



Multidisciplinary Approaches to Cancer Symposium

Complex Cases in Locally Advanced/ Metastatic Non-Small Cell Lung Cancer (NSCLC)

Moderator: Colton Ladbury, MD

Medical Oncology: Jyoti Malhotra, MD, MPH

Surgical Oncology: Dan J. Raz, MD

Radiation Oncology: Percy Lee, MD

Panel & Disclosures

Colton Ladbury, MD

Chief Resident
Department of Radiation Oncology
City of Hope

- *Grant/Research Support from RefleXion Medical.*

Jyoti Malhotra, MD, MPH

Associate Professor
Department of Medical Oncology &
Therapeutics Research
City of Hope

- *Consultant for Abbvie, AstraZeneca, BioAtla, Catalyst Pharmaceuticals, Mirati Therapeutics, Regeneron, Sanofi, and Takeda.*
- *Grant/Research Support from Beyond Spring and Daichi Sankyo.*

This presentation and/or comments will be free of any bias toward or promotion of the above referenced company or their product(s) and/or other business interests.

This presentation and/or comments will provide a balanced, non-promotional, and evidence-based approach to all diagnostic, therapeutic and/or research related content.

This presentation has been peer-reviewed and no conflicts were noted.

Panel & Disclosures

Dan J. Raz, MD
Associate Professor
Department of Surgery
Co-Director, Lung Cancer Program
City of Hope

- *Grant/Research Support from Delfi.*

Percy Lee, MD
Vice-Chair and Professor
Department of Radiation Oncology
Medical Director
Orange County and Coastal Radiation Oncology
City of Hope

- *Consultant for Genentech, Johnson & Johnson, Varian, and ViewRay.*
- *Grant/Research Support from AstraZeneca.*

This presentation and/or comments will be free of any bias toward or promotion of the above referenced company or their product(s) and/or other business interests.

This presentation and/or comments will provide a balanced, non-promotional, and evidence-based approach to all diagnostic, therapeutic and/or research related content.

This presentation has been peer-reviewed and no conflicts were noted.

The off-label/investigational use of Durvalumab will be addressed.

Cultural Linguistic Competency (CLC) & Implicit Bias (IB)

STATE LAW:

The California legislature has passed [Assembly Bill \(AB\) 1195](#), which states that as of July 1, 2006, all Category 1 CME activities that relate to patient care must include a cultural diversity/linguistics component. It has also passed [AB 241](#), which states that as of January 1, 2022, all continuing education courses for a physician and surgeon **must** contain curriculum that includes specified instruction in the understanding of implicit bias in medical treatment.

The cultural and linguistic competency (CLC) and implicit bias (IB) definitions reiterate how patients' diverse backgrounds may impact their access to care.

EXEMPTION:

Business and Professions Code 2190.1 exempts activities which are dedicated solely to research or other issues that do not contain a direct patient care component.

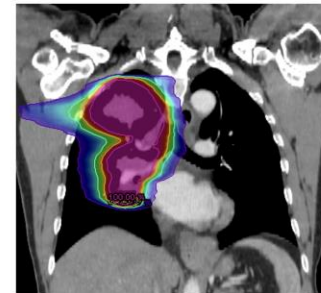
The following CLC & IB components will be addressed in this presentation:

- *Commonalities and differences among individuals in this population*
- *Race/ethnicity of people with lung cancer more likely to have actionable mutation (East Asian, Latino)*
- *Need for molecular testing in all patients with lung cancer*

Outline

- Case 1: Locally Advanced
 - Pre-op vs peri-op
 - Borderline Resectable (CRT vs Induction ChemolImmuno)
 - Patient downgraded to lobectomy. Non PCR
 - PORT?
- Case 2: Oligo Met
 - Treatment of primary
 - Treatment of mets (surgery vs RT)
 - Treatment of Oligoprogression
- Discuss relevance of molecular analyses in all cases

