GRADE tables for review question: How effective is radiotherapy, including both fractionated and unfractionated radiotherapy, for the management of spinal metastases, direct malignant infiltration of the spine or associated spinal cord compression?

Table 6: Evidence profile for comparison 1: Spinal metastases patients - single fraction radiotherapy versus multiple fraction radiotherapy

	(Quality	assessmer	nt			No. of p	oatients	E	ffect		
No. of studies	Design	Risk of bias	Incon- sistency	Indi- rect- ness	Impre- cision	Other consid- era- tions	Single fraction RT	Multiple fraction RT	Rela- tive (95% CI)	Absolute	Qual- ity	Im- portance
Overall surv	vival (even	t is dea	th from any	y cause	; media	n follow	-up 11 mo	nths)				
2 ⁶	random- ised trials	very seri- ous ¹	no serious incon- sistency	seri- ous ²	seri- ous ³	none	242/261 (92.7%)	224/246 (91.1%)	HR 1.08 (0.9 to 1.29)	16 more per 1000 (from 24 fewer to 45 more)	VERY LOW	CRITICAL
Pain - comp	lete or pai	rtial pai	n response	(follow	-up 1 to	o 3 mont	hs)					
37	random- ised trials	very seri- ous ¹	no serious incon- sistency	seri- ous ²	no se- rious impre- cision	none	152/245 (62%)	157/244 (64.3%)	RR 0.97 (0.85 to 1.11)	19 fewer per 1000 (from 97 fewer to 71 more)	VERY LOW	CRITICAL
Treatment r	elated mo	rbidity -	grade 2 to	4 adve	rse eve	nts						
28	random- ised trials	very seri- ous ¹	no serious incon- sistency	no seri- ous in- direct- ness	seri- ous ³	none	6/155 (3.9%)	17/144 (11.8%)	RR 0.35 (0.14 to 0.85)	77 fewer per 1000 (from 18 fewer to 102 fewer)	VERY LOW	IM- PORTANT
Treatment r	elated mo	rbidity -	moderate	or seve	re flare	effect						
1 (Roos 2005)	random- ised trials	no se- rious risk of bias	no serious incon- sistency	seri- ous ²	seri- ous ³	none	12/137 (8.8%)	4/135 (3%)	RR 2.96 (0.98 to 8.94)	58 more per 1000 (from 1 fewer to 235 more)	LOW	IM- PORTANT
Treatment r	elated mo	rbidity -	- treatment	discont	inuatio	n due to	adverse e	events				
1 (Majumder 2012)	random- ised trials	no se- rious risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	very seri- ous ⁴	none	0/31 (0%)	0/33 (0%)	Not es- timable	0 fewer per 1000 (from 60 fewer to 60 more)	LOW	IM- PORTANT
Spinal stabi	lity - cord	compre	ession (me	dian foll	ow-up	11 mont	hs)					

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		Quality	assessmei	nt			No. of p	oatients	E	Effect		
No. of studies	Design	Risk of bias	Incon- sistency	Indi- rect- ness	Impre- cision	Other consid- era- tions	Single fraction RT	Multiple fraction RT	Rela- tive (95% CI)	Absolute	Qual- ity	Im- portance
1 (Roos 2005)	random- ised trials	no se- rious risk of bias	no serious incon- sistency	seri- ous ²	very seri- ous⁵	none	9/137 (6.6%)	8/135 (5.9%)	RR 1.11 (0.44 to 2.79)	7 more per 1000 (from 33 fewer to 106 more)	VERY LOW	IM- PORTANT
Spinal stabi	ility - fract	ures (m	edian follo	w-up 11	month	s)						
2 ⁹	random- ised trials	no se- rious risk of bias	no serious incon- sistency	seri- ous ²	very seri- ous⁵	none	10/302 (3.3%)	6/312 (1.9%)	RR 1.68 (0.62 to 4.53)	13 more per 1000 (from 7 fewer to 68 more)	VERY LOW	IM- PORTANT

CI: confidence interval; HR: hazard ratio; RR: risk ratio; RT: radiotherapy

¹ Very serious risk of bias in the evidence contributing to the outcomes as per RoB 2.

² Population is indirect due to inclusion of patients with non-spinal metastases in TROG 96-05 trial (Roos 2005).

