Welcome to the COVID-19 and Cancer ECHO Series

Use the Q&A portal throughout today’s session to submit your questions! Our expert faculty will be answering your questions live.

All ECHOs take place on the Zoom platform. Review Zoom’s privacy policy at zoom.us/privacy.

This ECHO will be recorded.
## AMERICAN CANCER SOCIETY COVID-19 AND CANCER ECHO

### Today’s agenda

| Introductions          | Laura Makaroff, DO  
|                       | 5 minutes           |
| Didactic presentation  | Lawrence N. Shulman, MD, MACP, FASCO
|                       | 20 minutes          |
| Question and answer session | Expert faculty panel
|                       | 30 minutes          |
| Wrap-up                | Richard Killewald, MNM  
|                       | 5 minutes           |
Introductions
INTRODUCTIONS

Expert faculty panel

John T. Brooks, MD
Chief Medical Officer, COVID-19 Response
Centers for Disease Control and Prevention

Lawrence N. Shulman, MD, MACP, FASCO
Professor of Medicine
Deputy Director for Clinical Services
Director, Center for Global Cancer Medicine
Abramson Cancer Center at the University of Pennsylvania

F. Marc Stewart, MD
Medical Director and Senior Vice President
Seattle Cancer Care Alliance

Thomas K. Varghese Jr. MD, MS, FACS
Executive Medical Director and Chief Value Officer
Huntsman Cancer Institute – University of Utah
Didactic presentation
Lawrence N. Shulman, MD, MACP, FASCO
Professor of Medicine
Deputy Director for Clinical Services
Director, Center for Global Cancer Medicine
Abramson Cancer Center at the University of Pennsylvania
Cancer Medicine in the Time of COVID-19

Lawrence N Shulman, MD
Abramson Cancer Center
University of Pennsylvania

April 30, 2020
What do we know about cancer patients and Covid-19?

- Not sure if cancer pts on active treatment or with a hx of cancer are more likely to contract Covid

- Pts with active cancer infected with Covid have greater likelihood of serious complications/death, and more rapid infectious progression.
  - pts with hematologic malignancy and lung cancer the most

- Not clear of cancer survivors are more likely to have serious complications from Covid infection, but data are worrisome
What do we know about cancer patients and Covid-19?

- Cancer pts infected with Covid undergoing surgery have higher post-operative mortality
  
  - 25% post-operative mortality in European study
  
  - Recommended that all pre-op pts be tested for Covid
    - False negative rate a problem – may be as high as 20%
    - 1/3 of surgery pts who turned out to have Covid were asymptomatic at time of surgery
  
  - Benefit/Risk assessment – risk of surgical delay vs risk of Covid infection or poor post-operative outcome
Patients with cancer appear more vulnerable to SARS-COV-2: a multi-center study during the COVID-19 outbreak

Mengyuan Dai¹,²,³, Dianbo Liu⁴,⁵, Miao Liu⁶, Fuxiang Zhou²,³,⁷, Guiling Li⁸, Zhen Chen⁹, Zhian Zhang¹⁰, Hua You¹¹, Meng Wu¹², Qichao Zheng¹², Yong Xiong¹³, Huihua Xiong¹⁴, Chun Wang¹⁵, Changchun Chen¹⁶, Fei Xiong¹⁷, Yan Zhang¹⁸, Yaqin Peng¹⁸, Siping Ge¹⁹, Bo Zhen²⁰, Tingting Yu²¹, Ling Wang²², Hua Wang²³, Yu Liu²,³,⁷, Yeshan Chen⁸, Junhua Mei¹⁰, Xiaojia Gao¹⁵, Zhuyan Li²⁴, Lijuan Gan¹,²,³, Can He¹,²,³, Zhen Li¹,²,³, Yuying Shi¹,²,³, Yuwen Qi¹,²,³, Jing Yang¹,²,³, Daniel G. Tenen²⁵,²⁶, Li Chai⁶, Lorelei A. Mucci²⁷, Mauricio Santillana⁴,⁵ and Hongbing Cai¹,²,³

