

Table S1 siRNA sequences used in this study

SiRNA	Sequences
siAR 1	Sense: 5'-GGCAAGAGCACUGAAGAUAdTdT-3' Antisense: 5'-UAUCUUCAGUGCUCUUGCCdTdT-3'
siAR 2	Sense: 5'-CUGCUACUCUUCAGCAUUAdTdT-3' Antisense: 5'-UAAUGCUGAAGAGUAGCAGdTdT-3'
siControl	Sense: 5'-UUCUCCGAACGUGUCACGdTdT-3' Antisense: 5'-ACGUGACACGUUCGGAGAAdTdT-3'

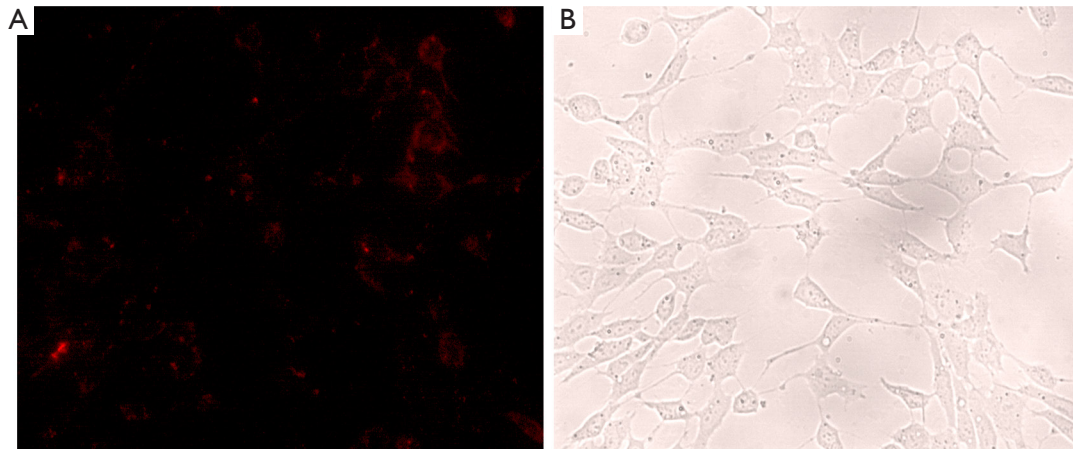


Figure S1 Primary chondrocytes of AIS patients were transfected with the siRNA. (A) AR was labeled with red fluorescence, 400x, strong signals of AR were observed in the cells transfected (B).

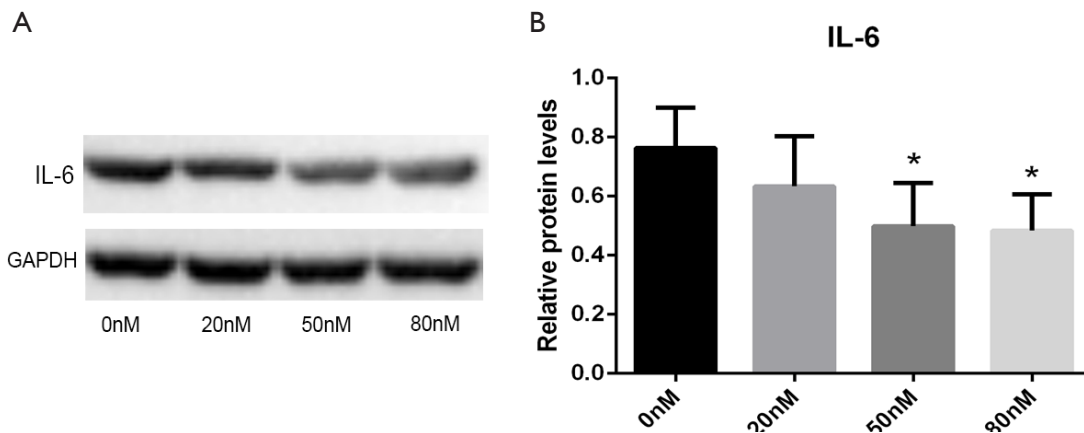


Figure S2 The effect of androgen intervention is effective when the concentration is 50nM/80nM. (A,B) the expression of IL-6 after treating with gradient concentration of androgen. *indicates P<0.05 vs. the control group.

