

Materials for this course will release 04/26/2023

Oncology Pharmacy Specialty Review Course for Recertification, Workbook Chapters + RECERT EXAM (Cert # L239065)

Teaser: This online course will help you earn BCOP recertification credit. 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: 04/12/2023

Content Release Date: 04/26/2023

Expiration Date: 04/23/2024

Activity Type: Application-based

CE Credits: 26.25 (BPS and ACPE) contact hours

Activity Fee: \$475 (ASHP member); \$675 (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 recertification activities are intended for board certified pharmacists seeking to update their knowledge and skills in oncology pharmacy.

Activity Overview

This course is intended for BCOPs in need of recertification credit and is designed based on the content outline developed by the Board of Pharmacy Specialties (BPS) to provide an overview of recent standards and guidelines that specialists should be familiar with in practice. The course uses a case-based approach to discuss patient care issues. In this series, faculty will:

- Review pertinent clinical topics and practice skills
- List valuable resources for further self-study

This online course consists of 20 activities (see table below) and provides up to 26.25 contact hours of continuing pharmacy education credit and/or recertification credit.

Recertification Credit*

Board certified pharmacists are eligible to receive up to 26.25 contact hours of recertification credit for completing this course. To earn recertification credit, learners must review the course content and successfully complete the online assessments by the deadline. Only completed assessments will be eligible for credit; no partial or incomplete assessments will be processed. You are allowed only one attempt to successfully complete this assessment.

This course is not intended for those preparing to take the BPS Oncology Pharmacy Specialty Examination for Certification. To prepare for the examination, please see courses here: <http://elearning.ashp.org/catalog/onc-review>

These activities are part of the ASHP and ACCP professional development program for BCOP recertification approved by the BPS.

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** Please note: Review Course for Recertification may only be completed for recertification credit up to three times, in nonconsecutive years, during the 7-year recertification cycle.*

Learning Module	ACPE Number	Contact Hours
Breast Cancer	0204-9999-23-900-H01-P	2.50 ACPE
Gynecologic Malignancies	0204-9999-23-901-H01-P	1.00 ACPE
Prostate Cancer	0204-9999-23-904-H01-P	1.25 ACPE
Pediatric Malignancies and Supportive Care	0204-9999-23-917-H01-P	1.25 ACPE
Recertification Assessment Group 1 (TBD% passing score required)		6.0 BPS
Upper Gastrointestinal and Hepatocellular Carcinomas	0204-9999-23-905-H01-P	0.75 ACPE
Bladder, Renal Cell, and Testicular Cancers	0204-9999-23-903-H01-P	1.00 ACPE
Melanoma and Non-Melanoma Skin Cancers	0204-9999-23-906-H01-P	1.00 ACPE
Research Design, Statistics, and Evaluating Oncology Literature	0204-9999-23-907-H04-P	2.00 ACPE
Recertification Assessment Group 2 (TBD% passing score required)		4.75 BPS
Adult Acute Leukemias and Myelodysplastic Syndromes	0204-9999-23-908-H01-P	1.50 ACPE
Lymphomas	0204-9999-23-909-H01-P	1.25 ACPE
Chronic Leukemias	0204-9999-23-910-H01-P	1.50 ACPE
Hematopoietic Cell Transplantation	0204-9999-23-911-H01-P	1.25 ACPE
Recertification Assessment Group 3 (TBD% passing score required)		5.50 BPS
Lung Cancer	0204-9999-23-912-H01-P	1.75 ACPE
Lower Gastrointestinal and Pancreatic Cancers	0204-9999-23-913-H01-P	1.25 ACPE
Head, Neck, Adult Central Nervous System (CNS), and Thyroid Malignancies	0204-9999-23-902-H01-P	1.00 ACPE
Cancer-related Infectious Diseases	0204-9999-23-918-H01-P	1.00 ACPE
Recertification Assessment Group 4 (TBD% passing score required)		5.0 BPS
Oncology Practice Management	0204-9999-23-914-H04-P	2.00 ACPE
Multiple Myeloma	0204-9999-23-915-H01-P	1.50 ACPE
Adult Sarcomas	0204-9999-23-919-H01-P	0.75 ACPE
Pharmacogenomics in Oncology	0204-9999-23-916-H01-P	0.75 ACPE
Recertification Assessment Group 5 (TBD% passing score required)		5.0 BPS

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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.

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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 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 #: 0204-9999-23-907-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.

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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.

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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.

