

## Supplementary Online Content

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**eFigure.** Treatment Details of 278 Patients Included for the Current Analysis

**eTable 1.** Quality of Life and Functional Outcome of Patients Followed by Watch and Wait Without Requiring Additional Surgery at 3, 12, and 24 Months Following Inclusion

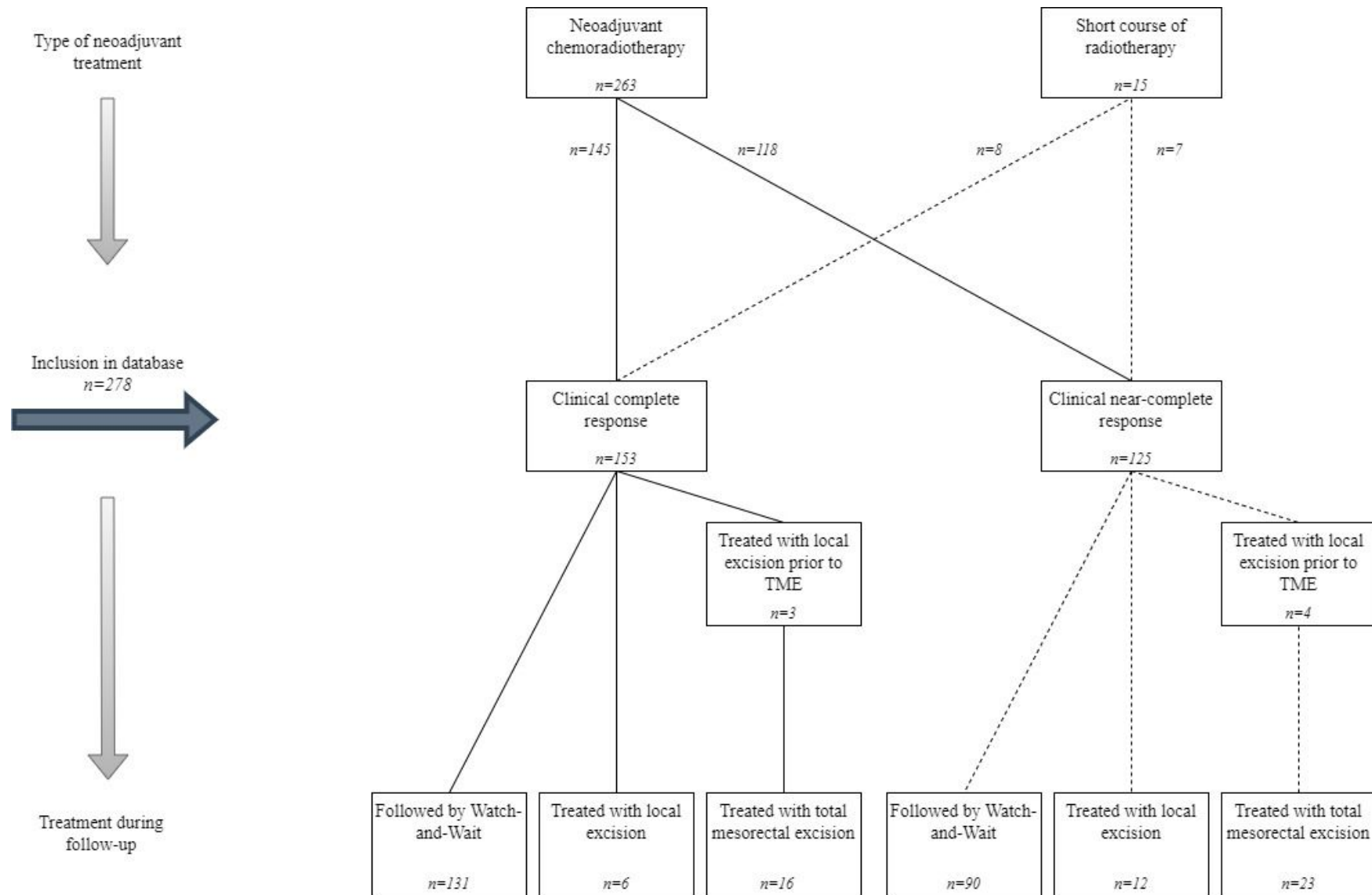
**eTable 2.** Quality of Life and Functional Outcome of Patients Treated With Local Excision (LE) and Patients Treated With Total Mesorectal Excision (TME) Compared to Patients Followed by Watch-and-Wait Without Requiring Additional Surgery (W&W) at 24 Months Following Inclusion

**eTable 3.** Association of Sex, Age, Tumor Distance, and Neoadjuvant Treatment on Quality of Life and Functional Outcome at 24 Months Following Inclusion

**eTable 4.** Quality of Life and Functional Outcome of All Patients Included in the Dutch Watch-and-Wait Registry at 3, 12, and 24 Months Following Inclusion

This supplementary material has been provided by the authors to give readers additional information about their work.

**eFigure.** Treatment Details of 278 Patients Included for the Current Analysis



**eTable 1.** Quality of Life and Functional Outcome of Patients Followed by Watch and Wait Without Requiring Additional Surgery at 3, 12, and 24 Months Following Inclusion<sup>a</sup>

<sup>a</sup>measured with (A) the EORTC-QLQ-C30 and SF-36, (B) the EORTC-QLQ-CR29 and EORTC-QLQ-CR38, (C) the LARS score, Vaizey score, IPSS score, IIEF, and FSFI.

A	3 months	12 months	24 months	12 versus 3 months			24 versus 3 months			24 versus 12 months		
	Mean (SD)	Mean (SD)	Mean (SD)	Mean diff.	p-value	Clinical sign.	Mean diff.	p-value	Clinical sign.	Mean diff.	p-value	Clinical sign.
<b>EORTC-QLQ-C30</b>												
<i>Function scales</i>												
Global health status	82.8 (14.6)	84.7 (14.4)	80.6 (20.1)	1.9	0.05	Trivial	-2.2	0.09	Trivial	-4.1	0.002	Trivial
Physical functioning	90.5 (14.4)	90.7 (14.0)	91.0 (13.8)	0.2	0.79	Trivial	0.5	0.53	Trivial	0.3	0.68	Trivial
Emotional functioning	85.9 (16.7)	88.7 (14.8)	88.1 (14.6)	2.8	0.009	Trivial	2.2	0.05	Trivial	-0.6	0.46	Trivial
Cognitive functioning	88.2 (16.6)	88.8 (15.4)	88.6 (15.9)	0.7	0.48	Trivial	0.5	0.67	Trivial	-0.2	0.82	Trivial
Social functioning	89.0 (18.3)	90.9 (16.2)	92.9 (12.6)	1.9	0.21	Trivial	3.9	0.002	Small	2.0	0.10	Trivial
<i>Symptom scales</i>												
Fatigue	15.8 (17.8)	15.3 (18.1)	15.7 (20.0)	-0.5	0.73	Trivial	0.1	0.94	Trivial	0.4	0.79	Trivial
Nausea	1.9 (7.3)	1.4 (5.8)	2.9 (9.0)	-0.5	0.37	Trivial	1.1	0.14	Trivial	1.6	0.01	Trivial
Pain	7.8 (19.3)	8.1 (19.2)	6.8 (16.2)	0.3	0.85	Trivial	-1.1	0.46	Trivial	-1.4	0.31	Trivial
Insomnia	15.4 (23.2)	15.1 (21.6)	14.6 (22.5)	-0.3	0.84	Trivial	-0.8	0.63	Trivial	-0.5	0.78	Trivial
Appetite loss	2.7 (9.7)	2.4 (10.3)	3.2 (11.2)	-0.3	0.73	Trivial	0.5	0.63	Trivial	0.8	0.37	Trivial
Constipation	5.9 (13.9)	6.6 (15.1)	6.6 (15.4)	0.8	0.55	Trivial	0.8	0.52	Trivial	0.0	1.00	Trivial
Diarrhea	9.0 (17.4)	9.0 (17.4)	10.6 (20.1)	0.0	1.00	Trivial	1.5	0.30	Trivial	1.5	0.33	Trivial
Financial difficulties	4.8 (13.4)	3.8 (13.1)	4.8 (13.7)	-1.1	0.16	Trivial	0.0	1.00	Trivial	1.1	0.24	Trivial
<b>Short form-36</b>												
<i>Function scales</i>												
Physical functioning	85.9 (18.4)	84.7 (20.6)	84.2 (19.7)	-1.2	0.24	..	-1.7	0.14	..	-0.5	0.63	..
Physical role functioning	74.2 (38.2)	77.9 (36.6)	79.1 (34.9)	3.7	0.20	..	4.9	0.06	..	1.2	0.65	..
Bodily pain	89.4 (17.1)	88.8 (15.8)	87.5 (17.6)	-0.6	0.64	..	-1.8	0.19	..	-1.3	0.30	..
General health	70.2 (17.9)	73.0 (18.1)	72.6 (20.6)	2.8	0.01	..	2.4	0.10	..	-0.4	0.76	..
Vitality	68.3 (15.0)	68.6 (14.1)	68.7 (15.6)	0.3	0.76	..	0.4	0.70	..	0.1	0.91	..
Social functioning	87.5 (18.8)	87.4 (17.2)	88.2 (16.6)	-0.1	0.97	..	0.7	0.60	..	0.8	0.52	..
Emotional role functioning	83.9 (31.9)	86.4 (29.4)	89.0 (26.1)	2.6	0.27	..	5.1	0.04	..	2.6	0.20	..
Mental health	76.2 (14.1)	77.2 (13.1)	75.5 (14.5)	1.0	0.16	..	-0.7	0.48	..	-1.7	0.04	..

