

Supplementary material

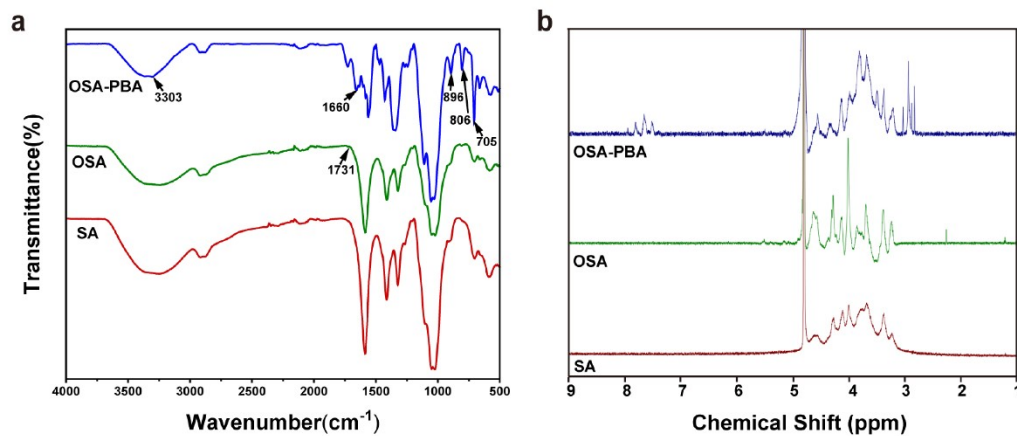


Figure S1. Design and chemical structure of SA, OSA and OSA-PBA. (a) The FTIR spectra of SA, OSA and OSA-PBA. (b) The ¹H NMR spectra of SA, OSA and OSA-PBA.

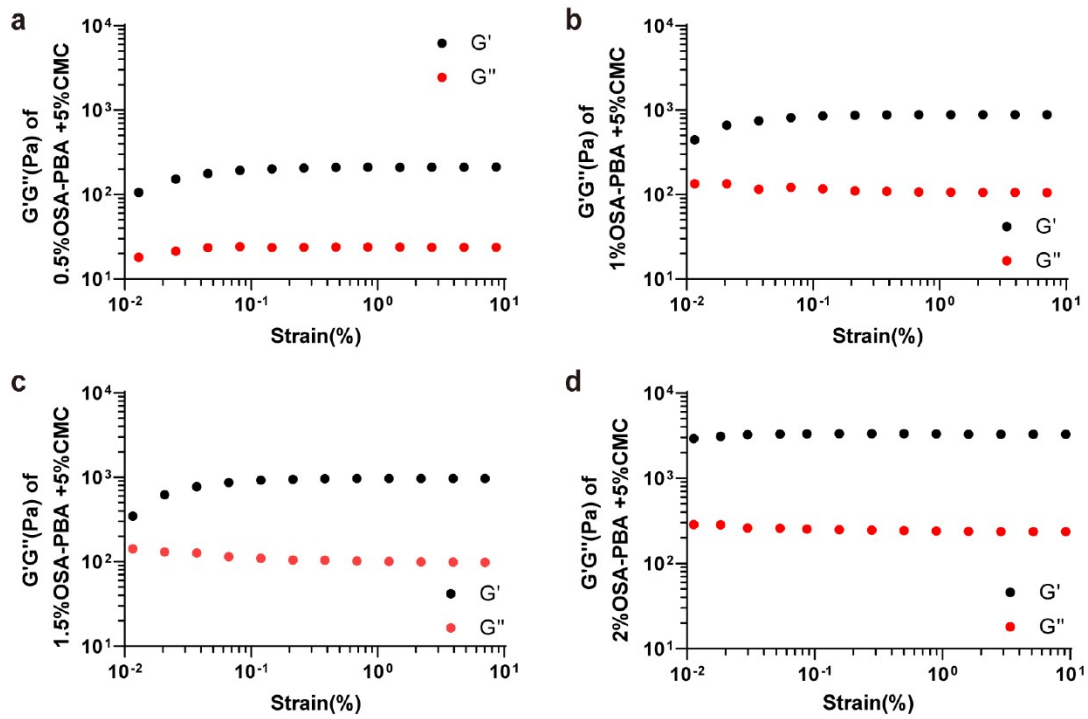


Figure S2. Variations of storage and loss moduli (G' and G'') versus strain (0.01-10%) of the hydrogels formed with different concentration of OSA-PBA at 0.5% (a), 1% (b), 1.5% (c) and 2% (d).

