

# Exosome-Derived MiRNAs as Biomarkers of the Development and Progression of Intracranial Aneurysms

Bao Liao, Meng-xiao Zhou, Feng-kun Zhou, Xiu-mei Luo, Song-xin Zhong, Yuan-fang Zhou, Yan-sheng Qin, Ping-ping Li and Chao Qin

Bao Liao and Meng-xiao Zhou contributed equally to this work.

Department of Neurology, the First Affiliated Hospital, Guangxi Medical University, Guangxi, China

**Aim:** Exosome-derived microRNAs (miRNAs) are potential diagnostic biomarkers. However, little is known about their effectiveness as diagnostic biomarkers of intracranial aneurysms (IAs). This study aimed to explore miRNA levels in plasma exosomes of patients with IA to identify potential biomarkers that predict the development and progress of IA.

**Methods:** A total of 69 patients with IA and 30 healthy controls (HC) were recruited, among whom 30 had unruptured IA (UA), and 39 had ruptured IA (RA). The miRNA expression profiles of plasma exosomes in 12 IA patients (4 UA and 8 RA) and 4 HC were determined using next-generation sequencing. In addition, significantly differentially expressed miRNAs were further analyzed by Quantitative Real-Time PCR (qRT-PCR) in a validation cohort of 99 subjects.

**Results:** From the sequencing analysis, 181 miRNAs were identified to be differently ( $p < 0.05$ ) expressed. Of these, 9 miRNAs were up-regulated, and 20 were down-regulated in patients with UA compared with HC. Also, 21 were up-regulated, and 10 were down-regulated in patients with RA compared with HC. In addition, compared with UA, 92 miRNAs were up-regulated in RA, whereas 29 were down-regulated. Furthermore, qRT-PCR analysis confirmed that miR-145-5p and miR-29a-3p were up-regulated in IA samples. To distinguish IA patients from controls, the area under the receiver operating characteristic curve was 0.791 for miR-29a-3p, while that of miRNA-145-5p was 0.773 in terms of discriminating whether the aneurysm was ruptured.

**Conclusions:** Circulating exosomal miRNAs can serve as biomarkers of the development and progression of IA.

**Key words:** Intracranial aneurysm, Subarachnoid hemorrhage, MicroRNA, Exosome, MiR-145-5p, MiR-29a-3p

## Introduction

Intracranial aneurysms (IAs) are abnormal dilations of intracranial arteries caused by the decreased localized structural integrity of the arterial wall due to damage of the internal elastic lamina and disruption of the media. This condition affects 3% to 5% of the general population<sup>1)</sup>. Rupture is the most lethal complication of IAs and is the major cause of subarachnoid hemorrhage (SAH). The most common clinical symptoms of aneurysmal SAH are sudden attack from

severe headache with stiff neck, nausea, and vomiting. Unruptured IAs are often asymptomatic and are identified by screening high-risk individuals or as incidental findings of magnetic resonance imaging, particularly magnetic resonance angiogram (MRA) or computerized tomographic angiography (CTA). Despite advances in surgical clipping, endovascular coiling, and neurological intensive care, the mortality rate due to this condition is high, and its prognosis is poor<sup>1)</sup>. Thus, it is important to identify and develop biomarkers to enable diagnosis at early-stage IA and predict IA

Address for correspondence: Chao Qin, Department of Neurology, The First Affiliated Hospital, Guangxi Medical University, Nanning 530021, Guangxi, China. E-mail: mdqc2019@126.com

Received: May 27, 2019 Accepted for publication: September 9, 2019

Copyright©2020 Japan Atherosclerosis Society

This article is distributed under the terms of the latest version of CC BY-NC-SA defined by the Creative Commons Attribution License.

rupture. This will improve the prognosis and survival of patients.

The natural course of IA is the gradual dilation and eventual rupture of intracranial arteries, although there are differences in etiology among individuals. Risk factors for the initiation of IAs include ethnicity, familial history, age, female sex, hypertension, smoking, excessive alcohol intake, and cocaine usage<sup>2</sup>. Although the mechanisms leading to IA formation, growth, and eventual rupture have not been completely elucidated, gene expression regulation is known to play a significant role.