<b>B</b>	<b>3 months</b>	<b>12 months</b>	<b>24 months</b>	<b>12 versus 3 months</b>		<b>24 versus 3 months</b>		<b>24 versus 12 months</b>	
	<b>Mean (SD)</b>	<b>Mean (SD)</b>	<b>Mean (SD)</b>	<b>Mean diff.</b>	<b>p-value</b>	<b>Mean diff.</b>	<b>p-value</b>	<b>Mean diff.</b>	<b>p-value</b>
<b>EORTC-QLQ-CR29</b>									
<b>Symptom scales/items</b>									
Urinary frequency	22.9 (20.7)	23.0 (18.8)	25.0 (18.0)	-0.1	0.94	2.2	0.26	2.0	0.22
Urinary incontinence	4.6 (12.1)	7.9 (14.6)	9.2 (15.5)	3.3	0.007	4.7	<0.001	1.3	0.27
Dysuria	2.2 (8.8)	0.5 (3.0)	1.5 (6.3)	-1.7	0.02	-0.7	0.42	1.0	0.04
Abdominal pain	6.4 (14.4)	5.2 (13.5)	5.8 (12.8)	-1.2	0.43	-0.6	0.64	0.5	0.66
Buttock pain	13.1 (23.6)	8.9 (16.6)	9.6 (15.7)	-4.2	0.03	-3.5	0.09	0.7	0.65
Bloating	12.8 (20.6)	10.4 (18.5)	12.7 (17.6)	-2.4	0.21	0.1	0.98	2.3	0.12
Blood and mucus in stool	6.3 (13.2)	4.8 (9.8)	4.6 (8.6)	-1.4	0.19	-1.7	0.14	-0.2	0.81
Dry mouth	17.6 (28.2)	8.1 (16.8)	7.2 (15.2)	-9.6	<0.001	-10.5	<0.001	-0.9	0.50
Hair loss	6.8 (22.8)	1.8 (6.9)	1.9 (6.9)	-4.9	0.01	-4.9	0.01	0.1	0.93
Taste	6.0 (19.0)	3.5 (12.0)	1.4 (5.7)	-2.5	0.10	-4.7	0.004	-2.2	0.03
Flatulence	23.9 (26.2)	24.3 (22.7)	25.3 (21.8)	0.4	0.86	1.4	0.52	1.0	0.56
Fecal incontinence	8.9 (16.4)	9.2 (15.1)	7.9 (13.0)	0.3	0.83	-1.1	0.47	-1.4	0.28
Sore skin	12.7 (21.7)	10.5 (18.8)	9.7 (16.7)	-2.2	0.20	-3.0	0.14	-0.8	0.61
Stool frequency	14.0 (15.2)	12.7 (12.6)	11.6 (13.2)	-1.3	0.31	-2.4	0.08	-1.1	0.36
Embarrassment	8.3 (17.1)	9.8 (17.8)	12.0 (17.1)	1.5	0.32	3.7	0.05	2.2	0.21
Impotence	35.5 (38.7)	33.4 (31.6)	42.2 (32.4)	-2.0	0.56	6.7	0.06	8.7	0.007
Dyspareunia	26.8 (21.8)	20.3 (20.5)	21.5 (17.7)	-6.5	0.08	-5.2	0.09	1.3	0.66
<b>Function scales/items</b>									
Anxiety	74.9 (19.7)	77.9 (20.5)	82.3 (16.6)	3.0	0.09	7.4	<0.001	4.5	0.01
Weight	84.2 (22.4)	83.8 (23.7)	88.6 (18.7)	-0.4	0.82	4.4	0.04	4.8	0.02
Body image	86.7 (22.1)	91.2 (15.6)	91.4 (12.1)	4.5	0.02	4.7	0.02	0.2	0.90
Sexual interest (men)	60.0 (26.0)	62.8 (26.3)	62.6 (18.4)	2.5	0.40	2.3	0.36	-0.2	0.94
Sexual interest (women)	82.9 (19.2)	81.6 (18.3)	80.0 (17.5)	-1.3	0.61	-3.0	0.30	-1.6	0.54
<b>EORTC-QLQ-CR38</b>									
<b>Symptom scales/items</b>									
Micturition problems	16.4 (16.1)	14.9 (13.6)	14.6 (13.4)	-1.5	0.39	-1.8	0.24	-0.3	0.83
Chemotherapy side effects	9.3 (11.7)	8.0 (9.6)	10.0 (12.4)	-1.3	0.34	0.7	0.66	2.0	0.16
Symptoms of the GI tract	13.9 (10.7)	12.3 (10.8)	12.7 (10.1)	-1.6	0.20	-1.2	0.35	0.4	0.69
Male sexual problems	31.2 (26.8)	36.4 (29.5)	39.3 (25.7)	5.2	0.13	8.1	0.05	2.9	0.46
Female sexual problems	42.0 (29.1)	21.7 (18.9)	40.7 (16.8)	-20.3	<0.001	-1.3	0.79	19.0	<0.001
Defecation problems	10.1 (8.3)	8.4 (6.9)	8.3 (7.1)	-1.7	0.04	-1.8	0.03	-0.1	0.91

	3 months	12 months	24 months	12 versus 3 months		24 versus 3 months		24 versus 12 months	
	Mean (SD)	Mean (SD)	Mean (SD)	Mean diff.	p-value	Mean diff.	p-value	Mean diff.	p-value
Weight loss	6.5 (17.6)	4.3 (10.4)	6.2 (12.3)	-2.2	0.33	-0.3	0.89	1.9	0.24
<b>Function scales</b>									
Body image	91.6 (14.5)	90.1 (16.3)	92.1 (14.5)	-1.4	0.35	0.5	0.71	1.9	0.20
Sexual functioning	71.5 (21.3)	71.4 (20.7)	70.9 (15.8)	-0.1	0.95	-0.7	0.73	-0.5	0.77
Sexual enjoyment	46.5 (21.6)	48.9 (24.8)	42.3 (20.6)	2.5	0.37	-4.2	0.12	-6.7	0.02
Future perspective	67.5 (18.0)	72.9 (21.7)	82.1 (19.9)	5.4	0.03	14.6	<0.001	9.2	0.001

