The effect of smoking behavior on alveolar bone marrow mesenchymal stem cells of clinical implant patient

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Supplementary Table 1. Primer Sequences.

Gene	Forward	Reverse
Runx2	5'-CCCGTGGCCTTCAAGGT-3'	5'-CGTTACCCGCCATGACAGTA-3'
Col-I	5'-CCAGAAGAACTGGTACATCAGCAA-3'	5'-CGCCATACTCGAACTGGAATC-3'
ALP	5'-TAAGGACATCGCCTACCAGCTC-3'	5'-TCTTCCAGGTGTCAACGAGGT-3'
LPL	5'-AGGACCCCTGAAGACAC-3'	5'-GGCACCCAACTCTCATA-3'
PPAR-γ	5'-CAAGACAACCTGCTACAAGC-3'	5'-TCCTTGTAGATCTCCTGCAG-3'
β-ACTIN	5'-TGGCACCCAGCACAATGAA-3'	5'-CTAAGTCATAGTCCGCCTAGAGCA-3'

Runx2: Runt-related transcription factor 2; Col-I: collagen type I; ALP: alkaline phosphatase; LPL: lipoprotein lipase; PPAR-γ: Peroxisome proliferator-activated receptor.

Primer sequences of osteogenesis related gene including Runx2, Col- I and ALP were used for RT-PCR to testy osteogenic differentiation. And primer sequences of adipogenesis related gene including LPL and PPAR-γ were used for RT-PCR to testy adipogenic differentiation.

Supplementary Table 2. Conditions of donators of hABMMSCs.

Patients	Smoking amount (cigarettes/ day)	Smoking history (year)	Bone type	Bone position

N1	—	—	Ⅲ	47
N2	—	—	Ⅲ	46
N3	—	—	Ⅱ	46
S1	20	>40	Ⅲ	36
S2	20	10-20	Ⅲ	37
S3	10	10-20	Ⅱ	46

hABMMSCs: human alveolar bone marrow mesenchymal stem cells; N1: non-smoking patient NO.1; N2: non-smoking patient NO.2; N3: non-smoking patient NO.3; N: the mean value of non-smoking patient; S1: smoking patient NO.1; S2: smoking patient NO.2; S3: smoking patient NO.3; S: the mean value of smoking patient.

Individual information including smoking and bone situation were collected from both nonsmoking and smoking patient. Compared with nonsmoking patient, the smoking amount (more than 10 cigarettes/ day) and history (longer than 10 years) of smoking patient reached the heavy smoking level.