MicroRNAs (miRNAs) are a class of small non-coding RNAs, on average containing 22 nucleotides, which regulate gene expression at the post-transcriptional level by interfering with transcription or inhibiting translation<sup>3</sup>. Accumulating evidence has shown that miRNAs are involved in various biological processes, such as cell development, differentiation, proliferation, apoptosis, and metabolism<sup>4</sup>. Circulating miRNAs can be found in cell-free serum, plasma, and other body fluids in a highly stable form, such as in exosomes. In these carriers, mRNAs are protected from RNase, extreme temperatures, extreme pHs, or the freeze–thaw cycle<sup>5–7</sup>. Exosomes are small homogeneous membrane vesicles with diameters ranging from 40 to 150 nm, which are derived from the exocytosis process of cells<sup>8</sup>. Exosomes carry many kinds of biological molecules, including proteins, RNAs, DNAs, and lipids, and are released into the peripheral circulatory system or the extracellular matrix<sup>9</sup>. The transport of miRNAs by exosomes is specifically interesting because miRNAs are more stable and regulate the expression of multiple target genes in the recipient cells<sup>9</sup>. Therefore, miRNA expression profiling of circulating exosomes holds may identify novel noninvasive markers for assessing disease progression and severity.

Exosomal miRNAs are actively involved in numerous physiological or pathological processes. However, the role and expression profiles of exosomal miRNA in IA is not well-understood. The results from several previous studies on the diagnostic role of miRNAs in circulating blood in IA have been inconsistent<sup>10–12</sup>. In this study, using the next-generation sequencing (NGS) method, we characterized the miRNA expression profile of circulating exosomes between neurologically healthy patients and IA patients with or without rupture and performed Quantitative Real-Time PCR (qRT-PCR) to validate the results. This study lays a solid foundation for further studies aimed at identifying early warning signs of the occurrence, development, and rupture of IAs based on circulating miRNA.

## Methods

### Ethics Statement

Institutional Review Board approvals for use of the samples were obtained from the Institutional Review Board of the First Affiliated Hospital of Guangxi Medical University. Written informed consents were obtained from all participants or their legal representatives in the study.

### Clinical Samples

A total of 69 out of 176 patients with IAs were enrolled at the Neurology Department in the First Affiliated Hospital of Guangxi Medical University (Guangxi, Nanning, China) between June 2017 and June 2018. Subsequently, blood samples obtained from individuals who met the following criteria were analyzed in this study:

i. Individuals diagnosed with unruptured aneurysm (UA) and without a family history of IA (UA,  $n = 30$ ). These individuals were identified in outpatient units presenting with symptoms such as headache, ptosis, or diplopia, as well as other health anomalies, and finally diagnosed with the use of digital subtraction angiography (DSA).

ii. Individuals diagnosed with ruptured aneurysm (RA,  $n = 39$ ). These cases included patients with SAH who met the following criteria: (1) The first acute onset, with a severe headache, nausea, vomiting, meningeal irritation positive by CT or lumbar puncture-confirmed SAH; (2) Within 7 days of onset and Hunt–Hess level I–V patients; (3) After admission, the patient with SAH was diagnosed by DSA. Exclusion criteria were the following: (1) intracranial hematoma or parenchymal hemorrhage; (2) SAH caused by rupture of other non-aneurysms, such as arterial dissection and vascular malformation; (3) cannot cooperate with angiography and treatment; (4) need to undergo craniotomy as a later treatment.

iii. Healthy controls (HC,  $n = 30$ ). A group of healthy individuals who volunteered was enrolled at the Medical Center in the First Affiliated Hospital of Guangxi Medical University (Guangxi, Nanning, China). These individuals have no history of SAH. Volunteers were not subjected to angiographic examination.

