2023 FLASCO SPRING Session HER-2 IN GASTROINTESTINAL CANCERS

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Case Presentation

- 56-year-old female with transverse colon adenocarcinoma Stage IIIC (pT4a,N2a, Mo), Microsatellite stable (MSS), KRAS mutant and BRAF wild type.
- The patient was treated with adjuvant modified-FOLFOX-6 (5-FU, Leucovorin and Oxaliplatin) for 12 cycles.
- Seven months post-adjuvant therapy, CT scan revealed evidence of metastatic disease with bilobar liver metastases and innumerable lung nodules that were suspicious on PET scan.
- First-line treatment was composed of FOLFIRI (Leucovorin, 5-FU, Irinotecan) + bevacizumab x 8 months.

Case Continued:

- Unfortunately, the patient has progressed on the above regimen.
- Second-line treatment was offered: regorafenib vs Trifluridine tipiracil (TAS-102).
- Patient is asking you about any targeted therapy based on molecular profiling.
- ECOG performance status 1 (Grade 1 peripheral neuropathy, grade 1 fatigue)

Molecular Profile

Genomic Alteration Identified	
ERBB2	Amplification
RET	Amplification – equivocal
CCND3	Amplification – equivocal
TOP2A	Amplification
TP53	P177R
VEGFA	Amplification – equivocal
Additional Findings	
Microsatellite status	MS-Stable
Tumor Mutation Burden Muts/Mb	TMB-Intermediate; 9

Molecular Information

Genomic Findings Detected	FDA-Approved Therapies (in patient's tumor type)	FDA-approved Therapies (in another tumor type)	Potential Clinical Trials
ERBB2 amplification	None	Trastuzumab, Trastuzumab-dkst, Ado-trastuzumab emtansine, Afatinib, Lapatinib, Neratinib, Pertuzumab	Yes
RET Amplification - equivocal	None	Cabozantinib, Lenvatinib, Ponatinib, Sorafenib, Sunitinib, Vandetanib	Yes
CCND3 Amplification - equivocal	None	None	None
Microsatellite status MS-Stable	None	None	None
TOP2A Amplification	None	None	None
Tumor Mutation Burden TMB-Intermediate; 9 Muts/Mb	None	None	None
VEGFA Amplification - equivocal	None	None	None
TP53 P177R	None	None	None

What will be your recommendation for this patient?

A. Based on *ERBB2* amplification, you ask for FISH confirmation.

B. Based on *ERBB2* amplification, you consider trastuzumab.

C. You recommend pembrolizumab based on tumor mutation burden.

D. You consider liver-directed therapy.

E. You treat the patient (off clinical trial) with Sorafenib or Sunitinib as she has *RET* amplification.

F. You search for a clinical trial based on NGS testing.

G. You prefer regorafenib over TAS-102 as it seems less attractive due to *VEGFA* amplification.