Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B.

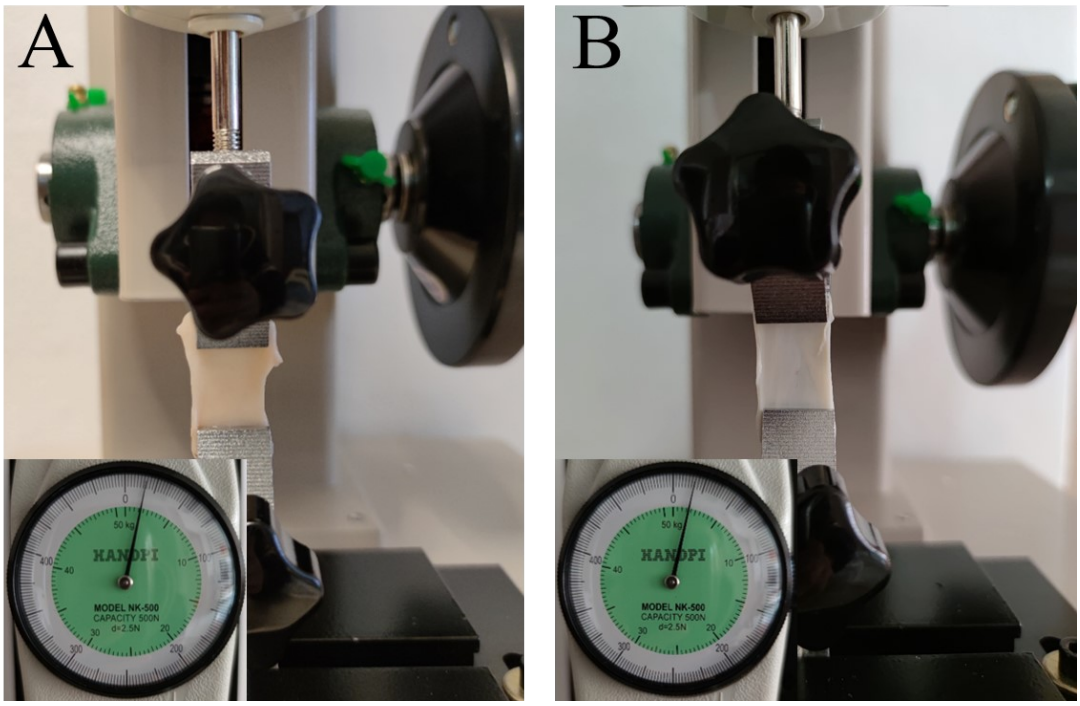

Figure S1. Mechanical analysis of native intestine and DIS. The maximum pulling force of native intestine was 16.7 ± 0.42 N (A), in contrast to 15.4 ± 0.42 N for DIS (B).

