



COLLEGE of AMERICAN
PATHOLOGISTS

Multidisciplinary Breast Pathology

Advanced Learning Series

MANUAL

This Multidisciplinary Breast Pathology manual is current as of October, 2018. Information is subject to change.

CURRICULUM

The MBP Advanced Learning Series curriculum focuses on providing pathologists with the knowledge and skills needed to be a vital member of the patient care team. The CAP's MBP Advanced Learning Series curriculum is organized and summarized below by two delivery modalities: online and faculty-led. For activity sequence, please refer to the MBP Advanced Learning Series Workshop Agenda section.

Accreditation

The College of American Pathologists (CAP) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Accreditation in Canada

The online courses in this program are Accredited Self Assessment Program (Section 3) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada, approved by the Canadian Association of Pathologists - Association Canadienne des Pathologistes. The maximum number of CPD credits to be claimed is specific to each course. Remember to visit MAINPORT to record your learning and outcomes.

Accessing MBP Advanced Learning Series Online Activities

The following online activities are available at least one month prior to the Workshop. Upon registration, these activities will be added to your CAP Learning Transcript. Descriptions for each online activity follow this listing. Clicking on an activity title navigates directly to the description.

- [Saving Breast Cancer Patients With BPF Testing](#) (3.75 CME/SAM)
- [Correlating Pathology Results to Breast Imaging](#) (3.25 CME/SAM)
- [Diagnosing and Classifying Hyperplasia, Atypical Hyperplasia, and Low-Grade DCIS](#) (1.25 CME/SAM)
- [Essential Elements of Multidisciplinary Breast Cancer Reporting](#) (1.25 CME/SAM)
- [Factors of Breast Conservation](#) (3.75 CME/SAM)
- [Understanding Breast Imaging Terminology](#) (1.75 CME/SAM)
- [Use of Immunohistochemistry in the Diagnosis of Breast Lesions](#) (1.25 CME/SAM)

Online Instructions

Participants must establish a CAP Web account in order to access and complete the online training and cognitive assessment. If you do not have an individual Web account, go to cap.org, then select the Log In/Register button and complete and submit the requested information.

Upon registration, the online activities will be added to your CAP Learning Transcript. To access,

1. Go to www.cap.org and click on **LOG IN** on the upper right hand corner and login with your user id and password.
2. Click on the **LEARNING** Tab and then click on the **IN PROGRESS Learning** Tab
3. Click the title of the activity you would like to access then click **Resume**.
4. On the *Activity Overview* tab, scroll to the bottom of the page to click the **ACCEPT** button and then click the **Continue** button.

Technical Requirements

Most common operating systems are enabled to run CAP activities. The following systems support the activities:

- Operating system: Windows (Vista, Windows 7, Windows 8, Windows 10), Mac IOS
- Browser version: Internet Explorer 10.x and newer, Firefox, Chrome, Safari
- Pop-up blockers must be turned off to complete CAP activities.

MBP Advanced Learning Series Online Activities

Saving Breast Cancer Patients With BPF Testing

Prerequisite Activity for the MBP Workshop

Credits: 3.75 CME/SAM



CME Category 1: The CAP designates this internet enduring materials educational activity for a **maximum of 3.75 AMA PRA Category 1 Credit™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This activity meets the American Board of Pathology's (ABP) Maintenance of Certificate (CC) requirements for Self-Assessment Modules (SAM).

SAM: 15-question SAM

CC Categories: Medical Knowledge, Patient Care

The evaluation and interpretation of breast predictive factors (HER2, ER/PgR) are critical to selecting the most appropriate treatment regimen for women with breast cancer. These important tests suffer from significant false-positive and false-negative rates. Many of the factors influencing testing accuracy happen before the test is actually performed. In this activity, you learn about the standardization of these preanalytical variables, including specimen handling and tissue fixation, via a current literature review. You review the ASCO-CAP ER/PgR and HER2 Guidelines documents in their entirety; learn the rationale for the Guidelines via scientific evidence; and consider strategies for implementing the guidelines. The activity will also introduce you to information on molecular analysis and its impact on patient care decisions.

