

### **Antineoplastic Therapy and Immunotherapy Course**

UPMC Hillman Cancer Center: Virtual via MS Teams

Day One: Wednesday, October 9, 2024

Day Two: Wednesday, October 16, 2024

Day Three: Wednesday, October 23, 2024

Day Four: Wednesday, October 30, 2024

Test Date: Thursday, November 14, 2024

### **Learning Objectives**

After participation in this activity, the learner will be able to:

- Compare and contrast the mechanism of action between antineoplastic therapy and immunotherapy.
- Recall the side effect profiles for the different classes of antineoplastic agents and immunotherapies.
- Recall nursing care considerations for patients receiving antineoplastic therapy and immunotherapy.
- Compare and contrast the mechanisms of action, side effect profile, complications, and management of side effects for patients receiving novel treatment modalities including Car T-cell therapy, BiTE therapy, and TIL-cell therapy.
- Describe the role that chemotherapy protectants play in the treatment of cancer.
- Recall patient barriers to adherence of oral cancer medications.
- Apply principles of antineoplastic therapy drug administration in calculating drug doses to include calculation of body surface area (BSA), absolute neutrophil count (ANC), creatinine clearance (Cr Cl) and carboplatin dosing.
- Describe the steps to ensure safe administration of antineoplastic and immunotherapy agents.
- Identify assessment priorities to effectively manage patient symptoms, dose-limiting toxicities, and adverse effects of antineoplastic therapy and immunotherapy.
- Recognize relevant resources for proper use of personal protective equipment (PPE) and excretion precautions.
- Prioritize the appropriate interventions for the management of hypersensitivity reactions.
- Describe the appropriate interventions for the management of vesicant extravasation.
- Discuss the differences between cancer genetics and cancer genomics.
- Identify the role that growth factors play when treating oncology patients.
- Recall strategies to prevent medication errors.

Day One: Wednesday, October 9, 2024

| 7:30 am  | Registration and Microsoft Teams Login    |                                      |
|----------|---|--------------------------------------|
| 8:00 am  | Welcome and Course Overview               | Maura Miller, DNP, APRN, FNP-BC, OCN |
| 8:20 am  | Principles of Antineoplastic Drug Therapy | Ernie Sanchez, PharmD                |
| 9:20 am  | Antineoplastic Therapy Administration     | Markie Rearick, MSN, RN, BMTCN       |
| 10:35 am | Break                                     |                                      |
| 10:45 am | Extravasation                             | Nancy Birus, MSN, RN, OCN            |
| 11:15 am | Hypersensitivity                          | Alyssa Owens, MPAS, PA-C             |
| 11:50 am | Lunch                                     |                                      |
| 12:30 pm | Error Prevention                          | Amy DiMaggio, MSN,RN, OCN            |
| 1:10 pm  | Build Your Knowledge Case Studies         | Lynne O'Connor, MSN, RN, OCN         |
| 2:00 pm  | Break                                     |                                      |
| 2:10 pm  | Alkylating Agents                         | Maura Miller, DNP, APRN, FNP-BC, OCN |
| 3:10 pm  | Chemotherapy Protectants                  | Lynne O'Connor, MSN, RN, OCN         |
| 3:45 pm  | Adjournment                               | Maura Miller, DNP, APRN, FNP-BC, OCN |

Day 2: Wednesday, October 16, 2024

| 7:30 am  | Registration and Microsoft Teams Login                                      |                                      |
|----------|---|--------------------------------------|
| 8:00 am  | Welcome and Course Overview   | Maura Miller, DNP, APRN, FNP-BC, OCN |
| 8:05 am  | Genetics vs. Genomics   | Melissa K. Bourdius, MS, CGC         |
| 8:40 am  | Antimetabolites   | Tim George, PharmD, BCOP             |
| 9:40 am  | Break   |                                      |
| 9:50 am  | Antitumor Antibiotics   | Steve Moretti, PharmD                |
| 10:50 am | Cytokines, L Asparaginase, and Vaccine Therapy                              | Tim George, PharmD, BCOP             |
| 11:50 am | Lunch   |                                      |
| 12:20 pm | Growth Factors  | Emily Mueseler, MPAS, PA-C           |
| 12:50 pm | Understanding Organ Toxicity: Management and Adverse Events of Chemotherapy | Linda Pfeifer, CRNP, RN              |
| 1:50 pm  | Break   |                                      |
| 2:00 pm  | Miscellaneous Agents  | Tim Brenner, PharmD, BCOP            |
| 4:00 pm  | Adjournment   | Maura Miller, DNP, APRN, FNP-BC, OCN |