Today's Options for Clinical Stage III NSCLC



ChemoRadiotherapy => Immunotherapy
16 months



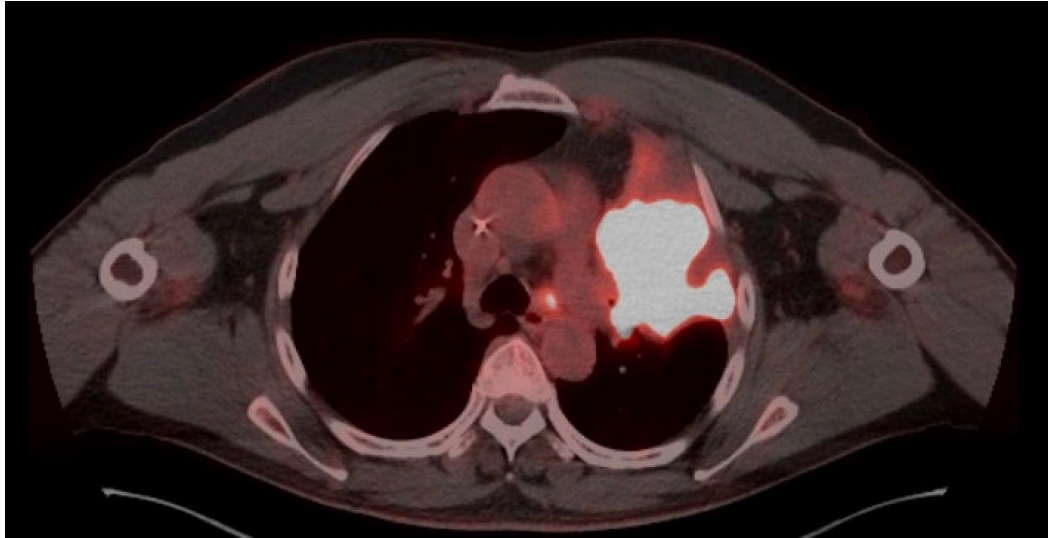
Chemo-Immunotherapy => Surgery => Systemic Therapy
22 months



Neoadjuvant Treatment

- 52M with at least two-year history of progressive shortness of breath and ultimately an episode of hemoptysis
- Prior CT imaging two years prior had shown 2.2 cm lung nodule that unfortunately was not followed up
- Ultimately underwent CT angiogram that revealed 8 cm lung mass
- Biopsy revealed lung adenocarcinoma
- No actionable mutations
- PD-L1 95%
- Mediastinal nodal evaluation via EBUS negative
- Metastatic work-up negative

Neoadjuvant Treatment



IMPRESSION:

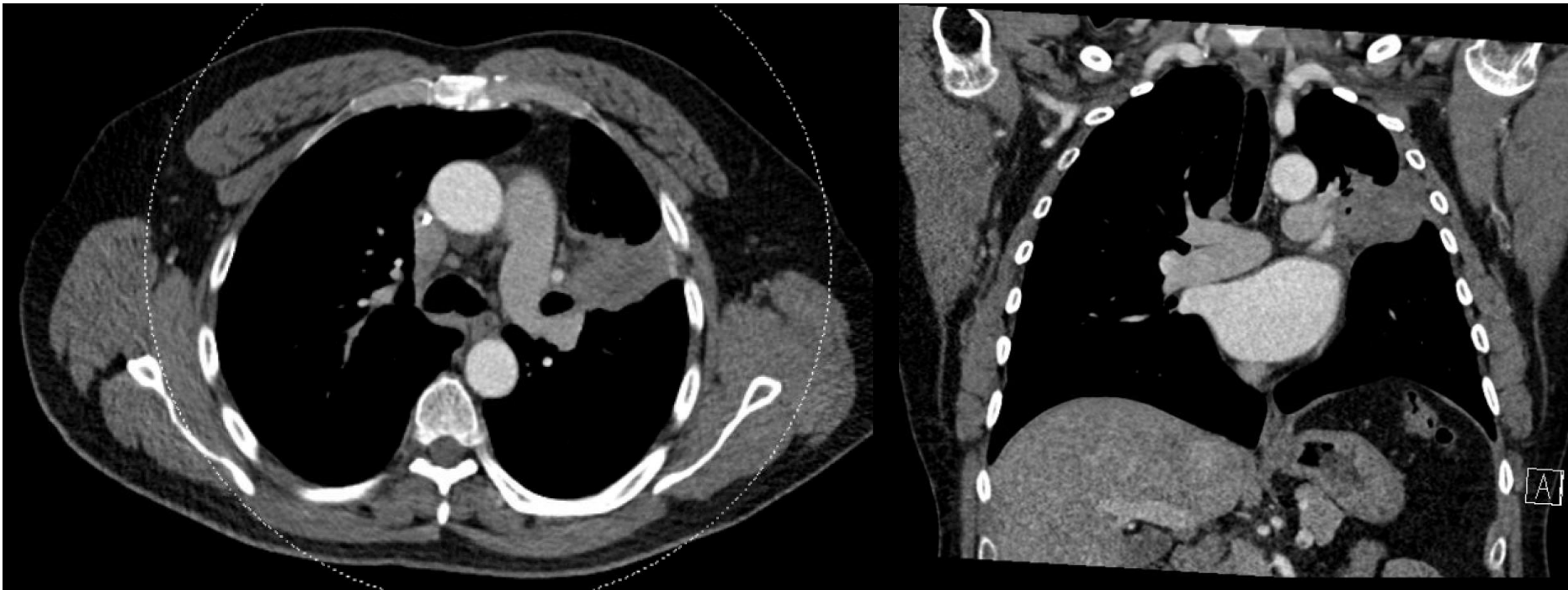
1. There is an intensely FDG avid consolidative mass in the left upper lung measuring up to 10 cm in size, extending into mediastinum, and left hilum. There is probable endobronchial extension obliterating the left upper lobe and lingular lobe bronchi. Findings are consistent with the patient's known history of lung cancer.
2. There is a 9 mm size FDG avid nodule in posterior left lower lobe lung concerning for an additional site of lung cancer.
3. There are FDG avid mediastinal lymph nodes measuring 16 x 11 mm in size, concerning for metastasis. The left internal mammary lymph node is increased in size, measuring up to 7 mm with increased FDG activity, also concerning for metastatic disease.
4. No metastatic disease is noted outside the chest.