<b>C</b>	3 months	12 months	24 months	12 versus 3 months		24 versus 3 months		24 versus 12 months	
				Mean diff.	p-value	Mean diff.	p-value	Mean diff.	p-value
<b>Low Anterior Resection Syndrome (LARS) score</b>									
<b>Mean</b>									
Mean score (SD)	20.9 (11.2)	21.0 (11.3)	20.6 (11.3)	0.1	0.94	-0.3	0.68	-0.4	0.62
<b>Percentage</b>									
% major LARS	25.3	24.0	24.9		0.80		1.00		0.89
<b>Vaizey incontinence score</b>									
<b>Mean</b>									
Mean score (SD)	6.8 (4.3)	7.1 (4.0)	8.0 (4.4)	0.3	0.25	1.3	<0.001	0.9	<0.001
<b>Percentage</b>									
% major incontinence	10.9	13.6	22.2		0.42		0.001		0.009
<b>International Prostate Symptom Score (IPSS)</b>									
<b>Mean</b>									
Mean score (SD)	5.2 (5.4)	5.9 (5.8)	5.5 (3.9)	0.7	0.19	0.3	0.47	-0.4	0.36
<b>Percentage</b>									
% severe dysfunction	3.3	4.6	0.0		0.77		Unable to estimate		Unable to estimate
<b>International Index of Erectile Function (IIEF)</b>									
<b>Mean score (SD)</b>									
Erectile function	15.0 (11.5)	14.4 (10.1)	14.5 (9.1)	-0.6	0.41	-0.5	0.56	0.2	0.80
Orgasmic function	5.4 (4.4)	5.6 (4.4)	5.4 (3.8)	0.2	0.60	0.1	0.87	-0.1	0.69
Sexual desire	5.6 (2.4)	5.5 (2.5)	5.5 (2.0)	-0.1	0.56	0.0	0.91	0.1	0.65

	3 months	12 months	24 months	12 versus 3 months		24 versus 3 months		24 versus 12 months	
				Mean diff.	p-value	Mean diff.	p-value	Mean diff.	p-value
Intercourse satisfaction	4.8 (5.4)	4.7 (4.9)	5.2 (4.6)	-0.1	0.82	0.4	0.38	0.5	0.18
Overall satisfaction	6.8 (2.7)	6.8 (2.3)	6.7 (2.3)	-0.1	0.79	-0.2	0.46	-0.1	0.55
Total IIEF score	39.0 (20.7)	37.0 (20.1)	38.0 (18.6)	-2.0	0.15	-1.0	0.51	0.9	0.46
<b>Percentage</b>									
% severe erectile dysfunction	43.0	41.1	31.8		0.72		0.03		0.04
<b>Female Sexual Function Index (FSFI)</b>									
<b>Mean score (SD)</b>									
Desire	2.4 (1.2)	2.2 (1.0)	2.3 (1.0)	-0.2	0.08	-0.1	0.31	0.1	0.38
Arousal	1.9 (1.7)	1.9 (1.9)	1.9 (1.7)	0.1	0.76	0.1	0.77	0.0	0.99
Lubrication	2.0 (2.1)	2.3 (2.1)	2.2 (1.9)	0.2	0.33	0.1	0.60	-0.1	0.72
Orgasm	2.3 (2.3)	2.1 (2.2)	2.2 (2.0)	-0.1	0.53	-0.1	0.83	0.1	0.72
Satisfaction	3.9 (1.5)	4.2 (1.4)	3.5 (1.4)	0.3	0.07	-0.4	0.04	-0.7	<0.001
Pain	1.9 (2.2)	2.0 (2.1)	1.7 (1.9)	0.1	0.80	-0.3	0.29	-0.3	0.22
Full scale score	18.2 (8.1)	16.7 (8.1)	15.6 (7.4)	-1.4	0.12	-2.6	0.002	-1.2	0.14

**eTable 2.** Quality of Life and Functional Outcome of Patients Treated With Local Excision (LE) and Patients Treated With Total Mesorectal Excision (TME) Compared to Patients Followed by Watch-and-Wait Without Requiring Additional Surgery (W&W) at 24 Months Following Inclusion<sup>a</sup>

<sup>a</sup> measured with (A) the EORTC-QLQ-C30 and SF-36, (B) the EORTC-QLQ-CR29 and EORTC-QLQ-CR38, (C) the LARS score, Vaizey score, IPSS score, IIEF, and FSFI. CI = confidence interval. \* = subscales or scores were not completed by patients with a colostomy.

A	LE					TME				
	(reference: patients in the W&W group)					(reference: patients in the W&W group)				
	N	Mean	B	95% CI	p-value	N	Mean	B	95% CI	p-value
<b>EORTC-QLQ-C30</b>										
<i>Function scales</i>										
Global health status	18	83.8	3.2	-7.0 – 13.4	0.54	39	68.4	-12.2	-19.5 – -5.0	0.001
Physical functioning	18	88.2	-2.8	-9.8 – 4.1	0.42	39	86.0	-5.0	-9.9 – -0.1	0.05
Emotional functioning	18	90.3	2.2	-5.2 – 9.6	0.56	39	81.6	-6.5	-11.7 – -1.2	0.02
Cognitive functioning	18	81.5	-7.1	-15.3 – -1.1	0.09	39	86.3	-2.3	-8.1 – 3.5	0.44
Social functioning	18	87.0	-5.9	-12.8 – 1.0	0.10	39	82.9	-10.0	-14.9 – -5.1	<0.001
<i>Symptom scales</i>										
Fatigue	18	10.2	-5.5	-15.6 – 4.6	0.29	39	23.1	7.4	2.8 – 14.6	0.04
Nausea	18	0.0	-2.9	-7.3 – 1.4	0.18	39	4.7	1.8	-1.3 – 4.8	0.26
Pain	18	3.7	-3.1	-11.7 – 5.6	0.48	39	23.9	17.1	11.0 – 23.3	<0.001
Insomnia	18	9.3	-5.4	-16.6 – 5.9	0.35	39	21.4	6.7	-1.2 – 14.7	0.10
Appetite loss	18	3.7	0.5	-5.9 – 6.9	0.87	39	11.1	7.9	3.4 – 12.5	0.001
Constipation	18	1.9	-4.8	-12.3 – 2.7	0.21	39	8.6	1.9	-3.4 – 7.2	0.48
Diarrhea	18	1.9	-8.7	-18.3 – 0.9	0.08	39	15.4	4.8	-2.0 – 11.6	0.17
Financial difficulties	18	1.9	-3.0	-10.3 – 4.4	0.43	39	13.7	8.8	3.6 – 14.1	0.001
<b>Short form-36</b>										
<i>Function scales</i>										
Physical functioning	18	79.2	-5.0	-15.1 – 5.0	0.32	39	73.0	-11.3	-18.4 – -4.2	0.002
Physical role functioning	18	79.2	0.1	-17.1 – 17.3	0.99	39	62.8	-16.3	-28.4 – -4.1	0.009
Bodily pain	18	92.1	4.6	-4.1 – 13.3	0.30	39	77.3	-10.2	-16.4 – -4.1	0.001
General health	18	71.1	-1.5	-11.8 – 8.9	0.78	39	65.5	-7.1	-14.4 – -0.2	0.06
Vitality	18	65.7	-3.0	-10.7 – 4.7	0.45	39	65.1	-3.6	-9.0 – 1.9	0.20
Social functioning	18	88.2	0.0	-8.7 – 8.6	0.99	39	76.0	-12.3	-18.4 – -6.1	<0.001
Emotional role functioning	18	81.5	-7.5	-21.1 – 6.1	0.28	39	78.6	-10.4	-20.0 – -0.7	0.04
Mental health	18	70.9	-4.5	-11.8 – 4.6	0.22	39	65.8	-9.7	-14.9 – -4.6	<0.001

