What's next after Turrisi in small cell lung cancer? Clinical challenges and future directions

Small Cell Lung Cancer Tumor Board
Challenging Case

Breakout Room Notes

- Please turn your camera and microphone on when in the breakout room
- Once you are in breakout rooms, person whose last name starts with the letter **closest to A in the alphabet** is the group moderator
  - The moderator will try to keep the conversation on track and encourage all members to participate
- You will be in breakout rooms for 10 minutes and will automatically be pulled back into main room

Discussion Questions

- How do you feel about the progression of systemic therapy treatments?
- General thoughts on the radiation treatment?

Case History

HPI: 57 yo male with new 10 lb weight loss, cough and dyspnea and new right supraclavicular lymph node

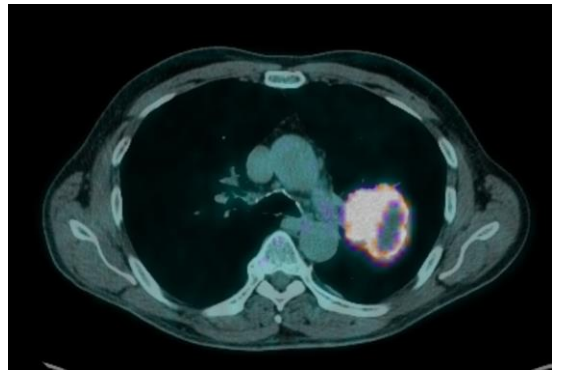
Past medical history: several resected basal cell skin cancers, hypertension, hyperlipidemia

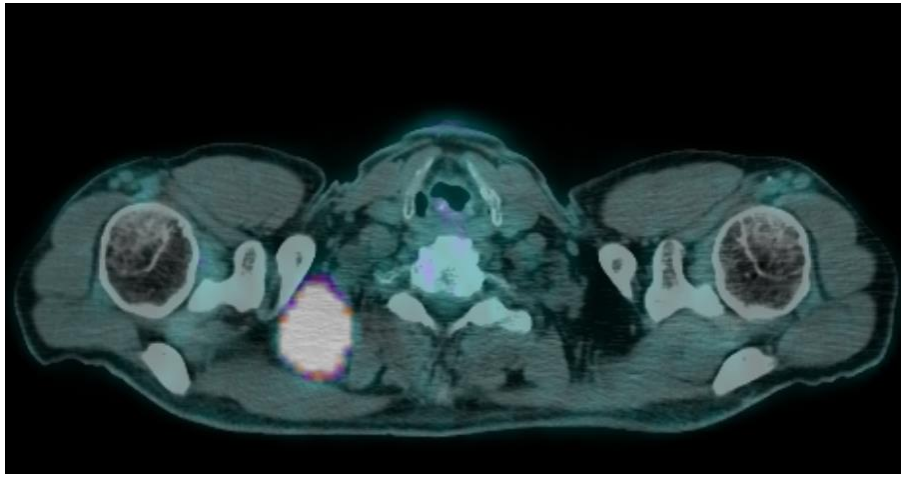
Social History: works as an engineer, current smoker (30 pack-year history)

Physical exam: fixed right 5 cm supraclavicular lymph node, no other abnormalities

Diagnostic Workup

- CT chest shows cavitary left upper lobe mass measuring 6.5 cm with direct extension into the left hilum
- PET/CT confirms R supraclavicular node (5.2 cm, SUV max 34) and left upper lobe mass both FDG avid. No other mediastinal nodal activity or distant disease
- Brain MRI negative
- Excisional biopsy of R supraclavicular LN





