

**Table S1** Baseline characteristics of multiple myeloma survivors between different genders after propensity score matching

Characteristic	Female (n=11,806)	Male (n=11,806)	P value
Age at diagnosis (years), mean $\pm$ standard deviation	64.79 $\pm$ 11.04	64.64 $\pm$ 10.91	0.287
Year, n (%)			0.044
2000–2003	1,965 (16.64)	1,857 (15.73)	
2004–2007	2,486 (21.06)	2,644 (22.4)	
2008–2011	3,322 (28.14)	3,302 (27.97)	
2012–2015	4,033 (34.16)	4,003 (33.91)	
Marital status, n (%)			>0.99
Unmarried	4,047 (34.28)	4,047 (34.28)	
Married	7,759 (65.72)	7,759 (65.72)	
Race, n (%)			0.304
Non-white	2,867 (24.28)	2,935 (24.86)	
White	8,939 (75.72)	8,871 (75.14)	
Income, n (%)			0.835
<\$75,000	7,963 (67.45)	7,978 (67.58)	
$\geq$ \$75,000	3,843 (32.55)	3,828 (32.42)	
Chemotherapy, n (%)			0.459
No	4,057 (34.36)	4,003 (33.91)	
Yes	7,749 (65.64)	7,803 (66.09)	
Radiotherapy, n (%)			0.356
No	9,847 (83.41)	9,794 (82.96)	
Yes	1,959 (16.59)	2,012 (17.04)	

**Table S2** Baseline characteristics of multiple myeloma survivors between different races after propensity score matching

Characteristic	Non-white (n=7,688)	White (n=7,688)	P value
Age at diagnosis (years), mean $\pm$ standard deviation	63.99 $\pm$ 11.19	63.84 $\pm$ 10.73	0.418
Gender, n (%)			0.617
Female	3,915 (50.92)	3,884 (50.52)	
Male	3,773 (49.08)	3,804 (49.48)	
Year, n (%)			0.526
2000–2003	1,208 (15.71)	1,251 (16.27)	
2004–2007	1,613 (20.98)	1,637 (21.29)	
2008–2011	2,136 (27.78)	2,151 (27.98)	
2012–2015	2,731 (35.52)	2,649 (34.46)	
Marital status, n (%)			0.235
Unmarried	3,285 (42.73)	3,358 (43.68)	
Married	4,403 (57.27)	4,330 (56.32)	
Income, n (%)			0.518
<\$75,000	5,335 (69.39)	5,298 (68.91)	
$\geq$ \$75,000	2,353 (30.61)	2,390 (31.09)	
Chemotherapy, n (%)			0.906
No	2,713 (35.29)	2,720 (35.38)	
Yes	4,975 (64.71)	4,968 (64.62)	
Radiotherapy, n (%)			0.161
No	6,428 (83.61)	6,363 (82.77)	
Yes	1,260 (16.39)	1,325 (17.23)	

**Table S3** Baseline characteristics of multiple myeloma survivors between different marital status after propensity score matching

Characteristic	Unmarried status (n=9,382)	Married status (n=9,382)	P value
Age at diagnosis (years), mean $\pm$ standard deviation	65.25 $\pm$ 11.55	65.05 $\pm$ 10.68	0.212
Gender, n (%)			0.682
Female	5,049 (53.82)	5,077 (54.11)	
Male	4,333 (46.18)	4,305 (45.89)	
Year, n (%)			0.131
2000–2003	1,493 (15.91)	1,613 (17.19)	
2004–2007	2,043 (21.78)	2,012 (21.45)	
2008–2011	2,638 (28.12)	2,584 (27.54)	
2012–2015	3,208 (34.19)	3,173 (33.82)	
Race, n (%)			0.241
Non-white	2,579 (27.49)	2,651 (28.26)	
White	6,803 (72.51)	6,731 (71.74)	
Income, n (%)			0.435
<\$75,000	6,380 (68.00)	6,330 (67.47)	
$\geq$ \$75,000	3,002 (32.00)	3,052 (32.53)	
Chemotherapy, n (%)			0.783
No	3,253 (34.67)	3,271 (34.86)	
Yes	6,129 (65.33)	6,111 (65.14)	
Radiotherapy, n (%)			0.099
No	7,781 (82.94)	7,695 (82.02)	
Yes	1,601 (17.06)	1,687 (17.98)	

