpoints (e.g., objective response, time to progression, adverse events, quality of life, overall survival) in oncology research.
- Interpret sensitivity, specificity, positive and negative predictive values, measures of effect, correlation, and regression for an oncology study.



# Adult Acute Leukemias and Myelodysplastic Syndromes

ACPE #: 0204-9999-23-908-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 #: 0204-9999-23-909-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 #: 0204-9999-23-910-H01-P

- Design an appropriate patient-specific treatment, supportive care, and monitoring plan taking into consideration relevant molecular biology testing, genomic information, efficacy and safety outcomes from clinical trials, and current treatment guidelines for patients 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 Cell Transplantation

ACPE #: 0204-9999-23-911-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 (HCT).
- Apply appropriate strategies to prevent and treat toxicity from chemotherapy agents employed in HCT 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 HCT and his or her caregiver.



## Lung Cancer

ACPE #: 0204-9999-23-912-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.
- 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.

# Lower Gastrointestinal and Pancreatic Cancers

ACPE #: 0204-9999-23-913-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.
- 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, Adult Central Nervous System (CNS), and Thyroid Malignancies

ACPE #: 0204-9999-23-902-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 #: 0204-9999-23-918-H01-P

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



## Oncology Practice Management

ACPE #: 0204-9999-23-914-H04-P

- Evaluate oncology pharmacy services for compliance with established regulations, professional practice standards, and procedures for safe handling, administration, and disposal of hazardous drugs.
- Select quality-improvement activities that enhance the safety and effectiveness of the medication-use process 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 investigational drugs, including drug management in patients with cancer.

# **Multiple Myeloma**

ACPE #: 0204-9999-23-915-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 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, thromboembolism, hypercalcemia of malignancy, and spinal cord compression.

### **Adult Sarcomas**

ACPE #: 0204-9999-23-919-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 the 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 #: 0204-9999-23-916-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 and germline genetic testing into therapy recommendations based on prognostic, predictive and patient characteristics.
- Recognize the place in therapeutic decision making for companion diagnostic testing.

# **Oncology Pharmacy Specialty Review Course**

# Materials for this course will release 03/29/2023



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### **Methods and CE Requirements**

Activities can be completed in any order. Each activity consists of audio, video, and/or PDFs and evaluations. Learners must review all content and complete the evaluations to receive continuing pharmacy education credit for each activity.

Follow the prompts to claim, view, or print the statement of credit within 60 days after completing the activity.

### **System Technical Requirements**

Learning activities are delivered via your Web browser and Acrobat PDF. For all activities you should have a basic comfort level using a computer and navigating web sites.

View the minimum technical and system requirements for learning activities.

### Development

ASHP collaborates with ACCP on Oncology Pharmacy activities.

To maintain its strict, independent standards for certification, BPS does NOT endorse or provide review information, preparatory courses, or study guides for Board Certification Examinations.