



Recommendations for Prioritization, Treatment and Triage of Breast Cancer Patients During the COVID-19 Pandemic: Executive Summary

Version 1.0

The COVID-19 Pandemic Breast Cancer Consortium.

March 24, 2020

Surgical Oncology:

Jill Dietz, MD (Jill.Dietz@UHhospitals.org)
Katharine Yao, MD (kyao@northshore.org)
Scott Kurtzman, MD (Scott.Kurtzman@wtbyhosp.org)
Benjamin O. Anderson, MD (banderso@fredhutch.org)
Shawna Willey, MD (Shawna.Willey@inova.org)
Susan Boolbol, MD (susan.boolbol@nuvancehealth.org)
Richard Bleicher, MD (Richard.Bleicher@fcc.edu)
Terry Sarantou, MD (Terry.Sarantou@atriumhealth.org)
Paul Baron, MD (Pbaron@montefiore.org)

Medical Oncology:

Steven Isakoff, MD, PhD (sisakoff@mgh.harvard.edu)
William Gradishar, MD (w-gradishar@northwestern.edu)
Harold J. Burstein, MD (hal_burstein@dfci.harvard.edu)
Lawrence Shulman, MD (Lawrence.Shulman@penncmedicine.upenn.edu)

Radiation Oncology:

Meena Moran, MD (Meena.Moran@yale.edu)
Randy Stevens, MD (rstevens@wphospital.org)
Janice Lyons, MD (janice.lyons@uhhospitals.org)

Corresponding author:

Jill R Dietz, MD, FACS
ASBrS (president),
NAPBC (vice chair standards and Accreditation Committee)
Associate Professor of Surgery Case Western Reserve University School of Medicine
Director Breast Operations University Hospitals Seidman Cancer Center
Cleveland, Ohio
Jill.Dietz@UHhospitals.org

Executive Summary

The COVID-19 pandemic poses unprecedented challenges for patients, clinicians and health care systems. We assembled representatives from multiple cancer care organizations with expertise in the multidisciplinary management of breast disease to provide preliminary recommendations for the triage and treatment of patients with breast disease amidst the COVID-19 pandemic. These are recommendations, and are not intended to supersede individual physician judgement, nor institutional policy or guidelines. These recommendations should be taken in the context of each institution's resources and prevalence of the COVID-19 pandemic in their region. The consortium highly recommends multidisciplinary discussion regarding priority for elective surgery and adjuvant treatments for your breast cancer patients. The COVID-19 pandemic may vary in severity over time and these recommendations are subject to change with changing COVID-19 pandemic severity.

Recommendations are broken down into the following priority categories based on patient condition¹: a) Priority A: patient condition is immediately life threatening, clinically unstable, b) Priority B: patient situation is noncritical but delay beyond 6-8 weeks could potentially impact overall outcome, c) Priority C: patient's condition is stable enough that services can be delayed for the duration of the COVID-19 pandemic.

In order to get the information out as quickly as possible prior to publication, we are releasing this executive summary and providing our emails for urgent questions related to treatment of breast cancer patients during this COVID-19 pandemic.

ACKNOWLEDGMENT

There was no funding source.

REFERENCE

¹Ontario Health, Cancer Care Ontario, "*Pandemic Planning Clinical Guideline for Patients with Cancer*", <https://www.accc-cancer.org/docs/document/cancer-program-fundamentals/oh-cco-pandemic-planning-clinical-guidelines> (accessed March 23, 2020).

UPDATE

In our haste to issue these guidelines, we inadvertently used a commercial name as an example of genomic assays. This has been updated on this summary.

