

**Poster 11: Long-term survival outcomes of robotic-assisted versus traditional laparoscopy for the treatment of stage I endometrial cancer: a National Cancer Database analysis**

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Topic: Endometrial

**Objectives**

To compare the long-term survival outcomes of robotic-assisted versus traditional laparoscopic surgery among patients who received minimally invasive surgery for stage I endometrial cancer.

**Methods**

We performed a retrospective cohort study using data from the National Cancer Database including patients with stage I endometrial cancer diagnosed from 2010-2017 (with follow-up through 2020) who underwent treatment with either robotic-assisted or traditional laparoscopic surgery. Patients were excluded if they were found to have in situ disease, had a previous cancer diagnosis, had a stromal tumor, if the surgery was converted to an open procedure, or if the vital status or time to last follow-up was missing. Demographics, characteristics and outcomes were summarized using descriptive statistics. Overall survival (OS) was compared using a Cox proportional hazards models adjusting for age, race, ethnicity, income, education, insurance, Charlson-Deyo comorbidity score, grade, year of diagnosis, facility type, facility location, and rurality; hazard ratios and 95% confidence intervals are reported.

**Results**

A total of 127,862 patients with stage I endometrial cancer who underwent minimally invasive surgery were identified and eligible for this analysis. The median follow-up among those still known to be alive was 69.7 months. Almost three-quarters (74.4%) received robotic-assisted surgery while 25.6% received traditional laparoscopic surgery. Demographic and clinical factors were generally similar between groups. No differences in overall survival were observed by surgery modality (5 year OS: 91.6% for robotic vs. 91.4% for laparoscopic surgery,  $p=0.51$ ) and this remained the case after adjustment for demographic and clinical factors (HR=1.02, 95% CI: 0.98, 1.06,  $p=0.29$ ).

**Conclusions**

There was no difference in overall survival for patients with stage I endometrial cancer treated with robotic-assisted versus traditional laparoscopic surgery. This data demonstrates excellent survival outcomes among patients with stage I endometrial cancer treated with minimally invasive surgery and does not favor a robotic-assisted or traditional laparoscopic approach.

Abstract Table or Graph