Neoadjuvant Treatment

- Staged as cT4N0M0 (IIIA)
- Due to extent of involvement upfront resection was felt to be challenging and would have required pneumonectomy
- Recommended neoadjuvant chemoimmunotherapy
- Received cisplatin, pemetrexed, and nivolumab x3 cycles

Neoadjuvant Treatment



IMPRESSION:

1. Clear decrease in size of the several mediastinal nodes and resolution of left medial supraclavicular node.
2. Decrease in size of now 56 x 39 mm consolidative mass in the left upper lobe presumably representing the patient's known lung carcinoma.
3. No change to minimal decrease in size of a 9 x 7 satellite nodule in the subpleural posterior left lower lobe.
4. No new pulmonary lesion or mediastinal adenopathy identified.

Neoadjuvant Treatment

- Proceeded with left thoracotomy, left upper lobectomy, left lower lobe wedge resection, and mediastinal lymph node dissection
- Lung, left upper lobe, lobectomy:
 - Adenocarcinoma, poorly differentiated, measuring 8.5 cm grossly.
 - Approximately 30% viable tumor status post neoadjuvant chemoimmunotherapy.
 - Focal spread through air spaces is present.
 - No lymphovascular invasion identified.
 - No viable carcinoma present in pleura (treatment changes present).
- Resection margins are negative.
- Lung, left lower lobe, wedge resection:
 - Adenocarcinoma (1.2 cm)
 - Resection margin is uninvolved.
- Level 5 lymph nodes, excision:
 - Metastatic carcinoma (5 mm) in one lymph node
- 14 other lymph nodes negative
- ypT4N2M0 disease

