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Supplementary table 1: Summary of results for RCTs

Author, year and PROM tool used	Interventions	N at baseline	Baseline QoL scores	FU	Reported Results		Reported p-values or Hazard Ratios with confidence intervals
					Estimated difference of EPIC score between the two intervention arms Mean (SD) Higher values refer to better function		P-values
Crook 2011 EPIC	Radical prostatectomy	66	NR	mean of 62.4 months	Urinary: 88.15 (11.47) Bowel: 94.37 (8.91) Sexual: 39.22 (25.35) Hormonal: 89.98 (12.79)		Urinary: 0.02 <i>favouring BT</i> Bowel: 0.34 Sexual: 0.001 <i>favouring BT</i> Hormonal: 0.1
	Brachytherapy	102			Urinary: 91.82 (8.53) Bowel: 93.0 (11.62) Sexual: 52.54 (24.06) Hormonal: 93.52 (8.27)		
					Cancer specific quality of life EPIC scores at 12 months Mean (SD) Higher values refer to better function	Cancer specific quality of life EPIC scores at 24 months Mean (SD) Higher values refer to better function	
	Active monitoring	545	Urinary incontinence: 93.5 (11.3) Urinary summary score: 93.0 (9.6) Urinary bother: 91.2 (12.3) Urinary obstruction/irritative: 93.2 (9.5) Sexual summary score: 60.3 (23.5) Sexual function: 53.5 (22.8) Sexual bother: 76.0 (30.5) Bowel summary score: 92.8 (9.1) Bowel function: 91.6 (9.0) Bowel bother: 94.0 (11.8)	72 months	Urinary incontinence: 89.1 (15.3) Urinary summary score: 91.2 (10.1) Urinary bother: 90.0 (12.2) Urinary obstruction/irritative: 92.9 (9.0) Sexual summary score: 51.5 (27.4) Sexual function: 44.4 (27.1) Sexual bother: 67.8 (34.3) Bowel summary score: 93.4 (8.6) Bowel function: 92.1 (8.6) Bowel bother: 94.7 (10.4)	Urinary incontinence: 88.9 (15.0) Urinary summary score: 90.3 (10.9) Urinary bother: 88.6 (13.5) Urinary obstruction/irritative: 91.7 (9.9) Sexual summary score: 48.2 (27.5) Sexual function: 41.9 (26.7) Sexual bother: 62.2 (35.4) Bowel summary score: 93.2 (9.4) Bowel function: 92.2 (19.1) Bowel bother: 94.2 (11.7)	

Supplementary table 1: Summary of results for RCTs

Author, year and PROM tool used	Interventions	N at baseline	Baseline QoL scores	FU	Reported Results		Reported p-values or Hazard Ratios with confidence intervals
Donovan 2016 QLQ-C30 EPIC	Radical prostatectomy	553	Urinary incontinence: 92.8 (11.6) Urinary summary score: 91.9 (9.4) Urinary bother: 89.9 (12.2) Urinary obstruction/irritative: 92.0 (9.9) Sexual summary score: 61.4 (22.7) Sexual function: 54.4 (22.9) Sexual bother: 77.6 (28.9) Bowel summary score: 93.1 (8.9) Bowel function: 91.4 (9.3) Bowel bother: 94.7 (10.3)		Urinary incontinence: 76.5 (23.7) Urinary summary score: 86.5 (13.2) Urinary bother: 87.7 (14.1) Urinary obstruction/irritative: 92.8 (9.2) Sexual summary score: 30.1 (23.2) Sexual function: 23.6 (22.8) Sexual bother: 44.5 (34.1) Bowel summary score: 94.0 (7.7) Bowel function: 92.8 (8.1) Bowel bother: 95.2 (9.1)	Urinary incontinence: 80.3 (21.4) Urinary summary score: 88.1 (12.3) Urinary bother: 88.9 (13.8) Urinary obstruction/irritative: 93.4 (8.7) Sexual summary score: 33.3 (23.3) Sexual function: 27.2 (23.4) Sexual bother: 46.8 (33.1) Bowel summary score: 93.8 (8.2) Bowel function: 92.6 (8.5) Bowel bother: 95.0 (9.4)	
	Radiotherapy	545	Urinary incontinence: 92.8 (11.0) Urinary summary score: 93.2 (8.3) Urinary bother: 92.1 (10.3) Urinary obstruction/irritative: 93.8 (7.9) Sexual summary score: 63.6 (23.1) Sexual function: 55.7 (23.0) Sexual bother: 80.5 (29.2) Bowel summary score: 94.8 (6.9) Bowel function: 92.9 (8.0) Bowel bother: 96.8 (7.1)		Urinary incontinence: 90.5 (13.5) Urinary summary score: 91.9 (9.0) Urinary bother: 90.6 (11.0) Urinary obstruction/irritative: 93.2 (7.9) Sexual summary score: 43.2 (27.6) Sexual function: 36.6 (27.0) Sexual bother: 57.6 (36.5) Bowel summary score: 90.5 (12.2) Bowel function: 90.3 (11.1) Bowel bother: 90.7 (14.9)	Urinary incontinence: 89.0 (14.1) Urinary summary score: 91.4 (9.8) Urinary bother: 90.3 (11.8) Urinary obstruction/irritative: 93.4 (8.5) Sexual summary score: 43.4 (25.2) Sexual function: 36.9 (25.1) Sexual bother: 57.9 (33.5) Bowel summary score: 89.3 (12.8) Bowel function: 89.5 (10.7) Bowel bother: 89.2 (16.7)	