³ 95% CI crosses 1 MID

⁴ Absolute effect range crosses 2 MIDs (10 more per 1000 and 10 fewer per 1000)

⁵ 95% CI crosses 2 MIDs

6 Howell 2013, Roos 2005

⁷ Howell 2013, Majumder 2012, Roos 2005

⁸ Howell 2013, Majumder 2012

⁹ Roos 2005, Steenland 1999

Table 7: Evidence profile for comparison 2: Patients with metastatic spinal cord compression - single fraction radiotherapy versus multiple (or short) fraction radiotherapy

		Qual	ity assessr	nent			No. of	patients		Effect		
No. of studies	De- sign	Risk of bias	Incon- sistency	Indi- rect- ness	Impre- cision	Other consid- era- tions	Single fraction RT	Multiple (or short) fraction RT	Rela- tive (95% Cl)	Absolute	Qual- ity	Im- portance
Health rel groups, a	ated qı djusteo	uality of d for ba	f life - EOR seline valu	TC QLQ es, rang	-C30 GI je 0 –10	obal hea 0, highei	lth (stand r scores a	ardised me re better)	an diffei	rences at 2 moi	nths be	tween
1 (Hoskin 2019)	ran- dom- ised trials	no se- rious risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	seri- ous ¹	none	345	341	not es- timable	SMD 0.13 lower (1-sided 97.5% CI 0.38 lower to ∞ higher) ⁶	MOD- ER- ATE	CRITICAL
Health rel tween gro	ated qu oups, a	uality of djusted	f life - EOR ⁻ for baselin	TC QLQ le value	-C30 Ph s, range	ıysical fı ∋ 0 – 100	Inctioning , higher s	ı (standardi cores are b	sed mea etter)	an differences a	at 2 mo	nths be-
1 (Hoskin 2019)	ran- dom- ised trials	no se- rious risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	seri- ous ¹	none	345	341	not es- timable	SMD 0.12 lower (1-sided 97.5% Cl 0.35 lower to ∞ higher) ⁶	MOD- ER- ATE	CRITICAL

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		Qual	ity assessr	nent			No. of	patients		Effect		
No. of studies	De- sign	Risk of bias	Incon- sistency	Indi- rect- ness	Impre- cision	Other consid- era- tions	Single fraction RT	Multiple (or short) fraction RT	Rela- tive (95% Cl)	Absolute	Qual- ity	Im- portance
Health rel tween gro	ated qu ups, a	uality of djusted	f life - EOR for baselin	FC QLQ	-C30 En s, range	notional e 0 – 100	functionir , higher so	ng (standar cores are b	dised m etter)	ean differences	at 2 m	onths be-
1 (Hoskin 2019)	ran- dom- ised trials	no se- rious risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	seri- ous ¹	none	345	341	not es- timable	SMD 0.18 lower (1-sided 97.5% CI 0.41 lower to ∞ higher) ⁶	MOD- ER- ATE	CRITICAL
Neurologi	cal and	d functio	onal status	- ability	v to wall	k after tr	eatment					
34	ran- dom- ised trials	no se- rious risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	no se- rious impre- cision	none	238/355 (67%)	256/363 (70.5%)	RR 0.95 (0.86 to 1.05)	35 fewer per 1000 (from 99 fewer to 35 more)	HIGH	CRITICAL
Neurologi	cal and	d functi	onal status	- norma	al bladd	er functi	on					
1 (Hoskin 2019)	ran- dom- ised trials	no se- rious risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	seri- ous ¹	none	184/316 (58.2%)	211/322 (65.5%)	RR 0.89 (0.79 to 1.00)	72 fewer per 1000 (from 138 fewer to 0 more)	MOD- ER- ATE	CRITICAL
Neurologi	cal and	d functio	onal status	- norma	al bowe	l functio	n after tre	atment				
2 ⁵	ran- dom- ised trials	no se- rious risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	no se- rious impre- cision	none	242/468 (51.7%)	249/472 (52.8%)	RR 0.97 (0.87 to 1.08)	16 fewer per 1000 (from 69 fewer to 42 more)	HIGH	CRITICAL
Overall su	ırvival	(event i	s death fro	m anv c	ause)							
2 ⁵	ran- dom- ised trials	no se- rious risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	seri- ous ¹	none	419/494 (84.8%)	413/495 (83.4%)	HR 1.06 (0.88 to 1.28)	not estimable	MOD- ER- ATE	CRITICAL
Pain - con	nplete	or parti	al pain resp	oonse								
1 (Ma- ranzano 2009)	ran- dom- ised trials	no se- rious risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	seri- ous¹	none	80/153 (52.3%)	80/150 (53.3%)	RR 0.98 (0.79 to 1.21)	11 fewer per 1000 (from 112 fewer to 112 more)	MOD- ER- ATE	CRITICAL
Pain - pai	n score	e (stand	ardised me	an diffe	erence b	etween	groups at	8 week foll	ow-up)			
1 (Hoskin 2019)	ran- dom- ised trials	no se- rious risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	seri- ous ¹	none	345	341	not es- timable	SMD 0.12 higher (1-sided 97.5% Cl ∞ lower to 0.38 higher) ⁶	MOD- ER- ATE	CRITICAL