In addition, patients with other serious underlying diseases, such as cardiopulmonary function, liver and kidney function, coagulation abnormalities, etc. were excluded from the study. To exclude the possible interference caused by DSA, all samples from patients with UA were collected before DSA. Moreover, the timing of blood sampling from patients with RA is the time of admission. Peripheral venous blood was col-

**Table 1.** Clinical characteristics of subjects in the discovery cohort

Sample No.	Sex	Age, y	Smoking <sup>a</sup>	Drinking <sup>a</sup>	Hypertension <sup>a</sup>	Diabetes <sup>a</sup>	Location <sup>b</sup>	Size (mm)	Hunt-Hess grade
UA01	F	47	-	-	-	-	ICA	7.0	...
UA02	F	31	-	-	-	-	ICA	3.3	...
UA03	M	69	-	-	-	-	ACA	5.6	...
UA04	F	71	-	-	+	-	PCoA	4.2	...
RA01	F	73	-	-	+	-	ACoA	8.7	III
RA02	M	43	+	-	-	-	ACoA	4.8	V
RA03	F	43	-	-	-	-	ACoA	4.2	III
RA04	M	45	+	+	-	-	MCA	5.2	I
RA05	F	47	-	-	-	-	ACoA	3.5	I
RA06	F	52	-	-	+	-	PCoA	15.9	II
RA07	F	66	-	-	+	+	PCoA	5.8	III
RA08	M	79	-	-	-	-	ICA	8.6	II
HC01	M	47	+	-	+	-	...	...	...
HC02	F	25	-	-	-	-	...	...	...
HC03	M	40	-	+	-	-	...	...	...
HC04	F	56	-	-	-	-	...	...	...

<sup>a</sup>+: Yes; -: No;

<sup>b</sup>ACoA: Anterior Communicating Artery; ICA: Internal Carotid Artery; MCA: Middle Cerebral Artery; PCoA: Posterior Communicating Artery;

lected from each participant in tubes containing ethylenediaminetetraacetic acid as an anticoagulant and processed within 120 min. The tubes were centrifuged at 3,000 g at 4°C for 15 min. After plasma separation, samples were stored at -80°C before analysis.

### Study Design

**Discovery Cohort** - We selected 12 cases (8 RA and 4 UA) and 4 HC from the above samples and performed miRNA sequencing to determine the miRNA expression profile of plasma exosomes. A restrictive selection criterion was used for this cohort: Samples were matched for age, gender, hypertension, diabetes mellitus, drinking, and smoking history (Table 1). In addition, considering the bias caused by different disease severity and admission time of patients with SAH, we selected 4 cases with a Hunt-Hess score of 1–2 and 4 cases from the RA group with a Hunt-Hess score of 3–4, doubling the sample from the RA group from that of the other two groups. A total of 1000 µL of plasma was taken from each sample. This group was analyzed on the Illumina HiSeq SE50 platform.

**Validation Cohort** - The above 99 samples were subsequently verified using quantitative qRT-PCR (Table 2). For this group, 500 µL of plasma was used per sample.

### Isolation and Identification of Exosomes

Plasma aliquots from individuals enrolled in this study were retrieved from storage, quickly thawed,

**Table 2.** Clinical characteristics of subjects in the validation cohort

	UA	RA	HC
Age (years)			
< 50	4	14	21
≥ 50	26	25	9
Gender			
Male	13	16	14
Female	17	23	16
Hypertension			
Yes	20	20	4
No	10	19	26
Diabetes mellitus			
Yes	22	38	3
No	8	1	27
Smoking			
Yes	4	9	4
No	26	30	26
Drinking			
Yes	2	7	6
No	28	32	24
Aneurysm Location			
Anterior Circulation	18	35	
Posterior Circulation	12	4	
Aneurysm Size			
≤ 5	19	15	
> 5	11	24	

and centrifuged at 13,000 g at 4°C for 10 min. To isolate exosomes, the supernatant was processed with exoRNeasy Serum/Plasma Midi Kit (Qiagen, Germany) according to the manufacturer's protocol. Exosomes were characterized by transmission electron microscopy and western blot analysis.

### Transmission Electron Microscopy

The exosome suspension was diluted with RNase-free water and then adsorbed to 200-mesh Formvar-coated copper grids for 1 min. Exosomes were then stained with 1% uranyl acetate for 15 s. After laying the grids on the filter paper to dry, the morphological features of exosomes were observed with a transmission electron microscope (H7650 Hitachi, Japan).

