SUPPORTING INFORMATION - FIGURE LEGENDS

Figure S1. ASCs or CM improves the pulmonary blood flow in PH. (A) Image of pulsed Doppler recordings of all the experimental groups. After two weeks of MCT-insult, ASCs or CM was administered through the jugular vein. Pulsed Doppler recordings were measured after 28 days of MCT-insult. ASCs or CM treatment improved the pulmonary blood flow. Mid-systolic notch observed in the PH animals (white arrows) were absent in presence of ASCs or CM.

Figure S2. Dermal Fibroblasts (DF) or DF derived CM (DF-CM) did not improve MCT-induced PH. DF ($1X10^6$) or DF-CM (harvested from $1X10^6$ DF) were injected through a jugular cannula, 2 weeks following the MCT insult. Following 4 weeks of MCT injection, ventricular hemodynamics were measured. (A) and (B) represent the RVSP and RVH in MCT animals in the presence of DF or DF-CM. Data represented in (A) and (B) are mean ± SEM, Con (n=7), MCT (n=7), MCT+M (n=7), MCT+DF (n=7), MCT+DF-CM (n=6). * Indicates a p value of ≤ 0.05, comparing MCT and MCT+M *vs* control.

Figure S3. Presence of eGFP-ASCs in PH lung. In the MCT+A group, eGFP-ASCs were administered through the jugular vein after 14 days of MCT-insult. After 28 days of MCT-insult, lungs were collected, sectioned and analyzed for the presence of eGFP-ASCs by staining with GFP antibody. Images were photographed at 400X. Images represented (A) eGFP, (B) DAPI, and (C) Composite (Merge). Scale bar is 50 μm. White arrows indicate the DAPI stained eGFP-ASCs. (D) Average number of eGFP-ASCs present in 10 randomly chosen field for three different animals. Further to confirm the presence of eGFP, the same three lung samples were

analyzed by real time RT-PCR. (E) Represents the C_T values of GFP and GAPDH product in RT-PCR.

SUPPORTING INFORMATION - MOVIE LEGENDS

Movie S1. Para-sternal short-axis ventricles view (papillary muscle level) of the control animals on Day-0.

Movie S2. Para-sternal short-axis ventricles view (papillary muscle level) of the control animals on Day-14.

Movie S3. Para-sternal short-axis ventricles view (papillary muscle level) of the MCT animals on Day-14.

Movie S4. Para-sternal short-axis ventricles view (papillary muscle level) of the control animals on Day-28.

Movie S5. Para-sternal short-axis ventricles view (papillary muscle level) of the MCT animals on Day-28.

Movie S6. Para-sternal short-axis ventricles view (papillary muscle level) of the MCT+ASCs animals on Day-28.

Movie S7. Para-sternal short-axis ventricles view (papillary muscle level) of the MCT+Media animals on Day-28.

Movie S8. Para-sternal short-axis ventricles view (papillary muscle level) view of the MCT+CM animals on Day-28.

Table S1: Rat primers used for RT-PCR experiment

No	Gene		Sequence
1.	TNF-α	F	GTAGCCCACGTCGTAGCAAA
		R	CCCTTCTCCAGCTGGGAGAC
2.	IL1-β	F	TGATGTTCCCATTAGACAGC
		R	GAGGTGCTGATGTACCAGTT
3.	iNOS	F	CCTTGTTCAGCTACGCCTTC
		R	GGTATGCCCGAGTTCTTTCA
4.	IL-10	F	TGCTACGACGTGGGCTACG
		R	TGCAGTCCAGTAGATGCCGGG
5.	GFP	F	TGGTCCCAATTCTCGTGGAA
		R	CCTCTCCGCTGACAGAAAATTT
6.	SDF-1α	F	TGAGATTTGCCAGCACAAAG
		R	CTCTCGGCAAGGAATCTGTC
7.	G-CSF	F	TGCTCTGGAGAACGAAAAGAACG
		R	ATTGAGTTTGGTGAGGTTGCCCC
8.	18S	F	TGCTGCAGTTAAAAAGCTCGT
		R	GGCCTGCTTTGAACA CTCTAA
9.	IL-6		Rn01410330_m1
10.	COL1		Rn01523309_m1
11.	COL3		Rn01437681_m1
12.	CCL2		Rn00580555_m1
13.	TIMP-1		Rn01430873_g1
14.	MMP-12		Rn00588640_m1
15.	IL-13		Rn00587615_m1
16.	CTGF		Rn01537279_g1
17.	18S		Hs99999901_s1
18.	GAPDH		Rn01775763_g1