Wuhan, China
Wuhan, China
SPECIAL FEATURE

Safety at the Time of the COVID-19 Pandemic: How to Keep our Oncology Patients and Healthcare Workers Safe

Pelin Cinar, MD, MS1; Timothy Kubal, MD, MBA2; Alison Freifeld, MD3; Asmita Mishra, MD2; Lawrence Shulman, MD4; James Bachman, MPA5; Rafael Fonseca, MD6; Hope Uronis, MD, MHS7; Dori Klemanski, DNP8; Kim Slusser, MSN, CHPN, NEA-BC9; Matthew Lunning, DO3; and Catherine Liu, MD10,11

<table>
<thead>
<tr>
<th>Prioritization Level</th>
<th>Examples</th>
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<tbody>
<tr>
<td>1 Care that is not time sensitive and can often be delivered remotely</td>
<td>Survivorship care or surveillance care in absence of symptoms</td>
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<tr>
<td>2 Care that cannot be delivered remotely but omission or delay has little effect on quality or quantity of survival</td>
<td>Treatments with marginal benefit – bone agents for metastatic disease, treatment of metastatic disease with marginally effective agents</td>
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<td>3 Delay of care has a moderate effect on quality and quantity of life</td>
<td>Adjuvant therapy that may improve long-term survival by 5%</td>
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<tr>
<td>4 Treatment that cannot be delayed without adversely affecting outcome, and can result in cure</td>
<td>Chemo for testicular ca, treatment of ALL</td>
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Pandemic Planning
Clinical Guideline for
Patients with Cancer

March 10 2020
**Priority A** – Patients who are deemed critical and require services/treatment including supportive treatments/psychosocial care/ toxicity management even in the event of a pandemic because their situation is unstable, has unbearable suffering and/or immediately life threatening. The following is a list.

**Priority B** – Patients who require services/treatment (including supportive care, psychosocial care and toxicity management) in the cancer centres, hospitals or primary care settings but whose situation is deemed non-critical (no unbearable suffering, patient is stable and condition is not immediately life.

**Priority C** – Patients who are generally healthy whose condition is deemed as non-life threatening where the service can be delayed without anticipated change in outcome. Staff will be deployed elsewhere. If
Recommendations for prioritization, treatment, and triage of breast cancer patients during the COVID-19 pandemic. the COVID-19 pandemic breast cancer consortium

Jill R. Dietz¹,²,⁶ · Meena S. Moran¹,³,⁷ · Steven J. Isakov⁵,⁸ · Scott H. Kurtzman¹,⁹ · Shawna C. Willey²,¹⁰ · Harold J. Burstein³,¹¹ · Richard J. Bleicher¹,¹² · Janice A. Lyons³,⁶ · Terry Sarantou¹,¹³ · Paul L. Baron¹,²,¹⁴ · Randy E. Stevens¹,¹⁵ · Susan K. Boolbol²,¹⁶ · Benjamin O. Anderson³,¹⁷ · Lawrence N. Shulman⁴,¹⁸ · William J. Gradishar³,¹⁹ · Debra L. Monticciolo⁵,²⁰ · Donna M. Plecha⁵,⁶ · Heidi Nelson¹,⁴ · Katharine A. Yao¹,¹²