### Western Blot Analysis

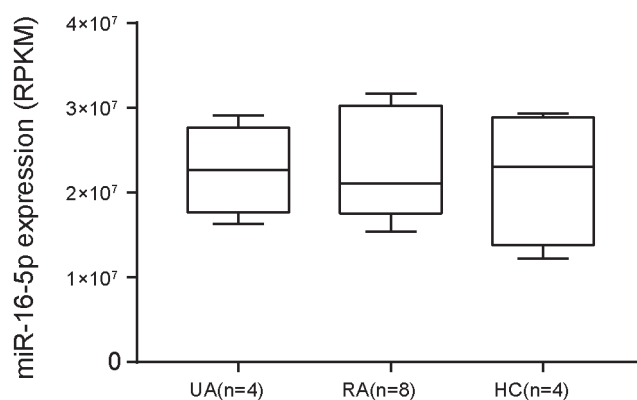
The exosome pellets were homogenized in lysis buffer containing proteinase inhibitors, and the protein concentration was determined using the BCA method. The proteins were separated on an SDS-PAGE gel before transferring them to a PVDF membrane. The membrane was incubated overnight at 4°C with primary antibodies (anti-CD9, anti-HSC70, and anti-TSG101), followed by incubation with horseradish peroxidase-conjugated secondary antibody at room temperature for 1 h. Specific bands were visualized with enhanced chemiluminescence detection kits (Thermo Fisher Scientific, USA).

### RNA Extraction from Exosomes

Total RNA was extracted from the exosome pellets using a miRNeasy<sup>®</sup> Serum/Plasma kit (Qiagen, Germany), according to the manufacturer's instructions, and dissolved in 14 µL of RNase-free water. The concentration of the isolated RNA was determined according to the ratio of radiation absorbance at 260 nm to that at 280 nm, using a Nanodrop ND-2000 spectrophotometer (Thermo Scientific, USA).

### MiRNA Profiling by HiSeq SE50 Sequencing

Small RNA libraries were constructed using the QIAseq<sup>™</sup> miRNA Library Kit (Qiagen, Germany) according to the manufacturer's protocols. Briefly, total RNAs isolated from exosomes were used to construct the miRNA sequencing library, which included the following steps: 3' ligation; 5' ligation; cDNA synthesis; cDNA cleanup; library amplification; library cleanup; library quality control: Qubit3 Fluorometer (Thermo Fisher) was used to determine the library concentration; finally, sequencing was performed on an Illumina HiSeq SE50 platform. This experiment was performed at the Chi-Biotech Corporation (Shen-



**Fig. 1.** Expression level of plasma exosomal miR-16-5p among the three groups based on NGS

zhen, China).

### Sequencing Data Analysis and Visualization

After sequencing, filtered raw reads were retrieved as Clean Reads by using the Cutadapt software tool (MIT). The adaptor sequences were trimmed and the adaptor-trimmed-reads ( $\geq 17$  nt) were retained. Then, the trimmed reads were analyzed using the FANse3<sup>13)</sup>, an ultra-precise sequence alignment algorithm, to map the sequencing reads to the human genome (hg19) and to identify miRNAs (miRBase, <http://www.mirbase.org/>). The miRNA expression levels were estimated using Reads Per Kilo bases per million reads<sup>14)</sup>, which is the number of reads per kilobase length from a gene per million reads. Analysis of the differentially expressed miRNAs between the two groups was performed using edgeR<sup>15)</sup> software.

### qRT-PCR

cDNA was synthesized from exosomal RNA using Mir-X miRNA First-Strand Synthesis kit (TaKaRa, Japan) under the following conditions: 37°C for 60 min and 85°C for 5 s. The synthesized cDNA was subjected to RT-PCR to detect miRNAs using an SYBR<sup>®</sup> Premix Ex Taq<sup>™</sup> II kit (TaKaRa, Japan). Amplification was performed in an ABI Fast 7500 Real-Time PCR System (Applied Biosystems, CA, USA) using the following cycling program: 95°C for 30 s, 40 cycles of 95°C for 5 s and 60°C for 34 s. All samples were analyzed in triplicate. The relative expression of targeted miRNAs was calculated based on the threshold cycle (Ct) values as  $\text{ratio} = 2^{-\Delta\Delta\text{Ct}}$ . miRNAs with Ct above 37 were considered as not expressed. Given that miR-16 is expressed abundantly and equally in most tissues, and there were no significant differences in its expression among individuals<sup>5)</sup>, including in the NGS samples (Fig. 1), all data were therefore normalized to miR-16-5p in this study. The