Day 3: Wednesday, October 23, 2024

| 7:30 am  | Registration and Microsoft Teams Login     |                                      |  |
|----------|--|--------------------------------------|--|
| 8:00 am  | Post Course Instructions                   | Maura Miller, DNP, APRN, FNP-BC, OCN |  |
| 8:20 am  | Hormone Therapy: Breast Cancer             | Courtney Stetor, MPAS, PA-C          |  |
| 8:50 am  | Hormone Therapy: Prostate Cancer           | Tom Boyer, PA-C                      |  |
| 9:30 am  | Adoptive Cellular Therapy and BiTE Therapy | Shrina Duggal, PharmD, BCOP          |  |
| 10:30 am | Break                                      |                                      |  |
| 10:40 am | Monoclonal Antibodies: Part One            | Melissa Bastacky, PharmD, BCOP       |  |
| 12:00 pm | Lunch                                      |                                      |  |
| 12:30 pm | Monoclonal Antibodies: Part Two            | Melissa Bastacky, PharmD, BCOP       |  |
| 1:30 pm  | Tyrosine Kinase Inhibitors: Part One       | Amanda Agnew, PharmD, BCOP           |  |
| 2:25 pm  | Break                                      |                                      |  |
| 2:35 pm  | Tyrosine Kinase Inhibitors: Part Two       | Jason Steele, PharmD, BCOP           |  |
| 3:40 pm  | Oral Adherence                             | Nancy Birus, MSN, RN, OCN            |  |
| 4:15 pm  | Adjournment                                | Maura Miller, DNP, APRN, FNP-BC, OCN |  |

Day 4: Wednesday, October 30, 2024

| 7:30 am  | Registration and Microsoft Teams Login |   |
|----------|--|---|
| 8:00 am  | Post Course Instructions               | Maura Miller, DNP, APRN, FNP-BC, OCN  |
| 8:20 am  | Plant Alkaloids                        | Marissa Lamary, PA-C  |
| 9:00 am  | Homework Review                        | Lynne O'Connor, MSN, RN, OCN  |
| 9:45 am  | Break                                  |   |
| 9:55 am  | Case Study                             | Maura Miller DNP, APRN, FNP-BC, OCN   |
| 10:45 am | Review/Jeopardy                        | Amy DiMaggio, MSN, RN, OCN<br>Maura Miller DNP, APRN, FNP-BC, OCN<br>Lynne O'Connor, MSN, RN, OCN |
| 11:45 am | Post Class Instructions                | Maura Miller, DNP, APRN, FNP-BC, OCN  |
| 12:00 pm | End of Class/Adjournment               | Maura Miller, DNP, APRN, FNP-BC, OCN  |

#### **Course Exam**

### **UPMC Employees:**

You will take course exam on your business unit as specified by your manager. The electronic test will be taken virtually in HR Direct - Learning on Thursday, November 14,2024. The following information must be provided to course director by <a href="Wednesday October 23">Wednesday October 23</a>, <a href="2024">2024</a> (Day 3) via email to Maura Miller kimballmk2@upmc.edu

- Name of exam proctor and contact information
- Test date (if other than scheduled test date)

#### **Non-UPMC Attendees:**

You will complete a paper test at your business unit as directed by your manager on the same day as the UPMC employees. The following information must be provided to course director by <a href="Wednesday">Wednesday</a>, <a href="October 23">October 23</a>, <a href="2024">2024 (Day 3)</a> via email to <a href="Maura Miller kimballmk2@upmc.edu">Maura Miller kimballmk2@upmc.edu</a>

- Name of exam proctor and contact information
- Test date (if other than scheduled test date)

