

Classification System

Diseases/Conditions

BROAD – A graduate of the Breast Oncology training program should be able to care for all aspects of disease and/or provide comprehensive management. When referring to a discipline of training (e.g. research or community outreach), the graduate should be able to carry out the endeavor from its conception through completion.

FOCUSED – A graduate of the Breast Oncology training program should be able to make the diagnosis and provide initial management, but will not be expected to be able to provide comprehensive management. For disciplines of training, the graduate should be able to implement and participate in the activity, but would not be expected to complete it on their own.

Operations/Procedures

ESSENTIAL-COMMON- Frequently performed operations, procedures, or endeavors for a breast surgeon; specific procedure competency is required by end of training and should be attainable primarily by case volume or active participation in the activity/endeavor.

ESSENTIAL-UNCOMMON – Uncommon operations, procedures, or endeavors for a breast surgeon in practice and not typically done in significant numbers by trainees; specific procedure competency required by end of training, but cannot be attained by case volume or participation in the activity/endeavor alone.

COMPLEX – Not consistently performed by a breast surgeon in training and not typically performed in practice. Generic experience in complex procedures or endeavors in training is required, but not competence in individual procedures/endeavors.

BENIGN BREAST DISEASE

Breast Diseases/Conditions

BROAD

Breast pain
Breast mass:
Cyst Fibroadenoma Phyllodes:
Benign
Borderline Diabetic mastopathy
Fat necrosis
Galactocele
Mondor's disease
Nipple discharge:
Intraductal papilloma: Duct ectasia
Breast infections:
Lactational mastitis
Non-lactational mastitis
Subareolar abscess
Granulomatous mastitis
High risk lesions:
Flat epithelial atypia
Columnar cell change with atypia
Atypical lobular hyperplasia
Atypical ductal hyperplasia
Lobular carcinoma in situ- classic form
Radial scar
High risk patients:
Family history Childhood radiation:
Mantle radiation for lymphoma
BRCA 1 and 2 mutation carriers
Other mutation carriers: CDH1, PALB2, PTEN, P53, ATM
Role for and utility of chemoprevention
Peripartum issues surrounding physiologic breast changes, breast feeding and breast health

BREAST IMAGING

Breast Diseases/Conditions

BROAD

Ultrasound
Mammogram
MRI
BIRADS classification

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Effective August 1, 2019

Indications and contraindications for stereotactic biopsy
Digital tomosynthesis
Knowledge of advanced breast imaging indications

FOCUSED

PEM
Molecular breast imaging

MALIGNANT BREAST DISEASE

Breast Disease/Conditions

BROAD

Lobular carcinoma in situ- pleomorphic
Paget's disease of the nipple
Ductal carcinoma in situ
Invasive ductal carcinoma
Invasive lobular carcinoma
Locally advanced breast carcinoma

- Operable
- Non-operable

Inflammatory breast carcinoma
Tubular carcinoma
Mucinous carcinoma
Other variants
Metaplastic breast cancer
Malignant Phyllodes
Pregnancy associated/lactation associated breast carcinoma
Occult primary breast carcinoma with axillary metastasis
Male breast cancer
Hereditary breast cancer:

- Family history positive
- BRCA 1 and 2
- Appropriate ordering of genetic germline mutation testing

Hormone receptor status:

- ER/PR positive
 - Her2 positive
- Triple negative

Recurrent Breast CA

- S/P mastectomy
- In breast recurrence s/p partial mastectomy

FOCUSED

Metastatic disease to the breast:

- Lymphoma
- Melanoma

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- Thyroid
- Primary sarcoma of the breast
- Metastatic breast cancer to other sites
- Hereditary breast cancer
 - P53, PTEN, CHEK

Operations/Procedures

ESSENTIAL-COMMON

- Breast ultrasound
- Cyst aspiration
- FNA
- Percutaneous core needle sampling
- Skin punch biopsy
- Diagnostic excisional biopsy, with/without wire/seed/ultrasound localization
- Central/Major/Terminal duct exploration and excision
- Partial mastectomy, with/without image-guided localization (wire/seed/ultrasound)
- Oncoplastic partial mastectomy
- Mastectomy:
 - Total mastectomy
 - Skin-sparing
 - Nipple/areolar sparing
- Axillary sentinel node dissection
 - Blue dye
 - Nuclear injection
 - Both
- Axillary node dissection

ESSENTIAL-UNCOMMON

- Percutaneous core needle sampling
 - Ultrasound guided
- Level 3 node dissection
- Radical mastectomy
- Chest wall resection

COMPLEX

- Stereotactic core biopsy
- MRI biopsy

PLASTIC AND RECONSTRUCTIVE SURGERY

Diseases/Conditions

BROAD

- Partial mastectomy breast defects
- Post-mastectomy defects

FOCUSED

- Breast asymmetry after breast conservation
- Chest wall defects following resection of locally advanced breast cancer