Supplementary table 1: Summary of results for RCTs

Author, year and PROM tool used	Interventions	N at baseline	Baseline QoL scores	FU	Reported Results		Reported p-values or Hazard Ratios with confidence intervals
					Cancer specific quality of life EPIC scores at 36 months Mean (SD) Higher values refer to better function	Cancer specific quality of life EPIC scores at 48 months Mean (SD) Higher values refer to better function	
Donovan 2016 cont.	Active monitoring	545			Urinary incontinence: 87.3 (16.7) Urinary summary score: 89.3 (11.5) Urinary bother: 87.5 (14.1) Urinary obstruction/irritative: 91.1 (10.0) Sexual summary score: 45.9 (28.4) Sexual function: 39.2 (27.4) Sexual bother: 60.7 (36.3) Bowel summary score: 92.8 (10.8) Bowel function: 91.9 (10.0) Bowel bother: 93.7 (13.1)	Urinary incontinence: 86.8 (17.4) Urinary summary score: 89.2 (12.5) Urinary bother: 87.9 (14.6) Urinary obstruction/irritative: 91.3 (11.2) Sexual summary score: 44.5 (26.9) Sexual function: 37.2 (26.5) Sexual bother: 60.4 (35.8) Bowel summary score: 92.9 (11.2) Bowel function: 92.2 (10.8) Bowel bother: 93.8 (12.7)	
	Radical prostatectomy	553			Urinary incontinence: 79.3 (21.8) Urinary summary score: 87.9 (12.1) Urinary bother: 88.7 (13.4) Urinary obstruction/irritative: 93.3 (8.7) Sexual summary score: 33.9 (23.9) Sexual function: 26.9 (23.7) Sexual bother: 49.6 (34.8) Bowel summary score: 93.8 (8.0) Bowel function: 92.7 (8.1) Bowel bother: 94.9 (9.8)	Urinary incontinence: 80.2 (20.3) Urinary summary score: 88.6 (11.9) Urinary bother: 89.5 (13.0) Urinary obstruction/irritative: 94.1 (8.6) Sexual summary score: 34.3 (24.2) Sexual function: 27.1 (24.2) Sexual bother: 50.4 (34.2) Bowel summary score: 93.7 (8.9) Bowel function: 93.0 (8.4) Bowel bother: 94.6 (11.1)	
	Radiotherapy	545			Urinary incontinence: 89.8 (13.5) Urinary summary score: 91.7 (9.2)	Urinary incontinence: 89.2 (14.4)	