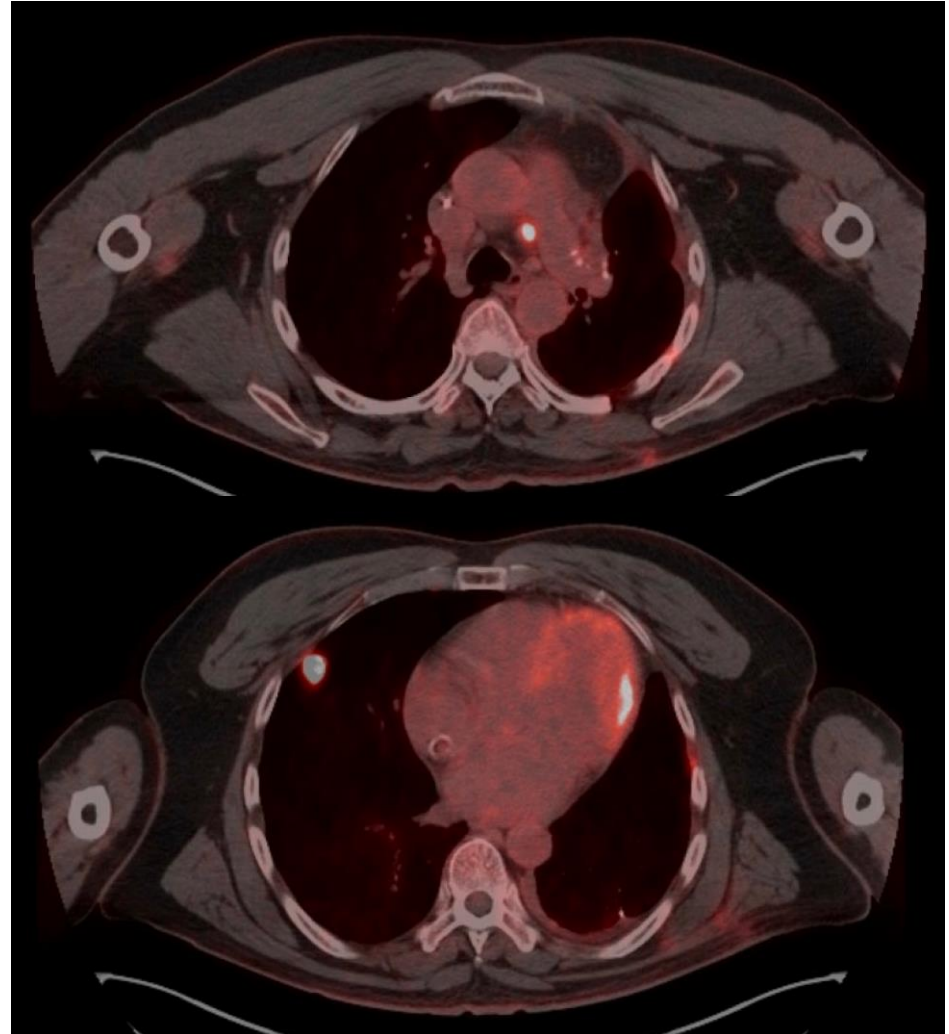
Neoadjuvant Treatment

- No PORT recommended
- Recommended 1 year of adjuvant nivolumab
- Restaging imaging planned for ~3 months after surgery

Neoadjuvant Treatment

IMPRESSION:

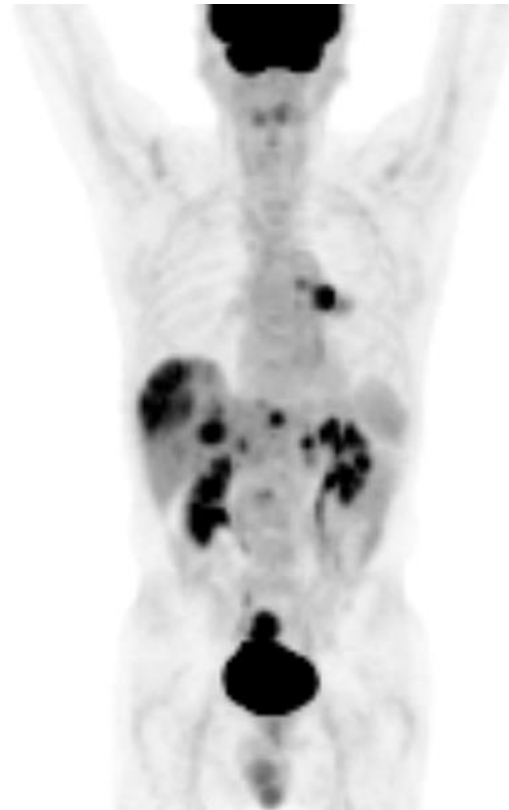
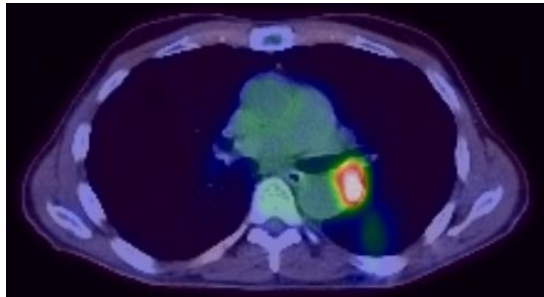
1. Pending