Treatment related morbidity: Grade 3 or 4 adverse events

		Qual	ity assessr	nent			No. of	patients		Effect		
No. of studies	De- sign	Risk of bias	Incon- sistency	Indi- rect- ness	Impre- cision	Other consid- era- tions	Single fraction RT	Multiple (or short) fraction RT	Rela- tive (95% CI)	Absolute	Qual- ity	Im- portance
25	ran- dom- ised trials	no se- rious risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	very seri- ous ²	none	71/498 (14.3%)	72/491 (14.7%)	RR 0.97 (0.73 to 1.3)	4 fewer per 1000 (from 40 fewer to 44 more)	LOW	IM- PORTANT

CI: confidence interval; HR: hazard ratio; RR: risk ratio; RT: radiotherapy; SMD: standardised mean difference

¹ 95% CI crosses 1 MID (for EORTC QLQ-C30 1-sided MID was -0.28; pain score 1-sided MID was +0.28)

² 95% CI crosses 2 MIDs

⁴ Hoskin 2019, Lee 2018, Maranzano 2009

⁵ Hoskin 2019, Maranzano 2009

⁶ Results reported as SMD with 1-sided 97.5% CI

Table 8: Evidence profile for comparison 3: Spinal metastases patients – Image guided intensity modulated radiotherapy versus conventional radiotherapy

		Qua	ality assessi	ment			No. of J	patients		Effect	Qual-	lm-
No. of studies	Design	Risk of bias	Incon- sistency	Indirect- ness	lm- preci- sion	Other consid- erations	IMRT	3D- CRT	Relative (95% CI)	Absolute	ity	portance
Health re scores ar	lated qu e better	ality of)	f life - EORT	C QLQ-B	M 22 F	unctional	interfer	ence (at	6 month	s follow-up, rang	ge 0 – 1	00, higher
1 (Sprave 2018a)	ran- dom- ised tri- als	very seri- ous ¹	no serious incon- sistency	no seri- ous indi- rectness	very seri- ous ²	none	17	12	Not esti- mable	MD 0.3 higher (19.74 lower to 20.34 higher)	VERY LOW	CRITICAL
Health re scores ar	lated qu e better	ality of)	f life - EORT	C QLQ-B	M 22 P	sychosoc	ial aspe	ects (at 6	months	follow-up, range	e 0 – 10	0, lower
1 (Sprave 2018a)	ran- dom- ised tri- als	very seri- ous ¹	no serious incon- sistency	no seri- ous indi- rectness	seri- ous ³	none	17	12	Not esti- mable	MD 13.6 lower (30.48 lower to 3.28 higher)	VERY LOW	CRITICAL
Overall s	urvival (mean f	follow-up 6 i	months)								
1 (Sprave 2018a)	ran- dom- ised tri- als	very seri- ous ¹	no serious incon- sistency	no seri- ous indi- rectness	seri- ous ⁴	none	14/30 (46.7%)	7/30 (23.3%)	HR 2.02 (0.81 to 5)	MSH: Please in- sert content in this cell	VERY LOW	CRITICAL
Pain - coi	mplete c	or parti	al pain resp	onse (foll	ow-up	3 months	;)					
1 (Sprave 2018a)	ran- dom- ised tri- als	very seri- ous ¹	no serious incon- sistency	no seri- ous indi- rectness	seri- ous ⁴	none	14/20 (70%)	9/19 (47.4%)	RR 1.48 (0.85 to 2.57)	227 more per 1000 (from 71 fewer to 744 more)	VERY LOW	CRITICAL
Treatmen	it related	d morb	idity - grade	3 to 4 ad	verse	events (fo	ollow-up	3 montl	ns)			