Supplementary table 1: Summary of results for RCTs

Author, year and PROM tool used	Interventions	N at baseline	Baseline QoL scores	FU	Reported Results		Reported p-values or Hazard Ratios with confidence intervals
					Urinary bother: 90.3 (11.4) Urinary obstruction/irritative: 93.3 (7.7) Sexual summary score: 42.5 (25.9) Sexual function: 35.7 (25.5) Sexual bother: 57.1 (34.9) Bowel summary score: 90.8 (11.2) Bowel function: 90.7 (10.1) Bowel bother: 90.9 (14.3)	Urinary summary score: 91.4 (9.6) Urinary bother: 90.4 (11.6) Urinary obstruction/irritative: 93.2 (8.4) Sexual summary score: 41.8 (25.5) Sexual function: 34.3 (25.4) Sexual bother: 58.2 (34.7) Bowel summary score: 91.2 (11.2) Bowel function: 90.7 (10.1) Bowel bother: 91.7 (13.8)	
					Cancer specific quality of life EPIC scores at 60 months Mean (SD) Higher values refer to better function	Cancer specific quality of life EPIC scores at 72 months Mean (SD) Higher values refer to better function	P-values for a difference in mean response over 6 years of follow-up across the three groups
Donovan 2016 cont.	Active monitoring	545			Urinary incontinence: 87.2 (16.8) Urinary summary score: 89.6 (11.3) Urinary bother: 88.3 (13.5) Urinary obstruction/irritative: 91.7 (9.8) Sexual summary score: 43.2 (27.4) Sexual function: 35.6 (27.3) Sexual bother: 60.1 (36.3) Bowel summary score: 93.1 (10.1) Bowel function: 92.0 (9.5) Bowel bother: 94.1 (12.2)	Urinary incontinence: 85.8 (18.5) Urinary summary score: 89.0 (12.5) Urinary bother: 88.0 (13.9) Urinary obstruction/irritative: 91.5 (11.0) Sexual summary score: 40.6 (26.7) Sexual function: 32.5 (26.4) Sexual bother: 57.9 (36.6) Bowel summary score: 93.0 (9.8) Bowel function: 92.3 (9.7) Bowel bother: 93.7 (11.6)	Urinary incontinence: <0.001 favouring AM and EBRT over RP Urinary summary score: <0.001 favouring AM and EBRT over RP Urinary bother: 0.095 Urinary obstruction/irritative: 0.77 Sexual summary score: <0.001 favouring AM and EBRT over RP Sexual function: <0.001 favouring AM and EBRT over RP
	Radical prostatectomy	553			Urinary incontinence: 80.6 (20.2) Urinary summary score: 88.9 (11.1) Urinary bother: 89.9 (11.9) Urinary obstruction/irritative: 94.1 (7.6) Sexual summary score: 34.5 (24.0) Sexual function: 26.5 (24.4) Sexual bother: 52.6 (35.1) Bowel summary score: 94.0 (7.9)	Urinary incontinence: 80.9 (20.2) Urinary summary score: 88.7 (11.3) Urinary bother: 89.7 (11.9) Urinary obstruction/irritative: 93.7 (7.9) Sexual summary score: 32.3 (23.2) Sexual function: 23.7 (23.4) Sexual bother: 51.4 (35.5)	

