Supplementary material

Primer Name	Primer sequence (5'-3')		
	Forward	Reverse	
human			
SMA	CCCGGGACTAAGACGGGAAT	AGCATTTGCGGTGGACAATG	
vWF	CACCTGCATTTGCCGAAACA	CCGAAAGGTCCCAGGGTTAC	
eNOS	AACAGCATCTCCTGCTCAGAC	CAGATTAAGGCGGACCCAGG	
GAPDH	TGAATGGGCAGCCGTTAGG	TGGACTCCACGACGTACTCA	
rat			
GAPDH	GTGCCAGCCTCGTGCTGATAGA	CGCCAGTAGACTCCATGACA	

Table S1. Classical PCR primers

Table S2. Quantitative real time PCR Primers			
Primer	Primer sequence (5'-3')		
Name (rat)			
	Forward	Reverse	
VEGFa	ACCCTGGCTTTACTGCTGTACCT	GCAATAGCTGCGCTGGTAGAC	
SDF1	ATCTGAAAATCCTCAACACTCCAAA	GCACACTTGTCTGTTGTTGCTTT	
STC1	TGATTCTGGCGCTGGTCATC	CTGAATTTTGAGCCGCCACC	
IGF1	TGAGCGCACCTCCAATAAAGA	AACTGAAGAGCGTCCACCAG	
NGF	TGCCCCTGCTGAACCAATAG	GAAGACTGGGTGGGTGGATG	
GAPDH	GTTACCAGGGCTGCCTTCTC	GATGGTGATGGGTTTCCCGT	

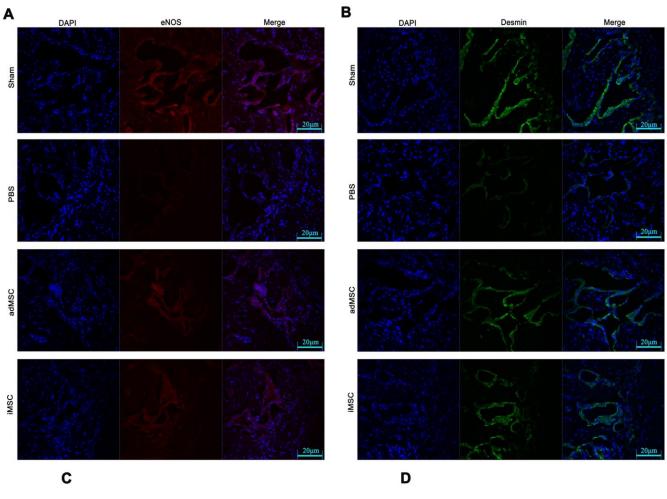
Supplementary Figure legends

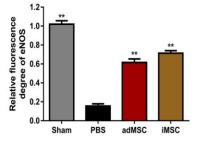
Figure S1. iMSC therapy increased eNOS and Desmin expression in the penis of CNI ED rats four weeks after injection. (A, C) The expression of endothelial cell marker eNOS could be obviously rescued after iMSC therapy. (B, D) The expression of smooth muscle cell marker Desmin could be significantly ameliorated after iMSC therapy. Error bars: mean \pm SD. **p<0.01 comparison with the PBS group.

Figure S2. iMSC therapy increased RECA-1 expression in the penis of CNI ED nude rats three months after injection. (A-B) Immunofluorescent staining on penile tissue of nude rats in three months after injection showed that the expression of RECA-1 expression was remarkably rescued by iMSC therapy. Error bars: mean \pm SD. Bar=40 µm. ***p*<0.01 comparison with PBS group.

Figure S3. The adMSC showed no transdifferentiation after injection in the corpus cavernosum of nude rats. (A) The PKH67 labelled adMSC could be identified in days 3 but vanished in days 7. There was no colocalization between adMSC and SMA. (B) There was no colocalization could be detected between adMSC and vWF.

Figure S1.





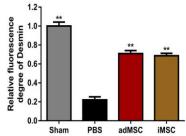
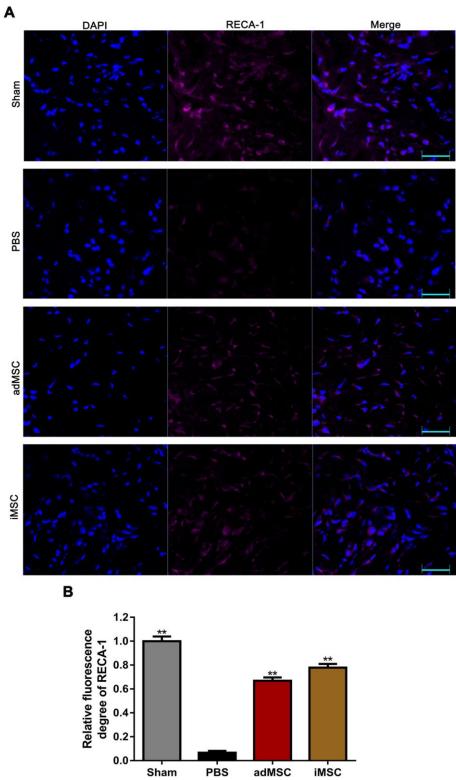


Figure S2.



S adMSC

Figure S3.