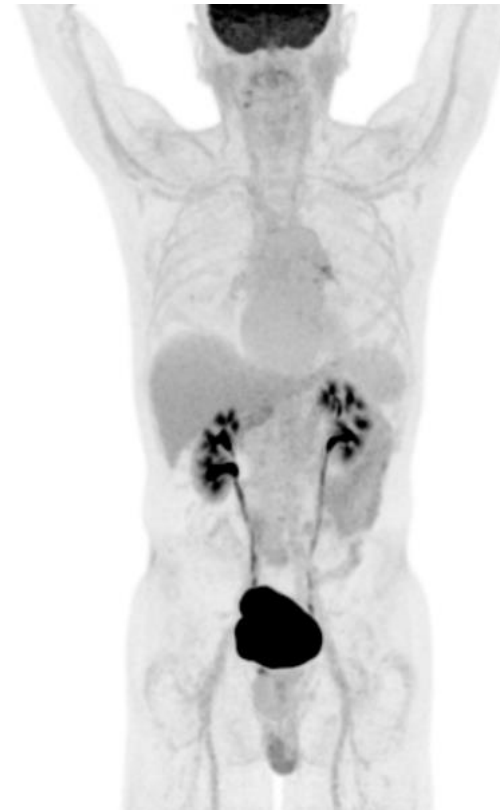
Oligoprogression/Oligopersistence

- 69M who presented with months of severe unintended weight loss over two months and two episodes of hemoptysis
- CT showed widespread metastatic lesions including the lung, pancreatic head, liver, adrenal glands
- Liver and pancreas biopsied. Stains consistent with lung primary adenocarcinoma (TTF-1 and Napsin A IHC positive)
- Guardant 360 positive for EGFR Exon 19 deletion
- Therefore recommended treatment with osimertinib

