

Supplementary Information

Low-intensity pulsed ultrasound/nanomechanical force
generators enhance osteogenesis of bone marrow
mesenchymal stem cells through microfilaments
and transient receptor potential melastatin 7 activation

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Supplementary methods

Cell proliferation assay

The cells were treated for 3 days and then harvested by trypsinization (Beyotime, Shanghai, China). The cell proliferation assay was performed using a BeyoClick™ EdU Cell Proliferation Kit with Alexa Fluor 488 (Beyotime), according to the kit manual. After staining, the cells were analyzed by fluorescence-activated cell sorting (FACS, CytoFLEX Flow Cytometer, Becton Coulter, Brea, CA).

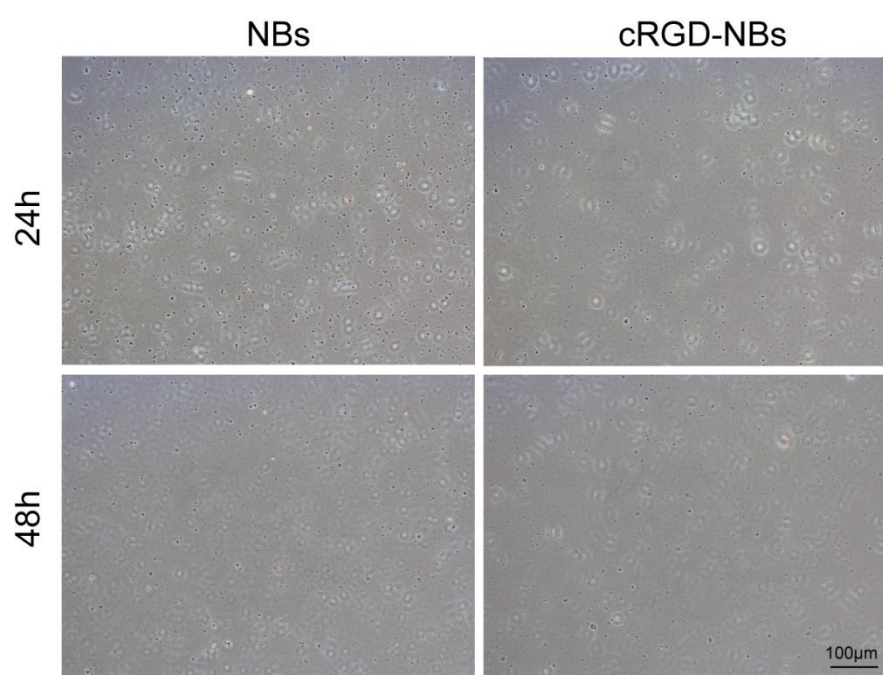


Fig. S1 Light microscopy images were taken at 24 h and 48 h after the preparation of the nanobubbles.

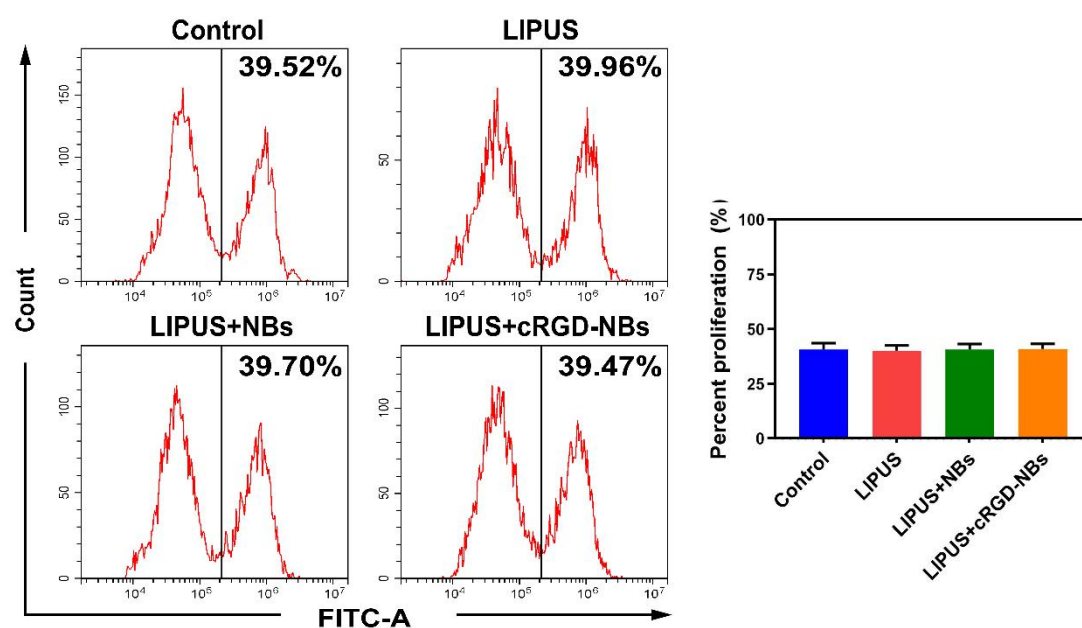


Fig. S2 Flow cytometric detection of cell proliferation in each group after 3 days of treatment and its quantitative analysis.