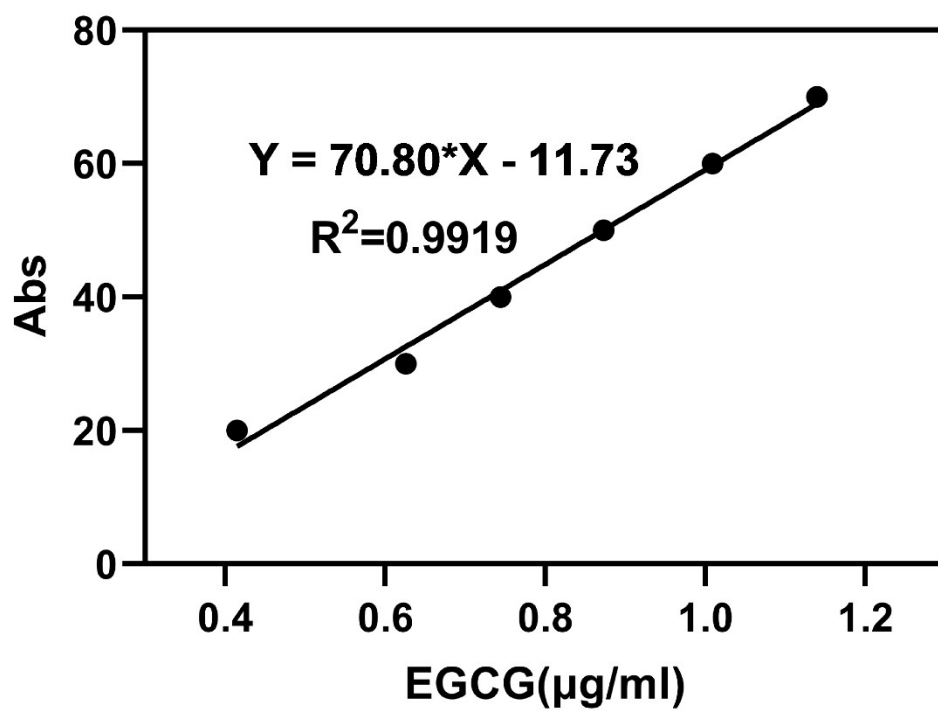


Figure S3. Standard curves of EGCG release *in vitro*.

