*Supplementary Material: instruments measuring bowel, sexual, urinary functions, and QoL results reported in the text

Instruments	Description	Ref.
Jorge-Wexner	it assesses the severity of faecal incontinence by combining type of incontinence (to gas, liquid or	[30]
Incontinence score	solid stool) and frequency (Never; <1/month; <1/week, ≥1/month; <1/day, ≥1/week; ≥1/day) The	
	resulting score is between 0 and 20.	
LARS	it describes functional bowel symptoms following low anterior rectal resection. It scores the	[20]
	following items: incontinence for flatus, incontinence for liquid stools, frequency of bowel	
	movements, clustering of stools, and urgency, with a range between 0 to 42. The results are	
	divided into no LARS (0-20), minor LARS (21 to 29), and major LARS (30 to 42).	
IPSS	it explores male urinary function assessing: incomplete emptying, frequency, intermittency,	[43]
	urgency, weak stream, straining, and nicturia.	
IIEF	it addresses the relevant domains of male sexual function (erectile and orgasmic function, sexual	[44]
	desire, intercourse and overall satisfaction).	
FSFI	it is a self-report measure of female sexual function and consists of six domains: desire, subjective	[45]
	arousal, lubrication, orgasm, satisfaction, and pain.	
EORTC QLQ-CR29	it explores the extent of different symptoms specifically for colorectal cancer patients varying in	[47]
	disease stage and treatment modality. It includes evaluation of body image, anxiety, weight,	
	sexual interest, urinary frequency, blood and mucus in stool, stool frequency, urinary incontinence,	
	abdominal and buttock pain, bloating, dry mouth, hair loss, taste, flatulence, fecal incontinence,	

	sore skin, embarrassment, stoma care problems, impotence, dyspareunia.	
QLQ-C30	it is a questionnaire developed to assess the quality of life of cancer patients. It is composed of 5 functional scales (physical, role, social, emotional and cognitive functioning), 3 symptom scales (Fatigue, Nausea and vomiting, Pain, Dyspnea, Insomnia, Appetite loss, Constipation, Diarrhea, Financial difficulties), a global health status/QoL scale, and 6 single items.	[35]
EQ-5D-3L	it consists of the EQ-5D descriptive system and the EQ visual analogue scale. The EQ-5D comprises five dimensions: mobility, self-care, usual activities, pain/discomfort and anxiety/depression. Each dimension has 3 levels: no problems, some problems, and extreme problems. The levels expressed for each of the five dimensions are combined into a 5-digit number that describes the patient's health state. The EQ VAS records the patient's self-rated health.	

LARS: Low anterior resection syndrome score IPSS:International Prostate Symptom Score IIEF: International Index of Erectile Function FSFI: Female Sexual Function Index EORTC QLQ-CR29: European Organization for Research and Treatment of Cancer Colorectal cancer specific quality of life QLQ-C30: European Organization for Research and Treatment of Cancer Quality of life

EQ-5D-3L: EuroQoL