**Table 3.** The sequence of PCR primers

Primers	Sequence (5' → 3')
miR-145-5p	CAGTTTCCCAGGAATCCCTAA
miR-29a-5p	AGCACCATCTGAAATCGGTAA
miR-215-3p	CCGACCTATGAATTGACAGACAA
miR-16-5p	CAGCACGTAATATTGGCGAA

forward miRNA specific primers used for the measurement of miR-145-5p, -29a-5p, -215-3p, and -16-5p expressions are listed in **Table 3**. The reverse universal primer was supplied along with the kit. All primers were synthesized by Takara Biotechnology (Dalian) Co., Ltd.

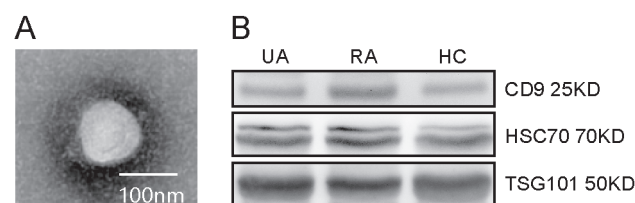
### Data Analysis

To eliminate biological variation, screening of differential expression of genes should be evaluated from two aspects: differential multiples and significant levels. In this analysis, the screening thresholds of differentially expressed genes were set to  $|\log_2(\text{Fold-Change})| > 1$  and  $P < 0.05$ . Statistical analyses were performed with SPSS 22.0 (SPSS Incorporated), and graphs were generated using GraphPad Prism 7.0. Measurement data were expressed as mean  $\pm$  standard deviation while categorical data as cases or percentage. Unless otherwise stated, differences between groups were analyzed using either: Mann–Whitney test when only two groups were compared. For the miRNAs with a significant difference in expression level, the receiver operating characteristic (ROC) curves were established, and the area under the curve (AUC) was calculated to assess the diagnostic potential of these miRNAs. To determine the correlation between the plasma expression level of exosomal miRNAs and its diagnostic value for IA, multivariate logistic regression analysis was performed. A value of  $P < 0.05$  was considered statistically significant.

## Results

### Characterization of Exosomes

Firstly, the isolated exosomes were characterized by transmission electron microscopy. As shown in **Fig. 2A**, the particles were generally spherical with diameters ranging from 100 to 150 nm. Furthermore, western blotting was performed to detect exosome specific markers CD9, HSC70, and TSG101. **Fig. 2B** shows that the isolated exosomes tested positive for these exosomal markers. These results are consistent with the morphology and dimension reported before, which verify that the commercial kits used for exosome isolation are reliable, simple, and convenient with higher purity and yield.

**Fig. 2.** Characterizations of exosomes

(A) Transmission electron microscopy image of exosomes showing small vesicles with diameters of approximately 100 nm. Scale bar, 100 nm. (B) Western blotting indicating that exosomes expressed the exosome specific markers—CD9, HSC70, and TSG101.

### High-Throughput Sequencing Data

After PCR amplification of the libraries, the products were pooled and size-selected. NGS was then performed using Illumina high-throughput RNA sequencing technology. About  $20.3 \pm 4.3$  million raw sequence reads per sample were analyzed (count and RPKM numbers are given as mean or mean  $\pm$  standard deviation) from an Illumina small RNA sequencing run (**Table 4**). After adapter cutting,  $9.3 \times 10^6 \pm 4.0 \times 10^6$  reads were selected for further analysis. Direct mapping of trimmed reads to human mature miRNA using FANse3 resulted in  $2.9 \times 10^6 \pm 3.0 \times 10^6$  hits, and our results corresponded to  $20.26 \pm 20.87\%$  of all reads per sample, aligned to mature miRBase sequences (**Table 5**). The miRNA read counts normalized to RPKM were chosen for further analyzes.

