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Breast Predictive Factors Testing

Advanced Practical Pathology Program

A Reference Manual for BPFT AP³ Participants

This BPFT AP³ manual is current as of November 1, 2011.
The manual's information is subject to change.

MANUAL

Overview

Congratulations on your desire to find out more about the CAP's Breast Predictive Factors Testing Advanced Practical Pathology Program (BPFT AP³)—or perhaps you have already decided to apply! This manual will address your questions regarding program eligibility, design, and requirements for obtaining your BPFT AP³ Certificate of Recognition.

The BPFT AP³ targets pathologists with intermediate or higher skill level in breast predictive factors testing. As a result of completing the BPFT AP³, qualified program participants will be able to:

- Explain, execute, and demonstrate best practice breast predictive factors procedures: specimen handling, processing, assay criteria and selection, process management, and remediation of test performance issues.
- Interpret and validate breast predictive factors test results for cases representing all levels of complexity, integrating the test results with clinical and morphologic findings.
- Communicate breast predictive factors test results and patient treatment implications to clinicians, multidisciplinary health care teams, and patients proactively and collaboratively.
- Explain and implement initial validation and ongoing quality management processes that monitor assay performance.

To participate in the BPFT AP³, you must complete and submit an application and pay the application fee. Candidates will receive notification regarding the disposition of their application within two to four weeks of the date it was submitted.

Read on to learn how the BPFT AP³ provides you the opportunity to learn new skills and become recognized in an emerging area for which no recognized program is currently available!

Note: Advanced Practical Pathology Programs (AP³) are intended to be learning activities. Completion of this program alone does not necessarily indicate competence. The CAP does not endorse, guarantee, or warrant, and expressly disclaims, any and all liability for the job performance of physicians participating in the program.

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Program Purpose

The College of American Pathologists (CAP) is the leading organization of board-certified pathologists, serving patients, pathologists, and the public by fostering and advocating excellence in the practice of pathology and laboratory medicine. The CAP seeks to create new and enhanced roles for the pathologist over the next generation, as well as greater recognition for pathologists as physicians actively involved on the patient care team. The BPFT AP³ directly contributes to the College's vision of transforming the role of the pathologist as a leading health care provider in a practical, coordinated, and systematic manner.

The purpose of the BPFT AP³ is to facilitate appropriate treatment of breast cancer patients by helping to ensure the accurate evaluation and interpretation of breast cancer predictive factors. The CAP awards a certificate of recognition to pathologists who successfully complete the program requirements and demonstrate knowledge of Breast Predictive Factor Testing (BPFT) per the American Society of Clinical Oncology (ASCO)-CAP Guideline Recommendations for IHC Testing of ER/PgR (published in 2010) and the ASCO-CAP Guideline Recommendations for HER2 Testing (published in 2007).

The use of prognostic and predictive biomarkers such as ER, PgR, and HER2 in breast cancer diagnosis is fundamentally different from the traditional use of markers in diagnostic pathology. In this new role, the assay results do not serve as an adjunct to making a pathologic diagnosis, rather the results stand alone in determining the clinical course of disease for the patient and their suitability for specific treatments. Given the critically important implications that the assay results will have in terms of subsequent selection of therapy and ultimately the clinical outcomes for a given patient, steps to help ensure testing accuracy are a high priority. Issues surrounding test variation and accuracy were a key driver for the development of the ASCO/CAP task force, which published guidelines for HER2 testing in early 2007, and for ER and PgR testing in 2010. These guidelines have attempted to identify the key factors that contribute to testing variability and make recommendations on how to standardize testing to help ensure accuracy. Such protocols, guidelines, and procedures will help address the variation and variability that currently exists between different laboratories and institutions for the results of these clinically important assays.

