PATIENT-BASED PANEL DISCUSSION

THORACIC CANCERS

Speakers: Drs. Ramalingam, Carlisle, Steuer, Leal, and Higgins.

Presented by Emory University Heme/Onc Fellow: Andrew McDonald, MD

EMORY WINSHIP CANCER INSTITUTE
National Cancer Institute Designated Comprehensive Cancer Center

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CASE PRESENTATION

- 64 yo M presenting to the oncology clinic to establish care for NSCLC.
- 1-month prior: screening CT identified an 8.8 x 5.0 x 3.0 cm spiculated mass-like LUL consolidation with prominent b/l hilar LAD.
- Bronchial brushing positive for adenocarcinoma. 11R and station 7 LN FNA negative. 11L LN positive for atypical cells.
  - Mutational analysis: PD-L1 1%. EGFR, ALK, BRAF, and ROS1 negative.
  - Per discussion with interventional pulm, bronch findings of 11L LN were very concerning for disease.
- CT head w/wo negative for intracranial disease

PATIENT MEDICAL HISTORY

PMHx: HTN, polysubstance use disorder (tobacco & EtOH), h/o GSW with retained bullet, OA, cataract

FHx: HTN and CAD in mother, HTN in brother

Social Hx: Former heavy EtOH use, active smoker (50PY history), no recreational drug use

Medications:
Chlorthalidone 25mg daily
Lisinopril 40mg daily
Albuterol 108mcg/act inhaler PRN
Fluticasone

Allergies: Shellfish

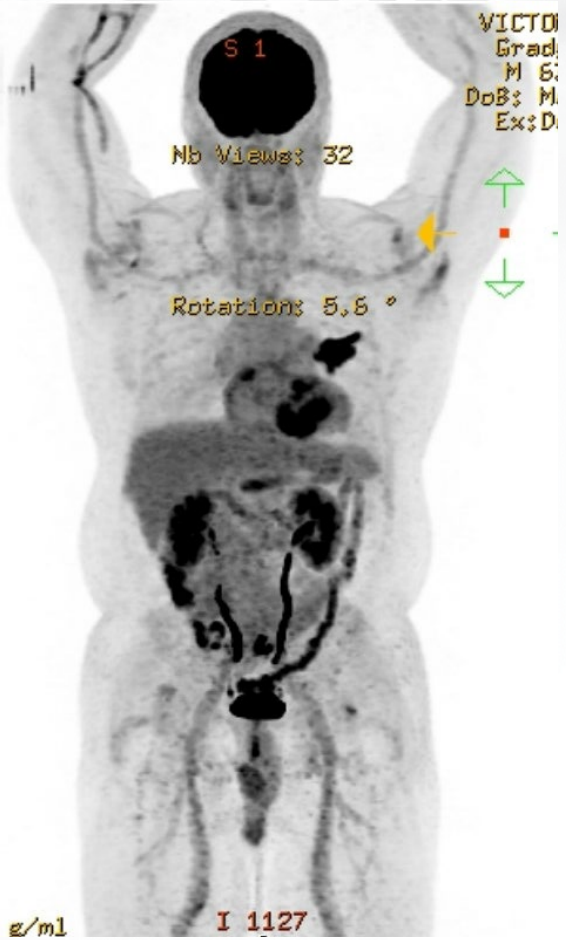
INITIAL PET/CT

PET/CT positive for FDG avid LUL mass extending into left hilum, mildly avid b/l hilar LN, and no distant disease