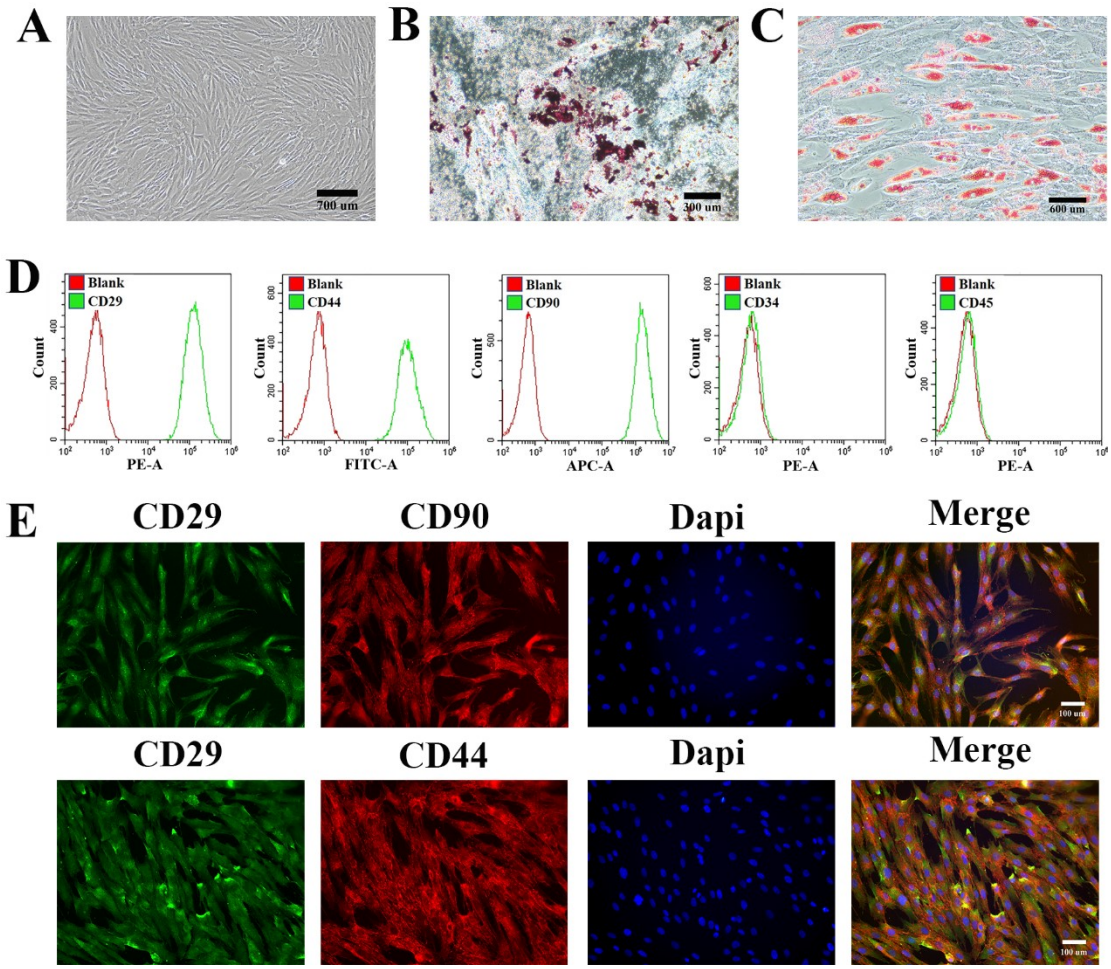

Figure S2. Identification of ADSC. (A) ADSC presented typical spindle-shaped and fibroblast-like morphology. Scale bar = 700 μm. (B) Osteogenic induction of ADSC. Scale bar = 300 μm. (C) Adipogenic induction of ADSC. Scale bar = 600 μm. (D) ADSC showed high expression of CD29, CD44, and CD90 and the absence of CD34 and CD45 by flow cytometry. (E) ADSC showed expression of CD29, CD44, and CD90 by IF. Scale bar = 100 μm.