Table 1. Priorities for Breast Disease Focused Outpatient Visits

Priority A	Priority B	Priority C
Potentially unstable (e.g. hematoma, infection)	New diagnosis of noninvasive cancer-convert as many visits to telemedicine visits	Established patients with no new issues
New diagnosis of invasive cancer-may convert to telemedicine visit	Post op patients	Survivorship visits
	Established patients with new problems or symptoms from treatment-convert as many visits to telemedicine visits	Patients at high risk for breast cancer (BRCA carriers, etc...)
		Well breast visits
		Benign breast follow up visits (including atypia and other benign lesions)

Table 2. Priorities for Breast Disease Focused Imaging

Priority A	Priority B	Priority C
None	Diagnostic imaging for breast symptoms or a BIRADS 4-5 screening mammogram	Routine screening can be deferred until the COVID-19 pandemic resolves- It is reasonable for patients in the general population to defer screening mammography for 6 to 12 months, a deferral that is not likely to have an impact on overall survival.
	Biopsies for abnormal mammograms or breast symptoms	Patients with abnormal screening mammograms who can go to 6 month interval imaging
		Defer all screening with other modalities such as MRI or breast U/S

Table 3. Priorities for Breast Disease Focused Surgical Oncology

Priority A	Priority B	Priority C
Incision and drainage of a breast abscess	Neoadjuvant patients finishing treatment	Excision of benign lesions-fibroadenomas, nodules, etc.
Evacuation of hematoma	Clinical stage T2 or N1 ER positive/PR positive/HER2 negative tumors*&-some of	Duct excisions

	these patients can receive hormonal therapy	
Revision of ischemic mastectomy flap	Triple negative and HER2 positive patients- In some cases institutions may decide to proceed with surgery versus subjecting a patient to an immunocompromised state, these decisions will depend on institutional resources.	Discordant biopsies likely to be benign
Revascularization/revision of autologous tissue flap- autologous reconstruction should be deferred	Reconstructive surgery should be limited to tissue expander or implant placement- autologous reconstruction should be deferred	High risk lesions-atypia, papillomas, etc...
	Discordant biopsies likely to be malignant	Prophylactic surgery-for cancer and noncancer
	Excision of malignant recurrence	Delayed sentinel node biopsy for cancer identified on excisional biopsy
	Provided that radiation oncology services are available and the risk of multiple visits or deferred radiation is acceptable, eligible patients should have breast conservation. Elective mastectomy with or without reconstruction may be preferred but should be deferred until after the COVID-19 pandemic resolves.	ER positive and ER negative DCIS
		Re-excision surgery
		Tumors responding to neoadjuvant hormonal therapy
		Clinical Stage I ER positive/PR positive/Her2 negative cancers-these patients can receive hormonal therapy

Table 4. Priorities for Breast Cancer Focused Medical Oncology

Priority A	Priority B	Priority C
Neoadjuvant/adjuvant chemotherapy for triple negative and HER2 positive breast cancer	<i>Higher Priority:</i> Use of neoadjuvant endocrine therapy to enable deferral of surgery by 6 to 12 months in clinical stage 1 or 2 breast cancers. Many women with early stage, ER positive breast cancers do not benefit substantially from chemotherapy. In general, these include women with stage 1 or limited stage 2 cancers, particularly those with low-intermediate grade tumors, lobular breast cancers, low genomic assay scores, or “luminal A” signatures. High level evidence supports the safety and efficacy of 6 to 12 months of primary endocrine therapy before surgery in such women, which may enable the deferral of surgery.	Antiresorptive therapy (zoledronic acid, denosumab) that is not needed urgently for hypercalcemia
Early line chemotherapy likely to improve outcomes in metastatic disease	<i>Higher Priority:</i> For HER2 positive breast cancer: Adjuvant antibody treatment may reasonably be curtailed after 7 months instead of 12 months of treatment, as randomized trials show narrow benefits of longer (12M) durations as compared to shorter durations.	Follow up imaging, restaging studies and some echocardiograms and ECGs can be delayed or done at lengthened intervals if clinically stable
Completion of neo/adjuvant chemotherapy (with or without anti-HER2 therapy) that has already been initiated	<i>Lower Priority:</i> Later line palliative chemotherapy that is less likely to improve outcomes	Port flush can go to 12 weeks or longer
Continuation of standard adjuvant endocrine therapy	<i>Lower Priority:</i> Antibody treatment (i.e. trastuzumab,	In carefully selected patients, particularly those with ER

