

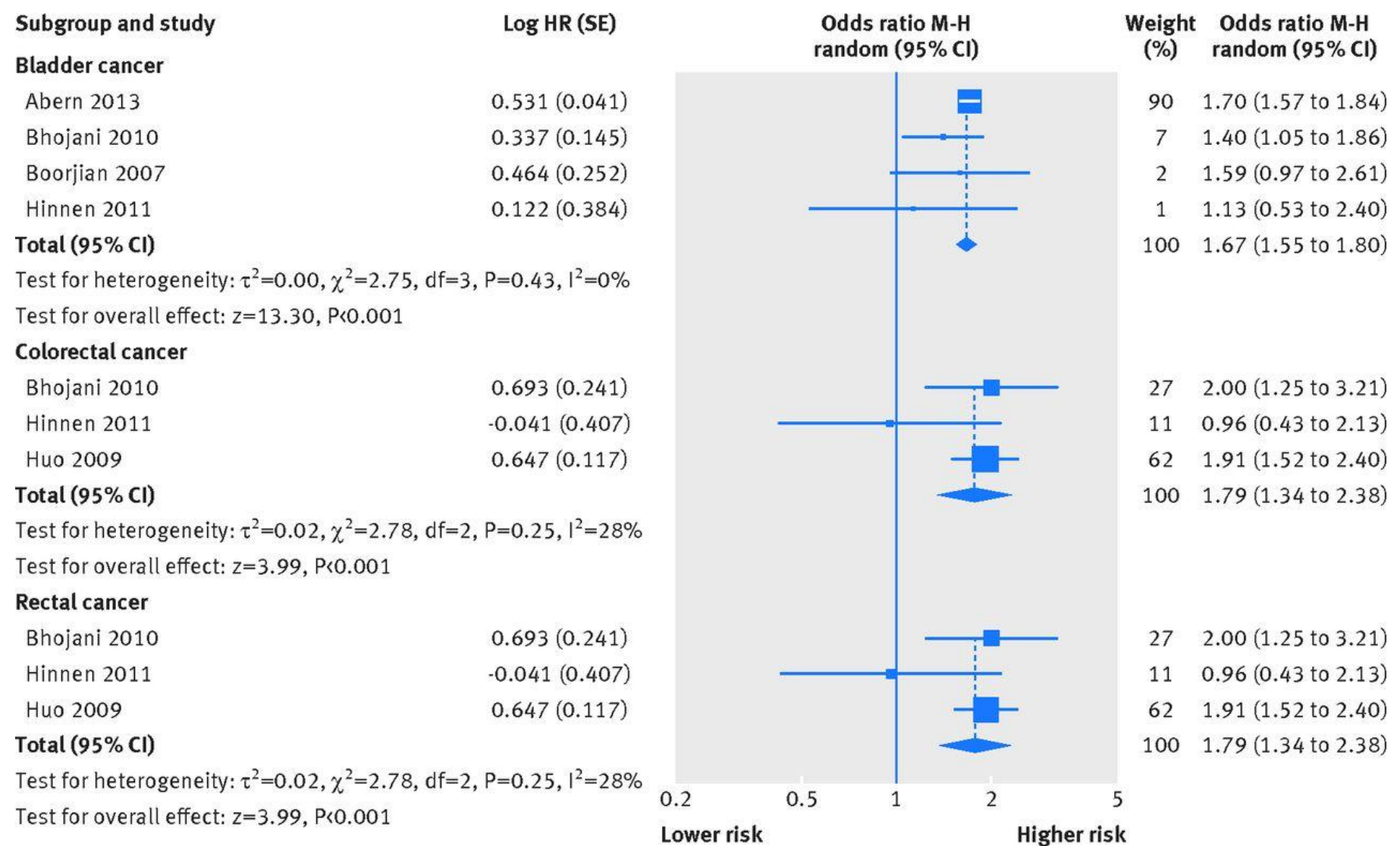
High Dose Rate Brachytherapy 2014 -2016

200 Publications

Planning / Technical	58
Outcomes	62
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Monotherapy	16
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**Second malignancies after
radiotherapy for prostate cancer:
systematic review and meta-analysis
BMJ 2016; 352: BMJ 2016;352:i851**

Fig 3 Risk of cancer after any radiotherapy compared with no radiation in studies reporting adjusted hazard ratios.



Christopher J D Wallis et al. BMJ 2016;352:bmj.i851



Second Malignancy by Radiation Modality

	Studies	No of Pts	OR(95%)	P<0.05
Bladder				
Any XRT	6	692 487	1.37 (1.02 to 1.84)	*
EBRT	5	259 521	1.39 (0.93 to 2.07)	*
BT	2	160 001	1.26 (1.1-1.43)	
Colorectal				
Any XRT	7	332 953	1.45(1.07 to 1.96)	*
EBRT	6	282 014	1.52 (1.14 to 2.03)	*
BT	2	133 828	1.22 (0.19 to 6.66)	
Rectal				
Any XRT	6	300 488	1.3 (0.99 to 1.71)	
EBRT	5	249 549	1.38 (1.12 to 1.7)	*
BT	2	133 828	0.49 (0.35 to 0.67)	

Prostate-specific antigen bounce after high-dose-rate prostate brachytherapy and hypofractionated external beam radiotherapy

Brachytherapy, 2014-09-01, Volume 13, Issue 5, Pages 450-455

Methods and Materials

Intermediate-risk prostate cancer

10 Gy single-fraction ¹⁹²Ir HDRB

50 Gy in 20 daily fractions

No androgen deprivation therapy.

