

# 2009 Oncology Pharmacy Home Study Syllabus

## Learning Objectives

### Melanoma

Val R. Adams, Pharm.D., FCCP, BCOP  
University of Kentucky College of Pharmacy  
Lexington, Kentucky

#### Learning Objectives:

1. Describe the presenting signs and symptoms of malignant melanoma
2. Discuss an individual's risk factors for developing melanoma.
3. Outline a plan for reducing the risk of melanoma for a high-risk individual.
4. Recommend a treatment based on stage.

### Thromboembolism

Val R. Adams, Pharm.D., FCCP, BCOP  
University of Kentucky College of Pharmacy  
Lexington, Kentucky

#### Learning Objectives:

1. Describe the roles of unfractionated heparin, low-molecular-weight heparin, and warfarin in preventing deep vein thrombosis (DVT)/pulmonary embolism recurrence.
2. Recommend appropriate use of antithrombotic agents in patients who have cancer but not thromboembolism.
3. Recommend the appropriate duration of low-molecular-weight heparin therapy after DVT.

### Breast Cancer

Chad Barnett, Pharm.D., BCOP  
Clinical Pharmacy Specialist,  
The University of Texas M.D. Anderson Cancer Center  
Houston, Texas

#### Learning Objectives:

1. Compare the clinical outcomes related to different dosing and administration schedules for paclitaxel and docetaxel when administered after anthracycline-based therapy for the adjuvant treatment of breast cancer.
2. Outline the clinically relevant toxicities between the respective treatment arms.
3. Discuss how this information might be incorporated into standard treatment recommendations for the treatment of early-stage breast cancer.

## **Myelodysplastic Syndrome**

Chris Fausel, Pharm.D., BCPS, BCOP  
Clinical Specialist  
Indiana University Simon Cancer Center  
Indianapolis, Indiana

### **Learning Objectives:**

1. Explain the study design and the patient populations examined in this trial.
2. Evaluate the efficacy data and the impact on overall survival in the treatment groups.
3. Delineate the efficacy results applied to subgroups on the basis of known disease prognostic factors.
4. Relate the findings of this trial to the consensus guidelines for colony-stimulating factor support in patients receiving cytotoxic chemotherapy.

## **Lung Cancer**

R. Donald Harvey, Pharm.D., FCCP, BCPS, BCOP  
Assistant Professor, Hematology/Medical Oncology  
Emory University  
Atlanta, Georgia

### **Learning Objectives:**

1. Describe the role of histology in the selection of initial therapy for unresectable non–small cell lung cancer (NSCLC).
2. Identify patient-specific criteria to assist in selecting NSCLC regimens of novel combinations and existing standard therapies.
3. Evaluate differences in response and toxicity outcomes with variable timing of second-line therapy for advanced NSCLC.

## **Pediatric Oncology**

Mark T. Holdsworth, Pharm.D., BCOP  
Associate Professor of Pharmacy and Pediatrics  
College of Pharmacy, University of New Mexico  
Albuquerque, New Mexico

### **Learning Objectives**

1. List the risk factors for hyperglycemia among children receiving induction therapy for acute lymphoblastic leukemia.
2. Analyze the variables included in the logistic regression model for determining risk factors for reasons for admission and occurrence of infectious complication comparisons.
3. Identify the primary limitation of the main study findings comparing euglycemic patients with glyceemic patients.

4. Identify the main limitation(s) of the Childhood Cancer Survivor Study that determined the incidence of osteonecrosis (ON).
5. Identify the main risk factors for ON in survivors of childhood cancer.
6. Discuss the relationship between treatment-related factors and patient characteristics in the development of ON.

## **Prostate Cancer**

Jill M. Kolesar, Pharm.D., FCCP, BCPS  
Associate Professor  
University of Wisconsin  
Madison, Wisconsin

### **Learning Objectives:**

1. Describe the incidence of diabetes mellitus and cardiovascular disease in men with prostate cancer undergoing treatment with androgen deprivation therapy (ADT).
2. Explain the mechanisms underlying the risks of diabetes mellitus and cardiovascular disease.
3. Outline a plan for a man with prostate cancer receiving ADT to reduce his risk and treat diabetes mellitus and cardiovascular disease.

