

Appendix 1: Sensitivity analysis. Demographic and disease characteristics of all eligible patients by country (n = 328,182).

	England	US	<i>p</i> value
	(n = 97,079)	(n = 204,910)	
Year of diagnosis			
2004	18,883 (19.5)	37,686 (18.4)	<0.001
2005	18,392 (19.0)	35,656 (17.4)	
2006	19,847 (20.4)	41,938 (20.5)	
2007	20,061 (20.7)	45,612 (22.3)	
2008	19,896 (20.5)	44,018 (21.5)	
Age group			
35-59	13,593 (14.5)	57,992 (28.9)	<0.001
60-64	16,643 (17.8)	41,601 (20.7)	
65-69	22,782 (24.3)	44,116 (22.0)	
70-74	23,565 (25.1)	35,612 (17.7)	
75-79	17,139 (18.3)	21,592 (10.8)	
Ethnicity			
White	68,618 (93.8)	159,399 (80.4)	<0.001
African/Caribbean	2,796 (3.8)	29,362 (14.8)	
Asian	1,343 (1.8)	8,983 (4.5)	
Other	430 (0.6)	654 (0.3)	
Missing	23,892	6,512	
Clinical tumour stage			
<i>cT1</i>	10,331 (36.4)	74,169 (37.0)	<0.001
<i>cT2</i>	10,779 (38.0)	109,680 (54.6)	
<i>cT3</i>	6,421 (22.6)	15,562 (7.8)	
<i>cT4</i>	855 (3.0)	1,322 (0.7)	
Missing	68,693	4,177	
Gleason score			
2-6	28,119 (43.4)	101,123 (50.6)	<0.001
7	23,527 (36.3)	76,049 (38.1)	
8-10	13,091 (20.2)	22,570 (11.3)	
Missing	32,342	5,168	
Use of definitive therapy			
No definitive therapy	63,716 (65.6)	51,100 (24.9)	<0.001
Definitive therapy	33,363 (34.4)	153,810 (75.1)	

Appendix 2: Sensitivity analysis. Relative all-cause mortality (ACM) and prostate cancer mortality (PCM) of all eligible patients according to country (n = 328,182).

	6 year All-Cause Mortality (ACM)		Model 1 (Age at diagnosis, year of diagnosis, ethnicity)		Model 2 (Model 1 and definitive therapy)	
	US	England	Adj HR (95% CI)	p value	Adj HR (95% CI)	p value
All patients	n = 204,910 9.6%	n = 97,079 21.0%	2.19 (2.13 to 2.26)	<0.001	1.55 (1.50 to 1.59)	<0.001
	6 year Prostate Cancer Mortality (PCM)		Model 1 (Age at diagnosis, year of diagnosis, ethnicity)		Model 2 (Model 1 and definitive therapy)	
	US	England	Adj SHR (95% CI)	p value	Adj SHR (95% CI)	p value
All patients	2.6%	9.6%	3.67 (3.50 to 3.85)	<0.001	2.37 (2.25 to 2.50)	<0.001

Adj HR = Adjusted Hazard Ratio, Adj SHR = Adjusted Sub-Hazard Ratio, CI = Confidence interval

Appendix 3: Comparison of demographic and disease characteristics of all eligible included and excluded English patients. Patients with either missing clinical tumour stage or missing Gleason score were classified as “excluded patients”.

	Included patients	Excluded patients	p value
	(n = 25,235)	(n = 71,844)	
Year of diagnosis (%)			
2004	5,378 (21.3)	13,505 (18.8)	<0.001
2005	4,959 (19.7)	13,433 (18.7)	
2006	5,172 (20.5)	14,675 (20.4)	
2007	5,009 (19.9)	15,052 (21.0)	
2008	4,717 (18.7)	15,179 (21.1)	
Age group (%)			
35-59	3,620 (14.4)	9,973 (13.9)	<0.001
60-64	4,361 (17.3)	12,282 (17.1)	
65-69	6,104 (24.2)	16,678 (23.2)	
70-74	6,145 (24.4)	17,420 (24.3)	
75-79	5,005 (19.8)	15,491 (21.6)	
Ethnicity (%)			
White	17,924 (94.8)	50,694 (93.4)	<0.001
African/Caribbean	571 (3.0)	2,225 (4.1)	
Asian	318 (1.7)	1,025 (1.9)	
Other	105 (0.6)	325 (0.6)	
<i>Missing</i>	6,317	17,575	
Socio-economic quartile			
1	6,262 (24.9)	17,588 (24.5)	<0.001
2	6,101 (24.2)	16,975 (23.7)	
3	5,392 (21.4)	14,693 (20.5)	
4	4,073 (16.2)	12,023 (16.8)	
5	3,363 (13.4)	10,409 (14.5)	
<i>Missing</i>	44	156	
Charlson co-morbidity index			
0	11,261 (44.6)	33,914 (47.2)	<0.001
1	11,761 (46.6)	30,861 (43.0)	
2 or more	2,213 (8.8)	7,069 (9.8)	
Clinical tumour stage			
cT1	9,374 (37.2)	957 (30.37)	<0.001
cT2	9,538 (37.8)	1,241 (39.4)	
cT3	5,577 (22.1)	844 (26.8)	
cT4	746 (3.0)	109 (3.5)	
<i>Missing</i>	0	68,693	
Gleason score			
2-6	10,909 (43.2)	17,210 (43.6)	0.083
7	9,112 (36.1)	14,415 (36.5)	
8-10	5,214 (20.7)	7,877 (19.9)	
<i>Missing</i>	0	32,342	
Treatment (%)			
No definitive therapy	15,583 (61.8)	48,133 (67.0)	<0.001
Definitive therapy	9,652 (38.3)	23,711 (33.0)	