Pathology

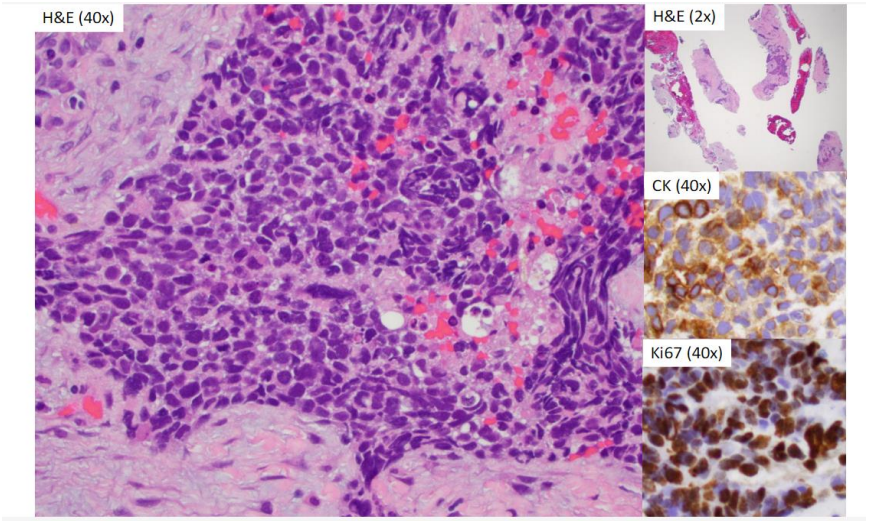
A. SUPRACLAVICULAR MASS, RIGHT, EXCISION:

- **CONSISTENT WITH METASTATIC SMALL CELL CARCINOMA, SEE COMMENT.**

Comment

Neoplastic cells show the following immunohistochemical profile in conjunction with immunoprofile consistent with small cell carcinoma.

STAIN	RESULT
AE1/3	Positive
Ki67	Most of the tumor cells are positive
TTF-1/napsinA	Focal positive/negative
TTF1	Negative
CD56	Rare tumor cells positive
Synaptophysin	Negative
Chromogranin	Negative
CD45	Negative
CK5/p40	Negative/negative



