



# Western Surgical Association 2020 Annual Meeting

Monday, November 9, 2020  
4:00pm – 6:15pm Pacific Time  
– Virtual Meeting --

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### 3. ASSOCIATION OF US NEWS AND WORLD REPORT RANKING OF BEST HOSPITALS IN GASTROENTEROLOGY AND GASTROINTESTINAL SURGERY WITH PATIENT OUTCOMES IN COMPLEX GASTROINTESTINAL SURGERY FOR MALIGNANCY

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**Background:** The US News & World Report (USNWR) annually ranks the best hospitals for Gastroenterology & Gastrointestinal Surgery to provide guidance for referral of complex medical and surgical gastrointestinal (GI) conditions. The objective of this study was to examine the outcome of complex GI surgery performed for malignancy at top 50 US News & World Report ranking hospitals (RHs) versus non-ranking hospitals (NRHs) and their affiliates.

**Methods:** We analyzed the 2018 Vizient database for patients who underwent esophagectomy, gastrectomy, and pancreatectomy for malignancy performed at RHs vs. NRHs. Operative cases were identified by ICD-10 diagnosis and procedural codes. Outcome measures included length of stay (LOS), mortality, mortality index (observed-to-expected mortality ratio), serious morbidity, and costs. A secondary analysis was performed for patients who developed serious complications post-intervention at RHs vs. NRHs with the same outcome measures applied.

**Results:** There were 3,012 complex GI operations performed for malignancy at 41 RHs and 3,580 operations performed at 310 NRHs. The mean annual case volume for complex GI surgery was higher at RHs compared to NRHs (72 cases/center vs 12 cases/center, respectively). In-hospital mortality (0.9% vs 2.2%  $p < 0.001$ ) and mortality index (0.7 vs 1.5) were lower at RHs compared with NRHs. There were no significant differences in LOS ( $P = 0.40$ ), direct cost ( $P = 0.076$ ), or serious morbidity (9.7% vs. 11.1%,  $p = 0.067$ ) between groups. Secondary analysis of patients who developed serious morbidity showed that compared to NRHs, RHs are more likely to rescue the patient as observed with a lower in-hospital mortality (8.9% at RHs vs 16.7% at NRHs,  $p = 0.0014$ ).

**Conclusion:** Within the context of academic centers and their affiliates, USNWR RHs performed 6-fold higher case volume of complex GI surgery for malignancy compared to NRHs and associated with a lower risk of in-hospital mortality. In an event when a serious complication develops, RHs are more likely to rescue the patient than NRHs. When logistically feasible, consideration should be given to direct patients requiring complex GI surgery for malignancy to RHs.