Update for Week of April 27, 2020 to the Joint Statement on COVID-19
From Lung Cancer Advocacy Groups

As of April 24, 2020, the Centers for Disease Control and Prevention (CDC) reports 895,766 cases of COVID-19 and 50,439 COVID-19-associated deaths. As the number of cases continue to rise, the importance of maintaining social distancing and following shelter in place/quarantine orders is central to flattening the COVID-19 curve.

In this week’s update, we address how different professional societies/organizations are addressing lung cancer screening and treatment during the COVID-19 pandemic. As described in the National Academy Press, the mission of the professional societies is primarily educational and informational. Their influence flows from their continuing and highly visible functions: to publish professional journals, to develop professional excellence, to raise public awareness, and to make awards. Through their work, they help to define and set standards for their professional fields and to promote high standards of quality through awards and other forms of recognition.

In this week’s update, we provide you with a brief summary of what different professional societies are saying about COVID-19 and lung cancer treatment. These consensus statements are a testament to the way the global oncology community is working together to ensure that lung cancer patients continue to get the best care possible. The following have been included in today’s update based on availability of information.

CHEST - American College of Chest Physicians
ASCO - American Society of Clinical Oncology
ESMO - European Society for Medical Oncology
ATS - American Thoracic Society
NCCN -National Comprehensive Cancer Network
ASTRO - American Society for Radiation Oncology
ESTRO - European Society for Radiotherapy & Oncology

**Question 1: How are doctors managing lung cancer screening during COVID-19?**

The recent consensus statement from CHEST states that it is appropriate to defer enrollment in lung cancer screening and modify the evaluation of lung nodules due to the added risks from potential exposure to SARS-CoV-2 and the need for resource reallocation.

This means that for individuals who have not yet initiated screening, they should wait to be screened.

In those individuals where nodules are detected through a low-dose CT (LDCT) scan, the consensus statement suggests follow-up and nodule management should depend on the size of the nodule, availability of local facilities, prevalence of COVID-19 in the region, and patient-specific factors (presence of other serious health issues such as diabetes and heart disease.

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Question 2: What factors are organizations/societies taking into account when deciding how to treat lung cancer patients?

According to Schrag and colleagues, oncology care generally falls into four categories.

1. **Care that is not time sensitive, can be delivered remotely, or both.**
   This includes survivorship and surveillance visits for patients who have completed cancer treatment (for example, a patient who has completed treatment and has no evidence of disease).

2. **Care that cannot be delivered remotely but for which treatment omission or delay has a marginal effect on quality or quantity of life.**
   The big question here is: does the risk of COVID-19 exposure outweigh the benefit of the treatment? Examples that fall into this category include:
   - Delaying systemic chemotherapy or reducing the number of cycles of chemotherapy for patients with advanced non-small cell lung cancer
   - Delaying surgery by providing neoadjuvant chemotherapy
   - Reducing the number of radiation therapy visits

3. **Treatment delay will have a moderate but clinically important adverse influence on quality of life or survival.**
   This includes using treatments that are less harsh than the original treatments, to minimize hospitalization or manage side effects during the time of COVID-19.

4. **Treatment that has the potential to cure and/or cannot safely be delayed.** This includes treatment of small cell lung cancer.

It is important to note that recommendations should be adapted to reflect the status of the patient and available facilities.

Question 3: What are the consensus recommendations for lung cancer surgery?

ATS has proposed the use of a three-phase framework to decide how to proceed with lung surgery. It defines three phases of hospital status based on:

- the prevalence of COVID-19 patients within the hospital
- availability of hospital resources, and
- the rate of change (in terms of increasing prevalence of infections and resource depletion)