The BPFT AP³ focuses on providing and equipping pathologists with practical skills, tools, and techniques that they can implement in their laboratories in order to ensure more effective results for patients as well as complying with the new ASCO-CAP guidelines. Additional constituencies benefit from the program as well:

- **Laboratories and pathology departments/groups**—It is anticipated that some laboratories and pathology groups will directly purchase the program on behalf of an employed/contracted pathologist. Laboratories and pathology groups who do so will benefit from having increased confidence in the oversight of their BPFT programs and increasing the visibility of these programs to others. They may become preferred providers of primary BPFT or preferred locations for confirmatory testing/second opinions. The availability of one or many pathologists completing the BPFT AP³ can position the laboratory, department, or group as a local expert in breast predictive factor testing best practices and may attract pathology recruits who aspire to work with recognized mentors in best practice settings.
- **Referring clinicians, tumor boards, and multidisciplinary health care teams**—The availability of one or more pathologists completing the BPFT AP³ in the health care setting is a key factor in assuring other health care providers that BPFT is best practice, accurate, and cost-effective.
- **Most importantly, the patients**—Likewise, the availability of one or more pathologists with this training in the health care setting provides patients assurance that their BPFT results are accurate. Given test accuracy, patients can feel confident that the clinician's treatment decisions will also be accurate and cost-effective.

Program Elements

The CAP's AP³ has four elements, which are specified below.

The CAP has designed the BPFT AP³ for pathologists with intermediate or higher skill level in breast predictive factors testing. The CAP recommends, **but does not require**, the following level of practice experience for BPFT AP³ participants:

- Successful sign-out of approximately 100 breast predictive factor testing cases (not tests) in the previous two years.
- Participation in approximately 20 multidisciplinary breast tumor conferences, multidisciplinary patient care and treatment planning sessions, and/or discussions in the previous two years.

CAP AP ³ Elements	Breast Predictive Factors Testing (BPFT) AP ³ Elements
<p>1. QUALIFICATIONS (Submit with Application)</p>	<p>American Board of Pathology (ABP) certified in Anatomic Pathology (AP), Clinical Pathology (CP), or Anatomic Pathology/Clinical Pathology (AP/CP) or Royal College of Physicians and Surgeons of Canada (RCPS) certified or American Osteopathic Board of Pathology (AOBP) certified</p>
<p>2. ONGOING EDUCATION</p>	<p>Participants must complete the CAP's BPFT AP³ curriculum (27.5 CME/SAM hours).</p> <ul style="list-style-type: none"> • The curriculum consists of nine CAP CME courses, seven of which include self-assessment modules (SAMs). • This manual contains both short and detailed descriptions of the BPFT courses. • The BPFT Intensive Workshop ("Intensive") delivers all of the faculty-led courses. All online courses will be available to participants one month prior to the Intensive. • The Intensive is offered two times a year: spring and fall. See the CAP Transformation Now website for the current workshop schedule.

Program Elements (continued)

CAP AP³ Elements	Breast Predictive Factors Testing (BPFT) AP³ Elements
3. COGNITIVE ASSESSMENT	<p>Participants must successfully complete a cognitive assessment.</p> <ul style="list-style-type: none">• The BPFT cognitive assessment will consist of 50 multiple choice questions and will be delivered online in a proctored environment.• Participants are eligible to take the cognitive assessment after completing the required BPFT AP³ courses (see Element 2 above). It is strongly recommended that participants take the cognitive assessment within three weeks of completing the Intensive.• Beginning in 2012, all AP³ cognitive assessments will be delivered through PSI, a testing service (corporate.psonline.com). This cost is included in the AP³ fee; participants are responsible for any associated travel expenses and for scheduling and completing their assessment at one of PSI's 250 convenient facilities. For details on how to schedule an assessment at a nearby testing site, please refer to the informational packet that you will receive from CAP Learning once you have registered for the program.• Participants who do not receive a passing score may retake the cognitive assessment up to two times. Assessment retakes will be available through the testing vendor. The participant is responsible for all associated travel expenses.

Program Elements (continued)

CAP AP ³ Elements	Breast Predictive Factors Testing (BPFT) AP ³ Elements
<p>4. PRACTICAL ASSESSMENT</p>	<p>Participants must successfully complete a practical assessment which consists of two key components:</p> <ul style="list-style-type: none"> • Completion of two scenario-based problem solving exercises requiring demonstration of best practices in identifying and mitigating risks to the accuracy of breast predictive factors testing. • Submission of sample pathology reports, including: <ul style="list-style-type: none"> ◦ One to two predictive factors testing reports showing ER negative and HER2 equivocal results. Reports submitted should adhere to the standard report format of your laboratory. ◦ One summary report created according to the template provided within the program. ◦ One patient-friendly report created according to the template provided within the program. • Participants may begin work on the practical assessment following completion of prerequisite BPFT AP³ courses. Detailed information regarding the practical assessment and its prerequisites will be provided at the Intensive. • All practical assessment materials will be evaluated by content experts. • Participants who do not pass the practical assessment may retake it up to two times.