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Faculty

Jessica Auten, PharmD, BCOP

Clinical Pharmacy Specialist, Acute Care
Malignant Hematology
UNC Medical Center
Chapel Hill, North Carolina

John Bossaer, PharmD, BCOP

Professor
Bill Gatton College of Pharmacy at East
Tennessee State University
Johnson City, Tennessee

Ryan Bycroft, PharmD, BCOP

Clinical Pharmacy Specialist,
Hematology/Oncology
University of Louisville Hospital, Brown
Cancer Center
Louisville, Kentucky

Courtney C. Cavalieri, PharmD, BCOP*

Clinical Oncology Pharmacist
Huntsman Cancer Institute at the University
of Utah
Salt Lake City, Utah

Brette Conliffe, PharmD, BCOP

Clinical Oncology Pharmacist
University of Louisville Health/Brown
Cancer Center
Louisville, Kentucky

Karen M. Fancher, PharmD, BCOP*

Associate Professor of Pharmacy
Practice/Clinical Pharmacy Specialist -
Oncology
Duquesne University School of
Pharmacy/UPMC Passavant Hospital
Pittsburgh, Pennsylvania

Christopher Fausel, PharmD, MHA, BCOP

Director of Pharmacy - Precision Genomics
Indian University Health
Indianapolis, Indiana

Lauren Ice, PharmD, BCOP, BCPS

Clinical Pharmacy Specialist
Corewell Health
Grand Rapids, Michigan

Alexis R. Jones, PharmD, BCOP, CPP

Clinical Pharmacist, Gynecologic Oncology
University of North Carolina Medical Center
Chapel Hill, North Carolina

Elyse A. MacDonald, PharmD, MS, BCPS

Director, Pharmacy Services, Investigational
Drug Service
Stanford Health Care
Palo Alto, California

Janelle Mann, PharmD, BCOP

Clinical Oncology Pharmacist/Manger,
Clinical Pharmacy Services
Alvin J. Siteman Cancer Center/Washington
University School of Medicine in St. Louis
St. Louis, Missouri

Colleen McCabe, Pharm.D., BCOP

Clinical Oncology Pharmacy Specialist,
Sarcoma and Melanoma
Vanderbilt University Medical Center
Nashville, Tennessee

Donald C. Moore, PharmD, BCPS, BCOP, DPLA

Pharmacy Clinical Coordinator –
Hematology/Oncology
Levine Cancer Institute – Atrium Health
Charlotte, North Carolina

Anthony J. Perissinotti, PharmD, BCOP*

Hematology Clinical Pharmacist Specialist
University of Michigan – Michigan Medicine
Ann Arbor, Michigan

Danielle Roman, PharmD, BCOP

Manager, Oncology Clinical Pharmacy
Services
Allegheny Health Network
Pittsburgh, Pennsylvania

Christine M. Walko, PharmD, BCOP, FCCP*

Senior Member, Individualized Cancer
Management
H. Lee Moffitt Cancer Center
Tampa, Florida

Jennifer Young, PharmD, BCOP

Clinical Pharmacy Specialist – Pediatric
Oncology
Cincinnati Children's Hospital Medical
Center
Cincinnati, Ohio