B	LE					TME				
	(reference: patients in the W&W group)					(reference: patients in the W&W group)				
	N	Mean	B	95% CI	p-value	N	Mean	B	95% CI	p-value
<b>EORTC-QLQ-CR29</b>										
<b>Symptom scales/items</b>										
Urinary frequency	15	23.6	-1.4	-11.4 – 8.6	0.78	35	35.0	9.9	2.9 – 16.9	0.006
Urinary incontinence	15	10.2	1.0	-8.5 – 10.4	0.84	35	16.3	7.1	0.5 – 13.6	0.04
Dysuria	15	0.1	-1.4	-4.8 – 2.0	0.41	35	2.2	0.7	-1.7 – 3.1	0.57
Abdominal pain	15	5.6	-0.2	-7.7 – 7.3	0.95	35	12.8	7.0	1.8 – 12.2	0.009
Buttock pain	15	14.5	4.9	-4.8 – 14.6	0.32	35	18.5	8.9	2.2 – 15.6	0.01
Bloating	15	3.8	-8.9	-18.8 – 0.9	0.07	35	17.8	5.0	-1.8 – 11.9	0.15
Blood and mucus in stool	15	1.2	-3.4	-7.8 – 0.9	0.12	35	4.3	-0.3	-3.4 – 2.7	0.83
Dry mouth	15	7.7	0.5	-8.0 – 9.0	0.90	35	15.3	8.1	2.1 – 14.0	0.008
Hair loss	15	0.4	-1.6	-5.2 – 2.1	0.40	35	2.2	0.3	-2.3 – 2.8	0.83
Taste	15	2.5	1.1	-2.7 – 4.9	0.57	35	4.5	3.1	0.4 – 5.7	0.02
Flatulence*	15	35.9	10.5	-1.7 – 22.8	0.09	3	27.1	1.8	-24.4 – 28.0	0.89
Fecal incontinence*	15	10.4	2.6	-4.5 – 9.6	0.47	3	1.3	-6.6	-21.7 – 8.5	0.39
Sore skin*	15	10.9	1.3	-7.8 – 10.4	0.79	3	12.2	2.6	-17.0 – 22.1	0.80
Stool frequency*	15	16.3	4.7	-2.5 – 12.0	0.20	3	25.5	13.9	-1.7 – 29.4	0.08
Embarrassment*	15	18.1	6.1	-3.2 – 15.4	0.20	3	26.6	14.6	-5.4 – 34.6	0.15
Impotence	9	38.5	-3.7	-26.0 – 18.7	0.75	23	55.8	13.6	-1.3 – 28.5	0.07
Dyspareunia	6	33.0	11.5	-6.2 – 29.2	0.20	12	27.7	6.2	-7.1 – 19.4	0.36
<b>Function scales/items</b>										
Anxiety	15	70.5	-11.8	-21.3 – -2.3	0.02	35	77.5	-4.9	-11.5 – 1.8	0.15
Weight	15	94.5	5.9	-3.7 – 15.5	0.23	35	85.6	-3.0	-9.7 – 3.7	0.38
Body image	15	93.9	2.5	-5.7 – 10.7	0.55	35	80.3	-11.1	-16.8 – -5.4	<0.001
Sexual interest (men)	9	69.9	7.3	-6.7 – 21.4	0.30	23	65.1	2.5	-6.8 – 11.9	0.59
Sexual interest (women)	6	86.1	6.1	-9.4 – 21.6	0.44	12	81.0	1.0	-10.6 – 12.7	0.86
<b>EORTC-QLQ-CR38</b>										
<b>Symptom scales/items</b>										
Micturition problems	3	13.2	-1.4	-16.6 – 13.9	0.86	4	17.7	3.1	-10.2 – 16.4	0.64
Chemotherapy side effects	3	12.9	2.9	-11.2 – 17.0	0.68	4	12.3	2.3	-10.0 – 14.5	0.72
Symptoms of the GI tract	3	12.2	-0.5	-12.1 – 11.0	0.93	4	13.8	1.1	-9.0 – 11.1	0.83
Male sexual problems	2	36.1	-3.3	-39.7 – 33.1	0.86	2	41.2	1.9	-34.5 – 38.3	0.92
Female sexual problems	1	39.7	-1.0	-35.5 – 33.6	0.96	2	43.8	3.1	-21.8 – 27.9	0.80



	LE					TME				
	(reference: patients in the W&W group)					(reference: patients in the W&W group)				
	N	Mean	B	95% CI	p-value	N	Mean	B	95% CI	p-value
Defecation problems*	3	7.3	-1.0	-9.2 – 7.2	0.81	0	..	..	..	..
Weight loss	3	9.3	3.1	-10.9 – 17.1	0.66	4	9.3	3.1	-9.1 – 15.2	0.62
<b>Function scales</b>										
Body image	3	93.1	1.1	-15.5 – 17.6	0.90	4	90.4	-1.7	-16.1 – 12.7	0.82
Sexual functioning	3	74.7	3.8	-14.1 – 21.8	0.67	4	68.2	-2.7	-18.4 – 12.9	0.73
Sexual enjoyment	3	36.0	-6.3	-29.8 – 17.1	0.59	4	38.3	-4.0	-24.4 – 16.4	0.70
Future perspective	3	79.3	-2.9	-25.4 – 19.7	0.80	4	80.7	-1.4	-21.1 – 18.3	0.89

C	LE					TME				
	(reference: patients in the W&W group)					(reference: patients in the W&W group)				
	N	Mean / %	B	95% CI	p-value	N	Mean / %	B	95% CI	p-value
<b>Low Anterior Resection Syndrome (LARS) score</b>										
<i>Mean</i>										
Mean score	18	28.2	7.6	2.2 – 13.0	0.006	3	28.3	7.7	-5.2 – 20.6	0.24
<i>Percentage</i>										
% major LARS	18	55.6			0.01	3	66.7			0.16
<b>Vaizey incontinence score</b>										
<i>Mean</i>										
Mean score	18	8.7	0.7	-1.4 – 2.7	0.54	3	11.7	3.7	-1.3 – 8.6	0.15
<i>Percentage</i>										
% major incontinence	18	22.2			1.00	3	66.7			0.13
<b>International Prostate Symptom Score (IPSS)</b>										
<i>Mean</i>										
Mean score	11	5.7	0.2	-2.5 – 2.8	0.90	25	7.2	1.7	-0.2 – 3.5	0.07
<i>Percentage</i>										
% severe dysfunction	11	0.0			1.00	25	4.0			0.14
<b>International Index of Erectile Function (IIEF)</b>										
<i>Mean score</i>										

	LE					TME				
	(reference: patients in the W&W group)					(reference: patients in the W&W group)				
	N	Mean / %	B	95% CI	p-value	N	Mean / %	B	95% CI	p-value
Erectile function	11	15.3	0.8	-4.8 – 6.3	0.78	25	11.3	-3.2	-7.0 – 0.6	0.10
Orgasmic function	11	4.5	-0.9	-3.3 – 1.4	0.43	25	5.5	0.0	-1.6 – 1.7	0.95
Sexual desire	11	5.2	-0.4	-1.6 – 0.9	0.54	25	5.6	0.0	-0.8 – 0.9	0.92
Intercourse satisfaction	11	4.4	-0.8	-3.6 – 2.0	0.57	25	3.9	-1.2	-3.2 – 0.7	0.21
Overall satisfaction	11	6.7	0.0	-1.4 – 1.4	0.98	25	6.3	-0.4	-1.4 – 0.6	0.44
Total IIEF score	11	37.4	-0.6	-11.9 – 10.8	0.92	25	33.9	-4.0	-11.9 – 3.8	0.31
<b>Percentage</b>										
% severe erectile dysfunction		27.3			1.00		44.0			0.26
<b>Female Sexual Function Index (FSFI)</b>										
<b>Mean score</b>										
Desire	7	2.1	-0.2	-1.0 – 0.6	0.61	14	2.3	0.0	-0.6 – 0.6	0.93
Arousal	7	1.8	-0.2	-1.5 – 1.1	0.77	14	2.3	0.3	-0.7 – 1.3	0.54
Lubrication	7	2.4	0.2	-1.3 – 1.8	0.75	14	2.6	0.4	-0.7 – 1.6	0.45
Orgasm	7	1.9	-0.3	-1.9 – 1.3	0.70	14	3.0	0.8	-0.4 – 1.9	0.19
Satisfaction	7	3.3	-0.2	-1.3 – 0.9	0.74	14	3.2	-0.3	-1.2 – 0.5	0.43
Pain	7	1.4	-0.3	-1.8 – 1.2	0.68	14	1.8	0.1	-1.0 – 1.2	0.86
Full scale score	7	13.7	-1.9	-8.0 – 4.1	0.53	14	15.3	-0.3	-4.7 – 4.2	0.91