Participants who successfully complete the **BPFT AP³** elements will receive a Certificate of Recognition, which is valid for a three-year period.

The CAP's BPFT AP³ Curriculum

The CAP's BPFT AP³ curriculum is organized and summarized below by two delivery modalities: online and faculty-led.

- Please reference Program Elements—Element 2, Ongoing Education when reviewing the curriculum summary.
- For course sequence, please refer to the BPFT Intensive Workshop agenda.
- For detailed course information, please refer to BPFT course descriptions.

BPFT AP³ Online Courses

The following online courses are available one month prior to the Intensive Workshop:

Breast Predictive Factors Testing Self Study

BPFT Intensive Workshop—Prerequisite Course

Credits: 2.5 CME/SAM 

MOC Categories: Medical Knowledge, Patient Care  

Understand the rationale for the ASCO-CAP ER/PgR and HER2 testing guidelines via a current literature review.

Validation of ER and PgR IHC Assays

BPFT Intensive Workshop—Prerequisite Course

Credits: 1.5 CME/SAM 

MOC Categories: Practice-Based Learning and Improvement 

Learn recommended procedures for the initial validation and verification of ER/PgR immunohistochemistry assays.

ER IHC Test Interpretation Accuracy—Video Microscopy

Credits: 2.0 CME/SAM 

MOC Categories: Medical Knowledge 

Refine ER IHC test interpretation and evaluation through the presentation of virtual images from real patient cases. Explore the impact of testing accuracy.

HER2 IHC Test Interpretation Accuracy—Video Microscopy

Credits: 2.0 CME/SAM 

MOC Categories: Medical Knowledge 

Refine HER2 IHC test interpretation and evaluation through the presentation of virtual images from real patient cases. Explore the impact of testing accuracy.

The CAP's BPFT AP³ Curriculum (continued)

HER2 FISH Test Interpretation Accuracy—Video Microscopy

Credits: 1.5 CME/SAM 

MOC Categories: Medical Knowledge 

Refine HER2 FISH test interpretation and evaluation through the presentation of virtual images from real patient cases. Explore the impact of testing accuracy.

BPFT Reporting

Credits: 1.5 CME/SAM 

MOC Categories: Patient Care, Interpersonal and Communication Skills  

Learn best practices for creating and formatting clear and understandable ER/PgR and HER2 reports for your cancer patients.

Faculty-Led Courses

The following courses are included in the Intensive Workshop:

BPFT Test Interpretation and Patient Treatment Implications

Credits: 7.0 CME

MOC Categories: Medical Knowledge, Patient Care  

Hear from an oncologist about how breast predictive factors are used to guide treatment decisions and why pathologists are important to the process. Participate in a tumor board simulation including real patient cases!

Multidisciplinary Communications

Credits: 4.0 CME

MOC Categories: Patient Care, Interpersonal and Communication Skills  

Learn key communication strategies that help establish your credibility and create an open and productive dialogue with your colleagues.

BPFT Risk Mitigation

Credits: 5.5 CME/SAM 

MOC Categories: Practice-Based Learning and Improvement 

Participate in interactive, problem-solving scenarios focused on common risks in BPFT.

BPFT AP³ Intensive Workshop Agenda

Participants must complete the Breast Predictive Factors Testing Self Study and Validation of ER and PgR IHC Assays online courses prior to attending the workshop. It is strongly recommended that participants complete all six online courses prior to attending the workshop.

DAY 1	
Time	Content
7:00–8:00 AM	Workshop Check-in and Continental Breakfast
8:00–11:30 AM	Welcome BPF Test Interpretation and Patient Treatment Implications—Part I
11:30 AM–12:30 PM	Group Lunch
12:30–4:00 PM	BPF Test Interpretation and Patient Treatment Implications—Part II
4:00–5:00 PM	Introduction to BPFT Risk Mitigation

DAY 2	
Time	Content
7:00–8:00 AM	Workshop Check-in and Continental Breakfast
8:00 AM–NOON	BPFT Risk Mitigation
NOON–1:00 PM	Group Lunch
1:00–5:00 PM	Multidisciplinary Communications

Additional Participation Information

Enrollment

- The CAP's BPFT curriculum (nine courses) is available to pathologists (members and nonmembers) who do not plan to take the assessments and earn the BPFT AP³ Certificate of Recognition.
- Pathologists may take the BPFT curriculum as open enrollment and take the assessments at a later date.