### Differentially Expressed miRNAs

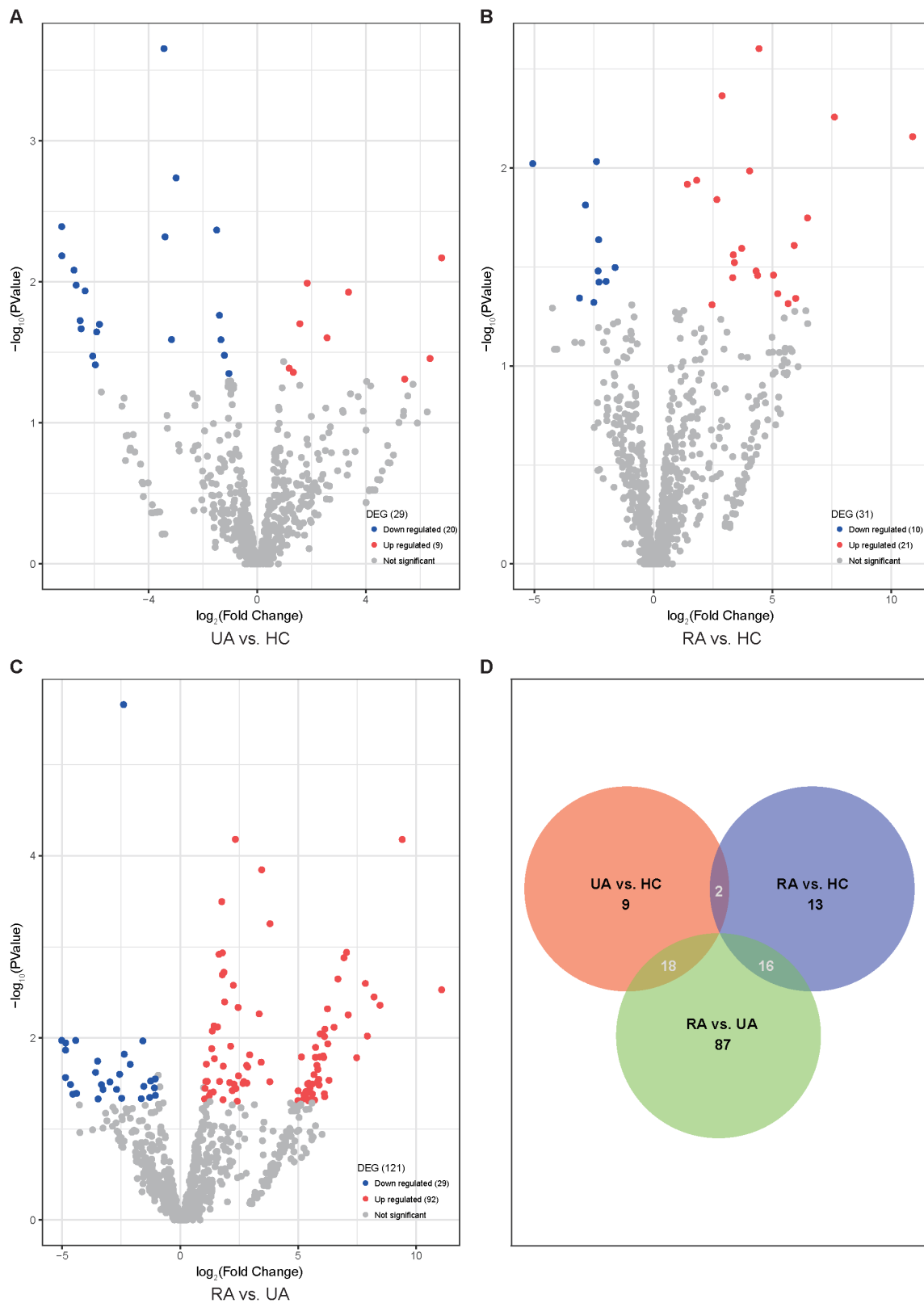
The raw miRNA-seq data, including 2590 miRNAs, were normalized and summarized. miRNAs with less than 10 RPKM in less than 50% samples were removed, leaving 539 miRNAs (Additional file: **Supplementary Table 1**). UA and RA patients and HC were classified based on miRNA profiles. The miRNAs that can discriminate between the healthy groups from UA and RA groups were identified. As disclosed by a volcano plot, 181 out of all the miRNAs had significantly different expression levels. Of these, 9 miRNAs were up-regulated, and 20 were down-regulated in UA compared with HC (**Fig. 3A** and **Table 6**), whereas 21 were up-regulated and 10 down-regulated in RA compared with HC (**Fig. 3B** and **Table 6**). In addition, compared with UA, 92 miRNAs were up-regulated in RA, and 29 were down-regulated, which was significantly higher than the other two groups (**Fig. 3C** and **Table 6**). However, none of the miRNAs changed consistently in these three groups. (**Fig. 3D** and **Table 6**). Results were calculated using the following conditions:  $|\log_2(\text{FoldChange})| > 1$  and  $P < 0.05$ .