Operations/Procedures

ESSENTIAL-COMMON

- Oncoplastic closure of partial mastectomy defects

ESSENTIAL-UNCOMMON

- Local tissue flap closure for acquired surgical defect

COMPLEX

- Tissue expander placement
- Permanent silicone implant placement
- Pedicle flaps for breast reconstruction:
 - Latissimus dorsi
 - TRAM
- Free flap for breast reconstruction:
 - DIEP
 - Gluteal
 - TUG
- Mastopexy for symmetry
- Fat grafting and lipofilling

MEDICAL ONCOLOGY

Diseases/Conditions

BROAD

- Chemotherapy principles and mechanisms of action

FOCUSED

- Management of common complications of chemotherapeutic administration
- Use of gene signatures to direct systemic treatment recommendations
- Management of hormone receptor positive breast cancers
 - Early stage
 - Late stage
- Management of hormone receptor negative breast cancers
 - Early stage
 - Late stage
- Management of Her2 neu positive breast cancers
- Management of cancers by stage:
 - T stage
 - Node negative

- Node positive

Indications for neoadjuvant systemic therapy, specifically with regards to optimization of breast conserving therapy

Systemic treatment for the de novo stage 4 patient

PALLIATIVE CARE, END OF LIFE

Diseases/Conditions

BROAD

Psycho-oncology includes the supportive care and management of depressive and anxiety symptoms that frequently occur in the setting of chronic complications or living with active disease for a protracted period of time. A single lecture on psycho-oncology does not satisfy this requirement.

Palliative care includes symptom treatment, hospice and end of life care and discussions, as well as management of cancer-related pain, nutrition, exercise and weight management options.

A formal experience in this is expected with exposure to end of life discussion and transitions of care to hospice. This may be an integrated experience and a rotation on a palliative care service is not required. It must be documented how the fellow obtains this experience longitudinally if a rotation is not used to satisfy this requirement. A single lecture on palliative care and end-of-life issues does not satisfy this requirement.

- Program directors and administrators are directed to the FAQ section of the SSO training website for additional information.

RADIATION ONCOLOGY

Diseases/Conditions

BROAD

Radiation biology principles

Radiation indications:

- Breast conservation:
 - Whole breast radiation
 - Partial breast radiation
- Post-mastectomy radiation

FOCUSED

Management of common radiation complications

Partial breast radiation:

- Interstitial brachytherapy
- Balloon brachytherapy
- External beam partial breast

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Radiation therapy for metastatic disease:

- Regional
- Distant
 - Treatment
 - Palliation

Radiation simulation/planning

Operations/Procedures
es COMPLEX

Partial breast radiotherapy techniques
Intraoperative radiation therapy

SURGICAL MANAGEMENT/COUNSELING FOR GENETIC SYNDROMES

Diseases/Conditions

BROAD

Family history
BRCA 1
BRCA 2
P53 mutations (Li Fraumeni)
Cowden's syndrome
CHEK
Knowledge of other panels

PALLIATIVE INTENT SURGERY

Diseases/Conditions

FOCUSED

Asymptomatic Stage 4 breast cancer
Symptomatic Stage 4 breast cancer

- Resectable breast/node disease
- Unresectable breast/node disease
 - Chest wall involvement
 - Skin involvement

Operations/Procedures

ESSENTIAL-UNCOMMON

Palliative mastectomy

CLINICAL AND BASIC RESEARCH

Diseases/Conditions

BROAD

Protection of Human Subjects

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Inclusion of diverse study populations
Basic Statistical Analysis
Institutional Review Board process and application
Database management, Retrospective Reviews
Defining Hypothesis and Study Aims
Evaluation of Study Design

FOCUSED

Assessment of Clinical Trial, Defining levels of Evidence/meta-analysis
Selection of primary and secondary endpoints
Defining study populations, sample size, power
Basic Survival Analysis
Assessment of Health Related QOL
Fundamentals of Health Outcomes Studies

Application

ESSENTIAL-COMMON

Participation in a journal club – clinical or science
Retrospective review study of a database or case study
Writing, submission and presentation of a cancer-related abstract
Manuscript preparation, writing and submission
Identification and Recruitment of patients to a clinical trial

ESSENTIAL-UNCOMMON

Participation in a cooperative trial group meeting

COMPLEX

Writing a grant – clinical or scientific
Writing an IRB application

COMMUNITY OUTREACH AND LEADERSHIP

Diseases/Conditions

BROAD

Communication with and education of the non-medical community

- Cancer screening ○
 - Cancer prevention ○
 - Cancer diagnosis
- Cancer treatment

Communication and interaction with cancer support groups

- Breast disease

Communication with and education of non-oncologic physicians

- Cancer screening ○
 - Cancer prevention ○

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- Cancer diagnosis
- Cancer treatment
- Communication and interaction with non-oncologic surgeons
 - Clinical trials
 - Multidisciplinary conferences
- Understand disparities in screening, diagnosis, and treatment of cancer
- Presentation skills
 - Slide presentation
 - Public speaking skills
 - Panel discussion skills
- Effective preparation of educational material
 - For general public
 - For patients
 - For families of patients
 - For fellows, residents, students
 - Computer/web-based
 - Print material

FOCUSED

Role within American Cancer Society, Komen, etc.