Assessment Scheduling

- For maximum learning and performance effectiveness, the CAP advises program participants to follow the guidelines provided below.

Completion Guidelines		
CME	Cognitive Assessment	Practical Assessment
Participants should complete all BPFT AP ³ courses before completing the Cognitive and Practical Assessments.	It is strongly recommended that participants take the cognitive assessment at a nearby PSI testing site within three weeks of completing the BPFT AP ³ Intensive Workshop. The cognitive assessment will be delivered through PSI, a testing service (http://corporate.psonline.com). The cost is included in the AP ³ fee. Participants are responsible for all associated travel expenses and for scheduling and completing the assessment at one of the PSI's 250 convenient facilities. For details on how to schedule an assessment at a nearby testing site, please refer to the informational packet that you will receive from CAP Learning once you have registered for the program.	We strongly recommend that participants submit the practical assessment to the CAP within three to six months of completing the required BPFT AP ³ courses. However, submissions will be accepted up to 12 months following enrollment in the program.

Certificate Notification

Upon receipt of all components of the participant's practical assessment, the CAP will notify the participant in three months if the participant met all the requirements for successful completion of the BPFT AP³ Certificate of Recognition. The participant will receive the certificate four to six weeks after notification.

BPFT AP³ Certificate Maintenance

BPFT Certificate of Recognition Maintenance and Renewal Requirements

The BPFT maintenance and renewal requirements are intended to ensure BPFT Certificate of Recognition holders maintain and apply an appropriate level of content and practice expertise to their laboratory responsibilities, and assert themselves as leaders within their practice. There are three required elements:

1. Maintenance CME

To be eligible for BPFT renewal, the certificate holder is required to complete at least 12 Category 1 CME credits on related topics during the three-year maintenance period; this is an average of four Category 1 CME credits per year. The Category 1 CME credits may be earned from any accredited provider, including the CAP, and should teach content consistent with the BPFT program's learning objectives. Topics consistent with the program's learning objectives include diagnosing invasive breast cancer, HER2 IHC or HER2 FISH test interpretation, ER/PgR test interpretation, treatment of HER2+ and ER+ breast cancer, breast specimen handling and processing, initial validation and ongoing quality management of IHC tests, and effective multidisciplinary communication.

The certificate holder must provide documentation that includes the CME activity name, number of credits earned, date completed, and provider name. Examples of acceptable forms of documentation include training certificates, training transcripts, and signed letters from the CME provider verifying your successful completion of the CME activity.

2. Technical Updates

To be eligible for BPFT renewal, the certificate holder must participate in all BPFT technical updates provided by the CAP on an as-needed basis. The technical updates may be in the form of webinars, online courses, and article distribution and may/may not include a SAM component. If these technical updates are CME Category 1 activities, such credits can be applied to the CME requirement above.

3. Performance Documentation

To be eligible for BPFT renewal, the certificate holder must submit **two** of the following forms of documentation demonstrating his/her expert implementation and professional leadership in breast predictive factors testing.

- a. Three reference letters attesting to the certificate holder's effectiveness in the practice of BPF testing, efforts to educate the multidisciplinary breast cancer treatment team and other technical staff on BPF testing, and/or communication and interpersonal skills as relevant to their effectiveness in working with the multidisciplinary breast cancer treatment team.

Reference letters must be submitted directly to CAP Learning using the BPFT Certificate Maintenance and Renewal Reference Letter form. This form can be found at cap.org under Transforming Pathologists/CAP Institute/Advanced Practical Pathology Programs.

Certificate holders may consider requesting reference letters from the laboratory director; the leader of the breast center; a peer pathologist; other medical staff (surgeons, oncologists) who are familiar with their practice in BPF testing; or a fellow, resident or other junior pathologist for whom the certificate holder has worked directly as a mentor.