**Table S4** Baseline characteristics of multiple myeloma survivors between different income after propensity score matching

Characteristic	Income <\$75,000 (n=10,463)	Income ≥\$75,000 (n=10,463)	P value
Age at diagnosis (years), mean ± standard deviation	65.06±10.95	65.08±11.19	0.900
Gender, n (%)			0.470
Female	4,752 (45.42)	4,700 (44.92)	
Male	5,711 (54.58)	5,763 (55.08)	
Year, n (%)			0.940
2000–2003	1,957 (18.7)	1,963 (18.76)	
2004–2007	2,482 (23.72)	2,463 (23.54)	
2008–2011	2,887 (27.59)	2,863 (27.36)	
2012–2015	3,137 (29.98)	3,174 (30.34)	
Marital status, n (%)			0.906
Unmarried	3,357 (32.08)	3,349 (32.01)	
Married	7,106 (67.92)	7,114 (67.99)	
Race, n (%)			0.658
Non-white	2,424 (23.17)	2,397 (22.91)	
White	8,039 (76.83)	8,066 (77.09)	
Chemotherapy, n (%)			0.862
No	3,666 (35.04)	3,678 (35.15)	
Yes	6,797 (64.96)	6,785 (64.85)	
Radiotherapy, n (%)			>0.99
No	8,625 (82.43)	8,625 (82.43)	
Yes	1,838 (17.57)	1,838 (17.57)	

**Table S5** Baseline characteristics of multiple myeloma survivors with and without chemotherapy after propensity score matching

Characteristic	No/unknown chemotherapy (n=9,993)	Chemotherapy (n=9,993)	P value
Age at diagnosis (years), mean $\pm$ standard deviation	66.70 $\pm$ 10.76	66.59 $\pm$ 10.46	0.488
Gender, n (%)			0.650
Female	4,571 (45.74)	4,603 (46.06)	
Male	5,422 (54.26)	5,390 (53.94)	
Year, n (%)			0.082
2000–2003	1,764 (17.65)	1,755 (17.56)	
2004–2007	2,211 (22.13)	2,296 (22.98)	
2008–2011	2,698 (27.00)	2,780 (27.82)	
2012–2015	3,320 (33.22)	3,162 (31.64)	
Marital status, n (%)			0.272
Unmarried	3,462 (34.64)	3,536 (35.38)	
Married	6,531 (65.36)	6,457 (64.62)	
Race, n (%)			>0.99
Non-white	2,541 (25.43)	2,643 (26.45)	
White	7,452 (74.57)	7,350 (73.55)	
Income, n (%)			
<\$75,000	6,674 (66.79)	6,659 (66.64)	0.822
$\geq$ \$75,000	3,319 (33.21)	3,334 (33.36)	
Radiotherapy, n (%)			
No	8,817 (88.23)	8,796 (88.02)	0.646
Yes	1,176 (11.77)	1,197 (11.98)	

**Table S6** Baseline characteristics of multiple myeloma survivors with and without different radiotherapy after propensity score matching

Characteristic	No/unknown radiotherapy (n=5,647)	Radiotherapy (n=5,647)	P value
Age at diagnosis (years), mean ± standard deviation	63.13±10.92	62.78±10.49	0.087
Gender, n (%)			0.716
Female	2,320 (41.08)	2,301 (40.75)	
Male	3,327 (58.92)	3,346 (59.25)	
Year, n (%)			0.210
2000–2003	1,116 (19.76)	1,038 (18.38)	
2004–2007	1,279 (22.65)	1,306 (23.13)	
2008–2011	1,549 (27.43)	1,530 (27.09)	
2012–2015	1,703 (30.16)	1,773 (31.40)	
Marital status, n (%)			0.746
Unmarried	1,771 (31.36)	1,787 (31.65)	
Married	3,876 (68.64)	3,860 (68.35)	
Race, n (%)			0.104
Non-white	1,228 (21.75)	1,300 (23.02)	
White	4,419 (78.25)	4,347 (76.98)	
Income, n (%)			0.004
<\$75,000	3,687 (65.29)	3,833 (67.88)	
≥\$75,000	1,960 (34.71)	1,814 (32.12)	
Chemotherapy, n (%)			0.532
No	1,164 (20.61)	1,191 (21.09)	
Yes	4,483 (79.39)	4,456 (78.91)	