### **Faculty Listing**

| Amanda Agnew, PharmD, BCPS,<br>BCOP<br>Clinical Oncology Pharmacist<br>UPMC Hillman Cancer Center           | Melissa Bastacky, PharmD, BCOP<br>Clinical Pharmacy Specialist<br>UPMC Hillman Cancer Center          | Nancy Birus, MSN, RN, OCN<br>Clinical Education Specialist<br>UPMC Hillman Cancer Center                                       |
|---|---|--|
| Melissa K. Bourdius, MS, CGC<br>Genetics Counselor<br>Special Genetic Counsel<br>UPMC Magee-Womens Hospital | Tom Boyer, PA-C<br>Physician Assistant<br>UPMC Hillman Cancer Center                                  | Tim Brenner, PharmD, BCOP<br>Clinical Pharmacy Specialist<br>UPMC Hillman Cancer Center  |
| Amy DiMaggio, MSN, RN, OCN<br>Clinical Education Specialist<br>UPMC Hillman Cancer Center                   | Shrina Duggal, PharmD, BCOP<br>Lead Clinical Oncology Pharmacist<br>UPMC Hillman Cancer Center        | Timothy George, PharmD, BCOP<br>Clinical Pharmacy Specialist<br>UPMC Hillman Cancer Center                                     |
| Marissa Lamary, PA-C<br>Physician Assistant<br>UPMC Hillman Cancer Center<br>UPMC Shadyside                 | Maura Miller DNP, APRN, FNP-BC,<br>OCN<br>Clinical Education Specialist<br>UPMC Hillman Cancer Center | Steven Moretti, PharmD<br>Oncology Consultant Pharmacist<br>Investigational Drug Service<br>UPMC Hillman Cancer Center         |
| Emily Mueseler, MPAS, PA-C<br>Physician Assistant<br>UPMC Hillman Cancer Center                             | Lynne O'Connor, MSN, RN, OCN<br>Advanced Clinical Education Specialist<br>UPMC Hillman Cancer Center  | Alyssa Owens, MPAS, PA-C<br>Physician Assistant<br>UPMC Hillman Cancer Center  |
| Linda Pfeifer, CRNP, RN<br>Nurse Practitioner<br>UPMC Hillman Cancer Center                                 | Markie Rearick, MSN, RN, BMTCN<br>Clinical Education Specialist<br>UPMC Shadyside                     | Ernest M. Sanchez, Pharm.D.<br>Lead Pharmacist of Oncology<br>Operations, Department of<br>Pharmacy<br>UPMC Shadyside Hospital |
| Jason Steele, PharmD, BCOP<br>Oncology Clinical Pharmacist<br>UPMC Hillman Cancer Center                    | Courtney Stetor, MPAS PA-C<br>Physician Assistant<br>UPMC Hillman Cancer Center                       |  |
|   |   |  |

#### **Contact Hours**

In support of improving patient care, the University of Pittsburgh is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

The University of Pittsburgh has been authorized by the American Academy of PAs (AAPA) to award AAPA Category 1 CME credit for activities planned in accordance with AAPA CME Criteria. This activity is designated for 25.25 AAPA Category 1 CME credits. PAs should only claim credit commensurate with the extent of their participation.

The maximum number of hours awarded for this Continuing Nursing Education activity is 25.25 contact hours.

To receive 25.25 Contact Hours, the learner must sign into each class day via Microsoft Teams, attend all four class days, and pass the exam with an 80% or greater. Following test completion, the learner will complete the evaluation on the CCE site and claim credit.

#### **Disclosure of Conflicts of Interest**

All individuals in a position to control the content of this education activity are required to disclose all relevant financial relationships with any proprietary entity producing, marketing, re-selling, or distributing health care goods or services, used on, or consumed by, patients.

The following information was provided:

Amanda Agnew, Nancy Birus, Melissa K. Bourdius, Thomas G. Boyer, Timothy Brenner, Amy DiMaggio, Marissa Lamary, Maura Miller, Steven Moretti, Emily Mueseler, Lynne O'Connor, Alyssa Owens, Linda Pfeifer, Markie Rearick, Ernest Sanchez, Courtney Stetor, and the planning committee for this activity did not have any relevant financial relationships with a commercial interest.

The following information was disclosed:

Melissa Bastacky: Stockholder: CVS Health

Shrina Duggal: Consultant Up ToDate; CE Speakers Bureau: Astellas, Pfizer, Incyte

Timothy George: Stockholder: Syros Pharmaceuticals, Valneva

Jason Steele: Stockholder: Abbvie