

Appendix 1 Epidemiology and clinicopathologic features of breast cancer in China and the United States

There were 9,462 cases of Chinese in the SEER database, including 9,417 cases of female breast cancer (99.52%) and 45 male cases (0.48%). The peak incident age was 45–54 years old in 1999–2014 for Chinese in the SEER database. The young breast cancer (<35 years old) of Chinese in the SEER database were fewer than those in China (6.56% *vs.* 2.50%), but more than the in the US (2.50% *vs.* 1.97%). The elderly breast cancer (≥65 years old) of Chinese in the SEER database were more than those in China (30.72% *vs.* 9.99%), but fewer than those in the US (30.72% *vs.* 40.88%). Patients with stage I of Chinese in the SEER database were more (24.93% *vs.* 48.84%) than those in China, but were the same with the US (50.15% *vs.* 48.84%).

Table S1 Comparison of clinicopathological features of female breast cancer patients in China, the Chinese population in the United States and the United States

Characteristics	China, n (%)	The Chinese population in the United States, n (%)	The United States, n (%)	χ^2	P value
Total	18,685 (100.0)	9,417 (100.0)	757,357 (100.0)		
Age at diagnosis*				13,119.95	<0.001
<35 years	1,214 (6.56)	235 (2.50)	14,931 (1.97)		
35–44 years	4,912 (26.56)	1,397 (14.83)	76,338 (10.01)		
45–54 years	6,586 (35.62)	2,753 (29.23)	167,286 (21.93)		
55–64 years	3,915 (21.17)	2,139 (22.71)	186,892 (24.50)		
65–74 years	1,470 (7.85)	1,571 (16.68)	161,051 (21.11)		
≥75 years	395 (2.14)	1,322 (14.04)	150,859 (19.77)		
Pathological type				1,765.08	<0.001
Invasive ductal	16,966 (90.8)	7,950 (84.42)	622,843 (82.24)		
Invasive lobular	488 (2.61)	438 (4.65)	75,807 (10.01)		
Invasive mucinous	364 (1.95)	343 (3.64)	19,474 (2.57)		
Invasive medullary	183 (0.98)	27 (0.29)	3,607 (0.48)		
Others	684 (3.66)	659 (7.00)	35,626 (4.7)		
Stage *				1,797.45	<0.001
I	1,824 (24.93)	4,441 (50.15)	349,194 (48.84)		
II	3,392 (46.36)	3,145 (35.51)	242,450 (33.91)		
III	1,536 (21.00)	958 (10.82)	88,301 (12.35)		
IV	564 (7.71)	312 (3.52)	34,977 (4.89)		
Histological grade*				3,095.73	<0.001
Grade I	844 (6.15)	1,725 (20.40)	150,336 (21.63)		
Grade II	8,677 (63.21)	3,765 (44.52)	291,284 (41.92)		
Grade III	4,207 (30.64)	2,967 (35.08)	253,263 (36.45)		
Surgery				4,653.58	<0.001
Yes	14,715 (78.75)	8,818 (93.64)	699,536 (92.37)		
No	3,970 (21.25)	599 (6.36)	57,821 (7.63)		
Chemotherapy				4,327.62	<0.001
Yes	2,957 (15.83)	3,840 (40.78)	299,552 (39.55)		
No	15,728 (84.17)	5,577(59.22)	457,805 (60.45)		
Radiotherapy				11,825.18	<0.001
Yes	837 (4.48)	4,244(45.07)	336,100 (44.38)		
No	17,848 (95.52)	5,173 (54.93)	421,257 (55.62)		
location				8,846.17	<0.001
Upper	9,674 (51.85)	4,199 (44.59)	334,709 (44.19)		
Central	3,741 (20.05)	576 (6.12)	43,678 (5.77)		
Lower	2,474 (13.26)	1,145 (12.16)	93,550 (12.35)		
Others	2,796 (14.99)	3,497 (37.13)	285,420 (37.69)		

*, some information was unknown.