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		Qua	ality assess	ment			No. of J	patients		Effect	Qual-	lm-
No. of studies	Design	Risk of bias	Incon- sistency	Indirect- ness	lm- preci- sion	Other consid- erations	IMRT	3D- CRT	Relative (95% Cl)	Absolute	ity	portance
1 (Sprave 2018a)	ran- dom- ised tri- als	very seri- ous ¹	no serious incon- sistency	no seri- ous indi- rectness	very seri- ous⁵	none	1/30 (3.3%)	4/30 (13.3%)	RR 0.25 (0.03 to 2.11)	100 fewer per 1000 (from 129 fewer to 148 more)	VERY LOW	IM- PORTANT
Spinal st	ability -	pathol	ogic fracture	es (follow	-up 3 n	nonths)						
1 (Sprave 2018a)	ran- dom- ised tri- als	very seri- ous ¹	no serious incon- sistency	no seri- ous indi- rectness	very seri- ous⁵	none	3/20 (15%)	2/19 (10.5%)	RR 1.42 (0.27 to 7.61)	44 more per 1000 (from 77 fewer to 696 more)	VERY LOW	IM- PORTANT

3DCRT: three dimensional conventional radiotherapy; CI: confidence interval; HR: hazard ratio; IMRT: image guided intensity modulated radiotherapy; MD: mean difference; RR: risk ratio; RT: radiotherapy.

¹ Very serious risk of bias in the evidence contributing to the outcomes as per RoB 2.
 ² 95% CI crosses 2 MIDs (0.5x control group SD, for HRQOL: EORTC QLQ-BM 22 Functional Interference ±14.9).
 ³ 95% CI crosses 1 MID (0.5x control group SD, for HRQOL: EORTC QLQ-BM 22 Psychosocial aspects ±9).

⁴ 95% CI crosses 1 MID

⁵ 95% CI crosses 2 MIDs

Table 9: Evidence profile for comparison 4: Spinal metastases patients – Stereotactic ablative body radiotherapy versus conventional radiotherapy

		Qı	ality assess	sment			No. of p	oatients		Effect	Qual-	lm-
No. of studies	Design	Risk of bias	Incon- sistency	Indirect- ness	Impre- cision	Other consid- erations	SABR	EBRT or 3D- CRT	Relative (95% Cl)	Absolute	ity	portance
Health re scores ar	lated qu e better	iality o)	f life - EORT	C QLQ-E	6M 22 Fu	nctional i	nterfere	nce (at (6 months	follow-up, rang	ge 0 – 1	00, higher
1 (Sprave 2018d)	ran- dom- ised tri- als	very seri- ous ¹	no serious incon- sistency	no seri- ous indi- rectness	serious ²	none	19	20	Not esti- mable	MD 3.4 higher (8.97 lower to 15.77 higher)	VERY LOW	CRITICAL
Health re 100, high	lated qu er score	ality o es are l	f life - EORT better)	C QLQ-B	6M 22 GI	obal quali	ity of life	e, chang	e from ba	aseline to 6 mo	nths (ra	nge 0 –
1 (Sahgal 2021)	ran- dom- ised tri- als	very seri- ous¹	no serious incon- sistency	no seri- ous indi- rectness	no seri- ous im- preci- sion	none	115	114	Not esti- mable	MD 5.10 higher (2.67 lower to 12.87 higher)	LOW	CRITICAL
Health re scores ar	lated qu e better	iality o)	f life - EORT	C QLQ-E	8M 22 Ps	ychosoci	al aspec	ts (at 6	months f	ollow-up, range	e 0 – 10	0, lower
1 (Sprave 2018d)	ran- dom- ised tri- als	very seri- ous ¹	no serious incon- sistency	no seri- ous indi- rectness	very se- rious ³	none	19	20	Not esti- mable	MD 1.7 lower (17.15 lower to 13.75 higher)	VERY LOW	CRITICAL

