

Does Ethnicity Influence Mucosal Healing in Inflammatory Bowel Disease?

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BACKGROUND

- Crohn's disease (CD) and Ulcerative Colitis (UC), the two major forms of inflammatory bowel disease (IBD), are characterized by chronic inflammation of the gastrointestinal tract.
- Mucosal healing is a key therapeutic goal in patients with IBD, as it has been associated with reduced risk of relapse, decreased hospital admission rates, and lower rates of major abdominal surgery.

OBJECTIVES

The aim of this study was to investigate the percentage of patients that achieved mucosal healing within 18 months of initiation or adjustment of IBD therapy. Additionally, we stratified this analysis by patient ethnicity.

METHODS

- Retrospective analysis was performed on a group of adults (>18 years old) with an ICD-9/10 code diagnosis of IBD during their index hospitalization for IBD flare to a tertiary care center between January 1st 2013 to June 1st 2017.
- Patients who did not have initial inflammation, were lost to follow-up, or did not have subsequent cross-sectional imaging (XCI), colonoscopy, or biopsy were excluded.
- Mucosal healing was defined as resolution of inflammation seen on colonoscopy or XCI.
- Patients were followed-up within 18-months of initiation or adjustment of IBD therapy.
- Data including the patients' XCI and colonoscopy reports was extracted from the institution's integrated electronic data repository and electronic chart review.

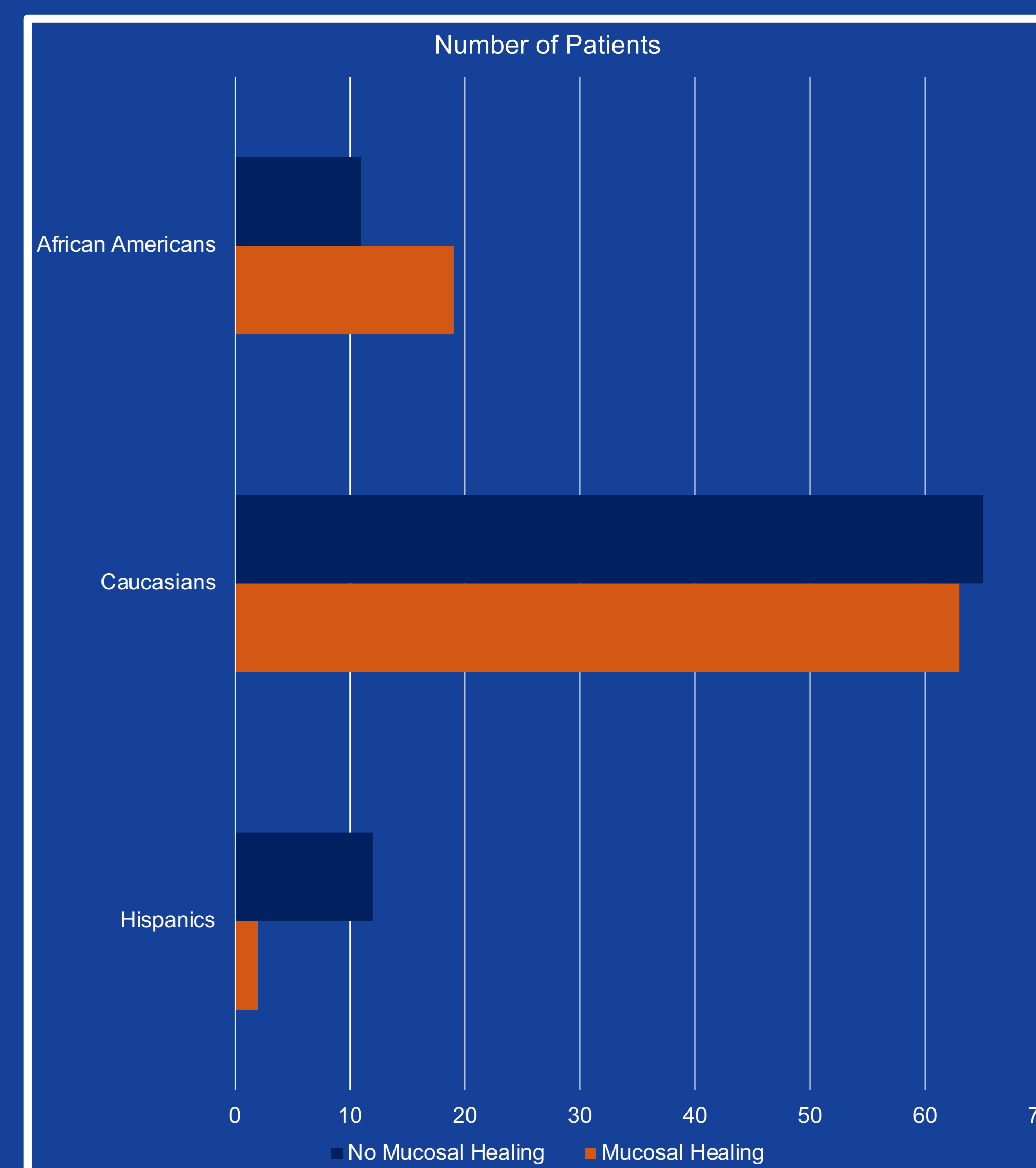
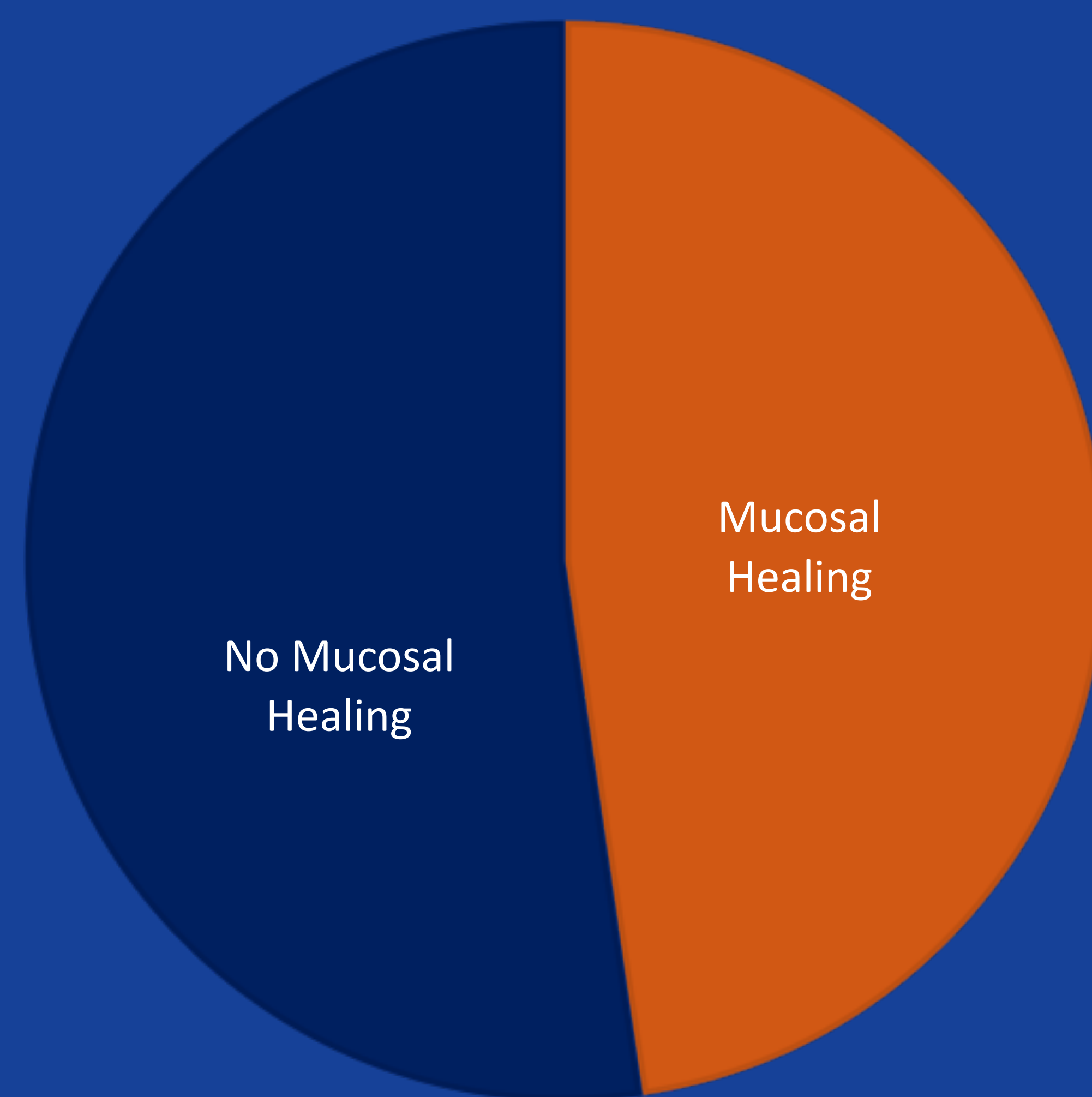


