Case One

HER2-LOW BREAST CANCER

TANMAYI PAI, M.D.

PGY-6, HEMATOLOGY/ONCOLOGY – MAYO CLINIC FLORIDA

Disclosures

I do not have any relevant conflicts of interest.

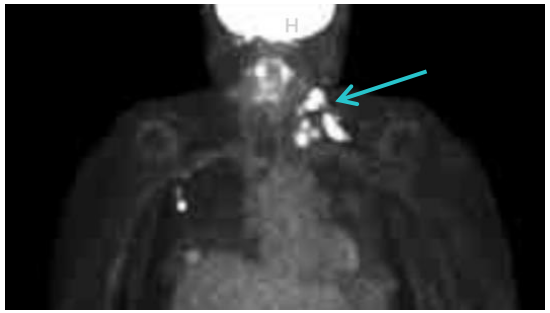
I3 Health and FLASCO have mitigated all relevant financial relationships.

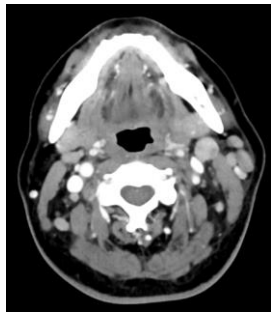
Case 1: Initial Diagnosis

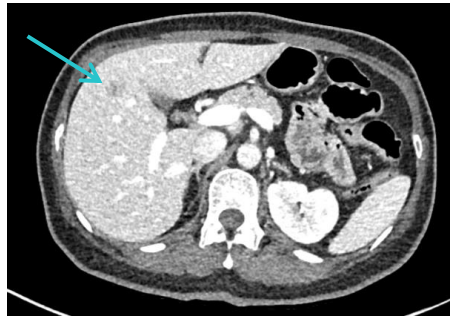
- **Case:** A 52-year-old woman initially presented with a 7.2-cm left breast mass and clinically evident axillary lymphadenopathy (**cT3 cN1**). Biopsy showed invasive ductal carcinoma; ER 66%, PR 59%, **HER2 negative (IHC 1+)**. PET-CT showed no evidence of distant metastatic disease.
- She received neoadjuvant dose-dense AC-T.
- She then underwent left mastectomy with ALND. Pathology showed a 5.5-cm residual tumor, grade 3, LVI+, with 12/19 lymph nodes positive. Extranodal extension was present. **pT3 pN3.**
- She completed adjuvant postmastectomy radiation therapy to the left chest wall and regional lymph nodes.
- She began adjuvant endocrine therapy (tamoxifen → anastrozole → tamoxifen).

Recurrence

2 years later, the patient presented with palpable left cervical lymphadenopathy.







9/2023

Supraclavicular LN biopsy confirmed metastatic ductal carcinoma.

Tissue NGS: ER 90%, PR 2%. **HER2 low (IHC 2+, FISH negative).** PIK3CAm.

Letrozole and abemaciclib were initiated.

7/2024

Due to frank disease progression, treatment was changed to **capivasertib and fulvestrant**.

10/2024

Disease progressed in the neck, thorax, and abdomen.

T-DXd was initiated.

Questions

- Would you use T-DXd at this point in this patient who has not received chemotherapy in the advanced/metastatic setting?
- When do you prescribe T-DXd after disease progression on AI + CDK4/6 inhibitor therapy, including in patients whose tumors carry an ESR1 mutation or AKT pathway alteration?
- Would your management of this patient have changed if the INAVO120 regimen had been approved at the time that this patient was diagnosed with recurrent/metastatic disease?

Patient Outcome

- Chest CT after 3 cycles of T-DXd 5.4 mg/kg showed bronchocentric nodularity and consolidative opacities with superimposed upper lobe-predominant patchy groundglass opacities, likely reflecting **medication-related pneumonitis vs. atypical infection**.
- Bronchoscopy with BAL was performed. Infectious workup and BAL cultures were negative.
- The patient was started on prednisone 1 mg/kg daily with a slow taper for treatment of presumed **grade 2 drug-induced ILD** requiring pulmonary medicine consultation. Patient had a cough but did not require supplemental O2.
- **T-DXd was discontinued**. She was started on single-agent eribulin.
- Follow-up CT chest is pending.