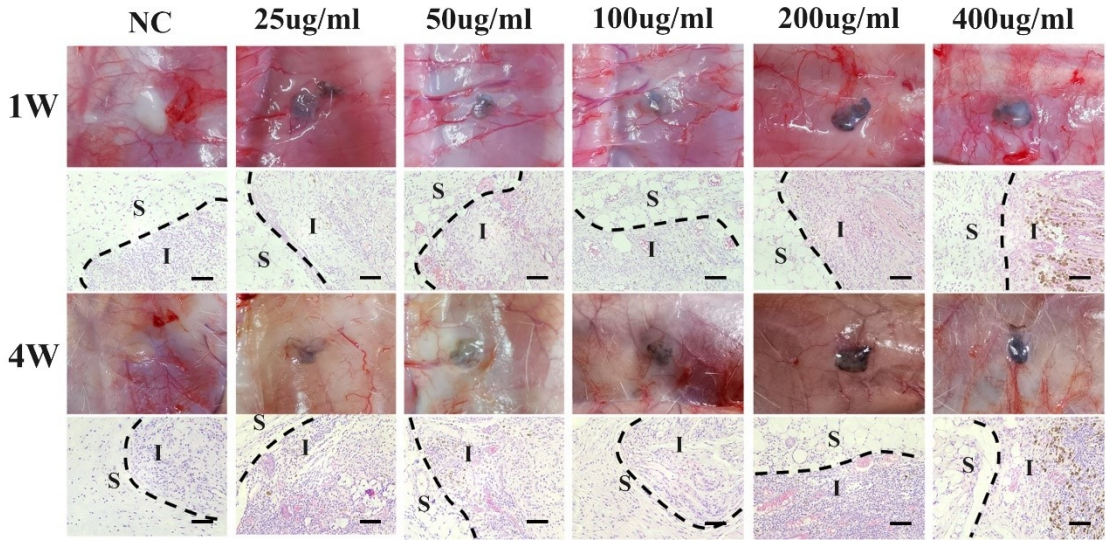

Figure S3. Histocompatibility of DIS and PDA-DIS. H&E staining showed that both DIS and PDA-DIS triggered angiogenesis after implantation. S represented the surrounding host tissues, I represented the implanted scaffolds. Scale bar = 100 μm.

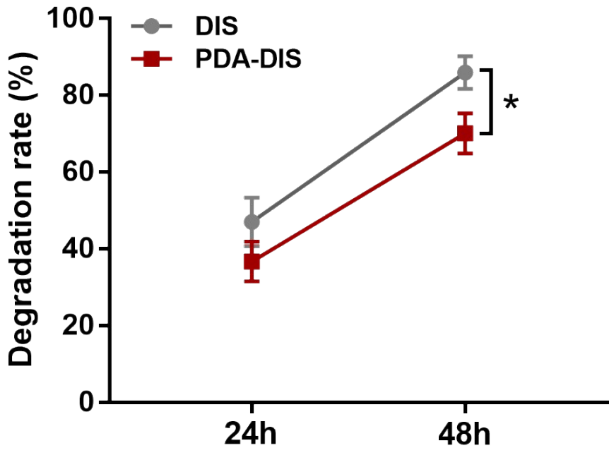

Figure S4. Degradation rate of DIS and PDA-DIS. The degradation rate of PDA-DIS was significantly lower than that of DIS.