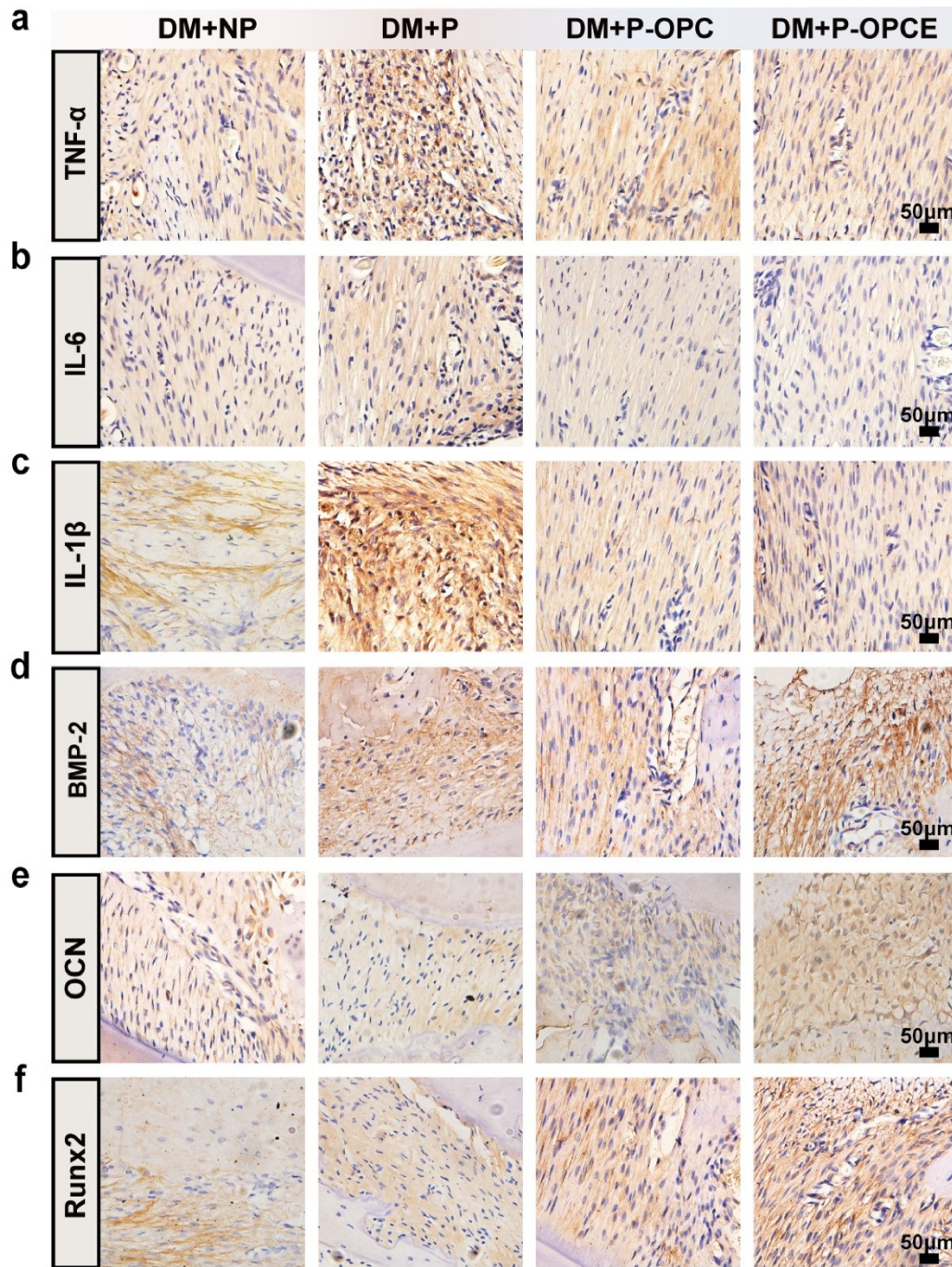


Figure S4. The immunohistochemical analysis of TNF- α (a), IL-6 (b), IL-1 β (c), BMP-2 (d), OCN (e) and Runx2 (f) positive cells around maxillary second molars after treatment. Scale bar=50 μ m.

Table S1. Primer sequence of related genes

Gene	Primer	Sequence (5' to 3')
GAPDH (mouse)	Forward	TGAGGTGACCGCATCTTCTTG
GAPDH (mouse)	Reverse	TGGTAACCAGGCGTCCGATA
GAPDH (rat)	Forward	AGGTCGGTGTGAACGGATTG
GAPDH (rat)	Reverse	GGGGTCGTTGATGGCAACA
IL-6	Forward	GAGGATACCACTCCCAACAGACC
IL-6	Reverse	AAGTGCATCATCGTTGTTCATACA
TNF-α	Forward	AGGGTCTGGGCCATAGAACT
TNF-α	Reverse	CCACCACGCTCTTCTGTCTAC
iNOS	Forward	GTTCTCAGCCCAACAATAACAAGA
iNOS	Reverse	GTGGACGGGTCGATGTCAC
IL-1β	Forward	TGGTGTGTGACGTTCCC
IL-1β	Reverse	TGTCCATTGAGGTGGAGAG
CD86	Forward	CTTACGGAAGCACCCACGAT
CD86	Reverse	CGGCAGATATGCAGTCCCAT
CD206	Forward	AGACGAAATCCCTGCTACTG
CD206	Reverse	CACCCATTCGAAGGCATTC
Arg	Forward	GGAATCTGCATGGGCAACCTGTGT
Arg	Reverse	AGGGTCTACGTCTCGCAAGCCA
ALP	Forward	CGTCTCCATGGTGGATTATGCT
ALP	Reverse	CGTCTCCATGGTGGATTATGCT
BMP2	Forward	ACCGTGCTCAGCTTCCATCAC
BMP2	Reverse	CTATTTCCCAAAGCTTCCTGCATTT
Runx2	Forward	CAGTTCCCAAGCATTTCATCC
Runx2	Reverse	TCAATATGGTCGCCAAA CAG
TRAP	Forward	CAGCAGCCAAGGAGGACTAC
TRAP	Reverse	ACATAGCCCACACCGTTCTC