BPFT AP³ Certificate Maintenance (continued)

- b. Documentation demonstrating the certificate holder's efforts to educate others on core topics related to BPF testing. Examples of documentation that meet this requirement include:
 - i. Presentations and/or other training materials created by the certificate holder and delivered to medical and/or technical staff at their institution during the three-year maintenance period. The certificate holder should provide a copy of the presentation, documentation indicating when he or she delivered the presentation, and a description of the audience.
 - ii. Presentations and/or other training materials created by the certificate holder and delivered at local, regional, or national meetings during the three-year maintenance period. The certificate holder should provide a copy of the presentation, documentation indicating when he or she delivered the presentation, and a description of the audience.
 - iii. Tumor Board presentations created and delivered by the certificate holder during the three-year maintenance period. The certificate holder should provide a copy of the presentation, documentation indicating when he or she delivered the presentation, and a description of the audience.
 - iv. Articles or informational letters written in the area of BPF testing during the three-year maintenance period. The certificate holder should provide a copy of the article or informational letter.
 - v. Verification of the participant's role as a laboratory inspector involved in inspections focused on BPF testing during the three-year maintenance period.
- c. Documentation verifying the certificate holder has regularly attended multidisciplinary breast tumor conferences or multidisciplinary patient care and treatment planning sessions and/or discussions during the three-year maintenance period. The certificate holder should either submit the records from his or her institution that document his or her participation in these events, or submit a letter from the person who coordinates the meetings attesting to his or her regular participation.
- d. Documentation of participation in a proficiency testing program focused on BPF testing during the three-year maintenance period. This includes proficiency testing products provided by the CAP and other qualified providers.

Maintenance and Renewal Fee

The fee for maintenance and renewal is \$200. This does not include costs associated with participation in CAP BPFT Technical Updates or other CME.

Notification of Maintenance and Renewal Deadline

CAP Learning will notify the certificate holder one year in advance of the date his/her certificate expires. Additional reminder notifications will be sent six months, three months, and one month prior to expiration.

Program Application and CME Registration

How to Apply

To start the BPFT AP³ enrollment process, submit your completed BPFT AP³ application and BPFT Intensive Workshop 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, AP³
325 Waukegan Road
Northfield, IL 60093

Participants who would like to attend the BPFT Intensive Workshop but not apply to the BPFT AP³ should complete and submit the Intensive Workshop registration form and payment to CAP Learning per the contact information provided in this section.

Participants accepted into the BPFT AP³ will receive priority registration for the BPFT Intensive Workshop. Registrations will be processed on a first-come, first-served basis.

Registration Fees

BPFT AP³ Fee: CAP Member – \$3,000/CAP Nonmember – \$3,900

Fee includes all CME courses, the two-day Intensive Workshop, the cognitive assessment, and the practical assessment. A completed application must accompany the registration form and payment.

BPFT CME Only Fee: CAP Member – \$2,000/CAP Nonmember – \$2,600

Fee includes all online CME/SAM courses and the two-day Intensive Workshop.

Withdrawal and Refund Policy for AP³ Participation

Pathologist candidates may withdraw from CAP AP³ at any time. To withdraw, please submit a written request to the CAP Council on Education. If you currently hold a BPFT AP³ Certificate of Recognition, the effective date of the certificate will cease on either the date of notification or a future date you specify, provided the future date is no later than the anniversary date of the certificate.

The CAP will manage candidate 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 CAP AP³. The CAP will refund your registration fee, less a \$100 processing fee, if the request to withdraw occurs prior to you beginning the CAP AP³ coursework.

Program Application and CME Registration (continued)

Cancellation Policy for BPFT AP³ CME Workshop

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 CAP AP³ workshop or refund your registration fee, less a \$100 processing fee, up to two weeks prior to the workshop; after that date, the CAP will consider refunds on a case-by-case basis. No refunds will be issued for cancellations received after the coursework is initiated.

The CAP reserves the right to cancel any AP³ 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.

Accessing Online Courses

- Participants must have a CAP Web account established in order to access and complete the online courses. If you do not have an individual Web account, visit cap.org, then go to the **Create an Account** link and complete and submit the requested information.
- Most common operating systems are enabled to run CAP courses. The following systems support the courses:
 - Internet Explorer 6.x and 7.x – Windows XP
 - Firefox 2.0 + – Windows XP
 - Internet Explorer 7.x – Windows Vista
- The CAP does not recommend using a Mac to view Education courses regardless of browser version.

Questions?

Please contact:

CAP Learning, AP³
College of American Pathologists
325 Waukegan Road
Northfield, IL 60093
Tel: 800-323-4040 option 1
Fax: 847-832-8006
Email: ap3@cap.org

Find additional information at cap.org/transformation under **CAP Institute**.

BPFT AP³ Course Descriptions

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.

