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### COLECTOMY OUTCOMES IN PATIENTS OVER 65 WITH ULCERATION COLITIS

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## Abstract

**Introduction:** There are limited data regarding surgical outcomes for elderly patients with Ulcerative Colitis, and we sought to examine the post-operative outcomes in this population.

**Methods:** The ACS NSQIP was queried for all patients with a diagnosis of ulcerative colitis and compared elderly patients (those aged 65 and older) to younger patients under age 65. Univariate and multivariate logistic regression was done to evaluate differences in morbidity and mortality rates.

**Results:** 2,699 patients were analyzed, of which 493 (18.3%) were defined as elderly. Elderly patients had more comorbidities compared to younger patients but were less likely to be on preoperative steroids (47.1% vs 74.2%,  $p < 0.0001$ ). Elderly patients had a higher proportion of emergent cases (27.6% vs 8.2%,  $p < 0.0001$ ) and an average 3 day longer hospital stay, ( $p < 0.0001$ ). There were no significant differences in the rates of anastomotic leak, surgical site infections or 30-day readmission. Elderly patients had a higher rate of morbidity (47.3% vs 26.8%,  $p < 0.0001$ ) and mortality (8.9% vs 1.2%,  $p < 0.0001$ ). Multivariate analysis showed elderly patients had significantly increased odds for morbidity (OR 2.45, 95% CI: 2.00-2.99,  $p < 0.0001$ ) and 30-day mortality (OR 7.91, 95% CI: 4.85-12.91,  $p < 0.001$ ). Preoperative sepsis significantly increased the risk of morbidity (OR 3.457, 95% CI: 2.27-5.26,  $p < 0.0001$ ) and mortality (OR 3.11, 95% CI: 1.48-6.57,  $p < 0.003$ ).

**Conclusions:** Elderly patients with Ulcerative Colitis that undergo a colectomy are at increased risk for both morbidity and mortality. Optimizing these patients may reduce the risk, but further prospective trials are warranted to further elucidate the ideal optimization strategies.

## Introduction

- Colectomy is a commonly performed procedure for Ulcerative Colitis (UC)
- Patients over the age of 65 with Ulcerative Colitis is an increasing trend
- Outcomes after a colectomy in these patients are unknown
- Objective: Determine risk of morbidity and mortality among older patients with Ulcerative Colitis after a colectomy as compare to younger patients

## Methods

- Data: NSQIP – Targeted Colectomy (2016)
- Variables:
  - Morbidity: any 30-day complication
  - Mortality: all-cause 30-day mortality
  - Patients  $\geq 65$  years old
- Analysis:
  - Descriptive analysis, univariable/multivariable logistic regression