Min 2-year followup.

The PB : PSA elevation higher than 0.2 ng/mL from previous measurement with subsequent drop to pre-bounce level.

The BF was defined as PSA nadir + 2 ng/mL.

Median time to bounce (range), mo	16 (3–76)
Median bounce value (range), ng/mL	0.45 (0.2–6.62)
Median bounce duration (range), mo	9 (2–40)

Comparisons between patients who experienced a PSA bounce and those who did not

Parameters	Bouncers	Nonbouncers
Number (%)	45 (39)	69 (61)
Median age (range)	66 (48–77)	70 (51–77)
Followup (range)	72 (26–124)	62 (24–121)
T staging, <i>n</i> (%)		
T1	27 (60)	36 (52)
T2	18 (40)	33 (48)
Gleason score, <i>n</i> (%)		
6	8 (18)	13 (19)
7	37 (82)	56 (81)
iPSA (range), ng/mL	7.6 (1.95–19.76)	10.45 (1.93–19.68)
Median time to nadir (range), mo	57 (24–118)	48 (8–113)
Median nadir value (range), ng/mL	0.14 (0.01–0.86)	0.17 (0.01–1.76)
Biochemical failure rate	3 (6.5)	9 (13)

High-dose-rate brachytherapy as monotherapy for prostate cancer

Demanes, D , Ghilezan , M I Brachytherapy 13 (2014) 529-541

Author (reference)	Year	N	Risk group	Dose × fractions	Total dose (Gy)	Implant number	Implant interval (wk)	Dosimetry
Barkati <i>et al.</i> (50)	2012	79	Low–interm.	10–11.5 Gy × 3	30–34.5	1	n/a	CT
Demanes <i>et al.</i> (42)	2011	157	Low–interm.	7 Gy × 6	42	2	1	X-ray/CT
Ghadjar <i>et al.</i> (48)	2009	36	Low–interm.	9.5 Gy × 4	38	1	n/a	CT
Ghilezan <i>et al.</i> (52)	2012	50	Low–interm.	12 Gy × 2	24	1	n/a	TRUS
		44		13.5 Gy × 2	27	1		
		55		8.5–9 Gy × 4	34–36	1		
		109						
Hoskins <i>et al.</i> (49)	2012		Interm.–high	10.5 Gy × 3	31.5	1	n/a	CT
		33		13 Gy × 2	26	1		
Komiya <i>et al.</i> (41)	2013	51	Low–high	6.5 Gy × 7	45.5	1	n/a	
Mark <i>et al.</i> (46)	2010	317	Low–high	7.5 Gy × 6	45	2	4	CT
Martinez <i>et al.</i> (45)	2010	141	Low–interm.	9.5 Gy × 4	38	1	n/a	TRUS
Prada <i>et al.</i> (53)	2012	40	Low–interm.	19 Gy × 1	19	1	n/a	TRUS
Rogers <i>et al.</i> (47)	2012	284	Interm.	6.5 Gy × 6	39	2	1–5	CT
Yoshioka <i>et al.</i> (39)	2011	111	Interm.–high	6 Gy × 9	54	1	n/a	X-ray/CT
				6.5 Gy × 7	45.5	1		
				9.5 Gy × 4	38	1		
Zamboglou <i>et al.</i> (51)	2013	351	Low–high	9.5 Gy × 4	38	2	2	TRUS
		225		11.5 Gy × 3	38	3	3	TRUS

Early toxicity in a randomized trial of high dose-rate (HDR) brachytherapy as monotherapy for low- and intermediate-risk prostate cancer

Citation: Journal of Clinical Oncology, January 2016, vol./is. 34/2 SUPPL.

Morton G.; Chung H.T.; McGuffin M.; Zhang L.; Ravi A.; D'Alimonte L.; Loblaw A. **86 Pts**

High dose rate brachytherapy as monotherapy for localized prostate cancer: Our initial experience

Citation: Journal of Clinical Oncology, January 2016, vol./is. 34/2 Challapalli A.; Masson S.; Humphrey P.; Bamisaye F.; Jacobs P.; French C.; Bahl A. **25Pts**

High-dose-rate brachytherapy alone given as two or one fraction to patients for locally advanced prostate cancer: acute toxicity.

Radiotherapy and oncology and Oncology, Feb 2014, vol. 110, no. 2, p. 268-271, 1879-0887 (February 2014)

Hoskin, Peter; Rojas,

24 Pts

Effect of celecoxib on nocturia-specific quality of life induced by high-dose-rate brachytherapy for prostate cancer

Kasahara T.; Nishiyama T.; Yuki E. European Urology, Supplements, April 2015, vol./is. 14/2(e688-e688b), 1569-9056 (April 2015)

87 pts; RCT

Tamsulosin (T=44) vs T and celecoxib (T/C=43).

HDR

IPSS and N QOL improved with T&C

Younger patients with lower iIPSS greater benefit