Supplementary Online Content

Ma TM, Romero T, Nickols NG, et al. Comparison of response to definitive radiotherapy for localized prostate cancer in Black and White men: a metaanalysis. *JAMA Netw Open*. 2021;4(12):e2139769. doi:10.1001/jamanetworkopen.2021.39769

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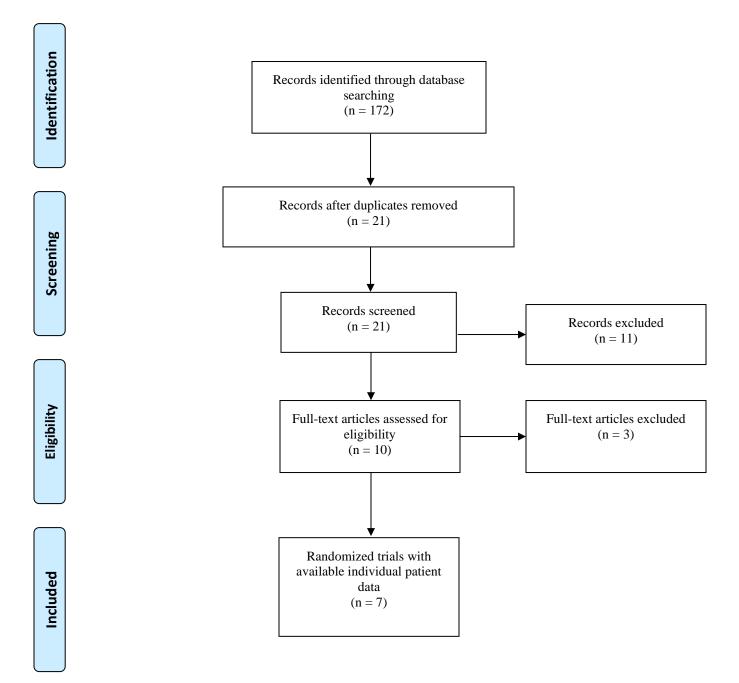
eTable 1. Summary of Trials Included in Network Meta-analysis

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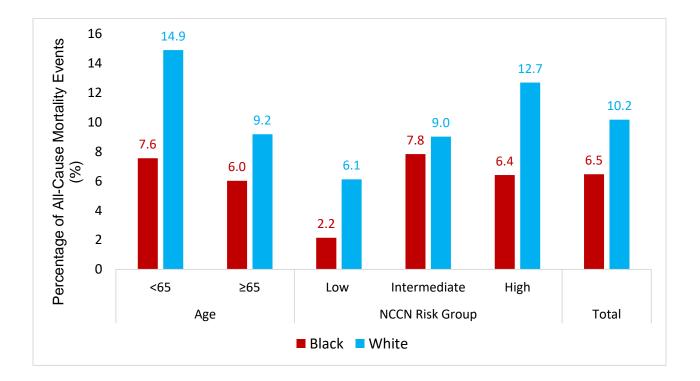
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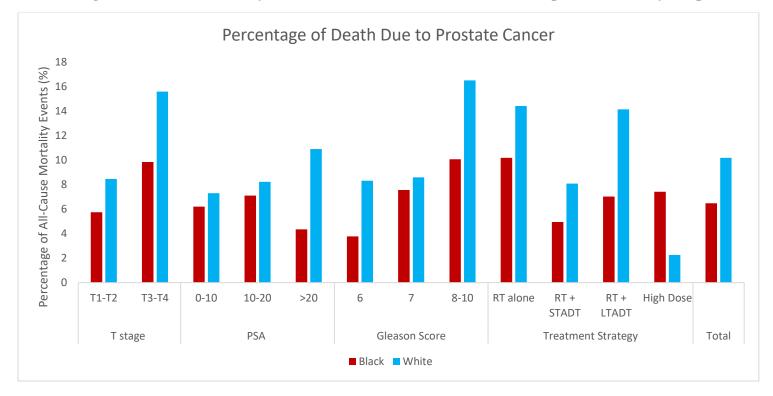
This supplementary material has been provided by the authors to give readers additional information about their work.

eFigure 1. Preferred Reporting Items for Systematic Reviews and Meta-Analyses Flowchart



eFigure 2. Percentage of All-Cause Mortality Events Attributable to Prostate Cancer-Specific Mortality. A lower percentage of mortality events were due to PCSM rather than OCM overall (50/773 [6.5%] vs. 368/3617 [10.2%]), and among men aged <65 (17/225 [7.6%] vs. 93/624 [14.9%]) and ≥65 (33/548 [6.0%] vs. 275/2993 [9.2%]) as well as men with high-risk disease (24/374 [6.4%] vs. 188/1480 [12.7%]).





