



Figure S1 Characterization of BMSCs and body weight of experimental mice.

(A) BMSCs were observed under a microscope (scale bar = 200 µm). (B) Alizarin red staining was performed (scale bar = 100 µm). (C) Alcian blue staining solution for cartilage (scale bar = 100 µm). (D) Oil red O solution was used for staining (scale bar = 100 µm). (E) Flow cytometry was employed to assess the expression of surface markers on BMSCs, including positive markers CD29, CD105, CD73, CD90, and negative markers CD34, CD45. Blue histograms: BMSCs stained with control antibody; Red histograms: BMSCs stained with antibodies against cell surface antigens. Percentiles indicate the average of each antigen. (F) body weight of experimental mice. 12 weeks: Body weights of 8-week-old mice after 4 weeks of dexamethasone modeling in six different groups. 16 weeks: Body weights of the same six groups of mice after 4 weeks of various experimental conditions. The data are expressed as the mean \pm SD (n = 3); ***p < 0.001.