Objectives

- Explain the ASCO-CAP ER/PgR Testing Guideline and its implications for laboratory procedures, test results, and patient care.
- Explain the ASCO-CAP HER2 Testing Guideline and its implications for laboratory procedures, test results, and patient care.
- Determine when it is appropriate to repeat an ER/PgR or HER2 test per the ASCO/CAP Guidelines.
- Explain the importance of tissue handling and its impact on ER/PgR and HER2 assay performance.
- Explain the potential use of molecular analysis in patient care decisions.

MBP Advanced Learning Series Online Activities, cont'd

Correlating Pathology Results to Breast Imaging

Credits: 3.25 CME/SAM



CME Category 1: The CAP designates this internet enduring materials educational activity for a **maximum of 3.25 AMA PRA Category 1 Credit™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This activity meets the American Board of Pathology's (ABP) Maintenance of Certificate (CC) requirements for Self-Assessment Modules (SAM).

SAM: 15-question SAM

CC Categories: Medical Knowledge, Patient Care

Correlating the histologic and radiographic findings is essential to ensure that the abnormality identified by imaging studies has been properly evaluated. Failure to perform proper correlation can result in a false negative diagnosis if a suspicious lesion was inadequately sampled, an underestimate of the extent of disease, delayed diagnosis of malignancy, and/or failure to identify nonmalignant high-risk lesions for which additional measures may be indicated. In this activity you'll learn to identify key features in radiographic images that prompt biopsy and when it is appropriate to recommend excision after a core biopsy. You will also have an opportunity to practice correlating imaged findings with histologic findings and recommending a course of action when the findings do not correlate.

Objectives

- Identify features in radiographic images for which biopsy is indicated.
- Identify when it is appropriate to recommend excision after core biopsy.
- Correlate radiographic and histologic findings and recommend a course of action when the two do not correlate.

MBP Advanced Learning Series Online Activities, cont'd

Diagnosing and Classifying Hyperplasia, Atypical Hyperplasia, and Low-Grade DCIS

Credits: 1.25 CME/SAM



CME Category 1: The CAP designates this internet enduring materials educational activity for a **maximum of 1.25 AMA PRA Category 1 Credit™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This activity meets the American Board of Pathology's (ABP) Maintenance of Certificate (CC) requirements for Self-Assessment Modules (SAM).

SAM: Five-question SAM

CC Categories: Medical Knowledge, Patient Care

Breast cancer is a morphologically and clinically diverse disease. The successful treatment for the patient relies on an accurate diagnosis of the morphological changes. In this activity, you will learn to distinguish usual ductal hyperplasia from atypical ductal hyperplasia and low-grade ductal carcinoma in situ (DCIS), as well as flat epithelial atypia (FEA) from various columnar cell lesions. You will also learn the clinical significance and the current management of these diagnoses.

Objectives

- Distinguish usual ductal hyperplasia from atypical ductal hyperplasia and low-grade ductal carcinoma in situ (DCIS).
- Distinguish flat epithelial atypia from various columnar cell lesions.

MBP Advanced Learning Series Online Activities, cont'd

Essential Elements of Multidisciplinary Breast Cancer Reporting

Credits: 1.25 CME/SAM



CME Category 1: The CAP designates this internet enduring materials educational activity for a **maximum of 1.25 AMA PRA Category 1 Credit™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This activity meets the American Board of Pathology's (ABP) Maintenance of Certificate (CC) requirements for Self-Assessment Modules (SAM).

SAM: Five-question SAM

CC Categories: Medical Knowledge, Patient Care

Breast cancer is a morphologically and clinically diverse disease. Providing clear and concise reporting of the pathologic findings will provide the patient's health care team the information they need to select the best treatment for the patient. In this activity, you will learn to follow the latest published recommendations for breast cancer reporting and staging, as well as the best format to use when communicating results to the health care team.