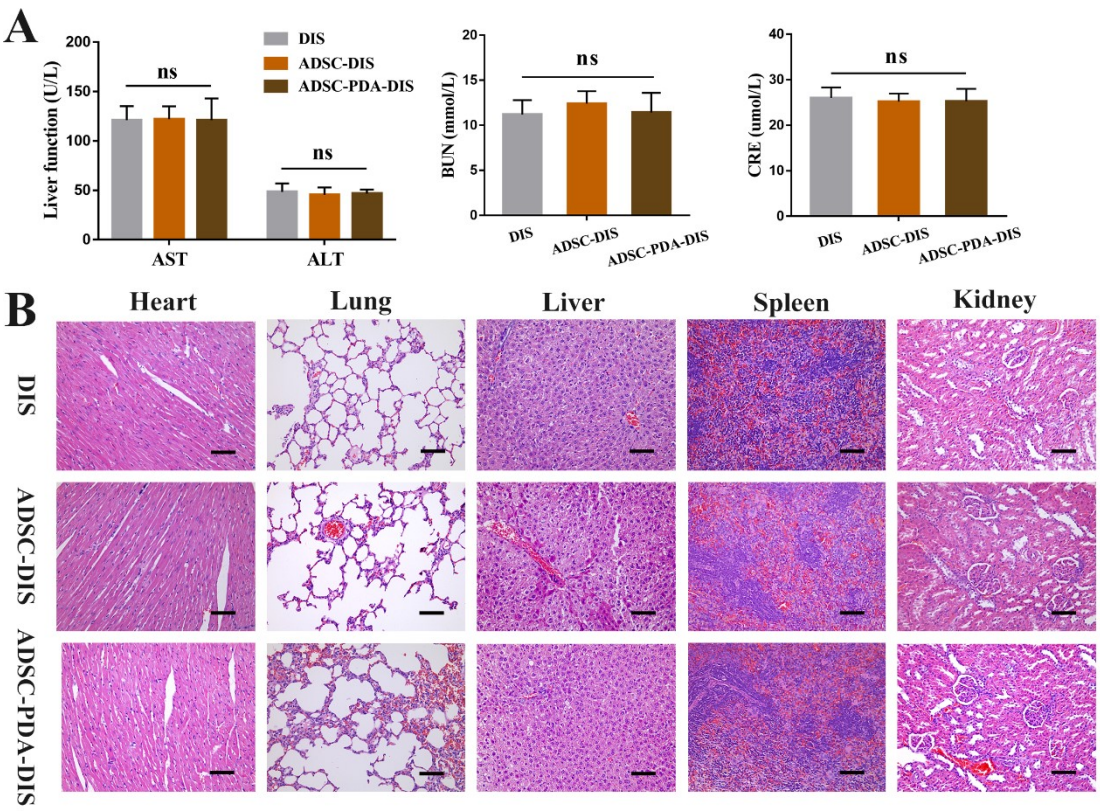

Figure S5. Biosafety evaluation. (A) Blood analysis showed negligible variations in biochemical indexes (AST, ALT, BUN, CRE) among the three groups. (B) H&E-stained histological sections of major organs (Heart, Lung, Liver, Spleen, Kidney) showed no prominent injuries. *P < 0.05. Scale bar =100 μm.

Table S1

Nucleotide sequences of primers used for qRT-PCR.

Gene		Primer sequence (5'->3')
Arg1	Forward primer	CTCCAAGCCAAAGTCCTTAGAG
	Reverse primer	GGAGCTGTCATTAGGGACATCA
IL10	Forward primer	CTTACTGACTGGCATGAGGATCA
	Reverse primer	GCAGCTCTAGGAGCATGTGG
IL6	Forward primer	CTGCAAGAGACTTCCATCCAG
	Reverse primer	AGTGGTATAGACAGGTCTGTTGG
TNFα	Forward primer	CGAGTGACAAGCCTGTAGCC
	Reverse primer	TGAAGAGGACCTGGGAGTAGAT
iNOS	Forward primer	GTTCTCAGCCCAACAATACAAGA
	Reverse primer	GTGGACGGGTCGATGTCAC
CD86	Forward primer	CTGGACTCTACGACTTCACAATG
	Reverse primer	AGTTGGCGATCACTGACAGTT
GAPDH	Forward primer	AGGTCGGTGTGAACGGATTTG
	Reverse primer	TGTAGACCATGTAGTTGAGGTCA

Table S2

List of primary and secondary antibodies

Antibodies	Company	Cat. NO.	Dilution
Mouse monoclonal to CD206	santa cruz	sc-58986	1:50 (IF)
Mouse monoclonal to CD31	santa cruz	sc-376764	1:50 (IF)
Rabbit monoclonal to Collagen I	Abcam	ab138492	1:100 (IF)
Rabbit polyclonal to Collagen IV	Abcam	ab6586	1:100 (IF)
Rabbit monoclonal to Fibronectin	Abcam	ab268020	1:100 (IF)
Mouse monoclonal to CD29	Abcam	ab30394	1:100 (IF)
Rabbit monoclonal to CD44	Abcam	ab189524	1:100 (IF)
Rabbit monoclonal to CD90	Abcam	ab133350	1:100 (IF)
Rabbit monoclonal to α-SMA	Abcam	ab150301	1:100 (IF)
Mouse monoclonal to Vimentin	Abcam	ab8978	1:100 (IF)
Rabbit monoclonal to iNOS	Abcam	ab178945	1:100 (IF)
Rat monoclonal to F4/80	Abcam	ab6640	1:100 (IF)
Goat Anti-Mouse IgG H&L (Cy3)	Abcam	ab97035	1:400 (IF)
Goat Anti-Rat IgG H&L (Cy3)	Abcam	ab6953	1:400 (IF)
Goat Anti-Rabbit IgG H&L (Alexa Fluor 488)	Abcam	ab150077	1:400 (IF)
Goat Anti-mouse IgG H&L (Alexa Fluor 488)	Abcam	ab150113	1:400 (IF)
Goat Anti-Rabbit IgG H&L (Cy3)	Abcam	ab6939	1:400 (IF)
Rabbit polyclonal to alpha Tubulin	Abcam	ab52866	1:5000 (WB)
Rabbit monoclonal to Arg1	Abcam	ab233548	1:5000 (WB)
Rabbit monoclonal to TNFα	Abcam	ab215188	1:1000 (WB)
Rabbit monoclonal to IL-6	Abcam	ab259341	1:1000 (WB)
Goat Anti-Rabbit IgG (H+L)	Jackson immunoresearch	111-035-003	1:10000 (WB)