eFigure 3. Percentage of All-Cause Mortality Events Attributable to Prostate Cancer-Specific Mortality in Specific Subgroups

Variable		sHR (95%CI)	q-value	Variable		HR (95%CI)	q-value
T stage				T stage			
T1-T2		1.06 (0.93 - 1.19)	0.930	T1-T2		1.04 (0.95 - 1.14)	0.901
T3-T4		1.01 (0.85 - 1.19)	0.930	T3-T4		0.92 (0.79 - 1.08)	0.901
Age				Age			
<=65		1.17 (0.98 - 1.40)	0.798	<=65		1.08 (0.93 - 1.25)	0.901
>65		1.07 (0.98 - 1.18)	0.798	>65		1.05 (0.96 - 1.15)	0.901
NCCN Risk Stratification				NCCN Risk Stratification			
Low Risk		1.03 (0.77 - 1.38)	0.930	Low Risk		0.98 (0.75 - 1.28)	0.979
Intermediate Risk		1.04 (0.92 - 1.18)	0.930	Intermediate Risk		1.02 (0.91 - 1.16)	0.979
High Risk	-	1.01 (0.88 - 1.15)	0.930	High Risk		0.97 (0.85 - 1.11)	0.979
Gleason score				Gleason score			
6		1.06 (0.92 - 1.22)	0.930	6		1.00 (0.85 - 1.18)	0.979
7		0.84 (0.52 - 1.38)	0.930	7		1.00 (0.82 - 1.22)	0.979
8-10		1.14 (0.79 - 1.65)	0.930	8-10		0.98 (0.77 - 1.26)	0.979
PSA				PSA			
<10		1.06 (0.92 - 1.22)	0.930	<10	_	1.00 (0.82 - 1.21)	0.979
10-20		1.02 (0.87 - 1.21)	0.930	10 - 20		1.03 (0.85 - 1.24)	0.979
>20	-	0.97 (0.83 - 1.13)	0.930	>20		0.90 (0.78 - 1.03)	0.901
RT Strategy				RT Strategy			
RT alone		1.15 (0.96 - 1.38)	0.798	RT alone		1.11 (0.91 - 1.34)	0.901
High Dose		0.98 (0.63 - 1.51)	0.930	High Dose		1.15 (0.78 - 1.68)	0.901
RT+STADT	-	0.98 (0.88 - 1.08)	0.930	RT+STADT		0.96 (0.87 - 1.07)	0.901
RT+LTADT		1.07 (0.81 - 1.39)	0.930	RT+LTADT		0.92 (0.72 - 1.16)	0.901
Race				Race			
Black vs. White	+	1.03 (0.95 - 1.12)	0.519	Black vs. White	-	1.00 (0.92 - 1.08)	0.909
	0.250.350.500.751.02.8	5		0	0.50 0.75 1.0 2.0)	

eFigure 4. Forest Plots of Association Between Race and Other Cause Mortality and Death or Distant Metastasis

Other Cause Mortality

Death or Distant Metastasis

Trial	Arms	Inclusion*	Primary Endpoint	RT Dose
RTOG 9202	RT + 4 mos ADT	cT2-4N0-X, PSA<150	Disease-free survival	65-70 Gy to
(1992-1995)	RT + 28 mos ADT			prostate
				44-46 Gy to pelvis
RTOG 9408	RT	cT1b-T2b	Overall survival	66.6 Gy to prostate
(1994-2001)	RT + 4 mos ADT	PSA≤20		46.8 Gy to pelvis
RTOG 9413	Prostate-only RT + adjuvant ADT	PSA≤100	Progression free	70.2 Gy to prostate
(1995-1999)	WPRT + adjuvant ADT	Ineligible for RTOG 9408	survival	50.4 Gy to pelvis
	Prostate-only RT + neoadjuvant/concurrent ADT			
	WPRT + neoadjuvant/concurrent ADT			
RTOG 9902	RT + 24 mos ADT	PSA 20-100, GS≥7, any T	Disease-free survival	70.2 Gy to prostate
(2000-2004)	RT + 24mos ADT+TEEx4	OR		46.8 Gy to pelvis
		≥cT2, GS 8-10, PSA≤100		
RTOG 9910	$RT + 4 \mod ADT$	cT1b-4, PSA>10 but ≤ 100 , and	Disease-specific	70.2 Gy to prostate
(2000-2004)	RT + 9 mos ADT	GS 2-6	survival	46.8 Gy to pelvis
		OR		(if no staging
		cT1b-4, PSA<20, GS 7		surgery)
		OR		
		cT1b-c, PSA<20, GS 8-10		
RTOG 0126	Moderate dose RT	cT1b-T2b, GS 2-6, PSA≥10 but	Overall survival	70.2 Gy to prostate
(2002-2008)	High dose RT	<20		79.2 Gy to prostate
		OR		
		cT1b-T2b, GS 7, PSA<15		
RTOG 0415	Conventionally-fractionated RT	cT1b-T2c, GS 2-6, PSA<10	Disease-free survival	73.8 Gy to prostate
(2006-2009)	Hypofractionated RT			70 Gy (in 28
, í				fractions) to
				prostate

