

# Asian American Research Center on Health

# **Abstract**

Title: Reduced disparities and improved surgical outcomes for Asian Americans with colorectal cancer.

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### Abstract:

## **BACKGROUND:**

Studies suggest Asian Americans may have improved oncologic outcomes compared with other ethnicities. We hypothesized that Asian Americans with colorectal cancer would have improved surgical outcomes in mortality, postoperative complications (POCs), length of stay (LOS), and readmissions compared with other racial/ethnic groups.

#### METHODS:

We queried the 2011-2014 American College of Surgeons National Surgical Quality Improvement Program for patients who underwent surgery for colorectal cancer and stratified patients by race. Primary outcome was 30-d mortality with secondary outcomes including POCs, LOS, and 30-d readmission. Stepwise backward logistic regression analyses and incident rate ratio calculations were performed to identify risk factors for disparate outcomes.

#### RESULTS

Of the 28,283 patients undergoing colorectal surgery for malignancy, racial/ethnic groups were divided into Caucasian American (84%), African American (12%), or Asian American (4%). On unadjusted analyses, compared with other racial/ethnic groups, Asian Americans were more likely to have normal weight, not smoke, and had lower American Society of Anesthesiologists score of 1 or 2 (P < 0.001). Postoperatively, Asian Americans had the shortest LOS and the lowest rates of complications due to ileus, respiratory, and renal complications (P < 0.001). There were no racial differences in 30-d mortality or readmission. On adjusted analyses, Asian American race was independently associated with less postoperative ileus (odds ratio 0.8, 95% confidence interval 0.66-0.98, P < 0.001) and decreased LOS by 13% and 4% compared with African American and Caucasian American patients, respectively (P < 0.001).

## **CONCLUSIONS:**

Asian Americans undergoing surgery for colorectal cancer have shorter LOS and fewer POCs when compared with other racial/ethnic groups without differences in 30-d mortality or readmissions. The mechanism(s) underlying these disparities will require further study, but may be a result of patient, provider, and healthcare system differences.