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		Qu	ality assess	sment			No. of p	oatients		Effect	Qual-	lm-
No. of studies	Design	Risk of bias	Incon- sistency	Indirect- ness	Impre- cision	Other consid- erations	SABR	EBRT or 3D- CRT	Relative (95% Cl)	Absolute	ity	portance
Overall s	urvival											
1 (Sprave 2018d)	ran- dom- ised tri- als	very seri- ous ¹	no serious incon- sistency	no seri- ous indi- rectness	very se- rious ⁴	none	15/27 (55.6%)	15/28 (53.6%)	HR 1 (0.49 to 2.05)	not estimable	VERY LOW	CRITICAL
Pain - coi	mplete c	or parti	al pain resp	onse (6 r	nonths f	ollow-up)						
27	ran- dom- ised tri- als	very seri- ous ¹	no serious incon- sistency	no seri- ous indi- rectness	serious⁵	none	61/141 (43.3%)	43/143 (30.1%)	RR 1.44 (1.05 to 1.97)	132 more per 1000 (from 15 more to 292 more)	VERY LOW	CRITICAL
Treatmen	t relate	d morb	oidity - grade	e 3 advers	se event	(6 mont	ns follov	(au-v				
1 (Sahgal 2021)	ran- dom- ised tri- als	very seri- ous ¹	no serious incon- sistency	no seri- ous indi- rectness	very se- rious ⁴	none	5/115 (4.3%)	5/114 (4.4%)	RR 0.99 (0.29 to 3.33)	0 fewer per 1000 (from 31 fewer to 102 more)	VERY LOW	IM- PORTANT
Spinal sta	ability -	verteb	ral compres	sion frac	ture of a	iny grade	(6 mont	hs follo	w-up)			
27	ran- dom- ised tri- als	very seri- ous ¹	very seri- ous ⁶	no seri- ous indi- rectness	very se- rious ⁴	none	23/132 (17.4%)	26/135 (19.3%)	RR 1.09 (0.33 to 3.66)	17 more per 1000 (from 129 fewer to 512 more)	VERY LOW	IM- PORTANT
3DCRT: 1	three di	mensi	onal conve	ntional ra	adiother	apy; CI: c	confiden	ice inter	val; EBF	RT: external be	am rad	liotherapy;

3DCRT: three dimensional conventional radiotherapy; CI: confidence interval; EBRT: external beam radiotherapy; HR: hazard ratio; IMRT: image guided intensity modulated radiotherapy; MD: mean difference; RR: risk ratio; RT: radiotherapy.

¹ Very serious risk of bias in the evidence contributing to the outcomes as per RoB 2.

² 95% CI crosses 1 MID (0.5x control group SD, for HRQOL: EORTC QLQ-BM 22 Functional interference ±12.2).

³ 95% CI crosses 2 MIDs (0.5x control group SD, for HRQOL: EORTC QLQ-BM 22 Psychosocial aspects ±11.8).

⁴ 95% CI crosses 2 MIDs

⁵ 95% CI crosses 1 MID

⁶ Very serious heterogeneity unexplained by subgroup analysis

7 Sahgal 2021, Sprave 2018d

Table 10: Evidence profile for comparison 5: Patients with metastatic spinal cord compression - short course radiotherapy versus split course radiotherapy

		Qual	ity assessn	nent			No. of p	oatients	E	ffect	Qual-	lm-
No. of studies	De- sign	Risk of bias	Incon- sistency	Indi- rect- ness	Impre- cision	Other consid- erations	Short course RT	Split course RT	Relative (95% CI)	Absolute	ity	portance

