

Table E1a. Characteristics of PSM strategies for comparison one

PSM Strategy	Caliper Width SD of logit(PS)	ISRT+HT (n)	EBRT+HT (n)	Events (n)
Unmatched	-	433	132	56
Nearest	no caliper	396	132	56
1	2.0	343	132	52
2	1.5	321	125	51
3	1.0	299	122	48
4	0.8	287	121	47
5	0.6	274	118	44
6	0.5	270	117	45
7	0.4	268	116	45
8	0.3	264	114	45
<b>9</b>	<b>0.2</b>	<b>258</b>	<b>112</b>	<b>44</b>
<b>10</b>	<b>0.1</b>	<b>248</b>	<b>109</b>	<b>41</b>
<b>11</b>	<b>0.05</b>	<b>234</b>	<b>104</b>	<b>37</b>
12	0.025	214	104	33
13	0.01	182	82	30
14	0.005	139	69	24

*Abbreviations:* PSM = propensity score matching; SD = standard deviation; PS = propensity score; ISRT = internal seed radiotherapy; HT = hormonal therapy; EBRT = external beam radiotherapy

Table E1b. Characteristics of PSM strategies for comparison two

PSM Strategy	Caliper Width SD of logit(PS)	EBRT+HT (n)	EBRT (n)	Events (n)
Unmatched	-	579	126	256
Nearest	No caliper	504	126	237
1	2.0	443	126	210
2	1.5	405	126	192
3	1.0	374	126	180
<b>4</b>	<b>0.8</b>	<b>361</b>	<b>126</b>	<b>175</b>
<b>5</b>	<b>0.6</b>	<b>352</b>	<b>126</b>	<b>173</b>
<b>6</b>	<b>0.5</b>	<b>347</b>	<b>126</b>	<b>171</b>
7	0.4	345	126	170
8	0.3	343	124	167
9	0.2	339	121	164
10	0.1	330	115	156
11	0.05	303	111	138
12	0.025	277	105	130
13	0.01	230	90	109
14	0.005	181	78	89

*Abbreviations:* PSM = propensity score matching; SD = standard deviation; PS = propensity score; HT = hormonal therapy; EBRT = external beam radiotherapy

Table E2a. Coarsening of covariates used in CEM for comparison one

Variable	Coarsening	Matching Range Boundaries
PSA (ng/ml)		
	1	0, 2, 4, 6, 8, 10, 13, 16, 20
	2	0, 2, 4, 7, 10, 14, 20
	3	0, 4, 10, 20
Treatment Year		
	1	Exact
	2	1997, 2000, 2002, 2004, 2007
	3	1997, 2002, 2007

*Abbreviations:* PSA = prostate-specific antigen; CEM = coarsened exact matching

Table E2b. Coarsening of covariates used in CEM for comparison two

Variable	Coarsening	Matching Range Boundaries
PSA (ng/ml)		
	1	0, 2, 4, 6, 8, 10, 13, 16, 20
	2	0, 2, 4, 7, 10, 14, 20
	3	0, 4, 10, 20
Treatment Year		
	1	1995, 1997, 1999, 2001, 2003, 2006
	2	1995, 1999, 2002, 2006
	3	1993, 1999, 2006
EBRT Dose (Gy)		
	1	66, 73, 79.8

*Abbreviations:* PSA = prostate-specific antigen; CEM = coarsened exact matching; EBRT = external beam radiotherapy

Table E3a. Characteristics of CEM strategies for comparison one

CEM Strategy	Treatment Year Coarsening	PSA Coarsening	ISRT+HT (n)	EBRT+HT (n)	Events (n)
Unmatched	-	-	433	132	56
1	3	3	391	123	50
2	3	2	371	116	48
3	3	1	363	109	45
4	2	3	372	112	41
5	2	2	353	106	40
6	2	1	343	100	38
7	1	3	308	107	35
<b>8</b>	<b>1</b>	<b>2</b>	<b>276</b>	<b>96</b>	<b>34</b>
9	1	1	242	90	32

*Abbreviations:* CEM = coarsened exact matching; PSA = prostate-specific antigen; CEM = coarsened exact matching; EBRT = external beam radiotherapy; HT = hormone therapy; ISRT = internal seed radiotherapy

Table E3b. Characteristics of CEM strategies for comparison two

CEM Strategy	Treatment Year Coarsening	PSA Coarsening	EBRT Dose Coarsening	EBRT+HT (n)	EBRT+HT (n)	Events (n)
Unmatched	-	-	-	579	126	256
<b>1</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>492</b>	<b>123</b>	<b>227</b>
2	3	2	1	445	122	209
3	3	1	1	436	119	203
4	3	3	1	439	122	211
5	3	2	1	398	122	194
6	3	1	1	373	118	180
7	2	3	1	377	118	176
8	2	2	1	337	116	160
9	2	1	1	295	108	138

*Abbreviations:* CEM = coarsened exact matching; PSA = prostate-specific antigen; EBRT = external beam radiotherapy; HT = hormone therapy