## **Supportive Care**

Theresa A. Mays, Pharm.D., B.S., BCOP  
Director, Investigational Drug Section (IDS)  
South Texas Accelerated Research Therapeutics (START)  
San Antonio, Texas

### **Learning Objectives:**

1. Discuss the appropriate clinical assessment of patients with chemotherapy-induced neurotoxic effects.
2. Explain the individual mechanisms of neurotoxicity for each class of chemotherapy agents.
3. List the different presentations of neurotoxicity for each class of chemotherapy agents.
4. Recommend appropriate treatment strategies for patients who develop neurotoxic reactions from chemotherapy.

## **Gynecologic Oncology**

Dayna L. McCauley, Pharm.D., BCOP.  
Smithtown, New York

### **Learning Objectives:**

1. Determine the patients likely to benefit from vaccination with Human Papillomavirus Quadrivalent (Types 6, 11, 16, and 18) Vaccine, Recombinant (GARDASIL).
2. List the limitations of vaccination with Human Papillomavirus Quadrivalent (Types 6, 11, 16, and 18) Vaccine, Recombinant (GARDASIL).
3. Describe the benefit of concurrent cisplatin-containing chemotherapy in patients undergoing radiation for cervical cancer.
4. Assess a patient for toxic effects when she is undergoing chemoradiation for cervical cancer.

## **Colon Cancer**

Patrick Medina, Pharm.D., BCOP  
Associate Professor  
University of Oklahoma College of Pharmacy  
Oklahoma City, Oklahoma

### **Learning Objectives:**

1. Outline the new screening guidelines for colorectal cancer.
2. Given a patient case, develop a specific screening protocol.
3. Describe the pros and cons of new tests listed in the guidelines including fecal immunochemical testing, “virtual CT [computed tomography],” and stool DNA testing.
4. Describe the study population and major end point of the trial evaluating the use of adjuvant chemotherapy in Medicare and Medicaid patients.
5. Discuss the results of the trial; include the likelihood of starting and finishing chemotherapy and the role that age and other variables had on the initiation of chemotherapy.

## **Hematopoietic Stem Cell Transplantation**

Ashley Morris Engemann, Pharm.D., BCOP  
Clinical Associate  
Division of Cellular Therapy  
Duke University Medical Center  
Durham, North Carolina

### **Learning Objectives:**

After reviewing the following article, the participant should be able to:

1. Discuss the impact of hematopoietic stem cell source on the development of acute graft-versus-host disease (GVHD) in adults undergoing human leukocyte antigen-identical stem cell transplantation for leukemia.
2. Describe the contribution of stem cell recipient age and race to the development of acute GVHD in the described population.
3. Evaluate the role that the stem cell transplant conditioning regimen plays in the development of acute GVHD in the defined population.
4. Assess the importance of the cytomegalovirus serologic status of the donor/recipient pair in its influence on the risk of developing acute GVHD in the described population.

## **Pancreatic, Stomach, and Liver Tumors**

Dina K. Patel, Pharm.D., BCOP  
Clinical Pharmacy Specialist  
The University of Texas M.D. Anderson Cancer Center  
Houston, Texas

### **Learning Objectives:**

1. Describe the pathogenesis and pathophysiology of liver tumors.
2. Identify the risk factors, clinical symptoms, and staging for liver tumors.
3. Explain the role of angiogenesis inhibitors with respect to liver tumors.
4. Outline the appropriate pharmacologic and nonpharmacologic treatments of liver tumors.
5. Discuss the pharmacology and toxicities associated with each chemotherapeutic agent used to treat liver tumors.

## **Literature Evaluation and Biostatistics in Oncology**

Linda S. Tyler, Pharm.D.  
Administrative Director, Pharmacy Services  
University of Utah Hospitals and Clinics  
Salt Lake City, Utah

### **Learning Objectives:**

1. Define subset analyses and explain the reasons for conducting subset analyses.
2. Identify the statistical methods that are used for subgroup analyses.
3. Analyze the potential limitations of subgroup analyses.

4. Given the number of subgroups, estimate the probability of false-positive results.
5. Given an article from the biomedical literature, evaluate the advantages and limitations of subgroup analyses.
6. Summarize the guidelines the reader should expect in an article on subset analyses.

## **Head and Neck Cancer**

John Valgus, Pharm.D., BCOP  
Hematology/Oncology Clinical Specialist  
University of North Carolina Hospitals and Clinics  
Clinical Assistant Professor  
UNC School of Pharmacy  
Chapel Hill, North Carolina

### **Learning Objectives:**

1. Identify proven risk factors for the development of head and neck cancer.
2. Compare and contrast various first-line therapies for the treatment of locally advanced head and neck cancer.
3. Evaluate the role of available biologic agents in the treatment of recurrent or metastatic head and neck cancer.