Each phase has a compass statement that is meant to give additional direction on how to manage number of lung surgeries, based on perceived risk to patients and hospital staff.
<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
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<tbody>
<tr>
<td>• Hospital resources intact (e.g. ICU beds, ventilators, clinicians, Personal Protective Equipment available for all doctors)</td>
<td>• Many COVID-19 patients</td>
<td>• Hospital resources are predominately routed to COVID-19 patients</td>
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<tr>
<td>• COVID-19 trajectory not in rapid escalation phase</td>
<td>• Resources limited (e.g. ICU beds, ventilators, clinicians, PPE),</td>
<td>• Resources critically limited/exhausted</td>
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<tr>
<td></td>
<td>• COVID trajectory within hospital in rapidly escalating phase</td>
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<td><strong>Compass statement:</strong> Surgery restricted to patients whose survivorship likely to be compromised by surgical delay of 3 months</td>
<td><strong>Compass statement:</strong> Surgery restricted to patients likely to have survivorship compromised if surgery not performed within next few days</td>
<td><strong>Compass statement:</strong> Surgery restricted to patients likely to have survivorship compromised if surgery not performed within next few hours</td>
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Specific treatment decisions should be made by the patient and their treating physician, keeping in mind the framework discussed in question 2.

**Question 4:** What are the consensus recommendations for the use of radiation for lung cancer treatment?

The ASTRO-ESTRO consensus statement follows a similar approach to the ATS statement and takes into account the local and regional scenario of the COVID-19 pandemic.

In a risk-mitigation pandemic scenario where radiotherapy resources remain available, efforts should be made not to compromise the prognosis of lung cancer patients and guideline-recommended radiation therapy should be practiced. Postponement or interruption of radiation therapy of COVID-19 positive patients should be considered to avoid exposure of cancer patients and staff to an increased risk of COVID-19 infection.

In a severe pandemic scenario characterized by reduced resources, if patients must be triaged, important factors included potential for cure, relative benefit of radiation, life expectancy, and performance status.

Specific treatment decisions should be made by the patient and their treating physician, keeping in mind the framework discussed in question 2.
**Question 5: What are the consensus recommendations from medical oncology associations and professional societies?**

The three professional societies/organizations (ASCO, ESMO and NCCN) are aligned in their recommendations for lung cancer patients. All societies note that the risk of COVID-19 must be balanced against the risk to the patient of lung cancer progression, which in most cases still represents the highest risk of mortality in lung cancer patients. Individual clinical judgment is necessary. The recommendations provided by these societies cannot provide absolutes for alternate strategies during the COVID-19 outbreak. *Specific treatment decisions should be made by the patient and their treating physician, keeping in mind the framework discussed in question 2.* It is important to note that most of these recommendations would not normally be considered standard of care or optimal but are reasonable under these unusual circumstances in which minimizing visits and potential exposure has become a priority.

NCCN further suggests that entry points to the health care system should feature screening of patients and providers (i.e., questionnaire, temperature-based screening, standard and rapid COVID-19 testing). If resources are sufficient, screening of visitors who can accompany patients is reasonable, although many institutions have visitation restrictions to facilitate social distancing.

**Question 6: How do these changes in lung cancer care impact shared decision-making?**

Shared decision-making is a process in which patients and doctors work together to make decisions and select tests, treatments, and care plans based on clinical evidence that balances risks and expected outcomes with what individual patient value. The consensus statements from all the professional societies urge doctors to have candid discussions with their patients and to take into account patient preferences and values when making decisions for screening and treatment.

**Question 7: Should lung cancer treatment be modified if patients also have COVID-19?**

Physicians don’t have much data to help guide treatment decisions for lung cancer patients who also have COVID-19. To gather this data, the global lung cancer community has come together to develop the TERAVOLT registry. The registry is collecting information on patients with thoracic cancer infected with COVID-19 regardless of therapies administered. More than 100 physicians worldwide are participating, and the number is growing. Currently, patients cannot deposit their data into the registry themselves. If you have or had a confirmed case of COVID-19 and would like your data included in the registry, talk to your doctor about joining the TERAVOLT registry.
Resources and websites:

1. IASLC’s Guide to COVID-19 and Lung Cancer
2. The National Cancer Institute has a special website for COVID-19 and emergency preparedness. COVID-19: What People with Cancer Should Know-
3. We are following updates provided by the World Health Organization (WHO) and the US Centers for Disease Control and Prevention (CDC)
4. Johns Hopkins COVID-19 Resource Center
5. Interactive map of US COVID-19 cases by state
6. The One-Two Punch: Cancer And COVID-19 (an important perspective for cancer patients)
7. You can find information specific to your state or city or town on your health department’s website.
   - Directory of state department of health websites
   - Directory of local health department websites
8. American Medical Association resources for healthcare providers.

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