*Content Matter Experts

Reviewers

Courtney Alexander, PharmD, BCOP, BCPS

Allison Bass, PharmD, BCOP

Mollie Beck, PharmD, BCOP

Michael Buege, PharmD, BCOP

Alison Carulli, PharmD, BCOP

Soniya Chandrasekhara, PharmD, BCOP

Jill Comeau, PharmD, BCOP

Phuong Dao, PharmD, BCOP

Bryna Ewachiw, PharmD, BCOP

Bryan Fitzgerald, PharmD, BCOP

Lisa Grate, PharmD, MS, BCOP, BCPS

Hailey Hill, PharmD, BCOP

Shahrier Hossain, PharmD, BCOP

Caren Hughes, PharmD, MBA, BCOP

Mitchell Hughes, PharmD, BCOP, BCPS

Anna Jan, PharmD, BCOP

Ashley Johns, PharmD, MS, BCOP

Justin Julius, PharmD, BCOP

Leslie Lamontagne, PharmD, BCOP

Maya Leiva, PharmD, BCOP

Andrew Li, PharmD, BCOP

Bob Luschen, PharmD, BCOP

Morgan Mace, PharmD, BCOP

Claire Mach, PharmD, BCOP

Brendan Mangan, PharmD, BCOP

Stephanie Matta, BSPharm, PharmD, BCOP

Oxana Megherea, PharmD, BCOP

Katlyn Mulhall, PharmD, BCOP

Carolyn Oxencis, PharmD, BCOP

Austin Percy, PharmD, BCOP, BCPS

Candy Peskey, PharmD, BCOP, BCPS

Farah Raheem, PharmD, BCOP

Melvin Rivera, PharmD, BCOP

Glenn Roma, PharmD, PhD, BCOP

Stephanie Sanders, PharmD, BCOP, BCCCP

Fuwang Xu, PharmD, BCOP, BCGP

Barbara Yim, PharmD, BCOP

Spencer Yingling, PharmD, BCOP

Mark Zangardi, PharmD, BCOP

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Field Testers

Susan Abeln, RPh, BCOP	Caren Hughes, PharmD, BCOP, MBA	Carolyn Oxencis, PharmD, BCOP
Pearl Abraham, PharmD BCPS BCOP	Mitchell Hughes, PharmD, BCOP	Tejas Patel, PharmD, BCOP
Stephen Aiken, PharmD, BCOP	Ying Ci (Wendy) Hui, PharmD, BCOP	Austin Percy, PharmD, BCPS, BCOP
Courtney Alexander, PharmD, BCPS, BCOP	Paul Hutson, PharmD, BCOP	Candy Peskey, PharmD, BCPS, PCOP
Nada Alsuhbany, PharmD, BCOP	Raymond Iannuccillo, PharmD, MBA, BCPS, BCOP	Trevor Potts, PharmD, BCOP
Laura Alwan, PharmD, BCOP	Lauren Ice, PharmD, BCOP, BCPS	Justine Preedit, PharmD, BCOP
Sarah Anderson, PharmD, BCOP	Anna Jan, PharmD, BCOP	Victoria Printz, PharmD, BCPS, BCOP
Allison Bass, PharmD, BCOP	Cheryl Jee, PharmD, BCOP	Heena Rathod, PharmD, BCOP
Mollie Beck, PharmD, BCOP	Ashley Johns, PharmD, MS, BCOP	Mohammad Rattu, PharmD, BCOP, BCPS, BCGP
Denae Beckman, PharmD, BCOP	Jocelyn Joseph, PharmD, BCOP	Sean Reilly, BSpHarm, PharmD
Brandon Benson, PharmD, BCOP	Justin Julius, PharmD, BCOP	Amy Riedel, PharmD, APh, BCPS, BCOP
Janet Bramell, PharmD, BCPS, BCOP	Amy Kamien, PharmD, BCOP	Melvin Rivera, PharmD, BCOP
Vickie Bridges, PharmD, BCOP	Minhee Kang, PharmD, BCPS, BCOP	Glenn Roma, PharmD, PhD, BCOP
Michael Buege, PharmD, BCOP	Melanie Kay, PharmD, BCOP, BCPS	Erika Rugay-Buchanan, PharmD, BCOP
Yuliya Byakina, PharmD, BCOP	Mijeong Kim, PharmD, PhD, BCPS, BCOP	Teresa Rushing, PharmD, BCPS, BCOP
Cathy Cao, PharmD, BCOP	Tiffany Knoll, PharmD, MS, BCOP	Danielle Rustem, PharmD, BCOP
Alison Carulli, PharmD, BCOP	Victoria LaMonaca, PharmD, BCOP	Theresa Ryan, PharmD, BCOP
Amanda Cass, PharmD, BCPS, BCOP	Leslie Lamontagne, PharmD, BCOP	Kristen Rychalsky, PharmD, BCPS, BCOP
Jill Cassaday, PharmD, BCPS, BCOP	Jodi Lech, PharmD, BCOP	John Patrick Sanchez, PharmD, BCOP
Sarah Castelo, PharmD, BCOP	Jessica LeClair, PharmD, MBA, BCOP	Stephanie Sanders, PharmD, BCOP, BCCCP
Soniya Chandrasekhara, PharmD, BCOP	Matthew Lei, PharmD, BCOP	Deborah Sarama, PharmD, BCOP
Kevin Chen, PharmD, MS, BCOP, CPP	Maya Leiva, PharmD, BCOP	Danielle Schlafer, PharmD, BCOP
Jill Comeau, PharmD, BCOP	Tanja Lepir, PharmD, BCOP	Bryan Schuler, PharmD, BCOP
Wendy Covert, PharmD, BCOP	Whitney Lewis, PharmD, BCOP	Ryan Schuller, PharmD, BCOP
Jon Crowley, PharmD, BCOP	Andrew Li, PharmD, BCOP	Shreya Shah, PharmD, BCOP
Phuong Dao, PharmD, BCOP	Barbara Li, PharmD, BCOP	Beenish Shaikh, PharmD, BCPS, BCOP
Travis Dash, PharmD, BCOP	Suwicha Limvorasak, PharmD, BCOP	R. Briana Shamilov, PharmD, BCOP
Jessica Davis, PharmD, BCOP	Pohung Lin, PharmD, BCPS, BCOP	Diana Shen, PharmD, BCOP
Bryna Delman Ewachiw, PharmD, BCOP	Amanda Lucky, PharmD, BCPS, BCOP	Samantha Shi, PharmD, BCOP
Kelley Doherty, PharmD, BCOP, BCPS	Bob Luschen, PharmD, BCOP	Patrick Shin, PharmD, BCPS, BCOP
Ekim Ekinci, PharmD, MS, BCOP	Mary Mably, BSpHarm, BCOP	Sunao Slayton, PharmD, BCOP
Victor Elsasser, PharmD, BCPS, BCOP	Morgan Mace, PharmD, BCOP	Christopher Smith, PharmD, BCOP
Olivia Fahey, PharmD, BCOP	Claire Mach, PharmD, BCOP	Amy Stewart, PharmD, BCOP
Kelsey Finch, PharmD, BCOP	Brendan Mangan, PharmD, BCOP	Lauren Trisler, PharmD, BCOP
Alan Fisher, BS, PharmD, BCOP	Amanda Manoogian, PharmD, BCPS, BCOP	David Turberville, PharmD, BCOP
Bryan Fitzgerald, PharmD, BCOP	Samantha Maples, PharmD, BCOP	Malgorzata Tyszk, BScPharm, BCOP
Susan Flatebo, PharmD, BCOP	Jessica Marini, PharmD, BCOP	Angela Urmanski, PharmD, BCOP
Ramiro Garza, PharmD, BCOP	Stephanie Matta, PharmD, BCOP	Sorana G. Ursu, PharmD, BCOP
Elizabeth George, BSpHarm, BCOP	Lilian May, PharmD, BCPS, BCOP, RPH	Rachel Vaught, PharmD, BCOP
Muoi Gi, PharmD, BCOP	Heather McCarthy, PharmD, BCOP	Cory Vela, PharmD, BCOP
Allison Graner, PharmD, BCOP	Kelly McElroy, PharmD, BCOP	Eric Vertin, PharmD, BCPS, BCOP
Lisa Grate, PharmD, MS, BCOP, BCPS	Oxana Megherea, PharmD, BCOP	Fuwang Xu, PharmD, BCOP, BCGP
Keith Hecht, BCOP	Natoya Muirhead, Pharm.D., BCOP	Carol Yarrington, PharmD, BCOP
Kristi Herald, PharmD, BCPS, BCOP	Katlyn Mulhall, PharmD, BCOP	Barbara Yim, PharmD, BCOP
Hailey Hill, PharmD, BCOP	Jessica Muth, PharmD, BCPS, BCOP	Spencer Yingling, PharmD, BCOP
Mikala Hillis, PharmD, BCOP	Laura Nice, PharmD, BCOP	Crystal Young, PharmD, BCOP
Anna Hitron, PharmD, BCOP	Nancy M. Nix, PharmD, BCPS, BCOP	Mark Zangardi, PharmD, BCOP
Shahrier Hossain, PharmD, BCOP	Yevgeny Okumyansky, PharmD, BCPS, BCOP	Kelsey Zielke, PharmD, BCPS, BCOP