**Table 4.** Basic statistical information on the reads quality

Sample Type	Raw Reads	Clean Reads	Clean Rate	Q20	Q30
UA01	23,492,879	13,313,253	56.67%	97.48%	96.22%
UA02	18,574,469	6,555,163	35.29%	97.55%	96.29%
UA03	20,768,409	10,509,072	50.60%	97.26%	95.86%
UA04	21,044,515	7,637,951	36.29%	97.55%	96.29%
RA01	28,274,512	12,322,587	43.58%	97.39%	96.15%
RA02	13,768,858	7,798,992	56.64%	97.72%	96.58%
RA03	23,161,484	15,051,526	64.99%	97.77%	96.71%
RA04	21,394,129	13,622,523	63.67%	97.07%	95.68%
RA05	24,770,487	15,825,425	63.89%	97.61%	96.44%
RA06	12,775,494	5,689,304	44.53%	97.46%	96.19%
RA07	17,429,573	5,782,516	33.18%	97.05%	95.66%
RA08	15,384,559	9,607,274	62.45%	96.96%	95.51%
HC01	16,390,223	6,555,376	40.00%	97.22%	95.84%
HC02	23,893,885	12,144,038	50.82%	97.53%	96.32%
HC03	21,746,269	3,272,337	15.05%	97.09%	95.72%
HC04	21,904,933	3,649,431	16.66%	97.53%	96.34%

**Table 5.** Mapping rate statistics

sample Type	Total Reads	Mapped Reads	Mapping Rate
UA01	13,313,253	3,928,389	29.51%
UA02	6,555,163	400,202	6.11%
UA03	10,509,072	3,200,706	30.46%
UA04	7,637,951	782,864	10.25%
RA01	12,322,587	4,436,342	36.00%
RA02	7,798,992	4,441,367	56.95%
RA03	15,051,526	9,658,045	64.17%
RA04	13,622,523	999,504	7.34%
RA05	15,825,425	8,343,026	52.72%
RA06	5,689,304	1,469,199	25.82%
RA07	5,782,516	283,658	4.91%
RA08	9,607,274	256,479	2.67%
HC01	6,555,376	549,059	8.38%
HC02	12,144,038	5,453,765	44.91%
HC03	3,272,337	112,087	3.43%
HC04	3,649,431	1,336,661	36.63%



**Fig. 3.** NGS analysis of plasma exosomal miRNAs profiles in UA or RA, and HC

A–C Volcano plot showing significantly up-regulated and down-regulated miRNAs among the groups (each point represents a single miRNA). (D) Venn diagram showing the number of differentially expressed miRNAs as compared between groups.