Objectives

- Follow published recommendations for breast cancer reporting and appropriate staging.
- Generate clear, accurate, and complete reports that effectively communicate results and treatment implications to the patient's health care team.

MBP Advanced Learning Series Online Activities, cont'd

Factors of Breast Conservation

Credits: 3.75 CME/SAM



CME Category 1: The CAP designates this internet enduring materials educational activity for a **maximum of 3.75 AMA PRA Category 1 Credit™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This activity meets the American Board of Pathology's (ABP) Maintenance of Certificate (CC) requirements for Self-Assessment Modules (SAM).

SAM: 15-question SAM

CC Categories: Medical Knowledge, Patient Care

No significant difference in overall or disease-free survival exists when comparing breast conservation therapy (BCT) with mastectomy, but BCT holds the advantage of preserving the breast. In this activity, you'll gain a better understanding of the clinical studies for BCT and learn how to apply the rationale and clinical goals of BCT to your pathologic evaluation of breast specimens. You will also learn how to identify eligible patients, the best approach for specimen handling, effective methods of margin evaluation, and the effects neoadjuvant therapy has on the pathology. You will practice applying these skills to realistic breast cancer scenarios and have the opportunity to hear a discussion of challenges as well as gather best practices used by faculty experts, including a radiation oncologist.

Objectives

- Apply the rationale and clinical goals for breast conservation to your pathologic evaluation of breast specimens.
- Explain the role of radiation therapy in breast conservation.
- Determine patient eligibility for breast conservation therapy.
- Accurately evaluate all margins by gross and microscopic evaluation and submit tissue for histologic examination of the surgical specimen as appropriate for the type and size of the specimen.
- Determine when reexcision is necessary, based on specimen assessment and imaging studies.
- Perform an optimal pathologic evaluation of breast specimens after neoadjuvant therapy.

MBP Advanced Learning Series Online Activities, cont'd

Understanding Breast Imaging Terminology

Prerequisite Activity to Correlating Pathology Results to Breast Imaging

Credits: 1.75 CME/SAM



CME Category 1: The CAP designates this internet enduring materials educational activity for a **maximum of 1.75 AMA PRA Category 1 Credit™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This activity meets the American Board of Pathology's (ABP) Maintenance of Certificate (CC) requirements for Self-Assessment Modules (SAM).

SAM: Five-question SAM

CC Categories: Medical Knowledge, Patient Care

Correlating the histologic and radiographic findings is essential to ensure that the abnormality identified by imaging studies has been properly evaluated. This activity will focus on common breast imaging terminology and the application of mammography, ultrasound, and MRI imaging modalities used in evaluating breast lesions. Faculty will reference imaging studies of the most common breast abnormalities throughout the activity. You will also have the opportunity to complete review questions to check your understanding of the material.

Objectives

- Understand common terminology associated with major imaging modalities (mammography, ultrasound, and MRI).
- Recognize BI-RADS® classification and nomenclature.

MBP Advanced Learning Series Online Activities, cont'd

Use of Immunohistochemistry in the Diagnosis of Breast Lesions

Credits: 1.25 CME/SAM



CME Category 1: The CAP designates this internet enduring materials educational activity for a **maximum of 1.25 AMA PRA Category 1 Credit™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This activity meets the American Board of Pathology's (ABP) Maintenance of Certificate (CC) requirements for Self-Assessment Modules (SAM).

SAM: Five-question SAM

CC Categories: Medical Knowledge, Patient Care

Immunohistochemical studies are increasingly being used to aid in the diagnostic evaluation of breast lesions. The activity will emphasize potential pitfalls in interpretation and will discuss both common as well as less recognized (but often more challenging) sources of diagnostic error. You will learn correlative morphological features to help you interpret confusing or indeterminate immunohistochemical results. You will also gain an understanding of the appropriate settings in which these immunohistochemical studies may be diagnostically helpful and an appreciation of their uses and limitations in daily practice.