Breast Predictive Factors Testing (BPFT) Self Study

The evaluation and interpretation of breast predictive factors (HER2, ER/PgR) is 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 self study, you learn about the standardization of these preanalytical factors, 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; and consider strategies for implementing the guidelines. You are also introduced to information on molecular analysis and its impact on patient care decisions by reading and studying current research. This course concludes with a 10-item assessment module that tests your achievement of the course's objectives.

Course Objectives

At the end of this course, you will be able to:

- Explain the 2010 ASCO-CAP ER/PgR Testing Guideline and its implications for lab procedures, test results, and patient care
- Explain the 2007 ASCO-CAP HER2 Testing Guideline and its implications for lab procedures, test results, and patient care
- Determine if the assay and tissue sample are appropriately matched per the ASCO/CAP Guidelines
- Explain the biology of fixation interactions with assay performance
- Explain the potential use of molecular analysis in patient care decisions

Modality: Online course

Length: 2.5 hours

SAM: 10-item SAM 

MOC Categories: Medical Knowledge, Patient Care  

CME Category 1

The College of American Pathologists designates this educational activity for a maximum of 2.5 AMA *PRA Category 1 Credits*[™]. Physicians should only claim credit commensurate with the extent of their participation in the activity.

This course is eligible for the American Board of Pathology's (ABP) Self-Assessment Module (SAM) credit.

CPD Credit

This event is an Accredited Group Learning Activity/Self Assessment Program, 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.

BPFT AP³ Course Descriptions (continued)

Validation of ER and PgR IHC Assays

Approximately 10% to 20% of estrogen receptor (ER) and progesterone receptor (PgR) test results are discordant when tested in multiple laboratories. The adoption of a standard initial test validation process will reduce interlaboratory variation, improve the accuracy of hormone-receptor testing, and minimize false-positive and false-negative results. This course defines minimal procedures for initially validating ER and PgR IHC tests before they are placed in clinical service and describes the ongoing assessment of assay procedures. You review a recent article on the validation of ER and PgR IHC assays and participate in a 10-item assessment that tests your understanding of the article's concepts. This course is a prerequisite to attending the BPFT AP³ Risk Mitigation course where concepts regarding ER/PgR IHC validation and verification are further discussed.

Course Objectives:

At the end of this course, you will be able to:

- Distinguish between validation and verification of an ER/PgR assay and when each is required
- Describe an appropriate sample set for an ER/PgR assay validation or verification study
- Identify appropriate test conditions and requirements for an ER/PgR assay validation or verification study

Modality: Online Course

Length: 1.5 hours

SAM: 10-item SAM



MOC Categories: Practice-Based Learning and Improvement



Prerequisite CME: Breast Predictive Factors Testing (BPFT) Self Study, ER IHC Test Interpretation Accuracy—Video Microscopy, HER2 IHC Test Interpretation Accuracy—Video Microscopy,

CME Category 1

The College of American Pathologists designates this educational activity for a maximum of 1.5 AMA *PRA Category 1 Credits*[™]. Physicians should only claim credit commensurate with the extent of their participation in the activity. This course is eligible for the American Board of Pathology's (ABP) Self-Assessment Module (SAM) credit.

CPD Credit

This event is an Accredited Group Learning Activity/Self Assessment Program, 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.

BPFT AP³ Course Descriptions (continued)

BPF Test Interpretation and Patient Treatment Implications

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 course, 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.

Course Objectives

At the end of this course, you will be able to:

- Evaluate and integrate Breast Predictive Factors (BPF) test results with clinical and morphologic findings
- Recognize how assay results are used to define treatment
- Explain breast cancer treatment options and their associated toxicities, cost implications, and efficacy as indicated by test results
- Apply appropriate interpretation criteria for controls and test tissue
- Implement ASCO-CAP Guidelines for interpreting difficult cases and remediation of poor interpretation performance

Modality: Faculty-led course

Length: 7.0 hours

MOC Categories: Medical Knowledge, Patient Care  

Prerequisite CME: Breast Predictive Factors Testing (BPFT) Self Study

CME Category 1

The College of American Pathologists designates this educational activity for a maximum of 7 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

CPD Credit

This event is an Accredited Group Learning Activity/Self Assessment Program, 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.