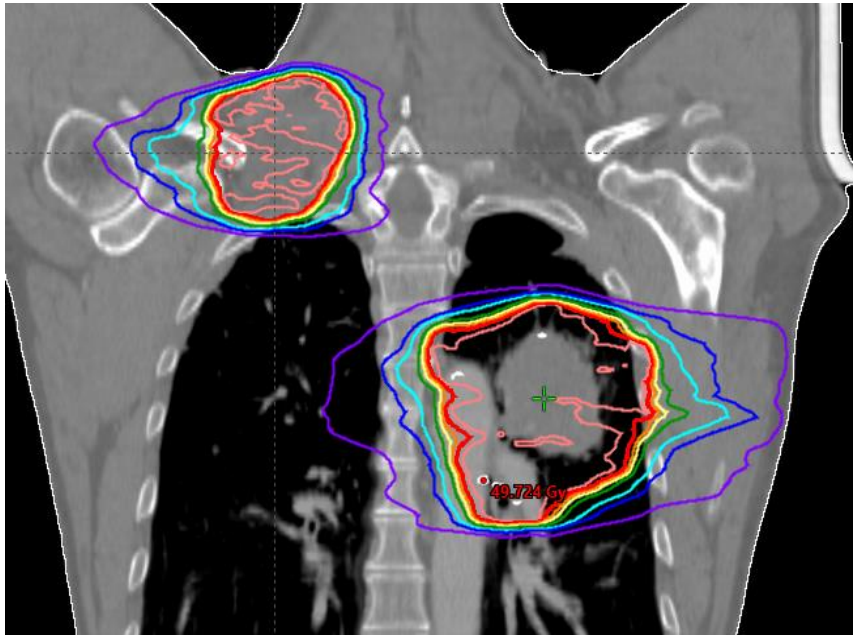
Stage and Initial Treatment

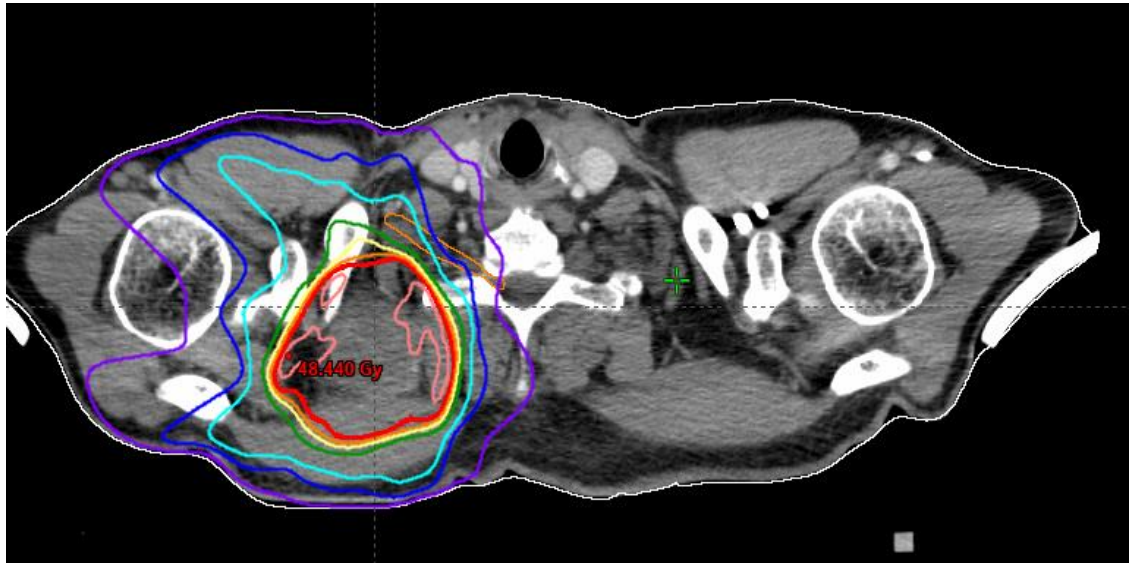
Staged as T3N3M0, limited stage small cell lung cancer

Definitive chemoradiation recommended

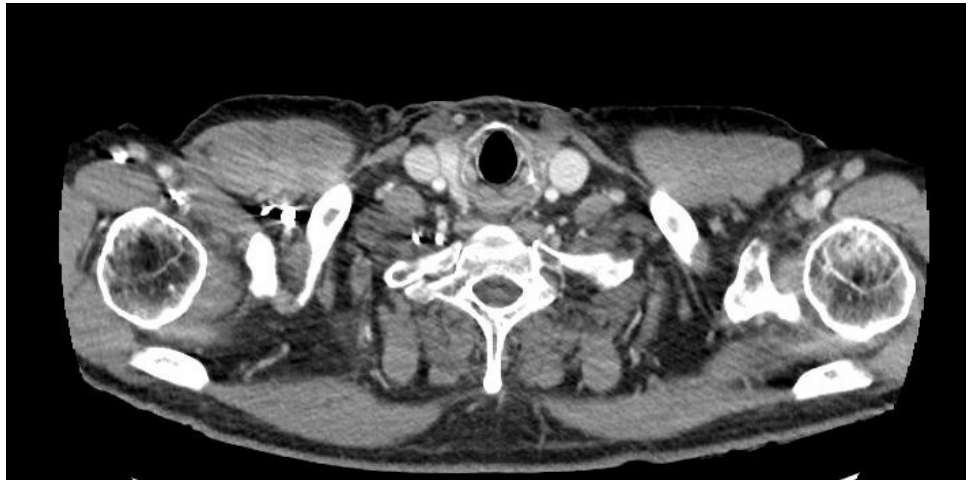
- 45 Gy thoracic radiation delivered twice daily (10/15/2018- 11/5/2018)
- 4 cycles cisplatin/etoposide (10/17/18 – 12/27/18)
- Enrolled in NRG CC003, a randomized trial of hippocampal avoidance PCI vs. standard PCI
  - Pt randomized to control arm
  - Received PCI in 10 fractions to 25 Gy + memantine (1/16/2019 – 1/20/2019)

