

Figure S1. Detection of miR-125a and HMGCR expression levels. (A) Relative miR-125a expression in the miR-NC, and miR-125a mimics or inhibitor-transfected VSMCs were analyzed by reverse transcription-quantitative PCR. Data are presented as the mean $\pm$ SD. (B) Western blot analysis of HMGCR expression in VSMCs transfected with si-Ctrl or si-HMGCR. n=3. **P<0.01. siRNA, small interfering RNA; VSMC, vascular smooth muscle cell; NC, negative control; miR, microRNA; HMGCR, 3-hydroxy-3-methylglutaryl-coenzyme A reductase; Ctrl, control.

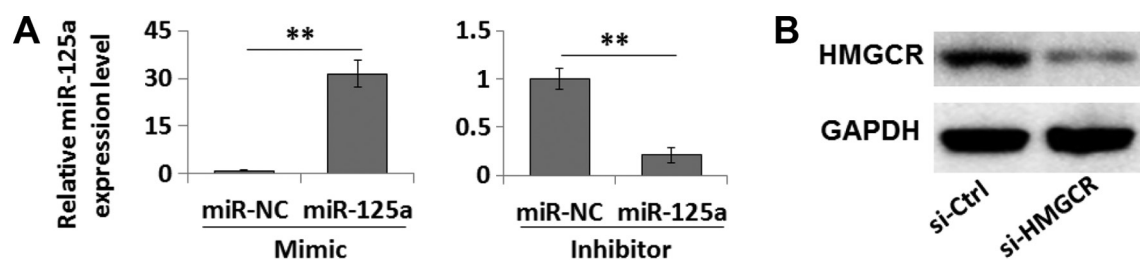


Table SI. Dysregulated miRNAs in VSMCs by HG exposure.

ID	Mean CPM of H.G	Mean CPM of N.C	Fold change
Downregulated			
rno-miR-125a-5p	6442.84±294.36	13266.78±879.95	0.49±0.05
rno-miR-331-3p	13.93±0.41	26.32±3.18	0.54±0.05
rno-miR-450b-5p	7.06±0.62	12.69±0.65	0.56±0.04
rno-miR-101a-3p	96.48±1.42	171.76±2.57	0.56±0.01
rno-miR-125b-5p	103731.41±2776.91	184560.50±17429.33	0.57±0.04
rno-miR-204-5p	35.15±2.92	60.49±6.89	0.59±0.07
rno-miR-101b-3p	28.49±2.40	48.35±9.16	0.63±0.06
rno-miR-497-5p	32.78±4.74	53.04±6.83	0.63±0.10
rno-miR-542-3p	166.64±7.19	266.64±29.07	0.63±0.06
rno-miR-598-3p	23.18±2.27	35.39±2.72	0.65±0.03
rno-miR-218a-5p	248.21±17.63	382.89±52.19	0.66±0.10
rno-miR-143-5p	587.15±16.41	881.91±11.11	0.67±0.03
Upregulated			
rno-miR-7a-5p	917.83±26.75	608.43±3.81	1.51±0.05
rno-miR-212-3p	16.10±0.78	10.69±1.09	1.52±0.09
rno-miR-127-3p	2963.20±60.43	1963.09±153.94	1.52±0.12
rno-miR-382-5p	1256.66±19.90	832.60±73.12	1.52±0.12
rno-miR-433-3p	17.87±0.73	11.76±0.49	1.52±0.04
rno-miR-132-3p	246.89±35.96	160.68±8.01	1.53±0.17
rno-miR-3068-3p	18.81±1.22	12.31±1.41	1.54±0.10
rno-miR-224-5p	39.35±4.99	25.36±1.85	1.55±0.09
rno-miR-34b-3p	61.49±1.28	39.80±2.23	1.55±0.05
rno-miR-541-5p	413.99±12.59	267.95±16.92	1.55±0.05
rno-miR-132-5p	59.99±6.17	38.55±1.80	1.55±0.09
rno-miR-672-5p	56.57±2.64	36.15±1.05	1.57±0.10
rno-miR-1193-3p	102.22±2.84	65.23±2.56	1.57±0.10
rno-miR-384-5p	74.73±3.98	47.30±4.83	1.60±0.20
rno-miR-34b-5p	55.69±2.54	34.99±4.46	1.61±0.13
rno-miR-27b-5p	14.85±0.53	9.29±0.82	1.62±0.21
rno-miR-493-5p	82.17±4.34	51.44±7.05	1.62±0.18
rno-miR-34c-3p	35.22±1.49	22.14±3.41	1.62±0.22
rno-miR-216a-5p	23.79±1.98	14.60±1.76	1.64±0.16
rno-miR-338-3p	24.09±3.43	15.16±4.16	1.69±0.42
rno-miR-411-3p	11.85±2.03	6.92±0.96	1.71±0.11
rno-miR-325-3p	12.97±0.39	7.59±0.17	1.71±0.09
rno-miR-323-3p	20.51±1.48	12.07±1.87	1.72±0.15
rno-miR-222-3p	337.19±16.61	196.30±18.38	1.73±0.15
rno-miR-183-5p	32.89±1.56	19.25±2.20	1.74±0.27
rno-miR-431	913.99±9.49	515.28±33.11	1.78±0.13
rno-miR-182	72.14±1.87	40.77±5.99	1.80±0.21
rno-miR-708-5p	12.64±0.93	6.90±0.50	1.85±0.25
rno-miR-495	35.55±1.69	20.09±6.67	1.93±0.50
rno-miR-377-3p	13.88±1.74	7.07±1.05	1.97±0.16

Data are presented as the mean ± SD. CPM, counts per million; H.G, high glucose; N.C, normal culture; miR, microRNA.