**eTable 3.** Association of Sex, Age, Tumor Distance, and Neoadjuvant Treatment on Quality of Life and Functional Outcome at 24 Months Following Inclusion <sup>a</sup> measured with (A) the EORTC-QLQ-C30 and SF-36, (B) the EORTC-QLQ-CR29 and EORTC-QLQ-CR38, (C) the LARS score, Vaizey score, IPSS score, IIEF, and FSFI of patients followed by Watch-and-Wait without requiring additional surgery. CI = confidence interval. \* = subscales were not completed by patients with a colostomy.

A	Independent variables											
	Sex			Age			Tumour distance			Neoadjuvant treatment		
	(female patients)			(years)			(cm)			(short-course radiotherapy)		
	Regression coefficient	95%CI	p-value	Regression coefficient	95%CI	p-value	Regression coefficient	95%CI	p-value	Regression coefficient	95%CI	p-value
<b>EORTC-QLQ-C30</b>												
<i>Function scales</i>												
Global health status	1.0	-4.7 – 6.7	0.73	0.1	-0.2 – 0.4	0.36	-0.3	-1.1 – 0.5	0.44	-9.1	-23.2 – 5.2	0.21
Physical functioning	-3.1	-7.0 – 0.8	0.12	-0.3	-0.5 – -0.1	0.002	0.0	-0.5 – 0.6	0.97	-7.9	-17.7 – 1.8	0.11
Emotional functioning	-1.4	-5.5 – 2.8	0.51	0.2	-0.1 – 0.4	0.16	-0.4	-1.0 – 0.2	0.21	-6.0	-16.3 – 4.3	0.25
Cognitive functioning	-0.8	-5.3 – 3.8	0.74	0.2	-0.1 – 0.4	0.17	-0.5	-1.2 – 0.1	0.11	1.0	-10.3 – 12.3	0.86
Social functioning	-0.1	-3.7 – 3.5	0.97	0.2	0.0 – 0.3	0.09	-0.4	-0.9 – 0.1	0.08	0.9	-8.1 – 9.8	0.85
<i>Symptom scales</i>												
Fatigue	-2.7	-8.4 – 3.0	0.35	-0.4	-0.7 – -0.1	0.008	0.6	-0.2 – 1.4	0.15	0.3	-13.9 – 14.6	0.96
Nausea	2.7	0.1 – 5.2	0.04	0.0	-0.1 – 0.2	0.67	0.2	-0.2 – 0.5	0.38	5.6	-0.8 – 12.0	0.08
Pain	4.0	-0.6 – 8.6	0.09	-0.1	-0.3 – 0.2	0.48	0.2	-0.4 – 0.9	0.48	5.9	-5.6 – 17.4	0.31
Insomnia	0.9	-5.5 – 7.3	0.79	-0.4	-0.7 – 0.0	0.03	0.3	-0.6 – 1.2	0.48	-6.5	-22.5 – 9.5	0.42
Appetite loss	4.4	1.3 – 7.6	0.006	-0.1	-0.2 – 0.1	0.37	0.2	-0.2 – 0.7	0.36	9.7	1.8 – 17.6	0.02
Constipation	4.9	0.6 – 9.3	0.03	-0.1	-0.4 – 0.1	0.20	0.0	-0.7 – 0.6	0.93	1.8	-9.2 – 12.7	0.75
Diarrhea	6.9	1.2 – 12.5	0.02	0.1	-0.2 – 0.4	0.33	0.1	-0.7 – 0.9	0.87	15.0	0.8 – 29.1	0.04
Financial difficulties	-2.2	-6.1 – 1.7	0.27	-0.3	-0.5 – -0.1	0.009	0.1	-0.5 – 0.6	0.80	-5.0	-14.8 – 4.7	0.31
<b>Short form-36</b>												
<i>Function scales</i>												
Physical functioning	-3.7	-9.2 – 1.9	0.20	-0.6	-0.8 – -0.3	<0.001	0.5	-0.3 – 1.3	0.20	-14.1	-28.0 – -0.2	0.05
Physical role functioning	1.9	-8.1 – 11.8	0.71	-0.1	-0.6 – 0.4	0.68	0.1	-1.3 – 1.5	0.92	-20.4	-45.1 – 4.2	0.10
Bodily pain	-5.3	-10.3 – -0.4	0.04	0.1	-0.2 – 0.3	0.52	-0.5	-1.2 – 0.2	0.17	-8.0	-20.2 – 4.8	0.23
General health	-0.1	-6.0 – 5.8	0.97	-0.1	-0.4 – 0.2	0.47	-0.4	-1.2 – 0.5	0.39	-6.6	-21.2 – 8.1	0.38
Vitality	-5.7	-10.1 – -1.3	0.01	0.1	-0.1 – 0.3	0.50	0.0	-0.6 – 0.7	0.92	-1.7	-12.8 – 9.4	0.76
Social functioning	0.5	-4.2 – 5.2	0.84	-0.1	-0.3 – 0.2	0.68	0.0	-0.6 – 0.7	0.90	-5.6	-17.4 – 6.1	0.35
Emotional role functioning	-2.7	-10.1 – 4.7	0.48	-0.1	-0.5 – 0.3	0.68	0.2	-0.8 – 1.3	0.66	-27.5	-45.7 – -9.3	0.003
Mental health	-3.7	-7.8 – 0.4	0.08	0.1	-0.1 – 0.3	0.18	0.1	-0.4 – 0.7	0.63	-9.7	-19.9 – 0.5	0.06
Body image	3.7	-3.1 – 10.6	0.28	-0.1	-0.5 – 0.3	0.61	0.5	-0.5 – 1.5	0.34	8.0	-21.1 – 37.2	0.59

