

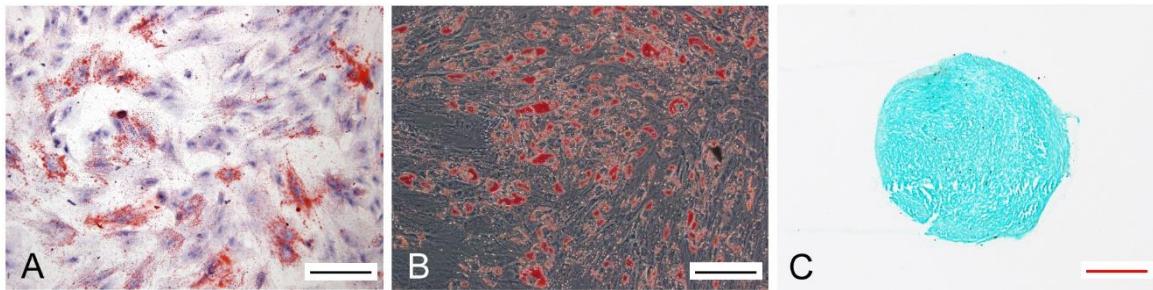
1      **Supplementary Materials**

2           Supplementary Table 1. Primer sequences used in RT-qPCR.

| Primer name     | Primer sequence               |
|-----------------|-------------------------------|
| IL-1 $\beta$ F  | 5'-AATGCCACCTTTGACAGTGATG-3'  |
| IL-1 $\beta$ R  | 5'-ATGTGCTGCTGCGAGATTG-3'     |
| IL-6 F          | 5'-CCCTCACACTCAGATCATCTTCT-3' |
| IL-6 R          | 5'-GCTACGACGTGGGCTACAG-3'     |
| IL-10 F         | 5'-GCTCTTACTGACTGGCATGAG-3'   |
| IL-10 R         | 5'-CGCAGCTCTAGGAGCATGTG-3'    |
| TNF- $\alpha$ F | 5'-CGGGCAGGTCTACTTGGAG-3'     |
| TNF- $\alpha$ R | 5'-ACCCTGAGCCATAATCCCCT-3'    |
| GAPDH F         | 5'-GGACACTGAGCAAGAGAGGC-3'    |
| GAPDH R         | 5'-TTATGGGGTCTGGGATGGA-3'     |

3

4

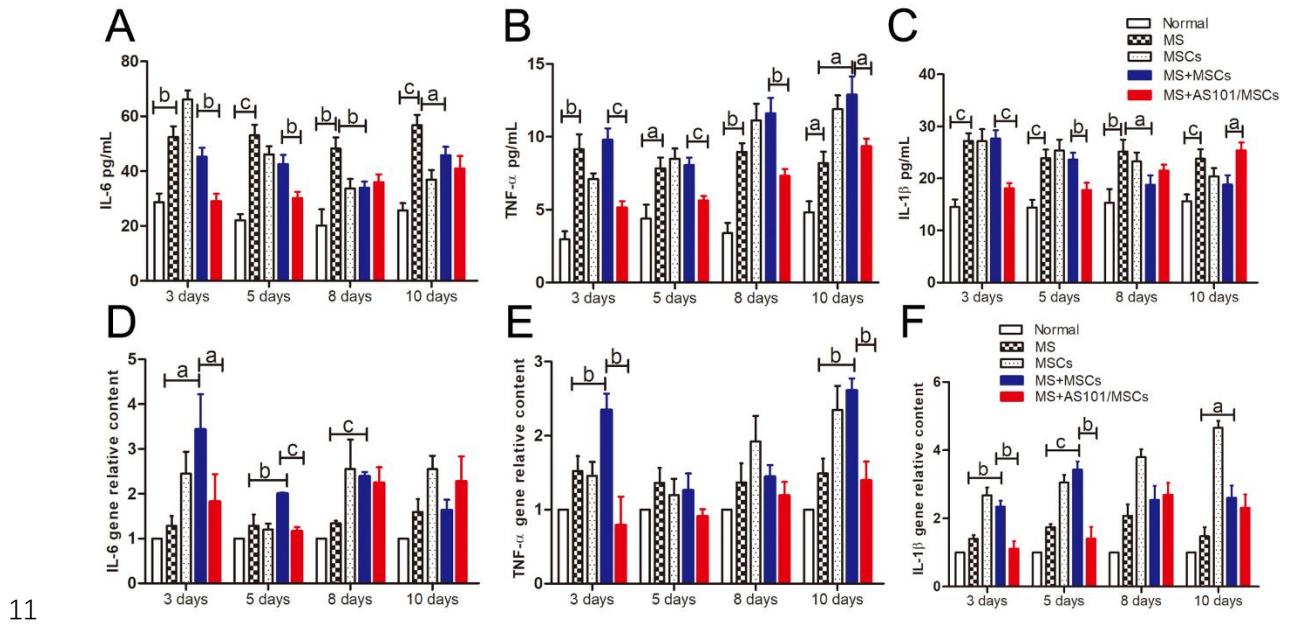


5      *Supplementary 2. Supplementary Figure 1: pleiotropic differentiation ability of primary UC-  
6      MSCs. A: Alizarin red. B: Oil Red O staining. C: Alcian blue stain. (black bar, 50  $\mu$ m; red bar,  
7      100 $\mu$ m).*

8

9

10



11

12     Supplementary 3. Supplementary Figure 2: levels of inflammatory cytokines in the three groups.

13     (A-C) Levels of IL-1 $\beta$ , IL-6, and TNF- $\alpha$  in the peripheral blood of the three groups ( $^aP < 0.05$ ;

14      $^bP < 0.01$ ;  $^cP < 0.001$ ; n = 8). (D-F) Relative *Il1 $\beta$* , *Il6*, and *Tnfa* mRNA levels (normalized to

15     mouse *Gapdh*) in the petrous part of temporal bone tissues of mice at four time periods ( $^aP <$

16     0.05;  $^bP < 0.01$ ;  $^cP < 0.001$ ; n = 3).

17