Gillianne Lai
National Cancer Centre Singapore

PD-L1 IHC Expression in Oncogene Driven Tumours with Low Mutational Burden
Mdm CT

- 46 year old Chinese female
- Married with 3 children
- Lifelong non-smoker
- ECOG 0

Past Medical History:
- T2DM, Hypertension, Hyperlipidaemia

Significant family history of CA:
- Sister: Breast CA at 38 years
- Father: Pancreatic cancer at 55 years
- Mother: Colon cancer in her 40s

- Has good insurance coverage
History & Work-Up

- First presented with symptomatic brain metastases in May 2016
- Initial staging PET-CT (7/5/17): FDG-avid R lung mass, mediastinal nodes, R SCF, bony mets, R putamen hypodense lesion

Histology:
- Adenosquamous; TTF1+ and p40+
- EGFR Exon 21 M+
- Quad FISH negative
- PD-L1 TPS 70%
Oncological Treatment

- May 16: WBRT 10#
- Jun 16: Started on Erlotinib (100 mg OM as poorly tolerant of 150 mg OM)
- Jan 17: PET-CT showed stable lung primary; new FDG avid left ala of the sacrum
- Mar 17: RT to pelvis (8#)

- Jun 17: PET-CT showed PD of lung primary
  > Started on Pembrolizumab and came for 2nd opinion
Management Options

- Re-biopsy?
- Continue pembrolizumab?

Patient opted to continue #2 Pembrolizumab
Progress

Primary lesion increased from 2 to 2.7 cm
Progress

- Underwent a rebiopsy
  - T790M negative

- Treatment options?
  - Chemotherapy + Immunotherapy
  - Combination Immunotherapy
  - Chemotherapy alone