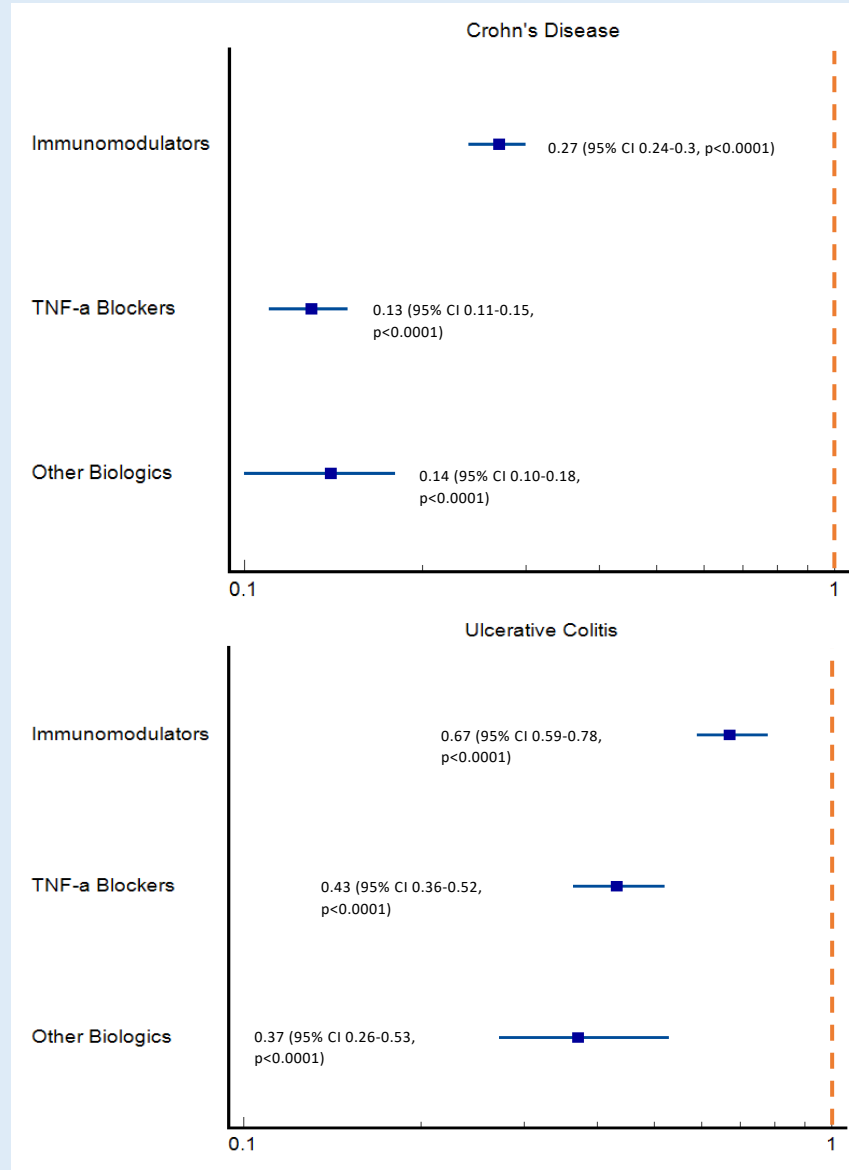


Background:

- Evidence supports reciprocal communication between the enteric and the central nervous system in disease, termed the 'gut-brain axis' Biologics have been shown to decrease inflammation among IBD patients.
- We investigated the prevalence of PD among individuals with IBD and assessed if biologics therapy may affect the risk of ED in patients with IBD.

Methods:

- Commercial database (Explorys Inc, Cleveland, OH) with 26 major integrated US healthcare systems.
- Inclusion criteria
 - Age >18
 - Diagnosed with Crohn's disease (CD) or ulcerative colitis (UC)
- Investigated the prevalence of PD in IBD patients.
- Compared the prevalence of PD between IBD patients with and without biologics therapy.



Logistic Regression of Parkinson's disease Risk in IBD

Results:

- A total of 249,480 patients with CD and 209,030 patients with UC were identified.
- 7,180 (2.88%) and 2,700 (1.29%) developed PD, respectively.
- Both CD [OR: 7.91; 95% CI: 7.73-8.10] and UC [OR: 3.44; 95%CI: 3.31-3.57] patients had a significantly higher risk of PD.
- The biologics-treated cohort was associated with a significantly lower risk of developing PD in CD [OR: 0.13; 95%CI: 0.11-0.13] and UC [OR: 0.40; 95%CI: 0.34-0.49], respectively.

Conclusion:

- Prevalence of PD in patients with IBD was significantly higher than the general population.
- IBD patients treated with biologics were significantly less likely to be diagnosed with PD.