

Table S1 Allele and genotype frequencies of single SNP association analysis in both stages

SNP ID	Allele Freq (%)		<i>P</i> -value	Genotype Freq (%)			<i>P</i> -value	HWE <i>P</i> -value
The Discovery Stage								
rs2165408	G	A		GG	GA	AA		
OS	416(73.24)	152(26.76)	0.492190	153(53.87)	110(38.73)	21(7.39)	0.787392	0.841
CTR	1465(74.67)	497(25.33)		548(55.86)	369(37.61)	64(6.52)		0.859
rs7871477	T	G		TT	TG	GG		
OS	404(71.13)	164(28.87)	0.592003	143(50.35)	118(41.55)	23(8.1)	0.857740	0.845
CTR	1418(72.27)	544(27.73)		512(52.19)	394(40.16)	75(7.65)		0.947
rs7867176	A	G		AA	AG	GG		
OS	386(67.96)	182(32.04)	0.902908	133(46.83)	120(42.25)	31(10.92)	0.857928	0.616
CTR	1328(67.69)	634(32.31)		448(45.67)	432(44.04)	101(10.3)		0.834
rs1544195	G	A		GG	GA	AA		
OS	518(91.2)	50(8.8)	0.487527	237(83.45)	44(15.49)	3(1.06)	0.547779	0.555
CTR	1807(92.1)	155(7.9)		833(84.91)	141(14.37)	7(0.71)		0.700
rs7874112	A	G		AA	AG	GG		
OS	411(72.36)	157(27.64)	0.390609	148(52.11)	115(40.49)	21(7.39)	0.684789	0.836
CTR	1455(74.16)	507(25.84)		539(54.94)	377(38.43)	65(6.63)		0.933
rs7850937	A	G		AA	AG	GG		
OS	313(55.11)	255(44.89)	0.588963	88(30.99)	137(48.24)	59(20.77)	0.759184	0.673
CTR	1056(53.82)	906(46.18)		282(28.75)	492(50.15)	207(21.1)		0.779
rs10965163	C	T		CC	CT	TT		
OS	529(93.13)	39(6.87)	0.234158	247(86.97)	35(12.32)	2(0.7)	0.220392	0.540
CTR	1797(91.59)	165(8.41)		824(84)	149(15.19)	8(0.82)		0.660
rs3802393	G	A		GG	GA	AA		
OS	441(77.64)	127(22.36)	0.474922	173(60.92)	95(33.45)	16(5.63)	0.709715	0.538
CTR	1495(76.2)	467(23.8)		571(58.21)	353(35.98)	57(5.81)		0.802
rs7039105	T	G		TT	TG	GG		
OS	412(72.54)	156(27.46)	0.498838	152(53.52)	108(38.03)	24(8.45)	0.679977	0.443
CTR	1451(73.96)	511(26.04)		538(54.84)	375(38.23)	68(6.93)		0.809
rs4977734	C	A		CC	CA	AA		
OS	301(52.99)	267(47.01)	0.818345	78(27.46)	145(51.06)	61(21.48)	0.926271	0.676
CTR	1029(52.45)	933(47.55)		269(27.42)	491(50.05)	221(22.53)		0.915
rs7047648	G	A		GG	GA	AA		
OS	337(59.33)	231(40.67)	0.444324	98(34.51)	141(49.65)	45(15.85)	0.688779	0.628
CTR	1199(61.11)	763(38.89)		366(37.31)	467(47.6)	148(15.09)		0.961
rs7047899	C	T		CC	CT	TT		
OS	458(80.63)	110(19.37)	0.228214	186(65.49)	86(30.28)	12(4.23)	0.449693	0.608
CTR	1536(78.29)	426(21.71)		602(61.37)	332(33.84)	47(4.79)		0.888
rs4129861	C	T		CC	CT	TT		
OS	526(92.61)	42(7.39)	0.394336	243(85.56)	40(14.08)	1(0.35)	0.471236	0.632
CTR	1795(91.49)	167(8.51)		822(83.79)	151(15.39)	8(0.82)		0.714

rs10117507	G	A		GG	GA	AA		
OS	309(54.4)	259(45.6)	0.468752	82(28.87)	145(51.06)	57(20.07)	0.731992	0.624
CTR	1101(56.12)	861(43.88)		307(31.29)	487(49.64)	187(19.06)		0.803
rs4977738	A	G		AA	AG	GG		
OS	387(68.13)	181(31.87)	0.701542	133(46.83)	121(42.61)	30(10.56)	0.908389	0.751
CTR	1320(67.28)	642(32.72)		445(45.36)	430(43.83)	106(10.81)		0.889
The Validation Stage								
rs2165408	G	A		GG	GA	AA		
OS	158(73.15)	58(26.85)	0.591708	59(54.63)	40(37.04)	9(8.33)	0.816402	0.552
CTR	894(74.87)	300(25.13)		337(56.45)	220(36.85)	40(6.7)		0.615
rs7871477	T	G		TT	TG	GG		
OS	155(71.76)	61(28.24)	0.776309	56(51.85)	43(39.81)	9(8.33)	0.938303	0.854
CTR	868(72.7)	326(27.3)		315(52.76)	238(39.87)	44(7.37)		0.917
rs7867176	A	G		AA	AG	GG		
OS	148(68.52)	68(31.48)	0.843943	52(48.15)	44(40.74)	12(11.11)	0.891433	0.563
CTR	810(67.84)	384(32.16)		276(46.23)	258(43.22)	63(10.55)		0.814
rs1544195	G	A		GG	GA	AA		
OS	197(91.2)	19(8.8)	0.772918	90(83.33)	17(15.74)	1(0.93)	0.809553	0.844
CTR	1096(91.79)	98(8.21)		503(84.25)	90(15.08)	4(0.67)		0.991
rs7874112	A	G		AA	AG	GG		
OS	158(73.15)	58(26.85)	0.647643	57(52.78)	44(40.74)	7(6.48)	0.876362	0.700
CTR	891(74.62)	303(25.38)		331(55.44)	229(38.36)	37(6.2)		0.755

OS: osteosarcoma; CTR: control.