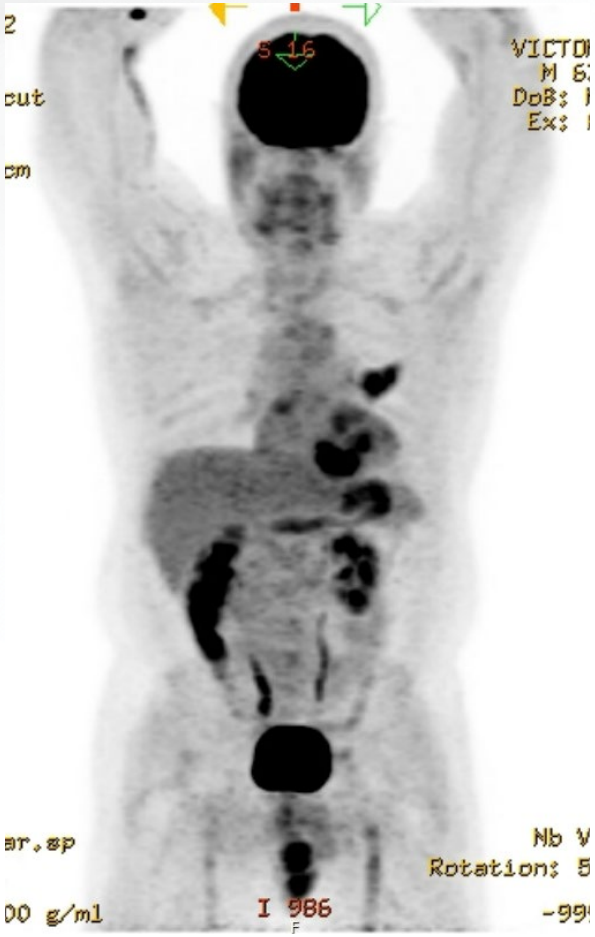
CASE PRESENTATION

- Diagnosed with stage IIIA (T4N1M0) adenocarcinoma.
- Tumor board discussion recommended neoadjuvant chemo-immunotherapy per CHECKMATE 816 with nivolumab, carboplatin, paclitaxel followed by resection.
- PET/CT after 3 cycles showed the LUL lesion decreased in size/activity with no new lesions identified.

BEFORE



AFTER



CASE PRESENTATION

- Left thoracotomy, left upper lobectomy, and mediastinal LN dissection
  - LUL resection positive for moderately-differentiated invasive adenocarcinoma, predominately acinar pattern with focal micropapillary features
    - Vascular margin positive
    - Lymphovascular invasion identified
    - Carcinoma involves the pleura
  - LLL wedge resection positive for moderately-differentiated invasive adenocarcinoma with multinodular pleural involvement
  - Lymph nodes negative (0/10)
- Post-surgical stage IVA (pT2a pN0 pM1a)
- Molecular testing on surgical specimen positive for KRAS p.G12D missense variant (exon 2).

CASE PRESENTATION

- What would be your treatment choice now?
- Can you speak on how to determine when “atypical cells” on a biopsy are concerning for malignancy?
- How does the KRAS pG12D mutation affect your management of this case, if at all?
- Have you felt like this mutation has affected responses to immunotherapy?
- Per Caris report, there are currently 3 clinical trials (one stage 1, two stage 2) that he could qualify for with this mutation. Would this mutation prompt earlier enrollment in clinical trial?

Cancer Commun (Lond). 2022 Sep;42(9):828-847. doi: 10.1002/cac2.12327. Epub 2022 Jul 11.

KRAS-G12D mutation drives immune suppression and the primary resistance of anti-PD-1/PD-L1 immunotherapy in non-small cell lung cancer

Chengming Liu [1 2], Sufei Zheng [1 2], Zhanyu Wang [1 2], Sihui Wang [1 2], Xinfeng Wang [1 2], Lu Yang [3], Haiyan Xu [4], Zheng Cao [5], Xiaoli Feng [5], Qi Xue [1], Yan Wang [3], Nan Sun [1 2], Jie He [1 2]

Affiliations + expand

PMID: 35811500 PMCID: PMC9456691 DOI: 10.1002/cac2.12327

Free PMC article

A Study of Avutometinib (VS-6766) + Defactinib in Recurrent KRAS G12V, Other KRAS and BRAF Non-Small Cell Lung Cancer (NCT04620330)

Testing the Combination of the Anti-cancer Drugs ZEN003694 (ZEN-3694) and Talazoparib in Patients With Advanced Solid Tumors, The ComBET Trial (NCT05327010)

A Study of PRT3645 in Participants With Select Advanced or Metastatic Solid Tumors (NCT05538572)

QUESTIONS OR COMMENTS?

Thank you to the patient and family involved in this case.

Thank you to Dr. Jennifer Carlisle for providing this case.

Thank you to the panelists for their insight.

AND THANK YOU!!!