Table 1: Treatment Modalities used by Ethnicity

		Treatment Modality			
		Steroids	Biologic	Immunomodulator	Combination (Biologic + Immunomodulator)
	Caucasian	17 (7.8%)	52 (24.0%)	29 (13.4%)	119 (54.8%)
Ethnicity	African American	2 (5.3%)	7 (18.4%)	3 (7.9%)	26 (68.4%)
	Hispanic	1 (4.8%)	2 (9.5%)	4 (19.0%)	14 (66.7%)

RESULTS

- A total of 1,116 unique patients were analyzed of which 768 (547 CD, 211 UC, 10 mixed) met inclusion criteria.
- Of these 768 patients, 590 (76.8%) were Caucasian, 95 (12.4%) were African American and 34 (4.4%) were Hispanic.
- Two-hundred and seventy six patients received treatment between their initial and follow-up encounter (Table 1).
- One hundred and seventy six patients (158 CD, 17 UC, 1 indeterminate) had follow-up at 18-months.
- Of these 176 patients, 127 (72.2%) were Caucasian, 30 (17.0%) were African American and 14 (8.0%) were Hispanic.
- Mucosal healing was achieved in 84/176 (47.7%) of the total cohort.
- Mucosal healing was achieved in 63/128 (49.2%) Caucasians, 19/30 (63.3%) African Americans and 2/14 (14.3%) Hispanics (p<0.0103).

CONCLUSIONS

- Mucosal healing was achieved in 47.7% of patients within 18-months of initiation or adjustment of IBD therapy.
- Mucosal healing was achieved most frequently in African Americans compared to Caucasians and Hispanics.
- Further prospective studies are needed to validate these findings.

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