B	Independent variables											
	Sex			Age			Tumour distance			Neoadjuvant treatment		
	(female patients)			(years)			(cm)			(short-course radiotherapy)		
	Regression coefficient	95%CI	p-value	Regression coefficient	95%CI	p-value	Regression coefficient	95%CI	p-value	Regression coefficient	95%CI	p-value
<b>EORTC-QLQ-CR29</b>												
<b>Symptom scales/items</b>												
Urinary frequency	0.4	-6.1 – 7.0	0.90	0.2	-0.1 – 0.6	0.14	-0.4	-1.3 – 0.5	0.35	2.3	-11.6 – 16.2	0.74
Urinary incontinence	5.7	0.2 – 11.3	0.04	0.1	-0.2 – 0.4	0.46	0.0	-0.8 – 0.9	0.91	0.3	-11.7 – 12.2	0.97
Dysuria	0.4	-1.9 – 2.7	0.75	0.0	-0.1 – 0.1	0.92	-0.2	-0.5 – 0.1	0.23	-1.2	-6.0 – 3.7	0.64
Abdominal pain	2.9	-1.8 – 7.5	0.22	-0.2	-0.4 – 0.0	0.07	-0.4	-1.0 – 0.3	0.28	0.7	-9.2 – 10.5	0.89
Buttock pain	7.5	1.9 – 13.0	0.009	-0.2	-0.5 – 0.1	0.12	-0.8	-1.6 – -0.1	0.034	1.2	-10.9 – 13.3	0.84
Bloating	3.0	-3.4 – 9.3	0.36	-0.2	-0.5 – 0.1	0.18	-0.4	-1.3 – 0.4	0.32	-2.8	-16.3 – 10.8	0.69
Blood and mucus in stool	1.2	-1.9 – 4.3	0.46	-0.1	-0.2 – 0.1	0.51	-0.2	-0.7 – 0.2	0.32	-0.4	-7.0 – 6.2	0.91
Dry mouth	4.8	-0.7 – 10.2	0.09	0.1	-0.1 – 0.4	0.34	-0.6	-1.4 – 0.2	0.15	6.3	-5.3 – 18.0	0.28
Hair loss	2.3	0.1 – 4.8	0.06	0.2	0.0 – 0.3	0.01	-0.1	-0.5 – 0.3	0.63	3.6	-1.7 – 8.8	0.18
Taste	1.2	-0.9 – 3.2	0.26	-0.1	-0.2 – 0.0	0.24	-0.1	-0.4 – 0.2	0.44	-0.9	-5.2 – 3.5	0.70
Flatulence	8.9	1.1 – 16.7	0.03	-0.4	-0.7 – 0.1	0.06	-0.6	-1.7 – 0.5	0.26	-5.9	-22.6 – 10.9	0.49
Fecal incontinence	3.7	-1.0 – 8.3	0.13	0.2	0.0 – 0.4	0.12	-0.4	-1.1 – 0.2	0.24	10.1	0.2 – 20.0	0.05
Sore skin	4.7	-1.3 – 10.7	0.12	-0.2	-0.5 – 0.1	0.27	-1.0	-1.9 – -0.2	0.02	-1.0	-13.8 – 11.8	0.88
Stool frequency	3.6	-1.2 – 8.3	0.14	-0.1	-0.3 – 0.1	0.35	-0.6	-1.2 – 0.1	0.07	-1.0	-11.2 – 9.2	0.85
Embarrassment	4.8	-1.4 – 10.9	0.13	0.0	-0.3 – 0.3	0.75	-0.4	-1.3 – 0.5	0.36	-1.7	-14.8 – 11.5	0.80
Impotence	..	..	..	1.7	1.0 – 2.3	<0.001	-0.9	-2.8 – 1.0	0.35	-29.4	-61.9 – 3.1	0.08
Dyspareunia	..	..	..	-0.1	-0.6 – 0.4	0.63	-0.5	-2.0 – 1.1	0.57	4.3	-17.2 – 25.9	0.67
<b>Function scales/items</b>												
Anxiety	-6.9	-12.8 – -1.0	0.02	0.4	0.1 – 0.7	0.01	-0.5	-1.3 – 0.3	0.25	-6.4	-19.2 – 6.3	0.32
Weight												
Body image	0.8	-3.6 – 5.2	0.73	0.1	-0.1 – 0.3	0.33	-0.2	-0.8 – 0.5	0.63	-4.1	-13.4 – 5.2	0.39
Sexual interest (men)	..	..	..	0.7	0.3 – 1.1	0.001	0.1	-1.0 – 1.2	0.85	3.0	-15.8 – 21.8	0.75
Sexual interest (women)	..	..	..	0.4	-0.1 – 0.9	0.14	-0.2	-1.9 – 1.5	0.78	8.7	-12.5 – 30.0	0.41
<b>Short form-36</b>												
<b>Function scales</b>												
Physical functioning	-3.7	-9.2 – 1.9	0.20	-0.6	-0.8 – -0.3	<0.001	0.5	-0.3 – 1.3	0.20	-14.1	-28.0 – -0.2	0.05
Physical role functioning	1.9	-8.1 – 11.8	0.71	-0.1	-0.6 – 0.4	0.68	0.1	-1.3 – 1.5	0.92	-20.4	-45.1 – 4.2	0.10

	Independent variables											
	Sex			Age			Tumour distance			Neoadjuvant treatment		
	(female patients)			(years)			(cm)			(short-course radiotherapy)		
	Regression coefficient	95%CI	p-value	Regression coefficient	95%CI	p-value	Regression coefficient	95%CI	p-value	Regression coefficient	95%CI	p-value
Bodily pain	-5.3	-10.3 – -0.4	0.04	0.1	-0.2 – 0.3	0.52	-0.5	-1.2 – 0.2	0.17	-8.0	-20.2 – 4.8	0.23
General health	-0.1	-6.0 – 5.8	0.97	-0.1	-0.4 – 0.2	0.47	-0.4	-1.2 – 0.5	0.39	-6.6	-21.2 – 8.1	0.38
Vitality	-5.7	-10.1 – -1.3	0.01	0.1	-0.1 – 0.3	0.50	0.0	-0.6 – 0.7	0.92	-1.7	-12.8 – 9.4	0.76
Social functioning	0.5	-4.2 – 5.2	0.84	-0.1	-0.3 – 0.2	0.68	0.0	-0.6 – 0.7	0.90	-5.6	-17.4 – 6.1	0.35
Emotional role functioning	-2.7	-10.1 – 4.7	0.48	-0.1	-0.5 – 0.3	0.68	0.2	-0.8 – 1.3	0.66	-27.5	-45.7 – -9.3	0.003
Mental health	-3.7	-7.8 – 0.4	0.08	0.1	-0.1 – 0.3	0.18	0.1	-0.4 – 0.7	0.63	-9.7	-19.9 – 0.5	0.06

C	Independent variables											
	Sex			Age			Tumour distance			Neoadjuvant treatment		
	(female patients)			(years)			(cm)			(short-course radiotherapy)		
	Regression coefficient	95%CI	p-value	Regression coefficient	95%CI	p-value	Regression coefficient	95%CI	p-value	Regression coefficient	95%CI	p-value
<b>Low Anterior Resection Syndrome (LARS) score</b>												
LARS score	3.8	0.6 – 6.9	0.02	-0.1	-0.3 – 0.0	0.10	-0.4	-0.9 – 0.0	0.07	-0.9	-8.9 – 7.1	0.82
<b>Vaizey incontinence score</b>												
Vaizey incontinence score	-0.1	-1.4 – 1.1	0.82	0.0	0.0 – 0.1	0.19	0.1	0.0 – 0.3	0.14	1.0	-2.1 – 4.2	0.52
<b>International Prostate Symptom Score (IPSS)</b>												
IPSS	..	..	..	0.1	0.0 – 0.2	0.02	0.0	-0.2 – 0.2	0.84	0.1	-3.4 – 3.6	0.94
<b>International Index of Erectile Function (IIEF)</b>												
Erectile function	..	..	..	-0.4	-0.5 – 0.2	<0.001	-0.1	-0.6 – 0.3	0.56	0.8	-7.4 – 8.9	0.86
Orgasmic function	..	..	..	-0.1	-0.2 – -0.1	<0.001	-0.1	-0.3 – 0.1	0.24	2.4	-1.0 – 5.7	0.17
Sexual desire	..	..	..	-0.1	-0.1 – -0.1	<0.001	0.0	-0.1 – 0.1	0.39	1.0	-0.9 – 2.8	0.30
Intercourse satisfaction	..	..	..	-0.1	-0.2 – -0.1	0.002	-0.2	-0.4 – 0.0	0.12	-0.4	-4.5 – 3.7	0.86
Overall satisfaction	..	..	..	-0.1	-0.1 – -0.0	0.04	-0.1	-0.2 – 0.0	0.26	-2.1	-4.2 – -0.1	0.04
Total IIEF score	..	..	..	-0.8	-1.1 – -0.4	<0.001	-0.3	-1.2 – 0.6	0.47	1.6	-15.1 – 18.3	0.85
<b>Female Sexual Function Index (FSFI)</b>												
Desire	..	..	..	0.0	0.0 – 0.0	0.38	-0.1	-0.1 – 0.0	0.10	-1.0	-2.2 – 0.2	0.11
Arousal	..	..	..	0.0	-0.1 – 0.0	0.05	-0.1	-0.2 – 0.1	0.25	-1.5	-3.5 – 0.4	0.13
Lubrication	..	..	..	0.0	0.0 – 0.1	0.92	-0.1	-0.2 – 0.0	0.14	-0.3	-2.5 – 2.0	0.80
Orgasm	..	..	..	0.0	-0.1 – 0.0	0.43	-0.1	-0.3 – 0.0	0.08	0.3	-2.1 – 2.6	0.83
Satisfaction	..	..	..	0.0	0.0 – 0.0	0.81	0.1	-0.0 – 0.2	0.18	-0.6	-2.3 – 1.1	0.50
Pain	..	..	..	0.0	-0.1 – 0.0	0.26	-0.0	-0.2 – 0.1	0.73	0.2	-2.0 – 2.5	0.83
Full scale score	..	..	..	0.0	-0.2 – 0.1	0.67	0.1	-0.5 – 0.6	0.73	-1.8	-10.5 – 7.0	0.69

