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## PARP inhibitors in metastatic breast cancer with BRCA mutation

# Disclosures

Sponsors for congress: Ipsen, Astellas

# Oncology History (1)

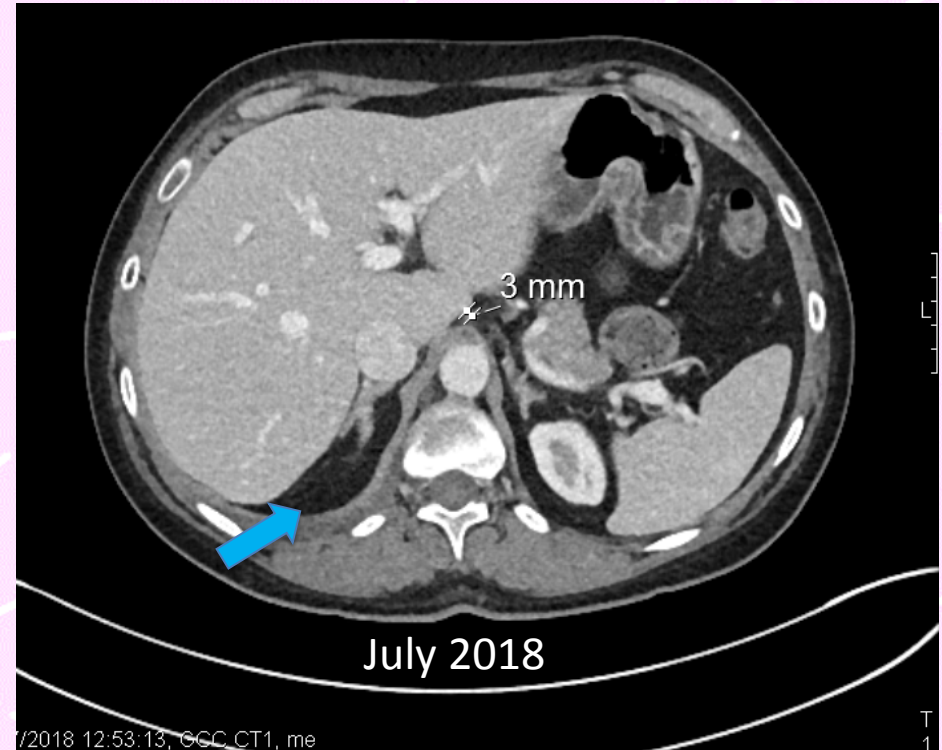
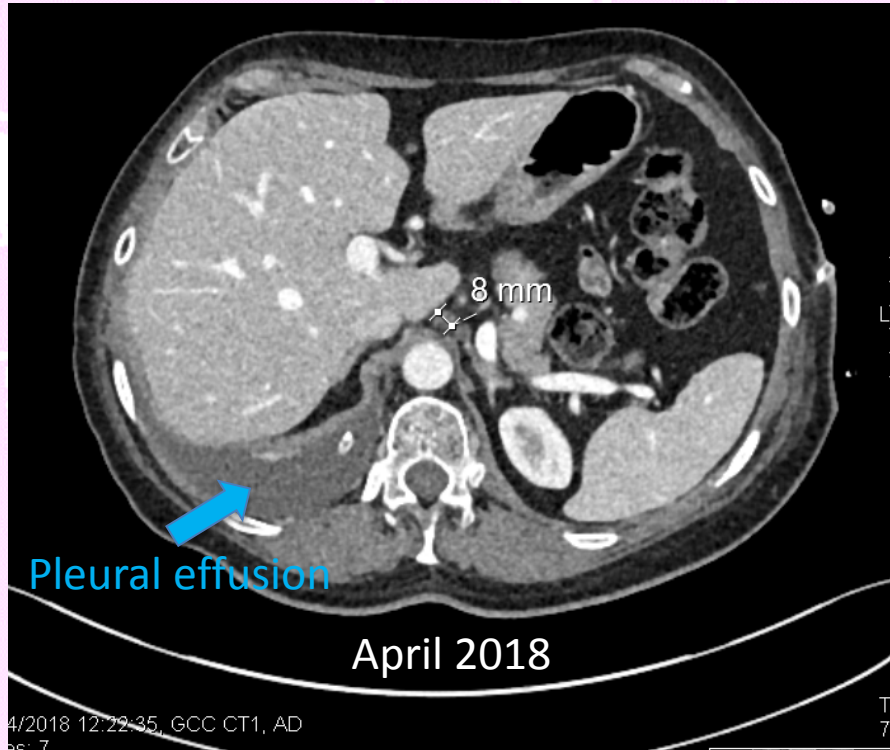
- ◉ 54 year-old post menopausal woman
- ◉ No significant PMH, family history of cancer (lung, colon, ovarian, prostate cancers)
- ◉ January 2017: diagnosed with right breast cancer
- ◉ Underwent wide local excision and axillary clearance, 40 mm, LVI positive, nodes 4/15, TNBC, narrow margins < 1 mm, BRCA2 germline mutation
- ◉ Adjuvant chemotherapy: accelerated EC x 2 cycles then 3 weekly carboplatin weekly paclitaxel for 12 weeks
- ◉ Contra-indication to adjuvant bisphosphonates due to dental issues
- ◉ 3/10/17: Right completion mastectomy and risk reducing salpingoophorectomy – Histology: 36mm residual invasive carcinoma, completely excised.
- ◉ December 2017: completed adjuvant RT right chest wall and SCF

# Oncology History (2)

- January 2018: CT scan shows progressive disease with right internal mammary nodes, mediastinal, right hilar and upper abdominal adenopathy. Skeletal involvement in the manubrium and ribs
- EBUS-TBNA station 7 and 4L: metastatic adenocarcinoma with new right pleural effusion. ER, PR, HER-2 negative. Bone scan negative
- February 2018: patient admitted for pleural drain due to symptomatic pleural effusion. Vocal cord palsy due to laryngeal nerve involvement. Started carboplatin AUC 6 as an inpatient, received 2 cycles with partial response
- April 2018: received compassionate access to olaparib 300 mg BD in the first line metastatic setting

# Radiological response to olaparib

After 3 months of treatment





# Tolerance to olaparib and clinical response

- ⊙ G1 nausea, G1 diarrhoea, No haematological toxicity
- ⊙ ECOG PS improved from 2 to 1, chest drains removed, bone pain resolved, vocal cord palsy improved
- ⊙ Literature: phase III OlympiAD compared olaparib vs standard single agent chemotherapy treatment of physician's choice (TPC) in patients with HER2-negative metastatic breast cancer and a germline *BRCA* mutation.
  - 302 patients randomly assigned
  - median PFS was 7.0 months for patients in the olaparib group compared with 4.2 months for patients in the TPC group (HR 0.58)
  - ORR was 59.9% in the olaparib group, compared with 28.8% in the TPC group
- ⊙ FDA has granted approval to olaparib in January 2018

