## THE LANCET Oncology

## Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Glover M, Smerdon GR, Andreyev HJ, et al. Hyperbaric oxygen for patients with chronic bowel dysfunction after pelvic radiotherapy (HOT2): a randomised, double-blind, sham-controlled phase 3 trial. *Lancet Oncol* 2015; published online Dec 15. http://dx.doi.org/10.1016/S1470-2045(15)00461-1.

## **Supplementary Tables and Figures to be added to the internet**

Table S1: IBDQ raw scores at baseline and 12 months

		Control		НВО	НВО		Total	
	IBDQ rectal bleeding score	N	%	N	%	N	%	
	More than ever before	3	10.70%	8	14.50%	11	13.30%	
	Extremely frequently	3	10.70%	6	10.90%	9	10.80%	
	Very frequently	4	14.30%	8	14.50%	12	14.50%	
Baseline	Moderate increase in frequency	3	10.70%	6	10.90%	9	10.80%	
	Some increase in frequency	1	3.60%	5	9.10%	6	7.20%	
	Slight increase in frequency	5	17.90%	7	12.70%	12	14.50%	
	Not at all / normal	9	32.10%	15	27.30%	24	28.90%	
	Total	28	100.00%	55	100.00%	83	100.00%	
	More than ever before	1	4.00%	4	8.30%	5	6.80%	
	Extremely frequently	2	8.00%	1	2.10%	3	4.10%	
	Very frequently	4	16.00%	3	6.30%	7	9.60%	
12 months	Moderate increase in frequency	3	12.00%	2	4.20%	5	6.80%	
	Some increase in frequency	2	8.00%	4	8.30%	6	8.20%	
	Slight increase in frequency	4	16.00%	12	25.00%	16	21.90%	
	Not at all / normal	9	36.00%	22	45.80%	31	42.50%	
	Total	25	100.00%	48	100.00%	73	100.00%	

N.B. table includes all patients in ITT population

Table S2: Exploratory endpoints of rectal bleeding. 2 sample tests of proportion of patients with improvement in symptoms between baseline and 12 months

	Control	НВО	Absolute difference	Dl
	n (%)	n (%)	% (95% CI)	P-value
IBDQ rectal bleeding question	10/15 (66.7%)	26/35 (74.3%)	7.6% (-20.3%, 35.5%)	0.58
Rectal LENT SOMA (objective)	12/16 (75.0%)	14/23 (60.9%)	-14.1% (-43.3%, 15.0%)	0.36
Rectal LENT SOMA (management)	5/5 (100.0%)	4/13 (30.8%)	-69.2% (-94.3%, -44.1%)	0.0085
CTCAE rectal bleeding	12/17 (70.6%)	13/22 (59.1%)	-11.5% (-41.4%, 18.4%)	0.46
EORTC QLQ-CR38 question 59	8/18 (44.4%)	17/29 (58.6%)	14.2% (-14.9%, 43.3%)	0.34

N.B. includes all patients included in the ITT population for whom rectal bleeding was present at baseline (according to each of the scales separately)

**Table S3: Recruitment by centre** 

Hyperbaric treatment centre	n
London Diving Chamber, Hospital of St John and St Elizabeth, London	24
Hyperbaric Medicine Unit, St Richard's Hospital, Chichester	15
Whipps Cross University Hospital, Leytonstone, London	11
South Wales Hyperbaric Medical Centre (DDRC), Cardiff	7
North of England Medical and Hyperbaric Services, Spire Hull & East Riding Hospital, Kingston-upon-Hull	6
DDRC Healthcare, Plymouth	6
The Diver Clinic, Poole	5
Midlands Diving Chamber, Hospital of St Cross, Rugby	4
East of England Hyperbaric Unit, Lowestoft Road, Great Yarmouth	3
North West Emergency Recompression Unit, Murrayfield Hospital, Wirral	3
Total	84

Table S4: Per protocol analysis of the primary endpoint

Primary endpoint 1: Bowel function component of the modified IBDQ							
	Median (IQR) score at baseline	Median (IQR) score at 12 months	Median (IQR) change from baseline to 12m	Mann- Whitney test U Score	P-value		
Control (n=22)	51 (44, 59)	51.5 (40, 59)	3.5 (-6, 9)	0.94	0.35		
HBO (n=38)	48 (42, 51)	52 (36, 62)	4 (-2, 11)	0.94	0.33		
Primary endpo	int 2: rectal bleed	ling score from th	ne modified IBD(	2			
	Median (IQR) score at baseline	Median (IQR) score at 12 months	Median change (from baseline to 12m)	Mann- Whitney test U Score	P-value		
Control (n=11)	3 (2, 4)	4 (2, 6)	1 (1, 2)	1 44	0.15		
HBO (n=25)	3 (2, 4)	6 (3, 7)	3 (0, 3)	1,44	0.13		

Table S5: Exploratory analysis of LENT SOMA scales

Change in rectal LENT SOMA total score from baseline to 2 weeks					
	Median (IQR) score at baseline	Median (IQR) score at 2 weeks	Median (IQR) change from baseline to 2 weeks	Mann- Whitney test U Score	P-value
Control (n=28)	9.5 (8, 14.5)	8.5 (5.5, 14.0)	-2 (-3, 0)	0.35	0.72
HBO (n=50)	10 (7, 13)	8 (4, 12)	-2 (-3, 1)	0.33	v2

Table S6: Exploratory analysis of primary endpoint according to treatment with hood, monochamber or mask.

Bowel function in patients treated with a hood or monochamber						
	Median (IQR) score at baseline	Median (IQR) score at 12 months	Median (IQR) change from baseline to 12m	Mann-Whitney test U Score	P-value	
Control (n=14)	53 (43, 56)	54.5 (33, 59)	4 (1, 9)	0.21	0.76	
HBO (n=29)	48 (44, 54)	55 (36, 63)	2 (-7, 11)	-0.31		
Bowel function is	n patients treated with a	mask				
	Median (IQR) score at baseline	Median (IQR) score at 12 months	Median change (from baseline to 12m)	Mann-Whitney test U Score	P-value	
Control (n=9)	51 (47, 59)	50 (47, 55)	1 (-8, 4)	1.50	0.11	
HBO (n=17)	46 (35, 51)	49 (46, 55)	8 (1, 13)	1.59		

Figure S1: Maximum CTCAE toxicities at each timepoint

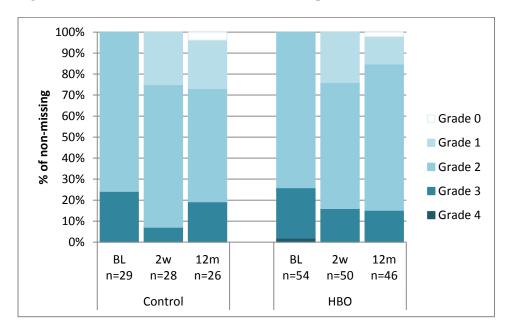


Figure S2: CTCAE rectal bleeding grade at each timepoint