**eTable 4.** Quality of Life and Functional Outcome of All Patients Included in the Dutch Watch-and-Wait Registry at 3, 12, and 24 Months Following Inclusion <sup>a</sup>

<sup>a</sup> measured with (A) the EORTC-QLQ-C30 and SF-36, (B) the EORTC-QLQ-CR29 and EORTC-QLQ-CR38, (C) the LARS score, Vaizey score, IPSS score, IIEF, and FSFI. \* = subscales or scores were not completed by patients with a colostomy.

A	3 months	12 months	24 months	12 versus 3 months			24 versus 3 months			24 versus 12 months		
	Mean (SD)	Mean (SD)	Mean (SD)	Mean diff.	p-value	Clinical sign.	Mean diff.	p-value	Clinical sign.	Mean diff.	p-value	Clinical sign.
<b>EORTC-QLQ-C30</b>												
<i>Function scales</i>												
Global health status	81.1 (16.0)	82.9 (16.5)	79.1 (21.5)	1.9	0.05	Trivial	-2.0	0.11	Trivial	-3.8	0.001	Trivial
Physical functioning	89.4 (15.4)	89.2 (15.6)	90.1 (14.4)	-0.3	0.69	Trivial	0.6	0.42	Trivial	0.9	0.19	Trivial
Emotional functioning	85.0 (17.1)	87.7 (15.7)	87.3 (15.5)	2.8	0.004	Trivial	2.3	0.02	Trivial	-0.4	0.63	Trivial
Cognitive functioning	87.9 (16.6)	88.4 (15.3)	87.8 (17.0)	0.5	0.58	Trivial	-0.1	0.95	Trivial	-0.5	0.58	Trivial
Social functioning	86.2 (21.7)	90.6 (16.0)	91.1 (14.7)	4.4	0.003	Small	4.9	<0.001	Small	0.5	0.67	Trivial
<i>Symptom scales</i>												
Fatigue	19.0 (21.4)	16.6 (19.3)	16.3 (21.0)	-2.4	0.09	Trivial	-2.7	0.08	Trivial	-0.2	0.85	Trivial
Nausea	1.9 (7.1)	2.4 (9.8)	3.0 (9.0)	0.5	0.47	Trivial	1.1	0.09	Trivial	0.6	0.37	Trivial
Pain	9.5 (21.4)	9.0 (20.1)	9.0 (18.9)	-0.5	0.74	Trivial	-0.5	0.73	Trivial	0.0	1.00	Trivial
Insomnia	16.7 (23.8)	16.3 (23.8)	15.2 (23.4)	-0.4	0.79	Trivial	-1.4	0.35	Trivial	-1.1	0.51	Trivial
Appetite loss	2.8 (10.4)	4.1 (15.2)	4.3 (13.5)	1.3	0.21	Trivial	1.6	0.10	Trivial	0.2	0.79	Trivial
Constipation	5.9 (13.9)	6.4 (14.8)	6.6 (15.5)	0.5	0.67	Trivial	0.7	0.51	Trivial	-0.2	0.84	Trivial
Diarrhea	9.7 (18.1)	9.7 (18.5)	10.7 (20.1)	0.0	1.00	Trivial	1.0	0.47	Trivial	1.0	0.50	Trivial
Financial difficulties	5.6 (14.6)	4.3 (13.8)	5.9 (15.6)	-1.3	0.08	Trivial	0.2	0.78	Trivial	1.6	0.07	Trivial
<b>Short form-36</b>												
<i>Function scales</i>												
Physical functioning	83.8 (20.1)	83.2 (21.6)	82.3 (21.1)	-0.6	0.53	..	-1.5	0.15	..	-0.9	0.28	..
Physical role functioning	71.1 (39.5)	74.6 (38.5)	76.8 (35.9)	3.4	0.19	..	5.7	0.01	..	2.2	0.38	..
Bodily pain	87.3 (19.5)	87.7 (17.7)	86.4 (18.4)	0.5	0.70	..	-0.8	0.51	..	-1.3	0.24	..
General health	69.1 (18.7)	71.6 (18.3)	71.5 (21.5)	2.5	0.02	..	2.4	0.08	..	-0.1	0.95	..
Vitality	66.6 (15.5)	67.4 (14.0)	68.0 (15.9)	0.8	0.31	..	1.4	0.14	..	0.6	0.54	..
Social functioning	86.0 (20.5)	86.7 (18.3)	86.5 (18.4)	0.7	0.57	..	0.5	0.70	..	-0.2	0.88	..
Emotional role functioning	80.7 (35.1)	83.6 (32.4)	87.1 (28.3)	2.9	0.24	..	6.4	0.01	..	3.5	0.06	..
Mental health	75.5 (13.9)	75.9 (13.3)	73.8 (15.4)	0.5	0.52	..	-1.6	0.08	..	-2.1	0.008	..

