

**Summary of findings:**

**Robotic-assisted surgery compared to laparoscopic surgery for rectal cancer surgery**

**Patient or population:** rectal cancer surgery

**Setting:**

**Intervention:** Robotic-assisted surgery

**Comparison:** laparoscopic surgery

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	No of participants (studies)	Certainty of the evidence (GRADE)	Comments
	Risk with laparoscopic surgery	Risk with Robotic-assisted surgery				
Ileus	117 per 1.000	<b>103 per 1.000</b> (91 to 115)	<b>OR 0.86</b> (0.75 to 0.98)	21202 (31 observational studies)	⊕⊕○○ LOW	Lower OR indicates lower rate of ileus retention for robotic-assisted surgery
Urinary retention	43 per 1.000	<b>28 per 1.000</b> (20 to 39)	<b>OR 0.65</b> (0.46 to 0.92)	4469 (19 observational studies)	⊕⊕⊕○ MODERATE	Lower OR indicates lower rate of urinary retention for robotic-assisted surgery
Sexual function assessed with: IEEF	-	<b>SMD 0.46 SD higher</b> (0.13 lower to 1.04 higher)	-	194 (5 observational studies)	⊕○○○ VERY LOW <sup>a</sup>	Higher score indicates better function for robotic-assisted surgery
Urinary symptoms assessed with: IPSS	-	<b>MD 0.6 fewer</b> (1.17 fewer to 0.03 fewer)	-	522 (7 observational studies)	⊕○○○ VERY LOW <sup>a</sup>	Lower score indicates less urinary symptoms for robotic-assisted surgery
Quality of Life assessed with: QLQ-C-30	-	<b>MD 2.99 higher</b> (2.02 higher to 3.95 higher)	-	308 (3 observational studies)	⊕○○○ VERY LOW <sup>a</sup>	Higher score indicates higher quality of life for robotic-assisted surgery

\***The risk in the intervention group** (and its 95% confidence interval) is based on the assumed risk in the comparison group and the **relative effect** of the intervention (and its 95% CI).

**CI:** Confidence interval; **OR:** Odds ratio; **SMD:** Standardised mean difference; **MD:** Mean difference

**GRADE Working Group grades of evidence**

**High certainty:** We are very confident that the true effect lies close to that of the estimate of the effect

**Moderate certainty:** We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different

**Low certainty:** Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect

**Very low certainty:** We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect

**Explanations**

a. subjective questionnaire