

Electronic Supplementary Material

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

Supplement to: Bjerre ED¹, Brasso K², Jørgensen AB, BSc³, Petersen TH³, Eriksen AR³, Tolver A⁴, Christensen JF⁵, Poulsen MH⁶, Madsen SS⁷, Østergren PB⁸, Borre M⁹, Krustrup P¹⁰, Johansen C¹¹, Rørth M¹², Midtgaard J¹³. Football compared to usual care in men with prostate cancer (FC Prostate Community trial): a pragmatic multicentre randomised controlled trial. *Sports Medicine*.

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ESM Table 1 Safety outcomes for ITT Population

	Football group (n=109)	Usual care group (n=105)
Safety outcomes		
Falls	10	6
p-value	p=0.44	
Fractures	1	2
p-value	p=1.00	
Serious adverse events (admissions)		
One	9	8
Two	1	7
Total	11	22
p-value	p=0.12	

ESM Table 2 Outcomes for ADT population, according to group allocation

	Football group (n=46)		Usual care group (n=41)		Covariance analysis, difference between groups, mean (95% CI)		Unadjusted analyses, t-test, difference between groups, mean (95% CI)	
	n	Mean (95% CI)	n	Mean (95% CI)	Adjusted for ADT, age, and baseline score	p value	Unadjusted	p value
Change in prostate cancer-specific quality of life (points, higher is better)								
12 weeks	43	-1.3 (-4.6 to 1.9)	40	-3.5 (-6.8 to 0.2)	2.2 (-2.3 to 6.6)	0.33	2.1 (-2.5 to 6.7)	0.36
6 months	42	-3.5 (-6.8 to -0.3)	37	-4.6 (-8.0 to -1.1)	0.9 (-3.9 to 5.7)	0.71	1.0 (-3.7 to 5.8)	0.67
Change in lean body mass (kilograms)								
6 months	44	-0.2 (-0.8 to 0.3)	37	-0.5 (-1.0 to 0.1)	0.2 (-0.7 to 1.0)	0.69	0.2 (-0.6 to 1.0)	0.58
Change in fat mass (kilograms)								
6 months	44	-0.2 (-0.8 to 0.5)	37	0.2 (-0.5 to 0.9)	-0.4 (-1.4 to 0.6)	0.42	-0.4 (-1.4 to 0.5)	0.39
Change in whole-body bone mineral content (grams)								
6 months	44	22.8 (0.1 to 45.5)	37	0.2 (-22.0 to 27.0)	22.0 (-12.4 to 56.3)	0.21	20.6 (-13.0 to 54.2)	0.23
Change in whole-body bone mineral density (grams/cm ²)								
6 months	44	0.005 (-0.002 to 0.013)	37	-0.001 (-0.009 to 0.008)	0.005 (-0.007 to 0.017)	0.40	0.006 (-0.006 to 0.017)	0.31
Femoral neck BMD (grams/cm ²)								
6 months	44	0.009 (-0.002 to 0.019)	37	0.003 (-0.009 to 0.014)	0.007 (-0.009 to 0.023)	0.39	0.006 (-0.009 to 0.021)	0.47
Change in total hip BMD (grams/cm ²)								
6 months	44	0.005 (-0.011 to 0.021)	37	0.015 (-0.003 to 0.032)	-0.009 (0.033 to 0.014)	0.43	-0.010 (-0.033 to 0.014)	0.42
Change in lumbar spine L1-L4 BMD (grams/cm ²)								
6 months	44	0.025 (0.001 to 0.050)	37	0.013 (-0.014 to 0.039)	0.017 (-0.019 to 0.053)	0.34	0.013 (-0.023 to 0.048)	0.48
Change in weekly physical activity (MET-minutes)								
12 weeks	40	2405 (-396 to 5205)	32	3174 (43 to 6305)	-845 (-4920 to 3229)	0.68	-770 (-4970 to 3431)	0.72
6 months	38	1060 (-475 to 2595)	31	1505 (-195 to 3204)	-312 (-2501 to 1878)	0.78	-444 (-2734 to 1845)	0.70
Change in general physical health (SF-12)								
12 weeks	43	-1.4 (-3.0 to 0.3)	40	-1.8 (-3.5 to -0.1)	-0.0 (-2.3 to 2.2)	0.98	0.4 (-1.9 to 2.8)	0.72
6 months	42	-2.7 (-4.9 to -0.4)	37	-1.8 (4.1 to 0.6)	-1.0 (-4.2 to 2.1)	0.51	-0.9 (-4.1 to 2.4)	0.59
Change in general mental health (SF-12)								
12 weeks	43	0.3 (-1.9 to 2.5)	40	-2.0 (4.2 to 0.3)	2.5 (-0.2 to 5.3)	0.07	2.3 (-0.8 to 5.4)	0.15
6 months	42	-0.2 (-2.8 to 2.4)	37	-3.7 (-6.5 to -1.0)	3.5 (-0.1 to 7.2)	0.06	3.5 (-0.3 to 7.3)	0.07