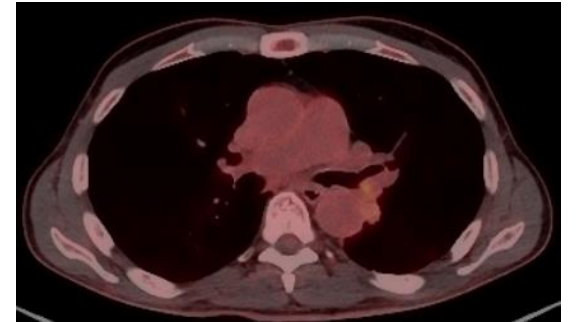
Oligoprogression/Oligopersistence



5/17/22



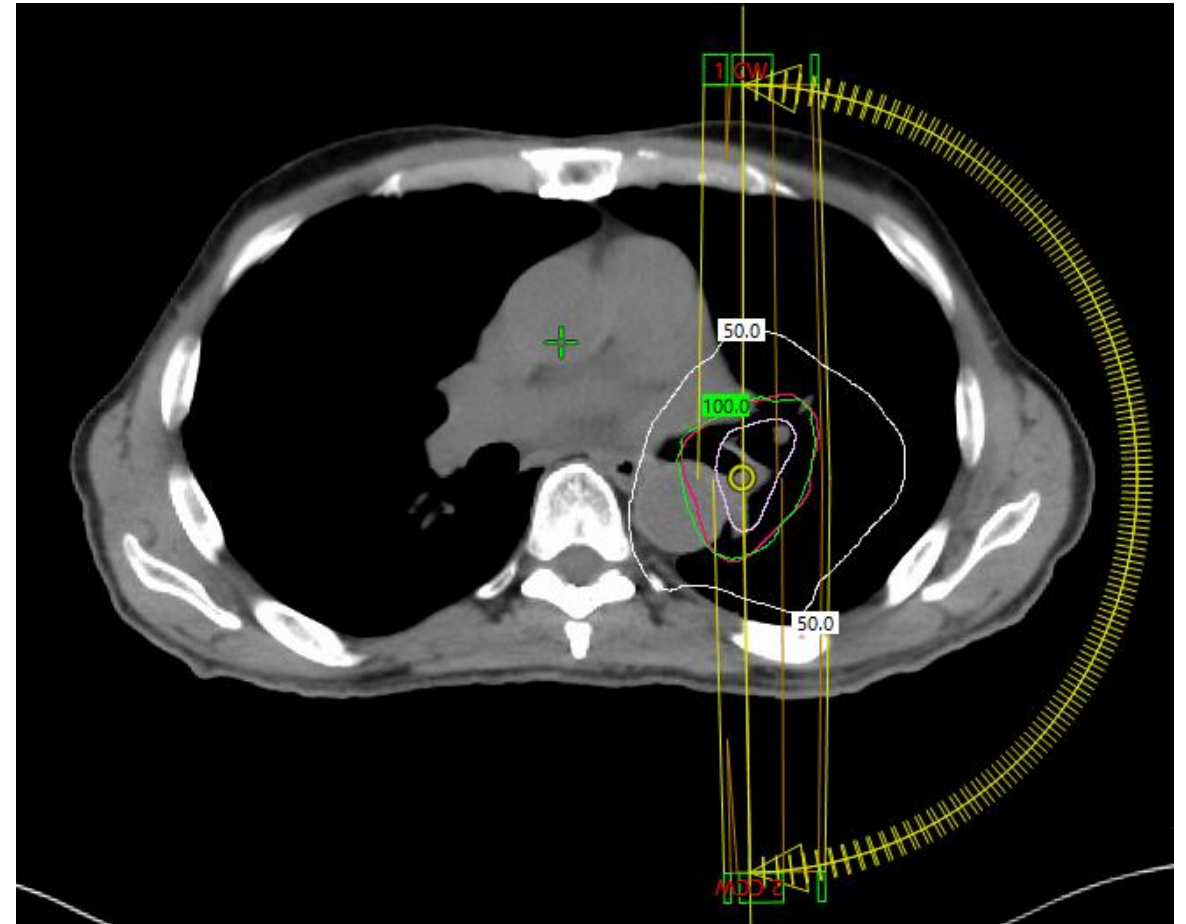
5/23/23



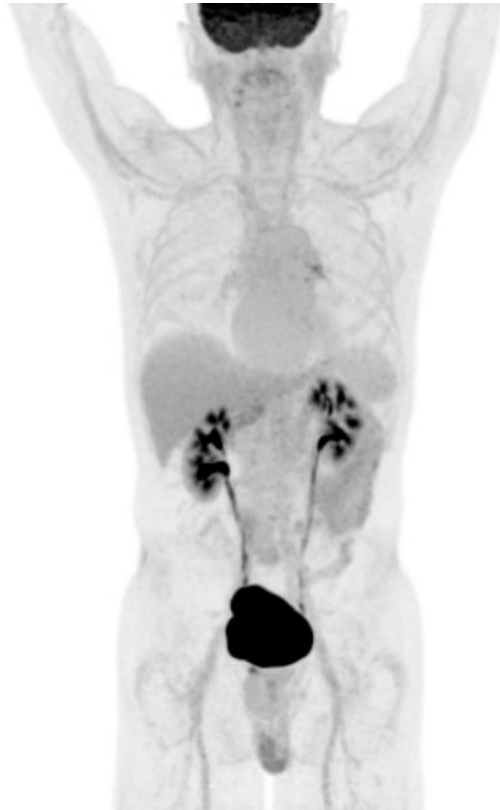
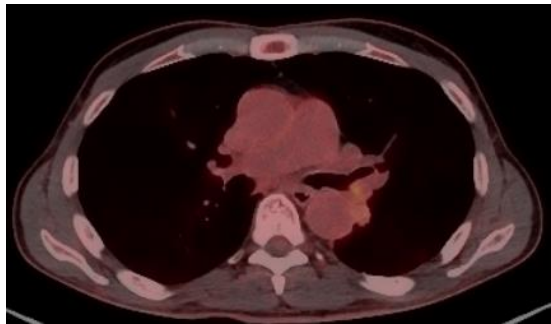
Discussion by Dr Raz on surgery for Oligoprogression/Persistence

Oligoprogression/Oligopersistence

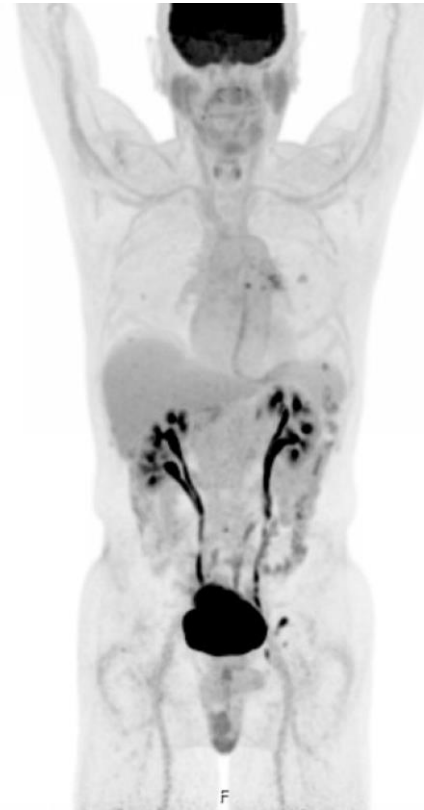
- After continuing on osimertinib for ~1 year, patient had excellent response with mild avidity in the left hilar/infrahilar left lower lobe
 - Did receive SBRT to sacral metastases ~3 months into osimertinib for palliation
- Therefore offered consolidative RT to hilar primary to total dose of 40 Gy in 10 fractions
- Delivered without reported toxicity



Oligoprogression/Oligopersistence



5/23/23



8/24/23