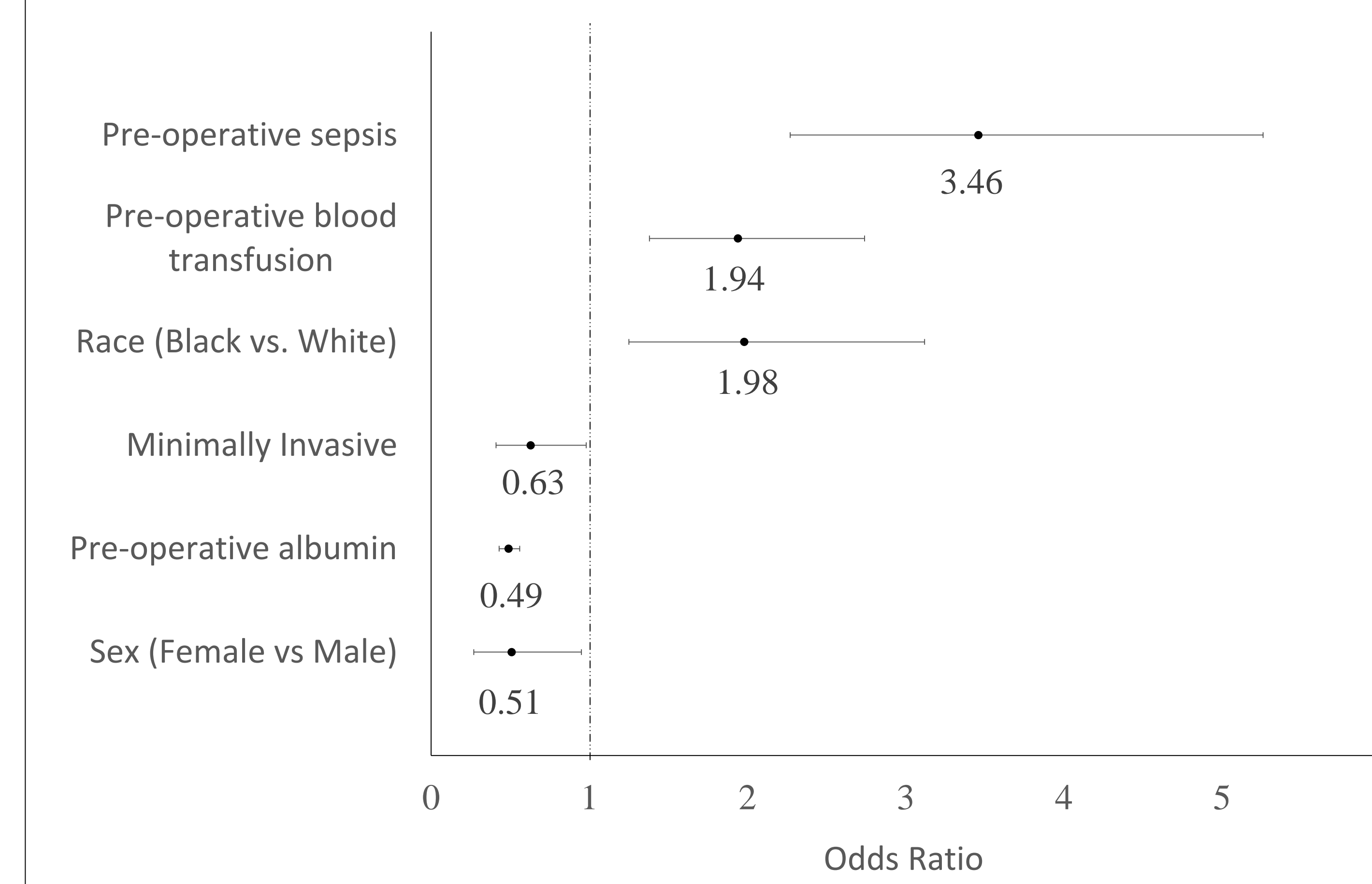
## Conclusion

- Elderly patient with Ulcerative Colitis that undergo a colectomy have increased morbidity and mortality.
- Optimizing these patients may reduce the risk, but further prospective trials are warranted to further elucidate the ideal optimization strategies.