ESM Table 3 Safety outcomes for ADT Population

	Football group (n=46)	Usual care group (n=41)
Safety outcomes		
Falls	5	4
p-value	p=1.00	
Fractures	1	1
p-value	p=1.00	
Serious adverse events (admissions)		
One	4	1
Two	0	3
Total	4	7
p-value	p=0.11	

ESM Table 4 Outcomes for per-protocol population, according to group allocation

(Minimum attendance for football 50%)	Football group		Usual care group		Covariance analysis, difference between groups, mean (95% CI)		Unadjusted analyses, t-test, difference between groups, mean (95% CI)	
	n	Mean (95% CI)	n	Mean (95% CI)	Adjusted for risk variables*	p value	Unadjusted	p value
Change in prostate cancer-specific quality of life (FACT-P total score, higher is better)								
12 weeks	82	-0.7 (-3.1 to 1.7)	104	-2.5 (-4.6 to -0.4)	3.0 (-0.2 to 6.1)	0.06	1.8 (-1.4 to 5.0)	0.26
6 months	70	-0.7 (-3.3 to 2.0)	100	-1.7 (-4.0 to 0.5)	1.8 (-1.6 to 5.2)	0.30	1.1 (-2.4 to 4.6)	0.55
Change in lean body mass (kg)								
6 months	71	-0.2 (-0.6 to 0.2)	100	-0.1 (-0.5 to 0.2)	-0.0 (-0.6 to 0.5)	0.88	-0.1 (-0.7 to 0.4)	0.63
Change in fat mass (kg)								
6 months	71	-0.3 (-0.9 to 0.4)	100	0.0 (-0.4 to 0.4)	-0.2 (-0.8 to 0.5)	0.65	-0.3 (-0.9 to 0.4)	0.37
Change in whole-body bone mineral content (g)								
6 months	71	14.7 (-2.2 to 31.6)	100	4.3 (-9.9 to 18.6)	8.3 (-14.8 to 31.4)	0.48	10.4 (-11.7 to 32.5)	0.36
Change in whole-body BMD (g/cm ²)								
6 months	71	0.005 (-0.001 to 0.010)	100	0.001 (-0.003 to 0.006)	0.001 (-0.007 to 0.009)	0.79	0.003 (-0.004 to 0.011)	0.39
Femoral neck BMD (g/cm ²)								
6 months	71	0.011 (0.004 to 0.018)	100	0.003 (-0.003 to 0.009)	0.008 (-0.002 to 0.017)	0.10	0.008 (-0.001 to 0.017)	0.08
Change in total hip BMD (g/cm ²)								
6 months	71	0.001 (-0.008 to 0.011)	100	0.006 (-0.002 to 0.013)	-0.007 (-0.019 to 0.005)	0.25	-0.004 (-0.016 to 0.008)	0.50
Change in lumbar spine L1-L4 BMD (g/cm ²)								
6 months	71	0.014 (0.000 to 0.029)	100	0.011 (-0.001 to 0.023)	-0.001 (-0.021 to 0.018)	0.89	0.003 (-0.015 to 0.022)	0.72
Change in weekly physical activity (MET minutes)								
12 weeks	74	1710 (328 to 3092)	89	638 (-797 to 2073)	2269 (-144 to 4683)	0.07	1072 (-920 to 3064)	0.29
6 months	63	394 (-1151 to 1938)	87	928 (-386 to 2242)	98 (-2021 to 2216)	0.93	-534 (-2562 to 1494)	0.60
Change in general physical health (SF-12)								
12 weeks	82	-1.3 (-2.5 to -0.0)	104	-1.7 (-2.8 to -0.6)	0.5 (-1.3 to 2.3)	0.59	0.4 (-1.3 to 2.1)	0.64
6 months	70	-2.0 (-3.4 to -0.6)	100	-1.3 (-2.5 to -0.2)	-0.5 (-2.4 to 1.3)	0.57	-0.7 (-2.4 to 1.1)	0.46
Change in general mental health (SF-12)								
12 weeks	82	-0.1 (-1.6 to 1.4)	104	-0.8 (-2.2 to 0.5)	0.8 (-1.3 to 2.9)	0.49	0.8 (-1.3 to 2.8)	0.46
6 months	70	1.1 (-0.6 to 2.9)	100	-1.5 (-2.9 to 0.0)	2.5 (0.2 to 4.8)	0.03	2.6 (0.3 to 4.9)	0.03