Supplementary table 1: Summary of results for RCTs

Author, year and PROM tool used	Interventions	N at baseline	Baseline QoL scores	FU	Reported Results		Reported p-values or Hazard Ratios with confidence intervals
					Bowel function: 92.9 (7.7) Bowel bother: 95.1 (9.6)	Bowel summary score: 93.2 (8.7) Bowel function: 92.3 (8.6) Bowel bother: 94.2 (10.8)	Sexual bother: <0.001 favouring AM and EBRT over RP Bowel summary score: <0.001 favouring AM and RP over EBRT Bowel function: <0.001 favouring AM and RP over EBRT Bowel bother: <0.001 favouring AM and RP over EBRT
	Radiotherapy	545			Urinary incontinence: 89.4 (14.4) Urinary summary score: 91.3 (9.6) Urinary bother: 90.2 (11.6) Urinary obstruction/irritative: 93.0 (8.3) Sexual summary score: 40.1 (24.4) Sexual function: 31.9 (24.8) Sexual bother: 58.9 (35.3) Bowel summary score: 91.0 (10.6) Bowel function: 90.3 (10.1) Bowel bother: 91.6 (13.2)	Urinary incontinence: 89.4 (14.0) Urinary summary score: 91.4 (9.2) Urinary bother: 90.3 (11.2) Urinary obstruction/irritative: 93.1 (7.7) Sexual summary score: 41.3 (24.9) Sexual function: 32.7 (25.6) Sexual bother: 60.1 (34.9) Bowel summary score: 91.2 (10.9) Bowel function: 90.8 (9.7) Bowel bother: 91.7 (13.7)	
					Cancer-specific quality of life: EORTC-QLQ-C30 at 5 years Mean (SD) Higher values refer to better function		P-values
Donovan 2016 cont.	Active monitoring	545			Global health status: 76.8 (17.6) Functioning scales Physical: 90.9 (14.7) Role: 90.5 (19.7) Emotional: 87.3 (17.3) Cognitive: 86.0 (15.4) Social: 91.3 (17.2) Symptom scales and items Fatigue: 19.0 (19.4) Nausea/vomiting: 2.0 (7.1) Pain: 12.0 (20.5) Dyspnoea: 12.4 (22.1) Insomnia: 18.3 (25.6) Appetite loss: 4.9 (13.6) Constipation: 6.4 (15.7) Diarrhoea: 6.0 (15.3) Financial difficulties: 3.1 (13.8)		

Supplementary table 1: Summary of results for RCTs

Author, year and PROM tool used	Interventions	N at baseline	Baseline QoL scores	FU	Reported Results	Reported p-values or Hazard Ratios with confidence intervals	
	Radical prostatectomy	553			<p>Global health status: 78.4 (17.7)</p> <p>Functioning scales Physical: 91.6 (13.8) Role: 90.9 (19.0) Emotional: 87.9 (16.0) Cognitive: 87.9 (14.4) Social: 91.3 (16.8)</p> <p>Symptom scales and items Fatigue: 17.1 (17.9) Nausea/vomiting: 1.4 (6.2) Pain: 9.7 (18.1) Dyspnoea: 10.1 (20.0) Insomnia: 14.6 (22.4) Appetite loss: 3.8 (11.9) Constipation: 4.6 (14.3) Diarrhoea: 6.0 (16.4) Financial difficulties: 3.4 (12.7)</p>		<p>Global health status: 0.38</p> <p>Functioning scales Physical: 0.81 Role: 0.60 Emotional: 0.79 Cognitive: 0.21 Social: 0.95</p> <p>Symptom scales and items Fatigue: 0.24 Nausea/vomiting: 0.44 Pain: 0.20 Dyspnoea: 0.34 Insomnia: 0.08 Appetite loss: 0.56 Constipation: 0.25 Diarrhoea: 0.89 Financial difficulties: 0.80</p>
	Radiotherapy	545			<p>Global health status: 77.4 (19.0)</p> <p>Functioning scales Physical: 91.3 (14.1) Role: 89.5 (20.1) Emotional: 87.7 (16.6) Cognitive: 87.3 (15.7) Social: 91.6 (17.8)</p> <p>Symptom scales and items Fatigue: 17.3 (17.1) Nausea/vomiting: 1.7 (5.9) Pain: 11.9 (20.2) Dyspnoea: 11.3 (19.9) Insomnia: 16.0 (23.1) Appetite loss: 4.2 (13.2) Constipation: 5.1 (14.0) Diarrhoea: 5.6 (13.7) Financial difficulties: 2.8 (11.9)</p>		

