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

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

- o 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
- o BRCA 1 and 2
- o Appropriate ordering of genetic germline mutation testing

Hormone receptor status:

o ER/PR positive o

Her2 positive

o Triple negative

Recurrent Breast CA

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

FOCUSED

Metastatic disease to the breast:

- o Lymphoma
- o Melanoma

Thyroid

Primary sarcoma of the breast Metastatic breast cancer to other sites Hereditary breast cancer

o 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

- o Blue dye
- Nuclear injection
- o 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
- o TRAM

Free flap for breast reconstruction:

- o DIEP
- Gluteal
- o TUG

Mastopexy for symmetry Fat grafting and lipofilling

Diseases/Conditions

MEDICAL ONCOLOGY

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
- o 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

Radiation therapy for metastatic disease:

- Regional
- Distant

Treatment

Palliation

Radiation simulation/planning

Operations/Procedur 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

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 o

Cancer

prevention o

Cancer diagnosis

Cancer treatment

Communication and interaction with cancer support groups

Breast disease

Communication with and education of non-oncologic physicians

Cancer screening o

Cancer

prevention o

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
- o Panel discussion skills

Effective preparation of educational material

- For general public
- For patients
- o For families of patients
- o 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

- o 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

- o Home
- Place of work
- Family/support network

Lymphedema management

- Preoperative assessment
- o 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



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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

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

o Image guided

Stereotactic

Ultrasound

MRI

Clip placement

o Image guided

Stereotactic

Ultrasound

MRI

Placement of localizing wire or seed

Image guided

Stereotactic

Ultrasound

MRI

Tumor ablation

- o Palpation guided
- o Image guided

Subcutaneous mastectomy for gynecomastia

Radical mastectomy

Radiation Oncology

Partial breast techniques

 Interstitial brachytherapy catheters
 Intracavitary balloon radiation
 External beam

o 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 consultations5 new breast cancer or recurrent breast cancer simulations15 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