* Risk variables used to adjust for confounding when analysing adherence: smoking, alcohol consumption, employment status, education, marital status, disease stage, Gleason score, treatment, and co-morbidities

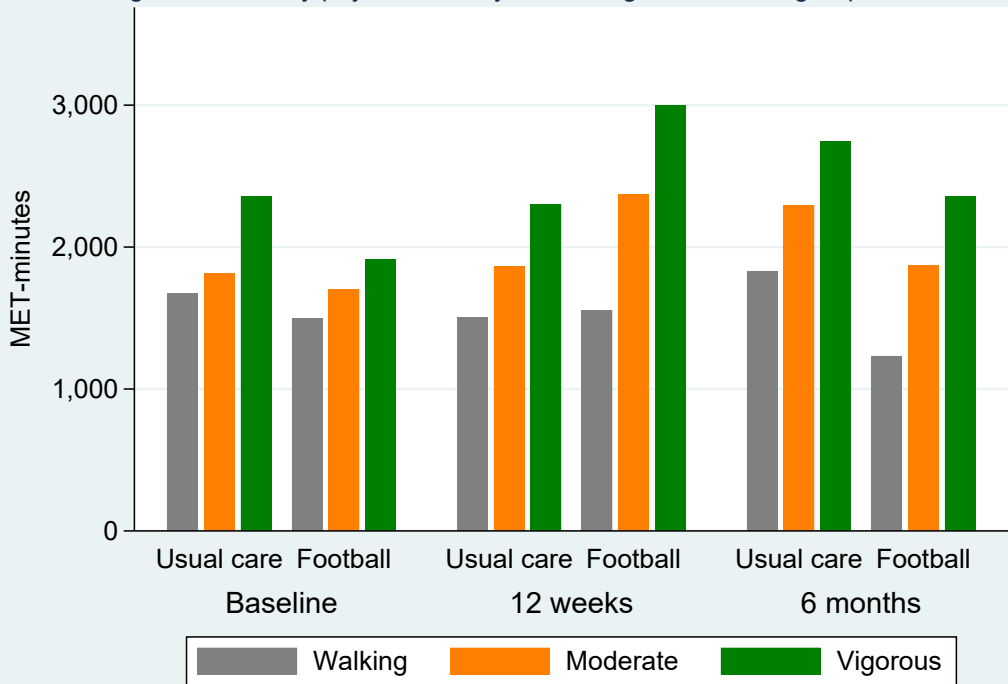
ESM Table 5 Safety outcomes for PP population

	Football group (n=82)	Usual care group (n=105)
Safety outcomes		
Falls	9	6
p-value	p=0.17	
Fractures	1	2
p-value	p=1.00	
Serious adverse events(admissions)		
One	7	8
Two	0	7
Total	7	22
p-value	p=0.07	

ESM Table 6 Injuries in football group

	Number of injuries	Percent of all injuries
Reason for injury		
All injuries	60	100
Overuse injuries	19	32
Acute/traumatic injuries	41	68
Injured region		
Chest/ribs/upper back	4	7
Lower back/sacrum/Ilium	2	3
Shoulder/clavicle	1	2
Wrist	1	2
Hand/fingers	1	2
Hip/groin	3	5
Thigh	18	30
Knee	5	8
Lower leg/Achilles tendon	21	35
Ankle	4	7
Injury type		
Bent rib cage	1	2
Dislocation/subluxation	2	3
Sprains	11	18
Lesion of meniscus/cartilage	1	2
Tendon irritation	10	17
Partial tendon rupture	1	2
Tendon rupture	1	2
Hematoma/contusion	2	3
Excoriation/scratch	1	2
Muscle strain	29	48
Bursa irritation	1	2

ESM Figure 1. Weekly physical activity, according to allocation group



Supplementary centre level information

Scanners used for Dual-energy X-ray Absorptiometry: Aarhus: Discovery A, Hologic; Copenhagen: Lunar Prodigy Advanced Scanner, GE Healthcare; Esbjerg: Discovery A, Hologic; Odense: Discovery A, Hologic.

Participants enrolled and randomised at each centre: Copenhagen (n=106), Aarhus (n=56), Esbjerg (n=37) and Odense (n=15).