Received: 8 April 2020 / Accepted: 10 April 2020
<table>
<thead>
<tr>
<th>Priority</th>
<th>Patient description</th>
<th>COVID-19 treatment considerations</th>
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<tr>
<td>Priority A</td>
<td>Patients with oncologic emergencies (e.g. febrile neutropenia, hypercalcemia, intolerable pain, symptomatic pleural effusions or brain metastases, etc.)</td>
<td>Initiate necessary management</td>
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<td>Priority B</td>
<td><strong>B1</strong> Patients with inflammatory BC</td>
<td>Neoadjuvant chemotherapy</td>
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<td></td>
<td><strong>B1</strong> Patients with TNBC or HER2+ BC</td>
<td>Neo/adjuvant chemotherapy (Neo/adjuvant for ≥ T2 or N1)</td>
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<td><strong>B1</strong> Patients with mBC for whom therapy is likely to improve outcomes</td>
<td>Initiate chemotherapy, endocrine, or targeted therapy</td>
</tr>
<tr>
<td></td>
<td><strong>B1</strong> Patients who already started neo/adjuvant chemotherapy</td>
<td>Continue therapy until complete (if neo/adjuvant and responding, can extend treatment if necessary to defer surgery further)</td>
</tr>
<tr>
<td></td>
<td><strong>B1</strong> Patients progressing on neoadjuvant therapy</td>
<td>Refer to surgery or change systemic therapy</td>
</tr>
<tr>
<td></td>
<td><strong>B1</strong> Patients on oral adjuvant endocrine therapy</td>
<td>Continue therapy</td>
</tr>
<tr>
<td></td>
<td><strong>B1</strong> Premenopausal patients with ER + BC receiving LHRH agonists (adjuvant or metastatic)</td>
<td>- If on aromatase inhibitor, continue LHRH agonist and consider long acting 3 month dosing or home administration - If on tamoxifen, consider deferring LHRH agonist</td>
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<td><strong>B1</strong> Patients with clinical anatomic Stage 1 or 2 ER+/HER2- BCs</td>
<td>Neoadjuvant endocrine therapy for 6 to 12 months to defer surgery (may consider gene expression assay on core biopsy)</td>
</tr>
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<td><strong>B2</strong> Patients receiving treatment for Stage 1 HER2+ breast</td>
<td>Ado-trastuzumab emtansine may be substituted for paclitaxel/trastuzumab</td>
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<td></td>
<td><strong>B3</strong> Patients with ER + DCIS</td>
<td>Consider neoadjuvant endocrine therapy to defer surgery</td>
</tr>
<tr>
<td></td>
<td><strong>B3</strong> Patients with mBC for whom therapy is unlikely to improve outcomes</td>
<td>Consider deferring chemotherapy, endocrine, or targeted therapy</td>
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Pandemic and Post-Pandemic Planning in Oncology at Penn

- All disease groups charged with forming a COVID multi-disciplinary team – surgery, med onc, rad onc, pathology, radiology, associated other services – pulmonary, endocrine, etc

- Disease teams create COVID-specific pathways for dissemination throughout the network

- Balance between patient needs, infection risk and constrained resources
  - Surgery most restricted
  - Radiation proceeding but many delayed due to surgery delay
  - Systemic therapies often altered
Pandemic and Post-Pandemic Planning in Oncology

- EHR patient lists capture all new patients from March 1 onward

- EHR “Smart Phrase” captures what treatments were delayed and the priorities to proceed when appropriate

- REDCap databases to capture details of treatments and outcomes
  - NCI, Cooperative Group, ASCO databases
Due to COVID-19 risk and capacity constraints related to the management of COVID-19, Ms. Zzzepic has had the following components of her treatment plan delayed:

- None
- Neoadjuvant, primary, or adjuvant therapy, consisting of
  - surgery,
  - radiation therapy
  - radioisotope therapy
  - chemotherapy
  - hormone therapy/biologic therapy

The clinical urgency for resuming this care when possible is:

- Low
- Medium
- High
- Not Applicable
COVID-19 Pandemic – Best Practices for Lung Cancer Care

Interventional Pulmonology

- Weekly attending assignment to triage outpatient scans and reports to determine urgency for visit/procedure
- Patients with pleural effusions – for new patients, still plan on doing diagnostic/therapeutic thoracentesis. Consider early placement of Pleurex catheter if effusion recurs quickly.
  Defer bronchoscopy/repeat biopsy for patients who have imaging that is equivocal for recurrent or progressive disease.
  For new diagnosis with inadequate tissue for molecular testing, plasma-based genotyping is recommended before invasive biopsy