COMPLEX

Understanding of and possible effective preparation of outreach or screening grants
Effective presentation at community outreach

Operations/Procedures

ESSENTIAL-COMMON

Attend and participate in cancer-support groups
Conference participation with general surgery and subspecialty colleagues
Lecture/talk to other fellows, residents, medical students

ESSENTIAL-UNCOMMON

Lecture/talk to non-oncologic physicians
Participation in American Cancer Society, Komen or similar screening and outreach events
Prepare outreach/screening material
Prepare outreach/screening grant

COMPLEX

Attend Commission on Cancer
Attend other Society/foundation meetings

PATHOLOGY

Diseases/Conditions

BROAD:

FOCUSED:

- Solid tumor margin assessment
- Nodal evaluation
 - Sentinel lymph node
 - Nodal dissection specimen
- Pathologic Analysis
- Frozen section, routine staining, immunohistochemistry
- Pathologic staging of tumors
- Intraoperative analysis

Operations/Procedures

ESSENTIAL-COMMON

- Fine needle aspiration biopsy

ESSENTIAL-UNCOMMON COMPLEX

- Margin assessment and preparation
 - Lumpectomy
 - Mastectomy
- Cytologic analysis
- Frozen section preparation and analysis
- Touch preparation
- Sentinel node processing and analysis
- Handling and pathologic assessment of regional lymphadenectomy specimen

CANCER REHABILITATION

Diseases/Conditions

BROAD

- Preoperative assessment of disability
- Preoperative assessment of impact on activities of daily life

FOCUSED

- Postoperative/treatment evaluation and management of disability
- Postoperative/treatment evaluation and management of impact on activities of daily life
- Postoperative/treatment evaluation and intervention for
 - Home
 - Place of work
 - Family/support network
- Lymphedema management
 - Preoperative assessment
 - Postoperative monitoring and treatment

Operations/Procedures:

ESSENTIAL-COMMON ESSENTIAL-

UNCOMMON

COMPLEX

Physical therapy
Occupational therapy
Lymphedema prevention and treatment

OTHER

Coding and billing of breast diseases and procedures

FELLOWSHIP

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ESSENTIAL-COMMON

Breast ultrasound – 15 (hands on) or 30 (observation only)

Percutaneous Procedures – 13

- Fine needle aspiration
- Cyst aspiration
- Percutaneous core needle sampling, palpation or image guided
- Seroma aspiration with/without drain placement
- Percutaneous abscess drainage with/without drain placement

Major ductal exploration and excision for nipple discharge – 1

Partial mastectomy or diagnostic excisional biopsy – 50

- Palpation guided
- Image guided
- Oncoplastic partial mastectomy

Mastectomy – 40 spread over all categories

- Total mastectomy
- Skin-sparing mastectomy
- Nipple/areolar sparing mastectomy

Axillary sentinel node biopsy – 50

Level 1, 2 completion axillary node dissection – 10

ESSENTIAL-UNCOMMON (No numbers set)

Level 3 node dissection

Palliative mastectomy for stage 4 disease

Chest wall recurrence /radical resection

Plastic Surgery

- Local tissue flap closure for tissue defect
- Breast Reconstruction with Tissue Expander
- Tissue expansion procedure
- Exchange of Expanders to Implants
- Breast Reconstruction with Autologous Tissue Transfer
 - Pedicle flaps (latissimus, TRAM)
 - Free flaps (free TRAM, DIEP, etc.)
- Nipple reconstruction
- Areolar tattooing
- Breast reduction
- Mastopexy for symmetry

COMPLEX – EXPERIENCE AS AVAILABLE (No numbers set)

Vacuum-assisted core biopsy (must have experience with and exposure to listed biopsy techniques)

- Image guided
 - Stereotactic
 - Ultrasound
 - MRI

Clip placement

- Image guided
 - Stereotactic
 - Ultrasound
 - MRI

Placement of localizing wire or seed

- Image guided
 - Stereotactic
 - Ultrasound
 - MRI

Tumor ablation

- Palpation guided
- Image guided

Subcutaneous mastectomy for gynecomastia

Radical mastectomy

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Radiation Oncology

- Partial breast techniques
 - Interstitial brachytherapy catheters
 - Intracavitary balloon radiation
 - External beam
- Intraoperative radiation therapy

NON-OPERATIVE EXPOSURE

Medical oncology

15 new breast cancer / recurrent disease consultations
15 follow-up visits

Radiation oncology

15 new breast cancer consultations
5 new breast cancer or recurrent breast cancer simulations
15 f/u visits and/or physics reviews

Pathology

8 cancer case sign-outs
8 frozen or intra-op evaluations
8 benign and/or high risk lesions

Plastic Surgery

8 reconstructive cases

Genetic Consultations

3 observed consultations

Imaging

8 screening cases
8 breast ultrasound and/or nodal ultrasound
8 diagnostic mammograms
8 breast MRIs