

# A Unique Case of HER2 Positive Adenocarcinoma of the Small Bowel

Authors: Alexandria Dennison MD, Ajay Iyer MD, Joseph Stilwill MD



MENORAH  
MEDICAL CENTER

## Introduction

59 yo male with history of Crohn's disease underwent partial small bowel resection due to obstruction with lysis of adhesions. A 3.5 cm jejunal mass with lymphovascular invasion and negative margins was identified and frozen section showed findings of adenocarcinoma. His symptoms before surgery were abdominal pain and obstructive symptoms, but no unintentional weight loss. His only therapy at the time was anti-TNF therapy. After various therapies he has shown positive results with Trastuzumab and Pertuzumab.

## Description

Preliminary pathology was consistent with T3NxM0 adenocarcinoma of the small intestine. Capecitabine was recommended for a 6 month course, but the patient developed significant diarrhea and hand-foot syndrome after his second cycle and therapy was unable to continue following 2 cycles despite dose reduction. Patient was followed closely with CEA and CT. Thirteen months following his surgery, recurrent disease was found due to increased CEA of 16.6 and PET scan showed focal thickening of the small bowel in the left lower quadrant and mesenteric masses and lymph nodes extending toward the central root of the mesentery. Upper endoscopic ultrasound was performed with fine needle biopsy was positive for metastatic adenocarcinoma. Patient then began FOLFOX 7 chemotherapy and then transitioned to maintenance 5-FU with leucovorin. Due to disease progression he was transitioned to FOLFIRI (irinotecan, leucovorin, and fluorouracil). He then underwent next generation sequencing with ERBB2 amplification identification. He was then initiated on fam-trastuzumab-deruxtecan-nxki. Due to GI side effects, he transitioned to Trastuzumab and Pertuzumab every 3 weeks. Imaging shows a complete clinical response to therapy. His CEA has normalized from a peak of 30.9. These results have continued over 6 months has been responding well with most recent level 1.5. Lifestyle has improved with energy and appetite gradually returning to normal.

## Discussion

In this case, we report an ongoing complete response to HER2-directed therapy in a patient with an ERBB2 mutation. HER2 positive adenocarcinoma of the small bowel is uncommon, and using next generation sequencing should be considered in all patients with metastatic disease to allow for targeted therapy.