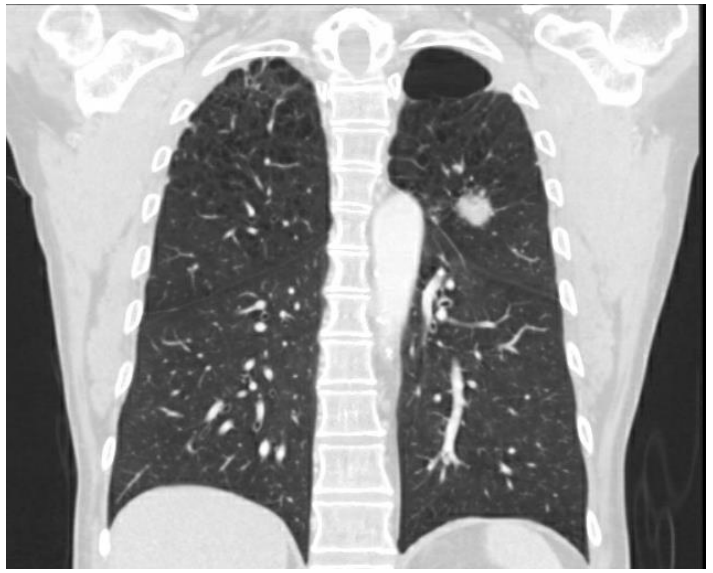
Radiation Field





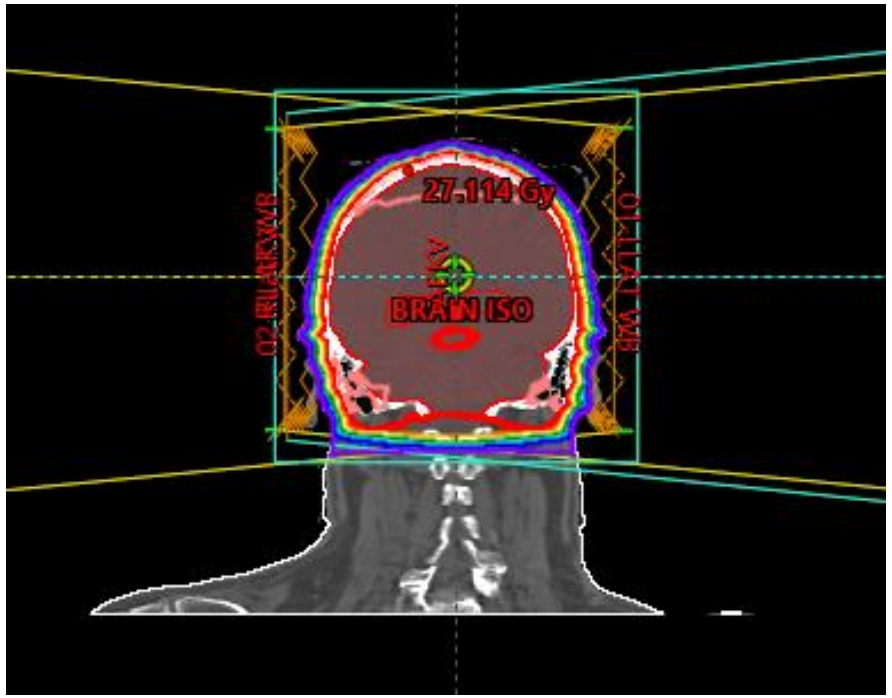
Post-Treatment Scans





Initial re-staging shows significant reduction in size in left upper lobe mass and right supraclavicular lymph node