BPFT AP³ Course Descriptions (continued)

ER IHC Test Interpretation Accuracy—Video Microscopy

The evaluation and interpretation of estrogen receptor (ER) immunohistochemistry results is critical to selecting the most appropriate treatment regimen for women with breast cancer. In this course, you learn proper ER IHC test interpretation and evaluation through the presentation of virtual images from real patient cases. You explore the impact of specimen requirements, testing methodologies, and performance challenges on testing accuracy. Factors influencing the quality of final test results, such as tissue fixation variables and staining artifacts, proper use and interpretation of controls, and assay exclusion criteria are also discussed. This course concludes with a 10-item assessment module that tests your achievement of the course's objectives.

Course Objectives

At the end of this course, you will be able to:

- Accurately interpret ER IHC tests, including the proper evaluation of appropriate controls and test tissues
- Evaluate and integrate ER staining patterns with clinical and morphologic findings
- Identify the relationship and impact of ER IHC test results on patient treatment

Modality: Online course

Length: 2.0 hours

SAM: 10-item SAM



MOC Categories: Medical Knowledge



Prerequisite CME: Breast Predictive Factors Testing (BPFT) Self Study

CME Category 1

The College of American Pathologists designates this educational activity for a maximum of 2 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

This course is eligible for the American Board of Pathology's (ABP) Self-Assessment Module (SAM) credit.

CPD Credit

This event is an Accredited Group Learning Activity/Self Assessment Program, 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.

BPFT AP³ Course Descriptions (continued)

HER2 IHC Test Interpretation Accuracy—Video Microscopy

The results of HER2 testing determine which patients are likely to respond to trastuzumab, a monoclonal antibody against HER2. In this course, you learn proper HER2 IHC test interpretation and evaluation through the presentation of virtual images from real patient cases. You will explore specimen requirements, testing methodologies, performance challenges in ensuring testing accuracy, and factors influencing the quality of final test results, such as tissue fixation variables and staining artifacts, proper use and interpretation of controls, and assay exclusion criteria. The course targets an audience of pathologists who perform and/or interpret HER2 testing. This course concludes with a 10-item assessment module that tests your achievement of the course's objectives.

Course Objectives

At the end of this course, you will be able to:

- Accurately interpret HER2 IHC tests, including the proper evaluation of controls and test tissues
- Evaluate and integrate HER2 staining patterns with clinical and morphologic findings to help improve concordance with HER2 FISH results
- Identify the relationship and impact of HER2 IHC test results on patient treatment

Modality: Online course

Length: 2.0 hours

SAM: 10-item SAM 

MOC Categories: Medical Knowledge 

Prerequisite CME: Breast Predictive Factors Testing (BPFT) Self Study

CME Category 1

The College of American Pathologists designates this educational activity for a maximum of 2 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

This course is eligible for the American Board of Pathology's (ABP) Self-Assessment Module (SAM) credit.

CPD Credit

This event is an Accredited Group Learning Activity/Self Assessment Program, 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.

BPFT AP³ Course Descriptions (continued)

HER2 FISH Test Interpretation Accuracy—Video Microscopy

The biological events underlying HER2-driven breast cancer can be assessed by evaluating gene amplification by fluorescence in situ hybridization (FISH). Increasing demands for FISH testing to assess HER2 status require greater familiarity with FISH assays and their interpretation. In this course, you learn accurate HER2 test interpretation and reporting using FISH methods. You see virtual images of real patient cases via a videotaped, expert tutorial. You explore content related to the following topics: factors influencing test results, tissue fixation variables, test modifications, artifacts, use of controls, field selection, and assay exclusion criteria. This course concludes with a 10-item assessment module that tests your achievement of the course's objectives.

Course Objectives

At the end of this course, you will be able to:

- Accurately interpret HER2 FISH tests
- Correct for HER2 FISH interpretative errors
- Identify the impact of HER2 test results on patient treatment

Modality: Online course

Length: 1.5 hours

SAM: 10-item SAM



MOC Categories: Medical Knowledge



Prerequisite CME: Breast Predictive Factors Testing (BPFT) Self Study

CME Category 1

The College of American Pathologists designates this educational activity for a maximum of 1.5 AMA *PRA Category 1 Credits™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

This course is eligible for the American Board of Pathology's (ABP) Self-Assessment Module (SAM) credit.

CPD Credit

This event is an Accredited Group Learning Activity/Self Assessment Program, 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.