Supplementary table 1: Summary of results for RCTs

Author, year and PROM tool used	Interventions	N at baseline	Baseline QoL scores	FU	Reported Results		Reported p-values or Hazard Ratios with confidence intervals	
			QLQ-C30 baseline score		Mean QLQ-C30 scores at 1 year Higher values refer to better function	Mean QLQ-C30 scores at 5 years Higher values refer to better function	P-value for difference from baseline QLQ-30 score at 1 year	P-value for difference from baseline QLQ-30 score at 5 years
Giberti 2009 QLQ-C30 QLQ-PR25	Radical prostatectomy	100	Cognitive functioning: 91 Emotional functioning: 82 Physical functioning: 91 Role functioning: 93 Social functioning: 89 Global health/QoL: 79	60 months	Cognitive functioning: 90 Emotional functioning: 86 Physical functioning: 86 Role functioning: 90 Social functioning: 89 Global health/QoL: 78	Cognitive functioning: 90 Emotional functioning: 84 Physical functioning: 90 Role functioning: 90 Social functioning: 89 Global health/QoL: 78	Cognitive functioning: NSS Emotional functioning: 0.03 Physical functioning: 0.02 Role functioning: NSS Social functioning: NSS Global health/QoL: NSS	Cognitive functioning: NSS Emotional functioning: NSS Physical functioning: NSS Role functioning: NSS Social functioning: NSS Global health/QoL: NSS
	Brachytherapy	100	Cognitive functioning: 87 Emotional functioning: 80 Physical functioning: 94 Role functioning: 95 Social functioning: 92 Global health/QoL: 83		Cognitive functioning: 88 Emotional functioning: 84 Physical functioning: 90 Role functioning: 93 Social functioning: 93 Global health/QoL: 81	Cognitive functioning: 88 Emotional functioning: 82 Physical functioning: 94 Role functioning: 94 Social functioning: 94 Global health/QoL: 82	Cognitive functioning: NSS Emotional functioning: 0.01 Physical functioning: 0.03 Role functioning: NSS Social functioning: NSS Global health/QoL: NSS	Cognitive functioning: NSS Emotional functioning: NSS Physical functioning: NSS Role functioning: NSS Social functioning: NSS Global health/QoL: NSS
			QLQ-PR25 baseline score		Mean QLQ-PR25 scores at 1 year Higher values refer to worse function	Mean QLQ-PR25 scores at 5 years Higher values refer to worse function	P-value for difference from baseline QLQ-PR25 score at 1 year	P-value for difference from baseline QLQ-PR25 score at 5 years
Giberti 2009 cont.	Radical prostatectomy	100	Urinary symptoms: 9 Bowel symptoms: 2 Treatment-related symptoms: 5 Sexual function: 5 Sexual activity: 6		Urinary symptoms: 10 Bowel symptoms: 2 Treatment-related symptoms: 9 Sexual function: 7 Sexual activity: 8	Urinary symptoms: 10 Bowel symptoms: 2 Treatment-related symptoms: 8 Sexual function: 7 Sexual activity: 8	Urinary symptoms: NSS Bowel symptoms: NSS Treatment-related symptoms: 0.03 Sexual function: NSS Sexual activity: NSS	Urinary symptoms: NSS Bowel symptoms: NSS Treatment-related symptoms: NSS Sexual function: NSS Sexual activity: NSS
	Brachytherapy	100	Urinary symptoms: 8 Bowel symptoms: 2 Treatment-related symptoms: 6		Urinary symptoms: 15 Bowel symptoms: 4 Treatment-related symptoms: 9 Sexual function: 7	Urinary symptoms: 17 Bowel symptoms: 2 Treatment-related symptoms: 8 Sexual function: 8	Urinary symptoms: <0.01	Urinary symptoms: NSS Bowel symptoms: NSS

Supplementary table 1: Summary of results for RCTs

Author, year and PROM tool used	Interventions	N at baseline	Baseline QoL scores	FU	Reported Results		Reported p-values or Hazard Ratios with confidence intervals	
			Sexual function: 6 Sexual activity: 6		Sexual activity: 8	Sexual activity: 8	Bowel symptoms: NSS Treatment-related symptoms: 0.04 Sexual function: NSS Sexual activity: NSS	Treatment-related symptoms: NSS Sexual function: NSS Sexual activity: NSS

NR: Not reported

NSS: Not statistically significant

AM: Active monitoring

RP: Radical prostatectomy

EBRT: External beam radiotherapy

BT: Brachytherapy