Surgery

Proceed with Surgery

- Solid or predominantly solid (>50%) lung cancer or presumed lung cancer >2cm (proceed with surgery if rapidly increasing in size even if <2cm), clinical node negative
- Node positive lung cancer (N1 disease)
- Post induction therapy cancer
- Staging to start treatment (mediastinoscopy, diagnostic VATS for pleural dissemination)
- Symptomatic mediastinal tumors – diagnosis not amenable to needle biopsy
- Patients enrolled in therapeutic clinical trials

Alternative Therapies, if resources permit

- Stereotactic Ablative Radiotherapy (SABR)
- Stent for obstructing cancers then treat with chemoradiation
- Debubking (endobronchial tumor) only in circumstance where alternative therapy is not an option due to increased risk of aerosolization (e.g. stridor post-obstructive pneumonia not responsive to antibiotics)
Management of Lung Cancer during the COVID-19 Pandemic

Aditi P. Singh\textsuperscript{1,2}, Abigail T. Berman\textsuperscript{2,3}, Melina E. Marmarelis\textsuperscript{1,2}, Andrew R. Haas\textsuperscript{4}, Steven J. Feigenberg\textsuperscript{2,3}, Jennifer Braun\textsuperscript{2}, Joshua M. Baum\textsuperscript{1,2}, Roger B Cohen\textsuperscript{1,2}, John C. Kucharczuk\textsuperscript{5}, Lawrence N. Shulman\textsuperscript{1,2}, Corey J. Langer\textsuperscript{1,2}, Charu Aggarwal\textsuperscript{1,2}

1 Division of Hematology-Oncology, Department of Medicine, University of Pennsylvania, Philadelphia, PA

2 Abramson Cancer Center, Philadelphia, PA

3 Department of Radiation Oncology, University of Pennsylvania, Philadelphia, PA

4 Division of Pulmonary, Allergy, and Critical Care, Department of Medicine, University of Pennsylvania, Philadelphia, PA

5 Department of Surgery, University of Pennsylvania, Philadelphia, PA
Post-Pandemic Planning

▪ No one has a good idea what the other side of the Pandemic will look like

▪ Likely SARS-CoV-2 will not just disappear

▪ Will need to weigh risks of:
  • Infection spread to patients and staff
  • Risk to infected patients to undergo surgery, systemic rx, radiation
  • Resource constraints
  • Public health concerns
Thank You
Question and answer session

Use the Q&A portal to submit your questions
I’m interested in the social distancing requirements for health workers. Should I remain isolated from all family members not in the household? My concern is for the long run and what type of standards for myself and staff in an oncology clinic.
How do you think COVID-19 will affect cancer centers' CoC accreditation?
Is there a period (say 1-2 d) after initial exposure when nasal swab-based testing will not effectively detect an infected person?
Do you have guidance for home health nurses who provide care for patients in their homes?
Is it wise for patients to be delaying treatment because of the pandemic? Won’t this decrease their chances of better outcomes?
Should patients who do not have cancer, but are in need of a mammogram still get one or wait?
What needs to be in place for an organization to start up screenings and vaccinations again?
Are there standard measures that should be taken to minimize exposure of cancer patients who are on treatment?
Questions received through Q&A portal

Use the Q&A portal to submit your questions
Wrap up
Resources

For more information and COVID-19 resources, visit:

cancer.org
nccn.org/covid-19
cdc.gov

For more about what Project ECHO is doing to respond to COVID-19, visit echo.unm.edu/covid-19
Join us Tuesday, May 5 at 12:00 ET

Thomas K. Varghese Jr. MD, MS, FACS
Executive Medical Director and Chief Value Officer
Huntsman Cancer Institute – University of Utah

Discussion will focus on steps to take to reengage patients as the pandemic subsides

Complete the post-survey evaluation and ask your questions of our expert faculty panel