

Peer Review File

Article Information: <http://dx.doi.org/10.21037/jgo-20-478>

Reviewer A

My suggestions are as follows:

1. lines 82-83 implied that CK19 and CK7 positivity with negative CDX2 were consistent with a pancreatic primary. Until now there is no specific immunostains (positive staining results) for a pancreatic primary. Therefore in this case pancreatic primary was concluded based on the overall staining pattern and the clinical findings (no other primary site of origin).

Reply: Yes, thank you for noting that it was the clinical findings (absence of extra-pancreatic disease on imaging) that also lent support to this being a primary pancreatic neoplasm; we will adjust the text to clarify.

Changes in the text:

- line 82 I added the word neoplasm; and line 90 I included primary carcinoma of the pancreas

2. Figure 2 lines 212 to 220. 30X and 300X magnifications are unusual, most of the microscopes have 20X, 40X, 100X, 200X and 400X. So I just want to make sure they are correct. Also what is the magnification for E)? it looks different from B)

Reply: Thank you for bringing this to our attention. I discussed this with our pathology colleagues and he informed me the stated magnifications were estimated following cropping and zooming the microscopy. Since we cannot provide an exact magnification, and did not have a ruler at the time of the photography we will omit the factor magnification and instead list them as low or higher power.

Changes in the text: changed “300X” to “higher power”

Reviewer B

The authors report the clinical finding of excellent treatment response to gemcitabine and nab-paclitaxel following immediate progression on FOLFIRINOX. The patient achieved complete radiologic response and showed no residual disease a year after initiation of the treatment. The manuscript is well presented and well written. I only have minor comment

1). Was MSI or MMR protein status known here (this is likely MSS given only a few mutations were seen on NGS panel, but may be informative, as a subset of SWI/SNF-def GI/PB cancer can be MMR-deficient - PMID 32413172)

Reply: Thank you for asking this and providing the interesting reference material. It was interesting to read in your reference how frequently (nine of 17) the undifferentiated carcinomas tested were dMMR. We call your attention to line 85-86, where we stated that the mismatch repair proteins were intact. Given your comment we considered whether we should additionally perform microsatellite testing by PCR to confirm MSS but given the very few number of somatic mutations identified in the tumor, we felt it would be very unlikely that microsatellite instability would be observed, so we felt that additional PCR testing would be of little yield.

Changes in the text: none; the requested material is already present

Reviewer C

The authors report the case of a 59y old female with metastatic pancreatic carcinoma progressing with first line mFOLFIRINOX, who achieved complete response with Gemcitabine + nab-paclitaxel. The tumor had rhabdoid histology and was SMACB1 deficient and KRAS mutant. The authors suggest that the good response might be related to the rare subtype (SMACB1 deficient) of the tumor. The case is well documented and well written. Only few cases of pancreatic carcinoma have been reported to achieved complete response with Gemcitabine + nab-paclitaxel and histo-molecular characteristics of the tumors are missing. Therefore, this case deserves to be published. However, the authors should discuss possible alternative cause of good response related either to the tumor (did it have a high mutation rate?) or to the host (drug metabolism or immune response)

Reply: Thank you to the reviewer for pointing out additional explanations for the unusual treatment response observed here. In response we did additional literature review and which uncovered additional speculative explanations underlying the response observed.

Changes in the text:

- Added line 87-88 “showing a low tumor mutational burden”
- Added lines 124-129, “Few data inform optimal treatment strategies for these very rare malignancies. A case report demonstrating a complete response to paclitaxel in pleomorphic variant undifferentiated pancreatic carcinoma was published in 2010. SMARCB1/INI1-deficiency is a recently recognized molecular hallmark of renal medullary carcinoma 4, where paclitaxel-containing combinations have shown partial and complete responses”
- Added line 161-164, “. While CPS score is not commonly used as a predictive biomarker in pancreatic cancer, the CPS score in this case was 20, suggesting a robust degree of immunogenicity of the tumor; perhaps this PD-L1 staining immune compartment primed an immune response for second-line therapy.”