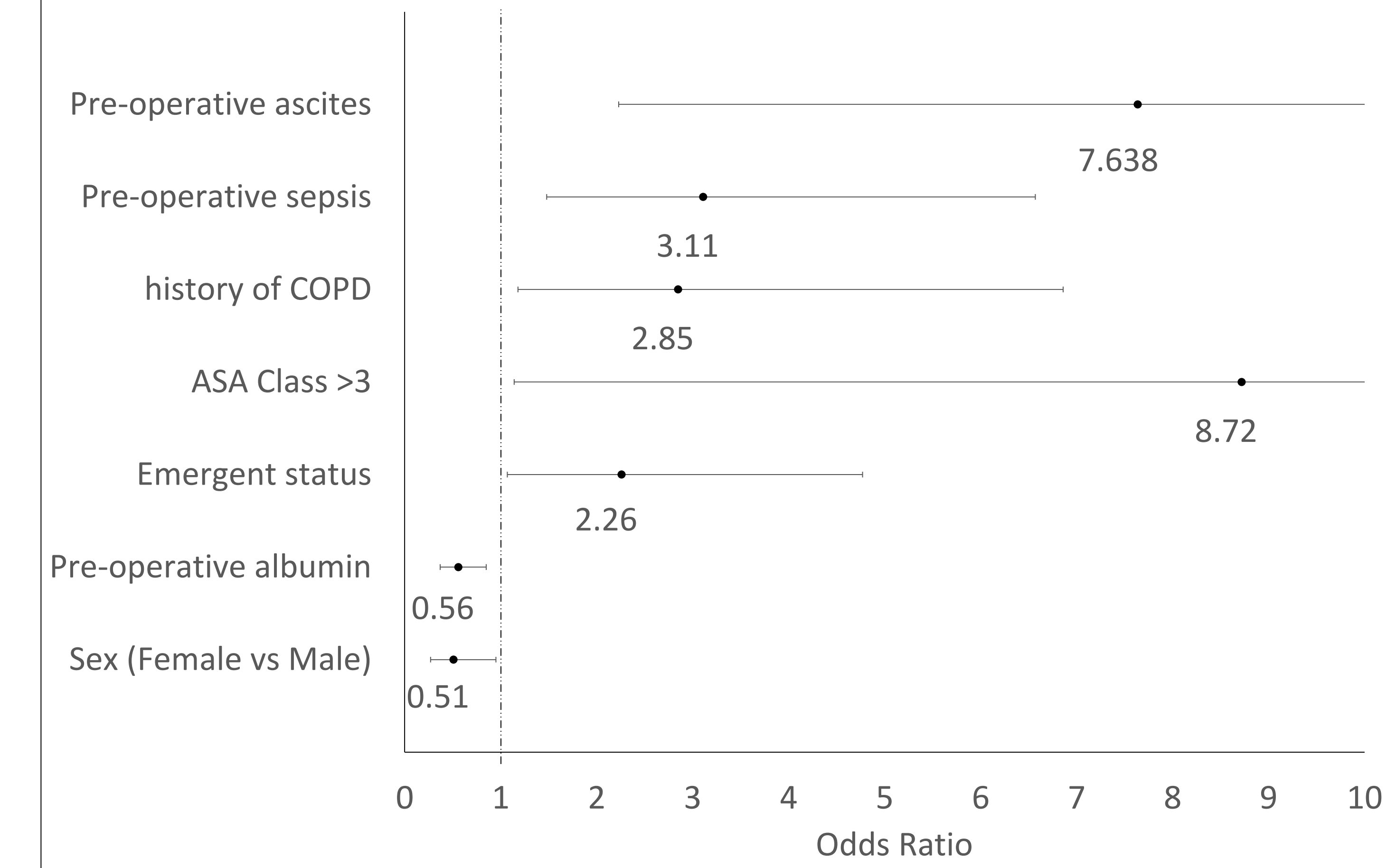
## Results

Patient Characteristics			Procedure Characteristics			Complications		
* $p < 0.0001$	<65 Years	65 or Older	* $p < 0.0001$	<65 Years	65 or Older	* $p < 0.0001$	<65 Years	65 or Older
Female	964 (43.7%)	238 (48.3%)	Emergent*	304 (3.0%)	15 (3.0%)	Anastomotic Leak*	66 (3.0%)	15 (3.0%)
Male	1242 (56.3%)	255 (51.7%)	ASA Class*			Ileus	408 (18.5%)	144 (29.2%)
Race			1-2	1084 (49.1%)	101 (20.5%)	Superficial SSI	127 (5.8%)	22 (4.5%)
Black	109 (4.9%)	24 (4.9%)	$\geq 3$	1122 (50.9%)	392 (79.5%)	Organ/Space SSI	166 (7.5%)	32 (6.5%)
Other	306 (13.9%)	61 (12.4%)	Operative			Wound Dehiscence	40 (1.8%)	10 (2.0%)
White	1791 (81.2%)	408 (82.8%)	Time	195.6 [82.7]	194.1 [105.2]	Pneumonia*	47 (2.1%)	47 (9.5%)
Diabetes*	141 (6.4%)	102 (20.7%)	Length of Stay*	11.3 [12.9]	14.0 [12.5]	Reintubation*	38 (1.7%)	36 (7.3%)
Smoking	199 (9.0%)	54 (11.0%)	Disposition*			PE	18 (0.8%)	5 (1.0%)
Dyspnea*	75 (3.4%)	48 (9.7%)	Home	2076 (94.1%)	311 (63.1%)	Vent > 48 Hours*	54 (2.4%)	49 (9.9%)
COPD*	18 (0.8%)	55 (11.2%)	Facility	107 (4.9%)	143 (29.0%)	Renal Failure*	14 (0.6%)	14 (2.8%)
Ascites	16 (0.7%)	8 (1.6%)	Expired	23 (1.0%)	39 (7.9%)	CVA	5 (0.2%)	3 (0.6%)
CHF*	6 (0.3%)	16 (3.2%)				Cardiac Arrest	10 (0.5%)	7 (1.4%)
HTN*	338 (15.3%)	304 (61.7%)				MI	7 (0.3%)	8 (1.6%)
Renal Failure*	11 (0.5%)	11 (2.2%)				Transfusion*	339 (15.4%)	134 (27.2%)
Albumin*	3.1 [0.9]	2.9 [0.8]				Septic Shock*	67 (3.0%)	55 (11.2%)
Sepsis*	149 (6.8%)	79 (16.0%)						

### Predictors of Morbidity



### Predictors of Mortality



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