Neurological and functional status - ability to walk after treatment

		Qual	lity assessr	nent			No. of p	oatients	E	ffect	Qual-	lm-
No. of studies	De- sign	Risk of bias	Incon- sistency	Indi- rect- ness	Impre- cision	Other consid- erations	Short course RT	Split course RT	Relative (95% CI)	Absolute	ity	portance
1 (Ma- ranzano 2005)	ran- dom- ised trials	no seri- ous risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	no seri- ous im- preci- sion	none	97/142 (68.3%)	95/134 (70.9%)	RR 0.96 (0.82 to 1.13)	28 fewer per 1000 (from 128 fewer to 92 more)	HIGH	CRITICAL
Neurologi	cal and	l functio	onal status -	normal	sphinct	er contro	ol after tre	atment				
1 (Ma- ranzano 2005)	ran- dom- ised trials	no seri- ous risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	no seri- ous im- preci- sion	none	128/142 (90.1%)	119/134 (88.8%)	RR 1.02 (0.94 to 1.1)	18 more per 1000 (from 53 fewer to 89 more)	HIGH	CRITICAL
Pain - con	nplete (or partia	l pain respo	onse afte	er treatn	nent						
1 (Ma- ranzano 2005)	ran- dom- ised trials	no seri- ous risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	seri- ous ¹	none	80/142 (56.3%)	79/134 (59%)	RR 0.96 (0.78 to 1.17)	24 fewer per 1000 (from 130 fewer to 100 more)	MOD- ER- ATE	CRITICAL
Treatment	relate	d morbi	dity - grade	3 or mo	re adve	rse event	S					
1 (Ma- ranzano 2005)	ran- dom- ised trials	no seri- ous risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	very seri- ous ²	none	3/142 (2.1%)	5/134 (3.7%)	RR 0.57 (0.14 to 2.32)	16 fewer per 1000 (from 32 fewer to 49 more)	LOW	IM- PORTANT
Spinal sta	bility -	in field I	recurrence									
1 (Ma- ranzano 2005)	ran- dom- ised trials	no seri- ous risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	seri- ous ¹	none	5/142 (3.5%)	0/134 (0%)	POR 7.19 (1.23 to 42.06)	40 more per 1000 (from 0 more to 70 more)	MOD- ER- ATE	IM- PORTANT

CI: confidence interval; POR: Peto odds ratio; RR: risk ratio

¹ 95% CI crosses 1 MID

² 95% CI crosses 2 MIDs

Table 11: Evidence profile for comparison 6: Patients with metastatic spinal cord compression – short course radiotherapy versus long course radiotherapy

		Qua	ality assess	ment			No. of p	oatients		Effect		
No. of studies	De- sign	Risk of bias	Incon- sistency	Indi- rect- ness	Impre- cision	Other consid- erations	Short course RT	Long course RT	Rela- tive (95% Cl)	Absolute	Qual- ity	Im- portance
Neurolo	gical an	d functi	onal status	- ambula	ntory sta	tus (1 mo	onth follow	v-up)				
1 (Rades 2016)	ran- dom- ised tri- als	no seri- ous risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	no seri- ous im- preci- sion	none	56/78 (71.8%)	57/77 (74%)	RR 0.97 (0.80 to 1.18)	22 fewer per 1000 (from 148 fewer to 133 more)	HIGH	CRITICAL

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Quality assessment							No. of patients		Effect			
No. of studies	De- sign	Risk of bias	Incon- sistency	Indi- rect- ness	Impre- cision	Other consid- erations	Short course RT	Long course RT	Rela- tive (95% Cl)	Absolute	Qual- ity	portance
Neurological and functional status - motor deficits improved or stable (1 month follow-up)												
1 (Rades 2016)	ran- dom- ised tri- als	no seri- ous risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	no seri- ous im- preci- sion	none	68/78 (87.2%)	69/77 (89.6%)	RR 0.97 (0.87 to 1.09)	27 fewer per 1000 (from 116 fewer to 81 more)	HIGH	CRITICAL
Overall s	Overall survival (6 months follow-up)											
1 (Rades 2016)	ran- dom- ised tri- als	no seri- ous risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	very seri- ous ¹	none	9/101 (8.9%)	9/102 (8.8%)	HR 1.21 (0.48 to 3.06)	18 more per 1000 (from 45 fewer to 158 more)	LOW	CRITICAL
Pain - complete or partial pain response (1 month follow-up)												
1 (Rades 2016)	ran- dom- ised tri- als	no seri- ous risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	very seri- ous ¹	none	36/101 (35.6%)	40/102 (39.2%)	RR 0.91 (0.64 to 1.3)	35 fewer per 1000 (from 141 fewer to 118 more)	LOW	CRITICAL
Treatment related morbidity - grade 3 or 4 acute toxicity												
1 (Rades 2016)	ran- dom- ised tri- als	no seri- ous risk of bias	no serious incon- sistency	no seri- ous in- direct- ness	seri- ous ²	none	0/101 (0%)	0/102 (0%)	RD 0.00	0 fewer per 1000 (from 20 fewer to 20 more)	MOD- ER- ATE	IM- PORTANT

CI: confidence interval; HR: hazard ratio; RD: risk difference; RR: risk ratio; RT: radiotherapy.