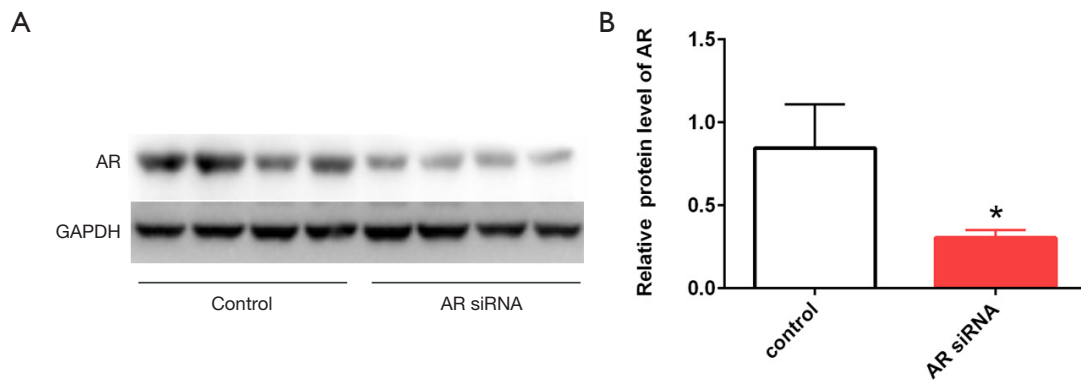


Figure S3 (A,B) The expression level of AR protein in AIS primary chondrocytes 48 h after transfection. *indicates $P < 0.05$ vs. the control group.

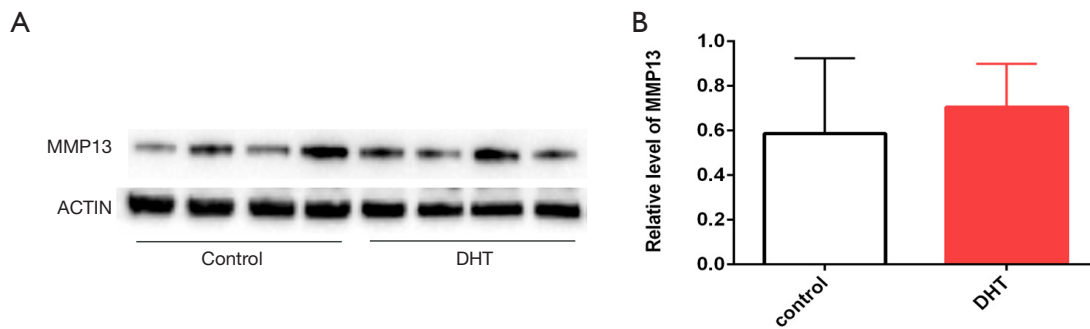


Figure S4 The expression of MMP13 did not significantly change after androgen treatment. (A,B) the protein level of MMP13 in chondrocytes from AIS patients after DHT treatment. *indicates $P < 0.05$ vs. the control group.

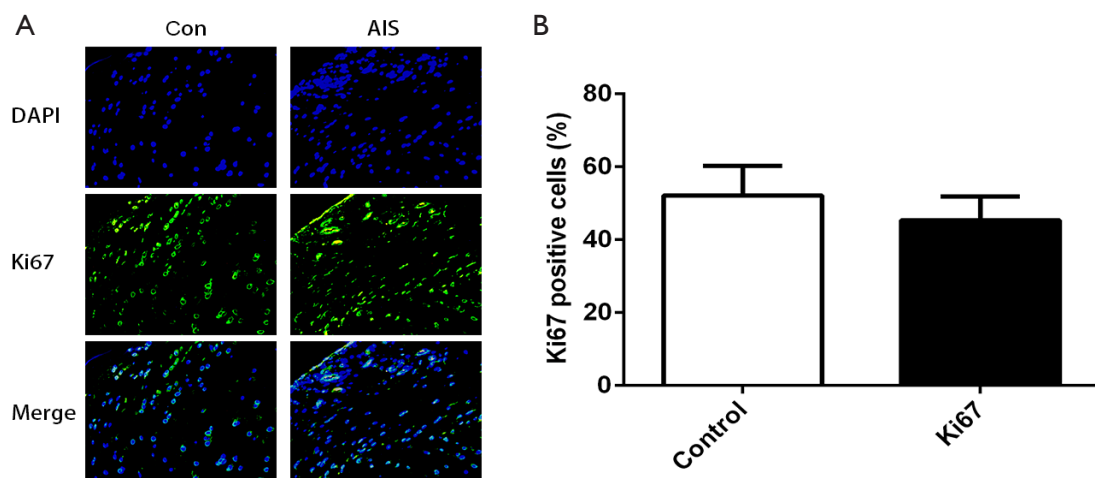


Figure S5 The proliferation of chondrocytes in cartilage from AIS and non-AIS patients. (A,B) There was no significant difference between two groups (green signal), 400 \times .