Objectives

- Interpret commonly used immunohistochemical studies.
- Recognize potential interpretative pitfalls.
- Utilize correlative morphologic features.

Faculty-led Workshop

Length: Two days

Credits: 14.0 CME/SAM



CC Categories: Medical Knowledge, Patient Care

Objectives

- Understand the implications of findings from the major breast imaging modalities, and correlate these findings with clinical and histologic information in order to provide appropriate recommendations for patient management and additional diagnostic steps when needed.
- Explain and implement best practices in breast pathology: specimen handling, assay criteria and selection, process management, and remediation of test performance issues in support of optimum patient care.
- Evaluate and interpret breast predictive factors test results following the ASCO-CAP Guidelines for cases representing all levels of complexity, integrating the test results with clinical and morphologic findings.
- Explain breast cancer treatment options and their associated toxicities, cost implications, and efficacy as indicated by test results.
- Review communication skills to more clearly communicate breast histology results and patient treatment implications with clinicians, multidisciplinary health care teams, and patients proactively and collaboratively.

The workshop includes multiple opportunities to discuss strategies needed by breast pathologists for handling difficult cases and to receive feedback from expert faculty. Workshop modules include:

Multidisciplinary Breast Pathology: The Oncologist's Viewpoint

You hear directly from an oncologist about how breast predictive factors are used to guide treatment decisions and why pathologists are important to the process.

BPF Test Interpretation and Patient Treatment Implications: Tumor Board Discussion

In this session, you participate in a tumor board simulation that includes real patient cases, covering a variety of breast cancer clinical scenarios, where you help determine appropriate next steps for each case. You have ample opportunity to ask questions about specific interpretation challenges you face, and to learn more about the ASCO-CAP Guidelines on ER/PgR and HER2 interpretation from faculty experts.

ER PgR and HER2 Overview

Breast cancer is a morphologically and clinically diverse disease. ER/PgR and HER2 are known breast cancer markers that are used to identify subsets of patients for targeted therapy. This approach to clinical management requires an accurate assessment of these markers to help ensure that the most appropriate patients are treated. In this activity, you explore the therapeutic implications of accurate testing on breast cancer care.

Challenging Cases

A number of difficult BPF cases are presented, including clinical information and test results as well as associated images for each case. You will be prompted to answer questions, such as the diagnosis or next steps for the case, and be able to view your colleague's responses to these questions. The faculty expert will then provide his insights as well as "pearls of pathology" takeaways for each case. BPF Test Interpretation and Patient Treatment Implications.

Faculty-Led Workshop, cont'd

Breast cancer is a morphologically and clinically diverse disease. ER/PgR and HER2 are known breast cancer markers that are used to identify subsets of patients for targeted therapy. This approach to clinical management requires an accurate assessment of these markers to help ensure that the most appropriate patients are treated. In this activity, you explore the therapeutic implications of accurate testing on breast cancer care. You hear directly from an oncologist about how breast predictive factors are used to guide treatment decisions and why pathologists are important to the process. You participate in a tumor board simulation that includes real patient cases, covering a variety of breast cancer clinical scenarios, where you help determine appropriate next steps for each case. You have ample opportunity to ask questions about specific interpretation challenges you face, and to learn more about the ASCO-CAP Guidelines on ER/PgR and HER2 interpretation from faculty experts.

Putting It All Together

In this wrap-up session, you have the opportunity to discuss your challenges in breast pathology and gather best practices used by faculty experts and your colleagues.

