

Figure S1. The relationship between TUG1 and miR-26a, TUG1 and HMGB1, or miR-26a and HMGB1 in NP tissues of LVF group.

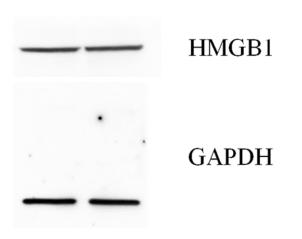


Figure S2. Protein expression of HMGB1 protein in NP tissues.

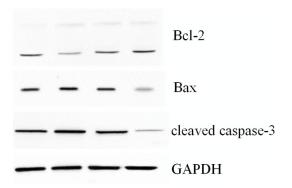
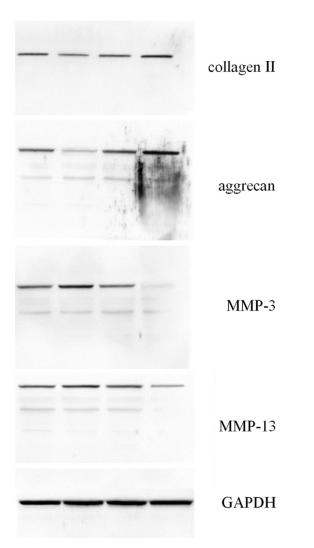


Figure S3. Apoptosis-related proteins Bcl-2, Bax and cleaved caspase-3 expression were detected by western blot assay in human degenerated intervertebral disc NPCs transfected for 48 h.



**Figure S4.** ECM degradation-related proteins collagen II, aggrecan, MMP-3 and MMP-13 expression were detected by western blot assay in human degenerated intervertebral disc NPCs transfected for 48 h.

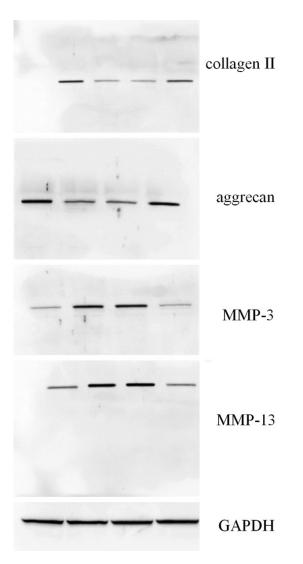


Figure S5. The expression of collagenII, aggrecan, MMP-3 and MMP-13 were determined in treated human degenerated intervertebral disc NPCs by western blot assay.

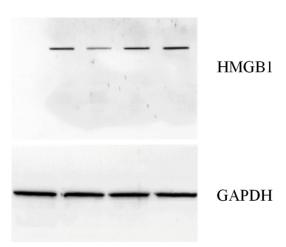


Figure S6. The expression of HMGB1 protein was examined in human degenerated intervertebral disc NPCs transfected with miR-26a mimic or miR-26a inhibitor.

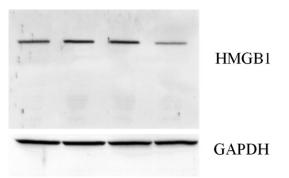


Figure S7. The expression of HMGB1 protein in NPCs transfected with pcDNA, pcDNA-TUG1, pcDNA-TUG1+miR-NC and pcDNA-TUG1+miR-26a mimic.

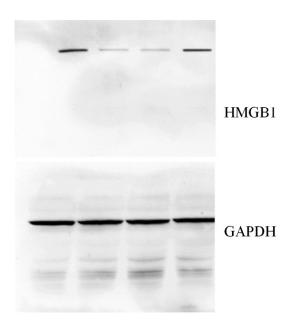


Figure S8. The expression of HMGB1 protein in NPCs transfected with si-NC, si-TUG1, si-TUG1+inhibitor-NC, si-TUG1+miR-26a inhibitor.

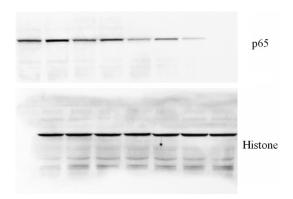


Figure S9. The expression of NF-B p65 in nuclear was analyzed by western blot.