

**Appendix file 6: The differences in the distribution of the associated factors
for bone metastatic patients diagnosed 2010-2016.**

Factors	Category A N (%)	Category B N (%)	Category C N (%)	Chi-square/ Z value	P-value
Age (years)				11479.41	<0.001
≤65	188771(44.6)	655595(50.8) ^a	424872(54.8) ^{ab}		
>65	234302(55.4)	634455(49.2) ^a	349889(45.2) ^{ab}		
Gender				12267.17	<0.001
Male	195259(46.2)	681193(52.8) ^a	353197(45.6) ^{ab}		
Female	227814(53.8)	608857(47.2) ^a	421564(54.4) ^{ab}		
Race				6918.44	<0.001
White	344242(81.8)	1015801(79.9) ^a	642437(84.3) ^{ab}		
Black	44302(10.5)	156068(12.3) ^a	68779(9.0) ^{ab}		
Asian or pacific islander	30030(7.1)	92363(7.3) ^a	46125(6.1) ^{ab}		
American Indian	2400(0.6)	7628(0.6) ^a	4933(0.6) ^{ab}		
Married status				11118.15	<0.001
None married	184728(46.1)	453372(38.4) ^a	310097(44.7) ^{ab}		
Married	216131(53.9)	728752(61.6) ^a	384274(55.3) ^{ab}		
Insurance				5339.05	<0.001
Uninsured	10530(2.5)	24724(2.0) ^a	22887(3.2) ^{ab}		
Medical aid	55989(13.5)	134772(11.0) ^a	92605(12.8) ^{ab}		
Insured	347062(83.9)	1067344(87.0) ^a	607854(84.0) ^{ab}		
Differentiated Grade				7726.01	<0.001
Well differentiated	36490(20.0)	179185(17.3) ^a	83317(18.6) ^{ab}		
Moderate differentiated	58434(32.0)	425480(41.1) ^a	224164(50.1) ^{ab}		
Poor differentiated	76864(42.1)	363961(35.2) ^a	102229(22.8) ^{ab}		
Undifferentiated	10676(5.9)	65866(6.4) ^a	38043(8.5) ^{ab}		
T stage				74638.36	<0.001
T1	129383(33.8)	607537(51.5) ^a	304902(46.4) ^{ab}		
T2	102109(26.7)	358360(30.4) ^a	108843(16.6) ^{ab}		
T3	79058(20.7)	152922(13.0) ^a	173702(26.5) ^{ab}		
T4	72066(18.8)	61437(5.2) ^a	69157(10.5) ^{ab}		
Lymphatic metastasis				181162.98	<0.001
N0	204700(51.2)	975989(80.8) ^a	503001(73.2) ^{ab}		
N1	47633(11.9)	175864(14.6) ^a	109209(15.9) ^{ab}		
N2	107708(26.9)	35895(3.0) ^a	68278(9.9) ^{ab}		
N3	40048(10.0)	19798(1.6) ^a	6577(1.0) ^{ab}		
Brain metastasis				133620.64	<0.001
No	382251(91.0)	1280980(99.5) ^a	769058(99.4) ^{ab}		
Yes	37966(9.0)	5854(0.5) ^a	4367(0.6) ^{ab}		
Liver metastasis				13436.48	<0.001
No	381416(90.8)	1228960(95.5) ^a	723388(93.6) ^{ab}		
Yes	38811(9.2)	57775(4.5) ^a	49844(6.4) ^{ab}		
Lung metastasis				50420.14	<0.001

No	370318(88.6)	1243993(96.8) ^a	744670(96.4) ^{ab}
Yes	47578(11.4)	41166(3.2) ^a	27474(3.6) ^{ab}

Note: a: reached significant level compared with Category A; b: reached significant level compared with Category B