Multidisciplinary Communications

Treating breast cancer effectively requires a multidisciplinary team approach made up of pathologists, oncologists, surgeons, and radiologists. Pathologists are well suited to serve as advisors on these multidisciplinary medical teams. To succeed in this role, pathologists need to increase the frequency and quality of their interactions with clinicians about patient diagnosis and treatment. In this activity, you will learn the necessary dialogue skills for expressing ideas clearly and confidently, establishing credibility, building relationships, and influencing others in your day-to-day interactions. You practice applying these new skills to realistic breast cancer scenarios. Opportunities are given to discuss your challenges and gather best practices used by faculty experts and your colleagues.

Workshop Agenda

Participants should plan on staying for the entire workshop as completion of all CME is a requirement to obtain the Certificate of Completion.

Prior to attending the workshop, participants should complete all seven online activities. The workshop is two days in length. The agenda is provided below.

Multidisciplinary Breast Pathology Workshop Agenda	
DAY 1	
7:00-8:00 AM	Check In and Continental Breakfast
8:00 AM-Noon	Welcome Multidisciplinary Breast Pathology: The Oncologist's Viewpoint BPF Test Interpretation and Patient Treatment Implications: Tumor Board Discussion
Noon-1:00 PM	Group Lunch
1:00-5:00 PM	ER PgR and HER2 Overview Challenging Cases
DAY 2	
7:00-8:00 AM	Check In and Continental Breakfast
8:00-11:00 AM	Putting It All Together
11:00-Noon	Group Lunch
Noon-3:00 PM	Multidisciplinary Communications

PROGRAM REGISTRATION

How to Register

To start the MBP Advanced Learning Series enrollment process, submit your completed MBP Advanced Learning Series registration form along with your payment via email at AP3@cap.org, fax at 847-832-8006, or mail to:

College of American Pathologists
CAP Learning, Advanced Learning Series
325 Waukegan Road
Northfield, IL 60093

Registration Fees

MBP Advanced Learning Series Fee*:

Fee includes all online activities and the two-day workshop. The current fee for the MBP Advanced Learning Series program is located on the registration form. Discounts for Membership and Early Bird Registration will be listed.

*Fees exclude travel expenses (airfare, lodging, some meals, etc).

Advanced Learning Series Program Completion

MBP Advanced Learning Series participants need to complete and pass the CME within one year following completion of the workshop; otherwise, a new registration form and enrollment fee is required.

Cancellation Policy

Please contact the CAP should you decide to cancel your registration in the program. The CAP will refund your registration fee, less a \$100 processing fee, if you cancel prior to beginning the curriculum. After that, the CAP will consider refunds on a case-by-case basis. No refunds will be issued for online activity cancellations received after the coursework is initiated.

Should you need to cancel your workshop registration, please contact the CAP as soon as possible. The CAP will apply your payment to a future MBP Advanced Learning Series, provided you cancel within two weeks prior to the workshop.

The CAP reserves the right to cancel any Advanced Learning Series CME workshop without prior notice for insufficient preregistration or for any other reason. The CAP is not responsible for airline or hotel cancellation penalties or any other losses incurred as a result of cancellation.

Withdrawal and Refund Policy

Participants may withdraw from CAP Advanced Learning Series at any time. To withdraw, please submit a written request to the CAP Council on Education.

The CAP will manage participant requests for a program fee refund on a case-by-case basis. You must submit your refund request in writing separately from your request to withdraw from the CAP MBP Advanced Learning Series. The CAP will refund your registration fee, less a \$100 processing fee for the live workshop, if the request to withdraw occurs prior to you beginning the CAP Advanced Learning Series curriculum.

Additional Participation Information

PROGRAM COMPLETION

MBP Advanced Learning Series participants need to successfully complete the online activities (CME) and within one year following completion of the workshop; otherwise a new application and enrollment fee are required.

NOTIFICATION OF REQUIREMENTS COMPLETION

Upon successful completion of the seven online courses and two-day workshop, the participant will receive the certificate within four to six weeks of notification.

Questions?

Please contact:

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Find additional information on this and other Advanced Learning Series program at <https://learn.cap.org/offerings.aspx>.