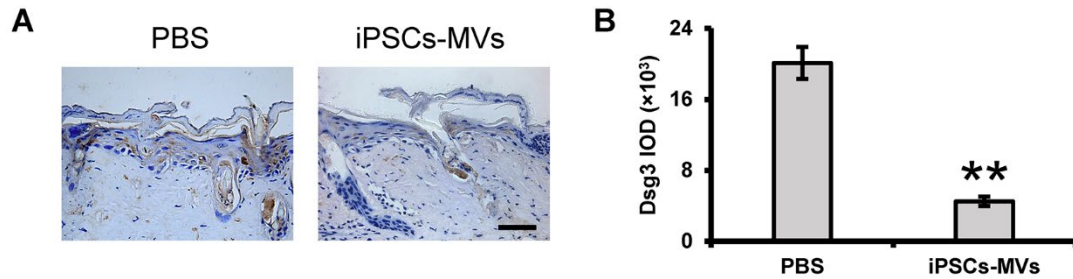


**Table S1**

Highly expressed miRNAs in iPSCs-MVs.

Gene ID	Name	Read count
MIMAT0000527	mmu-miR-16-5p	603437
MIMAT0000540	mmu-miR-93-5p	197446
MIMAT0000212	mmu-miR-183-5p	133357
MIMAT0000542	mmu-miR-34a-5p	122625
MIMAT0000532	mmu-miR-23a-3p	120342
MIMAT0000513	mmu-miR-19b-3p	99921
MIMAT0000126	mmu-miR-27b-3p	77640
MIMAT0000677	mmu-miR-7a-5p	76904
MIMAT0000534	mmu-miR-26b-5p	71735
MIMAT0000652	mmu-miR-25-3p	71284
MIMAT0000122	mmu-let-7i-5p	57868
MIMAT0000379	mmu-miR-301a-3p	46453
MIMAT0000537	mmu-miR-27a-3p	45089
MIMAT0000133	mmu-miR-101a-3p	42264
MIMAT0000158	mmu-miR-146a-5p	41837
MIMAT0000546	mmu-miR-103-3p	40494
MIMAT0000533	mmu-miR-26a-5p	40464
MIMAT0000387	mmu-miR-130b-3p	38881
MIMAT0000539	mmu-miR-92a-3p	32863
MIMAT0000141	mmu-miR-130a-3p	31745
MIMAT0000530	mmu-miR-21a-5p	28956
MIMAT0000208	mmu-miR-10b-5p	28812
MIMAT0000215	mmu-miR-186-5p	26603
MIMAT0000219	mmu-miR-24-3p	23834
MIMAT0000221	mmu-miR-191-5p	23551
MIMAT0001081	mmu-miR-196b-5p	23013
MIMAT0000516	mmu-miR-148a-3p	22984
MIMAT0000651	mmu-miR-19a-3p	20627
MIMAT0000541	mmu-miR-96-5p	18947
MIMAT0004186	mmu-miR-301b-3p	14963

**Figure S1 iPSCs-MVs decreased the expression of Dsg3 during burn wound healing.** (A) Representative photomicrographs of immunohistochemical staining for Dsg3 of wounds treated with PBS or iPSCs-MVs on days 5 after wounding. Scale bar = 50  $\mu$ m. (B) The areas stained with Dsg3 were determined by planimetric image analysis using Image Pro Plus 6.0 software. All values are expressed as mean  $\pm$  SD from three independently repeats, \*\*P < 0.01.



**Figure S2 Effects of mir-16-5p on inflammation, fibrosis and angiogenesis during burn wound healing.** (A) Representative photomicrographs of immunohistochemical staining for CD68 of wounds treated with agomir NC or miR-16-5p agomir on days 3 and 5 after wounding (left panel). Scale bar = 50  $\mu$ m. The areas stained with CD68 were determined by planimetric image analysis using Image Pro Plus 6.0 software (right panel). (B) Representative photomicrographs of immunohistochemical staining for CD31 of wounds treated with agomir NC or miR-16-5p agomir on days 11 after wounding (left panel). Scale bar = 50  $\mu$ m. The number of stained capillaries were counted (right panel). Statistics regarding the number of stained capillaries were obtained using five randomly selected fields of view for each group. (C) Representative photomicrographs of immunohistochemical staining for  $\alpha$ -SMA of wounds treated with agomir NC or miR-16-5p agomir on days 5 and 9 after wounding (left panel). Scale bar = 50  $\mu$ m. The areas stained with  $\alpha$ -SMA were determined by planimetric image analysis using Image Pro Plus 6.0 software (right panel). (D) Representative photomicrographs of Masson's trichrome -stained wounds treated with agomir NC or miR-16-5p agomir on days 7 and 11 after wounding. All values are expressed as mean  $\pm$  SD from three independently repeats.

