

## Supplementary Tables

**Table 1.** Characteristics of the patients with osteosarcoma

Characteristics	
<b>Age, (year)</b>	
<b>Mean ± SD</b>	17.2 ± 5.6
<b>Range</b>	9-26
<b>Sex</b>	
<b>Male</b>	6 (46.1)
<b>Female</b>	7 (53.9)
<b>Ethnicity</b>	
<b>Han</b>	9 (69.2)
<b>Minority</b>	4 (30.8)
<b>Smoking status</b>	
<b>No</b>	12 (92.3)
<b>Yes</b>	1 (7.7)
<b>Drinking status</b>	
<b>No</b>	11 (84.6)
<b>Yes</b>	2 (15.4)
<b>Tumour location</b>	
<b>Femur, n (%)</b>	6 (46.1)
<b>Tibia, n (%)</b>	3 (23.1)
<b>Humeral bone, n (%)</b>	4 (30.8)
<b>Enneking stage</b>	
<b>I, n (%)</b>	4 (30.8)
<b>II, n (%)</b>	9 (69.2)
<b>Tumour size</b>	
<b>≤5 cm, n (%)</b>	4 (30.8)
<b>&gt;5 cm, n (%)</b>	9 (69.2)
<b>Pathological subtype</b>	
<b>Osteoblastic type</b>	7 (53.8)
<b>Chondroblastic type</b>	3 (23.1)
<b>Fibroblastic type</b>	2 (15.4)
<b>Telangiectatic type</b>	1 (7.7)

**Table 2.** Primers and DNA sequences used in this study

Primer name	Primer Sequence (5'-3')
<b>GAPDH-hF</b>	TGACAACCTTTGGTATCGTGGAAGG
<b>GAPDH-hR</b>	AGGCAGGGATGATGTTCTGGAGAG
<b>circ_32279-hF</b>	TTGCAGTGTATGTTGTCGGGTA
<b>circ_32279-hR</b>	TGAGTCACAAGCAACATCTGA
<b>circ_24831-hF</b>	CCAGCCTGTCTACATCAA
<b>circ_24831-hR</b>	TAAATCCGTGCTTCTCC
<b>circ_2137-hF</b>	TAGACTAATAAGTGACAGGGTT
<b>circ_2137-hR</b>	TGTTGGAAGTGAGGGT
<b>circ_6798-hF</b>	CAGGGACGGCTTGATGG
<b>circ_6798-hR</b>	GCGAAGACAAAGTCGAGGG
<b>circ_20403-hF</b>	CTTACCCAGAAATACCCAC
<b>circ_20403-hR</b>	TTTCCTGGATAGACCTGTTG

**Table 3.** The ten circRNAs with the largest difference in expression (upregulation, downregulation)

circ_name	location	geneName	logFC	logCPM	F	P value	FDR
<b>circ_32279</b>	chr7:32672154-32678977:-	DPY19L1P1	-8.8794	7.865574	32.37816	1.28E-08	5.88E-05
<b>circ_24831</b>	chr6:149208121-149285699:+	UST	-8.64624	6.850988	20.56511	5.78E-06	0.010905
<b>circ_21841</b>	chr12:50824277-50835426:+	LARP4	-8.45639	6.593937	16.61752	4.58E-05	0.029042
<b>circ_21890</b>	chr12:66603235-66611015:+	IRAK3	-8.42778	6.744892	18.7573	1.49E-05	0.015392
<b>circ_22692</b>	chr17:48814320-48819092:+	LUC7L3	-8.23093	6.407996	14.53618	0.000138	0.059889
<b>circ_8523</b>	chr14:71880664-71996087:+	SIPA1L1	8.451599	6.765993	18.73325	1.51E-05	0.015392
<b>circ_2138</b>	chr13:64576517-64608670:-	AK057471	8.512857	6.795144	19.34833	1.09E-05	0.012547
<b>circ_2137</b>	chr13:64564228-64608670:-	AK057471	8.579295	6.934739	20.5156	5.93E-06	0.010905
<b>circ_6798</b>	chr16:29917108-29917448:+	ASPHD1	9.122766	8.217934	40.84021	1.67E-10	1.54E-06
<b>circ_20403</b>	chr2:106774513-106782539:-	UXS1	10.33314	8.42944	48.26512	3.79E-12	6.96E-08

**Table 4.** The miRNA frequency

miRNA	Frequency
hsa-miR-4691-5p	24
hsa-miR-4731-5p	23
hsa-miR-3692-5p	22
hsa-miR-6764-5p	22
hsa-miR-8089	22
hsa-miR-6851-5p	21
hsa-miR-4685-5p	20
hsa-miR-762	20
hsa-miR-3064-5p	19
hsa-miR-5193	19

**Table 5.** The circRNA information in the network diagram

circ_name	location	Host_geneName	isoformName	Regulate
circ_2137	chr13:64564228-64608670:-	AK057471	uc001vii.1	UP
circ_23401	chr18:6263945-6312055:-	L3MBTL4	ENST00000400105	DOWN
circ_2138	chr13:64576517-64608670:-	AK057471	uc001vii.1	UP
circ_20486	chr2:122260742-122287901:-	CLASP1	uc010yyy.2	UP
circ_2868	chr12:70193988-70195501:+	RAB3IP	ENST00000247833	DOWN
circ_8917	chr19:2213537-2214595:+	DOT1L	ENST00000398665	UP
circ_18566	chr4:183245098-183268082:+	TENM3	ENST00000513201	UP
circ_32537	chr1:17668437-17668897:+	PADI4	uc009vpc.2	DOWN
circ_24851	chr6:154520801-154535410:-	IPCEF1	NM_001130699	DOWN
circ_16365	chr6:145148746-145157074:+	UTRN	NM_007124	DOWN
circ_3517	chr11:6962801-6977013:+	ZNF215	uc001mez.1	DOWN
circ_10351	chr7:23381682-23391205:-	IGF2BP3	NM_006547	UP
circ_15993	chr6:47251673-47254331:-	TNFRSF21	NM_014452	UP
circ_5670	chr17:34881058-34884033:-	MYO19	ENST00000431794	UP
circ_23338	chr19:8619360-8619627:-	MYO1F	NM_012335	DOWN
circ_15000	chr9:88233897-88248289:-	AGTPBP1	uc004aod.4	DOWN