¹ 95% CI crosses 2 MIDs

² Sample size < 300

Table 12: Evidence profile for comparison 7: Patients with metastatic spinal cord compression – surgery + radiotherapy versus radiotherapy only

Quality assessment							No. of patients		Effect			
No. of studies	Design	Risk of bias	Incon- sistency	Indi- rect- ness	Impre- cision	Other consid- erations	Surgery + RT	RT only	Rela- tive (95% Cl)	Absolute	Qual- ity	im- portance
Neurological and functional status - ambulant after treatment - all patients												
1 (Patch- ell 2005)	ran- dom- ised tri- als	no seri- ous risk of bias	no serious incon- sistency	no seri- ous indi- rectness	serious ¹	none	42/50 (84%)	29/51 (56.9%)	RR 1.48 (1.13 to 1.93)	273 more per 1000 (from 74 more to 529 more)	MOD- ER- ATE	CRITICAL

Neurological and functional status - ambulant after treatment – patients ambulatory at study entry

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Quality assessment							No. of patients		Effect			
No. of studies	Design	Risk of bias	Incon- sistency	Indi- rect- ness	Impre- cision	Other consid- erations	Surgery + RT	RT only	Rela- tive (95% Cl)	Absolute	Qual- ity	Im- portance
1 (Patch- ell 2005)	ran- dom- ised tri- als	no seri- ous risk of bias	no serious incon- sistency	no seri- ous indi- rectness	serious ¹	none	32/34 (94.1%)	26/35 (74.3%)	RR 1.27 (1.02 to 1.57)	201 more per 1000 (from 15 more to 423 more)	MOD- ER- ATE	CRITICAL
Neuroloo	nical an	d functio	onal status -	ambular	nt after t	reatment	- patients	s non an	nbulator	v at studv entr	v	
1 (Patch- ell 2005)	ran- dom- ised tri- als	no seri- ous risk of bias	no serious incon- sistency	no seri- ous indi- rectness	serious ¹	none	10/16 (62.5%)	3/16 (18.8%)	RR 3.33 (1.12 to 9.9)	437 more per 1000 (from 23 more to 1000 more)	MOD- ER- ATE	CRITICAL
Neurological and functional status - maintenance of continence (time to incontinence)												
1 (Patch- ell 2005)	ran- dom- ised tri- als	no seri- ous risk of bias	no serious incon- sistency	no seri- ous indi- rectness	serious ¹	none	50	51	HR 2.13 (1.15 to 4.00)	Median 149 days longer	MOD- ER- ATE	CRITICAL
Neuroloo	aical an	d functio	onal status -	mainten	ance of	muscle s	trenath (time AS	A score	was maintaine	ed)	
1 (Patch- ell 2005)	ran- dom- ised tri- als	no seri- ous risk of bias	no serious incon- sistency	no seri- ous indi- rectness	no seri- ous im- preci- sion	none	50	51	HR 3.57 (1.64 to 7.69)	Median 494 days longer	HIGH	CRITICAL
Neuroloo	nical and	d functio	onal status -	mainten	ance of	functiona	al ability (time Fra	inkel sco	ore was mainta	ined)	
1 (Patch- ell 2005)	ran- dom- ised tri- als	no seri- ous risk of bias	no serious incon- sistency	no seri- ous indi- rectness	no seri- ous im- preci- sion	none	50	51	HR 4.17 (1.85 to 9.09)	Median 494 days longer	HIGH	CRITICAL
Pain - median (IOR) daily equivalent dose of morphine mg												
1 (Patch- ell 2005)	ran- dom- ised tri- als	no seri- ous risk of bias	no serious incon- sistency	no seri- ous indi- rectness	serious ³	none	50	51	Not esti- mable	Median 4.4 mg lower	MOD- ER- ATE	CRITICAL
Treatment related morbidity - 30 day mortality												
1 (Patch- ell 2005)	ran- dom- ised tri- als	no seri- ous risk of bias	no serious incon- sistency	no seri- ous indi- rectness	very se- rious ²	none	3/50 (6%)	7/51 (13.7%)	RR 0.44 (0.12 to 1.6)	77 fewer per 1000 (from 121 fewer to 82 more)	LOW	IM- PORTANT

¹ 95% CI crosses 1 MID ² 95% CI crosses 2 MIDs ³ Sample size < 300