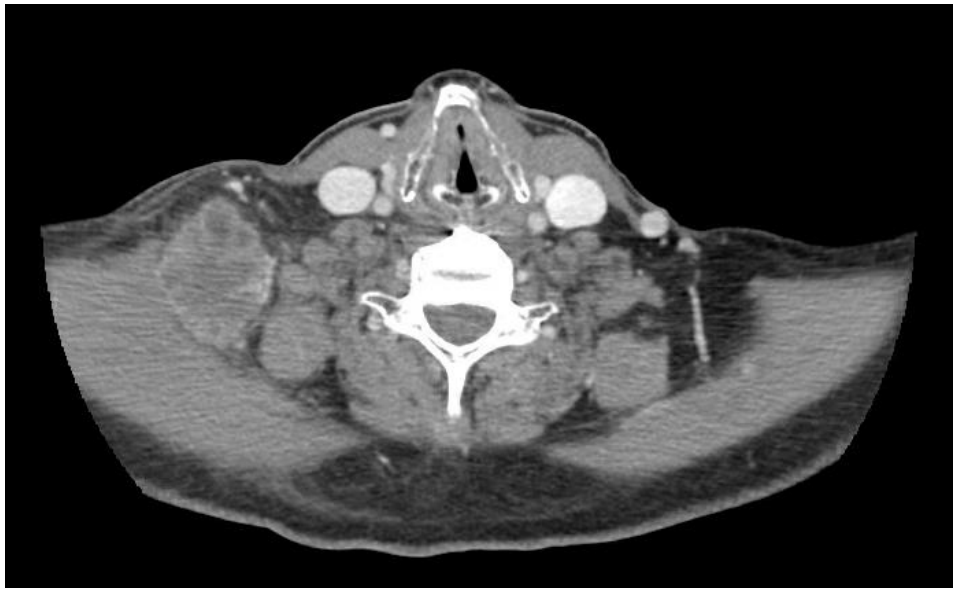
Prophylactic Cranial Irradiation



25 Gy in 10 fractions, delivered on NRG CC003 protocol (randomized to control arm- no hippocampal avoidance)

Post-Treatment Course

- In March 2019, 2 months after completion of PCI, right supraclavicular node begins enlarging
- Additional scans showed that this sole site of relapse

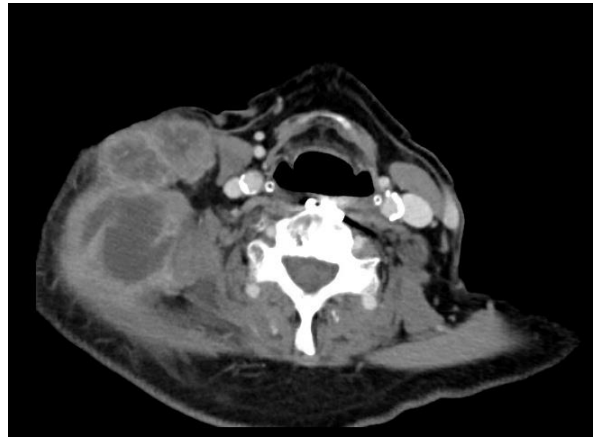


Clinical Course

- Pt enrolled on institutional study, WCI 3112-15: Durvalumab/Tremelimumab +/- SBRT for patients with platinum refractory SCLC
  - Randomized to arm 1 (durva/treme no radiation);
  - C1D1 4/17/2019
  - Developed disease progression in 6/2019

- Paclitaxel started 7/2019
  - R supraclavicular node progresses with pain

- Palliative re-treatment with radiation to R neck lymph nodes
  - 30 Gy in 10 fractions (8/22/19-9/5/19) with response to treatment



Clinical Course (con't)

- 11/2019 – presents with new subcutaneous nodules of right low neck/chest wall
- CT imaging shows multi-focal progression in chest
- Temodar recommended but patient did not start due to high copay
- Pt then received palliative RT for draining skin nodules
- Hospice initiated 1/2020