Introduction
- Checkpoint inhibitors are becoming more prevalent due to a growing number of oncologic indications.
- Colitis due to ipilimumab and nivolumab are well described adverse effects, but onset and severity can vary.
- We present a case of severe checkpoint inhibitor induced colitis just five days after infusion.

Case Description
- A 68-year-old man was admitted to the hospital for severe diarrhea and abdominal pain.
- 5 days prior, he received his first dose of ipilimumab and nivolumab combination therapy for metastatic prostate cancer
- Flexible sigmoidoscopy confirmed severe colitis, and biopsies showed acute inflammation, crypt abscesses, and cryptitis consistent with checkpoint inhibitor induced colitis.
- He was treated with IV steroids and transitioned to oral prior to discharge.
- As outpatient, his diarrhea persisted and he was given additional high dose steroids.
- After two weeks with no improvement, he was given an infusion of infliximab.
- Despite this, he was readmitted to the hospital for additional IV steroids and a second dose of infliximab.
- Four days later, he developed abdominal pain with guarding and CT showed pneumoperitoneum, requiring emergent surgery for cecal perforation (fig. 1).

Case Cont.
- Surgical pathology showed focal serositis, multifocal mucosal/submucosal inflammation and crypt microabscesses (fig. 2, 3, 4).
- Follow up sigmoidoscopy showed improved inflammation and he was discharged with an extended steroid taper.

Discussion Cont.
- Management is based on symptom severity - Grade 1-2 diarrhea may only require interruption of infusions, grades 3-4 should be treated with IV steroids (1).
- Infliximab is effective for steroid refractory disease.
- Vedolizumab has recently been used in patients unresponsive to steroids and infliximab (3).

Conclusions
- To our knowledge, this case represents the earliest onset of colitis following immune checkpoint inhibitor therapy.
- Early diagnosis with endoscopy is key, as this allows for directed treatment, which may decrease the risk of complications.
- It is important for the physician and patient to be aware of these side effects to ensure prompt treatment.

Discussion
- Ipilimumab and nivolumab are immune checkpoint inhibitors used for metastatic melanoma and RCC, with ongoing trials for metastatic prostate cancer (1).
- Diarrhea and colitis are adverse reactions with an incidence of up to 44% (1).
- Average onset of colitis is 5-10 weeks after the third infusion for both ipilimumab and nivolumab (2).

References