with oral agents such as tamoxifen or aromatase inhibitors	pertuzumab) for metastatic, HER2 positive breast cancer beyond two years of maintenance in patients with minimal disease burden (follow for progression every 3-6 months)	positive breast cancer, radiation therapy may be delivered before chemotherapy without compromising long term survival, if this facilitates patient safety.
LHRH agonists in the adjuvant or metastatic setting to ensure optimal endocrine therapy	In stage 1, HER2 positive breast cancers, clinicians may substitute trastuzumab-DM1 instead of paclitaxel/trastuzumab for patient safety or convenience based on randomized trial data	
	Consider delaying addition of CDK4/6, mTOR, or PIK3CA inhibitors to endocrine therapy, particularly in first-line and/or situations where endocrine-therapy alone is providing effective tumor control	
Adjusting and Optimizing Treatment Dosing or Scheduling		
Chemotherapy schedules may be modified so as to reduce clinical visits (for instance, using 2 or 3 week dosing instead of weekly dosing for selected agents when appropriate. Patients should receive G-CSF growth factor support so as to minimize neutropenia, while dexamethasone use should be limited as appropriate to reduce immunosuppression.	Neoadjuvant endocrine therapy. Based on randomized trials, preoperative treatment with an aromatase inhibitor may offer clinical benefit over tamoxifen in postmenopausal women. For premenopausal women, LHRH agonists should be used, and aromatase inhibitors are preferred over tamoxifen. Home administration of LHRH agonists by patient or visiting nursing may be considered where that is an option	
Anti-HER2 therapies. Trastuzumab and pertuzumab are unlikely to affect immune function and should be safe for patients.	Anti-Her2 therapies. Antibody treatment in metastatic setting may reasonably be liberalized to longer intervals (e.g. 4	

	weeks)	
LHRH agonists may be given with long acting, every 3 month dosing, to reduce patient visits or alternatively, home administration of LHRH agonists by patient or visiting nursing may be considered where that is an option.	Oral targeting agents (e.g. CDK4/6 inhibitors, mTOR inhibitors, PIK3Ca inhibitors). Use of oral targeted agents must be weighed against the increased risk of adverse events which may increase interaction with healthcare centers and staff. Doses may be reduced to optimize tolerability and minimize treatment related toxicities.	
Endocrine therapies. Oral agents used widely in adjuvant or metastatic setting (e.g. tamoxifen, aromatase inhibitors) should have no effect on immune function and can be safely continued. Fulvestrant should have no effect on immune function but requires monthly clinical administration.		

Table 5. Priorities for Breast Cancer Focused Radiation Oncology

Priority A	Priority B	Priority C
Bleeding/painful inoperable breast mass	Category 1: Adjuvant post-operative breast cancer patients within <u>16</u> weeks of last surgery or chemotherapy with high risk indications for radiation such as inflammatory disease, node positive disease, triple negative breast cancer, post neoadjuvant chemo with residual disease at surgery, young age (<40) with additional high-risk features	Patients over age 65-70yo with lower risk Stage I hormone receptor positive/HER2- cancers and taking adjuvant endocrine therapy can be encouraged to defer/omit radiation without affecting overall survival- If patient cannot tolerate endocrine therapy, re-evaluate for radiation depending on individual patient and pathologic factors and current severity of pandemic. Invasive cancers should be prioritized over DCIS.

<p>Patients already on treatment</p>	<p>Category 2: Adjuvant post-operative breast cancer patients within 3-6 months of last surgery or chemotherapy with low intermediate/intermediate risk indications for radiation, such as age < 65yo and stage I/II luminal cancer, ER+ node negative, ER+ node positive, or positive margins-use of hypofractionation where clinically appropriate is recommended to reduce visits</p>	<p>Women with DCIS may omit radiation therapy, especially those with ER positive lesions taking adjuvant endocrine therapy, without affecting overall survival</p>
<p>Patients with spinal cord compression, brain metastases, or other critical metastatic lesions</p>		