B	3 months	12 months	24 months	12 versus 3 months		24 versus 3 months		24 versus 12 months	
	Mean (SD)	Mean (SD)	Mean (SD)	Mean diff.	p-value	Mean diff.	p-value	Mean diff.	p-value
	<b>EORTC-QLQ-CR29</b>								
<b>Symptom scales/items</b>									
Urinary frequency	22.8 (20.2)	24.4 (19.5)	26.8 (19.0)	1.6	0.32	4.0	0.02	2.4	0.11
Urinary incontinence	5.1 (12.6)	8.6 (15.2)	10.6 (17.7)	3.5	0.001	5.5	<0.001	2.0	0.10
Dysuria	2.3 (8.6)	1.4 (5.9)	1.6 (6.3)	-0.9	0.19	-0.8	0.29	0.2	0.77
Abdominal pain	7.4 (15.6)	7.2 (16.9)	7.1 (14.1)	-0.1	0.93	-0.3	0.82	-0.2	0.88
Buttock pain	13.9 (23.8)	10.1 (18.6)	11.6 (18.3)	-3.8	0.03	-2.3	0.25	1.5	0.35
Bloating	12.6 (20.1)	10.5 (18.4)	12.9 (18.5)	-2.1	0.19	0.3	0.83	2.4	0.07
Blood and mucus in stool	5.9 (12.8)	4.5 (9.9)	4.3 (8.1)	-1.4	0.16	-1.6	0.10	-0.2	0.77
Dry mouth	19.6 (30.8)	8.5 (16.3)	8.7 (16.1)	-11.1	<0.001	-10.8	<0.001	-0.2	0.85
Hair loss	10.0 (26.6)	2.0 (7.2)	1.8 (6.8)	-8.0	<0.001	-8.1	<0.001	-0.2	0.79
Taste	6.6 (19.5)	4.0 (12.2)	2.0 (7.1)	-2.6	0.07	-4.5	0.002	-1.9	0.03
Flatulence*	25.9 (26.2)	24.6 (23.5)	26.4 (23.0)	-1.6	0.44	1.2	0.55	1.6	0.37
Fecal incontinence*	9.2 (16.1)	9.5 (16.7)	8.0 (13.1)	0.4	0.77	-1.7	0.23	-2.0	0.13
Sore skin*	12.7 (20.2)	11.3 (20.8)	9.9 (16.8)	-2.0	0.26	-3.2	0.10	-1.6	0.34
Stool frequency*	15.2 (15.4)	14.1 (14.9)	12.3 (13.6)	-1.0	0.42	-2.6	0.04	-1.8	0.16
Embarrassment*	9.3 (18.1)	11.4 (20.2)	12.9 (17.4)	2.2	0.14	3.7	0.04	1.3	0.46
Impotence	36.5 (38.0)	36.6 (32.3)	44.4 (32.5)	0.1	0.98	7.9	0.02	7.8	0.009
Dyspareunia	27.5 (21.2)	20.8 (21.1)	23.8 (20.4)	-6.7	0.05	3.7	0.24	3.0	0.21
<b>Function scales/items</b>									
Anxiety	72.4 (22.4)	76.1 (22.7)	80.5 (18.0)	3.8	0.02	8.1	<0.001	4.3	0.009
Weight	84.9 (21.6)	84.3 (23.4)	88.5 (17.9)	-0.6	0.69	3.6	0.04	4.2	0.01
Body image	85.1 (25.3)	90.3 (16.5)	89.7 (15.6)	5.6	0.006	5.0	0.02	-0.5	0.66
Sexual interest (men)	63.8 (27.0)	64.0 (28.5)	63.6 (20.3)	0.3	0.92	-0.2	0.93	-0.5	0.85
Sexual interest (women)	81.4 (18.4)	81.5 (19.2)	80.8 (17.6)	0.2	0.94	-0.6	0.81	-0.8	0.71
<b>EORTC-QLQ-CR38</b>									
<b>Symptom scales/items</b>									
Micturition problems	16.7 (16.1)	14.7 (13.2)	14.6 (12.9)	-2.0	0.25	-2.1	0.18	-0.1	0.95
Chemotherapy side effects	9.2 (11.6)	8.1 (9.4)	10.2 (12.0)	-1.1	0.41	1.0	0.50	2.1	0.11
Symptoms of the GI tract	14.5 (11.2)	12.4 (10.6)	12.8 (9.8)	-2.1	0.08	-1.7	0.18	0.4	0.70
Male sexual problems	31.4 (28.0)	36.8 (29.5)	39.3 (24.9)	5.4	0.10	7.9	0.05	2.5	0.52
Female sexual problems	41.3 (27.6)	21.6 (18.0)	40.9 (15.9)	-19.7	<0.001	-0.5	0.92	19.3	<0.001
Defecation problems*	10.1 (8.1)	8.6 (7.2)	8.3 (7.0)	-1.6	0.06	-1.8	0.02	-0.3	0.72



	3 months	12 months	24 months	12 versus 3 months		24 versus 3 months		24 versus 12 months	
	Mean (SD)	Mean (SD)	Mean (SD)	Mean diff.	p-value	Mean diff.	p-value	Mean diff.	p-value
Weight loss	6.0 (17.0)	4.2 (10.0)	6.5 (11.9)	-1.8	0.39	0.5	0.82	2.2	0.14
<b>Function scales</b>									
Body image	91.0 (16.4)	89.3 (17.2)	92.0 (14.0)	-1.7	0.25	1.0	0.50	2.7	0.09
Sexual functioning	70.8 (21.6)	70.7 (20.7)	70.9 (15.2)	-0.1	0.96	0.1	0.96	0.2	0.91
Sexual enjoyment	48.1 (21.9)	50.2 (25.0)	41.9 (19.9)	2.0	0.43	-6.2	0.02	-8.3	0.003
Future perspective	67.5 (18.0)	72.8 (20.9)	82.0 (19.1)	5.3	0.02	14.5	<0.001	9.2	<0.001

<b>C</b>									
	3 months	12 months	24 months	12 versus 3 months		24 versus 3 months		24 versus 12 months	
				Mean diff.	p-value	Mean diff.	p-value	Mean diff.	p-value
<b>Low Anterior Resection Syndrome (LARS) score*</b>									
<b>Mean</b>									
Mean score (SD)	21.4 (11.3)	21.5 (11.3)	21.3 (11.4)	0.1	0.83	0.1	0.99	-0.1	0.92
<b>Percentage</b>									
% major LARS	26.7	25.9	27.7		1.000		0.81		0.60
<b>Vaizey incontinence score*</b>									
<b>Mean</b>									
Mean score (SD)	7.3 (4.3)	7.2 (4.0)	8.1 (4.3)	0.1	0.84	1.1	<0.001	1.0	<0.001
<b>Percentage</b>									
% major incontinence	12.8	13.5	22.7		0.88		0.002		0.004
<b>International Prostate Symptom Score (IPSS)</b>									
<b>Mean</b>									
Mean score (SD)	5.7 (5.8)	6.7 (6.8)	5.7 (4.3)	1.0	0.05	0.1	0.86	-1.0	0.03
<b>Percentage</b>									
% severe dysfunction	4.3	8.6	0.5		0.13		0.04		<0.001
<b>International Index of Erectile Function (IIEF)</b>									
<b>Mean score (SD)</b>									
Erectile function	14.6 (11.4)	14.4 (9.8)	14.1 (9.0)	-0.2	0.80	-0.5	0.55	-0.3	0.64
Orgasmic function	5.3 (4.4)	5.6 (4.4)	5.4 (3.8)	0.3	0.42	0.0	0.88	-0.2	0.45
Sexual desire	5.5 (2.4)	5.5 (2.6)	5.5 (2.0)	0.0	0.98	0.0	0.84	0.0	0.82

	3 months	12 months	24 months	12 versus 3 months		24 versus 3 months		24 versus 12 months	
				Mean diff.	p-value	Mean diff.	p-value	Mean diff.	p-value
Intercourse satisfaction	4.6 (5.4)	4.7 (4.8)	5.0 (4.5)	0.1	0.83	0.4	0.36	0.3	0.37
Overall satisfaction	6.8 (2.7)	6.7 (2.3)	6.6 (2.3)	-0.1	0.67	-0.2	0.40	-0.1	0.57
Total IIEF score	38.7 (20.7)	36.8 (19.5)	37.4 (18.4)	-1.9	0.12	-1.4	0.34	0.6	0.64
<b>Percentage</b>									
% severe erectile dysfunction	44.9	39.6	33.2		0.17		0.009		0.12
<b>Female Sexual Function Index (FSFI)</b>									
<b>Mean score (SD)</b>									
Desire	2.4 (1.1)	2.2 (1.0)	2.3 (1.0)	-0.1	0.21	-0.1	0.37	0.1	0.62
Arousal	2.0 (1.8)	2.0 (1.9)	2.0 (1.7)	0.0	0.96	0.0	0.98	0.0	0.98
Lubrication	2.1 (2.1)	2.4 (2.2)	2.3 (1.9)	0.3	0.13	0.2	0.47	-0.1	0.55
Orgasm	2.3 (2.3)	2.1 (2.2)	2.3 (2.0)	-0.2	0.36	0.0	0.94	0.2	0.43
Satisfaction	3.9 (1.5)	4.2 (1.3)	3.4 (1.4)	0.3	0.11	-0.5	0.004	-0.8	<0.001
Pain	2.1 (2.2)	2.0 (2.1)	1.7 (1.9)	-0.1	0.79	-0.4	0.09	-0.3	0.13
Full scale score	18.2 (7.8)	17.1 (7.8)	15.4 (7.6)	-1.1	0.16	-2.8	0.001	-1.7	0.02