Disclosures

In accordance with our accreditor's Standards of Integrity and Independence in Accredited Continuing Education, ASHP requires that all individuals in control of content disclose all financial relationships with ineligible companies. An individual has a relevant financial relationship if they have had a financial relationship with an ineligible company in any dollar amount in the past 24 months and the educational content that the individual controls is related to the business lines or products of the ineligible company.

An ineligible company is any entity producing, marketing, re-selling, or distributing health care goods or services consumed by, or used on, patients. The presence or absence of relevant financial relationships will be disclosed to the activity audience.

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The following persons in control of this activity's content have relevant financial relationships:

- Anthony J. Perissinotti: Consultant and Advisory Board Member, Servier, BeiGene, Pfizer, Sanofi Aventis; Advisory Board Member, Abbvie, Rigel Pharmaceuticals, Janssen; Research Funding, Incyte
- Alexis Jones: Multidisciplinary Council Member, Esai
- Colleen McCabe: Advisory Board Member, Daiichi Sankyo
- Courtney Cavalieri: Consultant, Pfizer
- Karen M. Fancher: Consultant, BTG Specialty Pharmaceuticals; Consultant, AstraZeneca Pharmaceuticals LP, Merck & Co
- Mitchell Hughes: Grant Recipient, Acerta Pharma
- Justin Julius: Speaker's Bureau, AstraZeneca, Daiichi Sankyo, Bristol Myers Squibb; Consultant, Bristol Myers Squibb
- Maya Leiva: Speaker's Bureau, Bristol Myers Squibb
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- Donald Moore: Advisory Board Member, Oncocept, Janssen
- All other planners, presenters, reviewers, ASHP staff, and others with an opportunity to control content report no financial relationships relevant to this activity.

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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.