eTable 1. Summary of Trials Included in Network Meta-Analysis

*Patients with cN+ or pN+ disease were not included in our analysis.

ADT, androgen deprivation therapy; CT, computed tomography; GS, Gleason score; PSA, prostate-specific antigen; LHRH, luteinizing hormone releasing hormone; MRI, magnetic resonance imaging; Gy, gray; RT, radiation therapy; TEE, paclitaxel, estramustine, and oral etoposide; WPRT, whole pelvis radiation therapy

Treatment Strategy	Trial Arms					
RT Alone	RTOG 9408 RT alone					
	RTOG 0126 RT alone (control arm)					
	RTOG 0415 Conventionally fractionated RT alone					
	RTOG 0415 Moderately hypofractionated RT alone					
RT+STADT	RTOG 9202 RT + 4 months ADT					
	RTOG 9408 RT + 4 months ADT					
	RTOG 9413 Prostate-only RT + adjuvant 4 months ADT					
	RTOG 9413 Whole pelvis RT + adjuvant 4 months ADT					
	RTOG 9413 Prostate-only RT + neoadjuvant/concurrent 4					
	months ADT					
	RTOG 9413 Whole pelvis RT + neoadjuvant/concurrent 4					
	months ADT					
	RTOG 9910 RT + 4 months ADT					
	RTOG 9910 RT + 9 months ADT					
RT+LTADT	RTOG 9202 RT + 28 months ADT					
	RTOG 9902 RT + 24 months ADT					
	RTOG 9902 RT + 24 months ADT + TEEx4					
High Dose RT	RTOG 0126 high dose RT (experimental arm)					

eTable 2. Treatment Strategies As Defined by Individual Trial Treatment Arms

ADT, androgen deprivation therapy; LTADT, long-term ADT; RT, radiation therapy; STADT, short-term ADT; TEE, paclitaxel, estramustine, and oral etoposide

		Black				White					
			Number of Events					Number of Events			
Trial	Treatment	Total	BCR	DM	PCSM	ACM	Total	BCR	DM	PCSM	ACM
RTOG 9202	RT+STADT	83	43	19	13	62	617	375	159	115	501
RTOG 9202	RT+LTADT	103	47	13	8	81	611	269	106	83	482
RTOG 9408	RT Alone	197	84	17	17	135	754	375	80	95	521
RTOG 9408	RT+STADT	197	52	11	10	113	743	280	53	51	516
RTOG 9413	RT+STADT	322	150	49	0	220	881	443	193	0	667
RTOG 9902	RT+LTADT	102	51	6	0	33	265	149	43	0	105
RTOG 9910	RT+STADT	246	57	6	0	70	1190	308	71	0	371
RTOG 0126	RT Alone	84	26	3	0	19	643	300	45	17	192
RTOG 0126	High Dose	104	30	6	2	27	609	186	24	4	177
RTOG 0415	RT Alone	192	16	0	0	13	871	69	0	3	85
Total 16		1630	556	130	50	773	7184	2754	774	368	3617
Crude Event Rate			34.1%	8%	3.1%	47.4%		38.3%	10.8%	5.1%	50.3%

eTable 3. Crude Event Rates Per Trial, Stratified by Race and Treatment Strategy

ACM, all-cause mortality; BCR, biochemical recurrence; DM, distant metastasis; LTADT, long-term androgen deprivation therapy; PCSM, prostate cancerspecific mortality; RT, radiotherapy; STADT, short-term androgen deprivation therapy

*Based on trial outcomes, patients enrolled on RTOG 9413, 9902, and 9910 were considered to have received the same treatment in all arms.