BPFT AP³ Course Descriptions (continued)

Breast Predictive Factors Testing (BPFT) Reporting

Treating physicians rely heavily on pathology reports to make treatment planning decisions for their patients. Incomplete or unclear reporting can lead to the improper treatment of a patient's cancer. In this course, you learn reporting-related criteria from the ASCO-CAP ER/PgR and HER2 Guidelines along with best practices for formatting reports so they are clear and audience-friendly. You explore well-written reports from actual breast cancer cases in an interactive manner. You also review examples of poorly written reports and identify how these reports can be improved. This course concludes with a five-item assessment module that tests your achievement of the course's objectives.


Course Objectives

At the end of this course, you will be able to:

- Apply ASCO-CAP ER/PgR and HER2 Guidelines criteria to all reports in a standardized manner
- Create consistent, standardized and integrated reports (ie, histologic information with predictive factors)
- Remediate inconsistent data and provide a resolution in an integrated report
- Create patient-friendly reports
- Use formatting techniques to create clear and understandable reports

Modality: Online course

Length: 1.5 hours

SAM: 5-item SAM 

MOC Categories: Patient Care, Interpersonal and Communication Skills  

Prerequisite CME: Breast Predictive Factors Testing (BPFT) Self Study, ER IHC Test Interpretation Accuracy—Video Microscopy, HER2 IHC Test Interpretation Accuracy—Video Microscopy, and HER2 FISH Test Interpretation Accuracy—Video Microscopy

CME Category 1

The College of American Pathologists designates this educational activity for a maximum of 1.5 AMA *PRA Category 1 Credits™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

This course is eligible for the American Board of Pathology's (ABP) Self-Assessment Module (SAM) credit.

CPD Credit

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BPFT Course Descriptions (continued)

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 course, you 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.

Course Objectives

At the end of this course, you will be able to:

- Identify ways to establish and maintain credibility as a BP/BPF expert and a contributing member of a multidisciplinary breast cancer treatment team
- Describe communication strategies that manage resistance from others and help create an open and productive dialogue
- Identify strategies for influencing others, including situations where pathologic implications need to be recognized and understood

Modality: Faculty-led course

Length: 4.0 hours

MOC Categories: Patient Care, Interpersonal and Communication Skills



Prerequisite CME: Breast Predictive Factors Testing (BPFT) Self Study, Breast Predictive Factors Testing (BPFT) Reporting, Breast Predictive Factors Testing (BPFT) Risk Mitigation

CME Category 1

The College of American Pathologists designates this educational activity for a maximum of 4 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

CPD Credit

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BPFT AP³ Course Descriptions (continued)

Breast Predictive Factors Testing (BPFT) Risk Mitigation

BPFT is at great risk for error. ER/PgR status may be misclassified in up to 20% of cases, and HER2 status in 25% of cases (CAP 2004). There are many elements that cause these errors that must be recognized and managed. In this course, you learn about validating new tests, using controls effectively, managing preanalytic and analytic variations, monitoring pathologist competence and trends, and ensuring a quality testing process. You participate in interactive, problem-solving scenarios focused on common risks in BPF testing. You uncover root causes and find ways to minimize or mitigate risk to patients. This course concludes with a 10-item assessment module that tests your achievement of the course's objectives.

Course Objectives

At the end of this course, you will be able to:

- Identify key risks in breast predictive factors testing and the individual pathologist's role in mitigating these risks
- Explain how new tests for ER, PgR, and HER2 should be validated
- Create and review trend analysis data and identify areas for remediation
- Assist your laboratory in the preparation, execution, and follow up of the lab inspection process related to ER/PgR and HER2 items

Modality: Faculty-led course

Length: 5.5 hours

SAM: 10-item SAM



MOC Categories: Practice-Based Learning and Improvement



Prerequisite CME: Breast Predictive Factors Testing (BPFT) Self Study, ER IHC Test Interpretation Accuracy—Video Microscopy, HER2 IHC Test Interpretation Accuracy—Video Microscopy, and HER2 FISH Test Interpretation Accuracy—Video Microscopy

CME Category 1

The College of American Pathologists designates this educational activity for a maximum of 5.5 AMA *PRA Category 1 Credits™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

This course is eligible for the American Board of Pathology's (ABP) Self-Assessment Module (SAM) credit.

CPD Credit

This event is an Accredited Group Learning Activity/Self Assessment Program, 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.