**Table 6.** Significantly changed miRNAs in patients with unruptured or ruptured IAs as identified with NGS

Systematic Name	logFC	P-Value	Description								
UA vs. HC				RA vs. UA				<i>Continued</i>			
hsa-miR-96-5p	-3.46	0.000	Down	hsa-miR-215-5p	-2.42	0.000	Down	hsa-miR-583	-2.59	0.025	Down
hsa-miR-598-3p	-3.01	0.002	Down	hsa-miR-145-5p	2.31	0.000	Up	hsa-miR-4659a-3p	5.64	0.025	Up
hsa-miR-202-3p	-7.23	0.004	Down	hsa-miR-202-5p	9.38	0.000	Up	hsa-miR-1287-5p	2.44	0.026	Up
hsa-miR-660-5p	-1.52	0.004	Down	hsa-miR-598-3p	3.43	0.000	Up	hsa-miR-5699-3p	-4.89	0.027	Down
hsa-miR-92a-1-5p	-3.42	0.005	Down	hsa-miR-451a	1.74	0.000	Up	hsa-miR-141-3p	-1.08	0.028	Down
hsa-miR-202-5p	-7.22	0.007	Down	hsa-miR-96-5p	3.78	0.001	Up	hsa-miR-1254	5.84	0.029	Up
hsa-miR-1296-5p	6.77	0.007	Up	hsa-miR-550a-3p	7.02	0.001	Up	hsa-miR-4508	6.28	0.029	Up
hsa-miR-17-3p	-6.77	0.008	Down	hsa-miR-532-3p	1.76	0.001	Up	hsa-miR-193b-5p	-1.28	0.030	Down
hsa-miR-215-5p	1.82	0.010	Up	hsa-miR-15b-3p	1.62	0.001	Up	hsa-miR-18b-5p	5.81	0.030	Up
hsa-miR-186-3p	-6.70	0.011	Down	hsa-miR-3613-3p	6.91	0.001	Up	hsa-miR-181a-5p	1.12	0.030	Up
hsa-miR-873-5p	-6.37	0.012	Down	hsa-miR-106b-3p	1.83	0.002	Up	hsa-miR-106b-5p	1.64	0.030	Up
hsa-miR-129-5p	3.34	0.012	Up	hsa-miR-484	1.76	0.002	Up	hsa-miR-15b-5p	1.06	0.030	Up
hsa-let-7a-3p	-1.41	0.017	Down	hsa-miR-624-5p	6.65	0.002	Up	hsa-miR-548q	2.67	0.030	Up
hsa-miR-99a-3p	-6.55	0.019	Down	hsa-miR-208a-3p	7.82	0.003	Up	hsa-miR-208b-3p	3.77	0.030	Up
hsa-miR-200b-3p	1.55	0.020	Up	hsa-miR-502-3p	2.22	0.003	Up	hsa-miR-664b-3p	-3.00	0.031	Down
hsa-miR-671-3p	-5.84	0.020	Down	hsa-miR-4454	11.05	0.003	Up	hsa-miR-329-3p	2.07	0.031	Up
hsa-miR-551b-3p	-6.51	0.022	Down	hsa-miR-202-3p	8.19	0.004	Up	hsa-miR-92a-1-5p	2.80	0.031	Up
hsa-miR-548aw	-5.94	0.023	Down	hsa-miR-660-5p	1.85	0.004	Up	hsa-miR-4660	5.42	0.032	Up
hsa-miR-3074-5p	2.55	0.025	Up	hsa-miR-149-5p	8.44	0.004	Up	hsa-miR-1307-5p	2.64	0.032	Up
hsa-miR-376c-3p	-3.18	0.026	Down	hsa-miR-589-5p	2.43	0.005	Up	hsa-miR-548d-3p	5.37	0.032	Up
hsa-miR-144-5p	-1.36	0.026	Down	hsa-miR-186-3p	6.21	0.005	Up	hsa-miR-3667-5p	5.57	0.032	Up
hsa-miR-576-5p	-1.23	0.033	Down	hsa-miR-324-3p	3.32	0.005	Up	hsa-miR-145-3p	2.26	0.032	Up
hsa-miR-624-5p	-6.09	0.034	Down	hsa-miR-4448	7.09	0.006	Up	hsa-miR-7112-3p	-4.67	0.033	Down
hsa-miR-4755-5p	6.35	0.035	Up	hsa-let-7a-3p	1.41	0.007	Up	hsa-miR-3912-3p	-3.36	0.033	Down
hsa-miR-3161	-5.99	0.039	Down	hsa-miR-30c-5p	1.56	0.008	Up	hsa-miR-675-3p	5.86	0.033	Up



(Cont. Table 6)

Systematic Name	logFC	P-Value	Description								
hsa-miR-3613-5p	1.15	0.041	Up	hsa-miR-873-5p	6.49	0.008	Up	hsa-miR-1226-3p	-1.57	0.034	Down
hsa-miR-200c-3p	1.31	0.044	Up	hsa-miR-766-3p	6.10	0.008	Up	hsa-miR-3605-3p	-1.12	0.035	Down
hsa-miR-424-5p	-1.06	0.045	Down	hsa-miR-107	1.33	0.008	Up	hsa-miR-1268a	5.46	0.036	Up
hsa-miR-6807-5p	5.41	0.049	Up	hsa-miR-154-5p	5.91	0.009	Up	hsa-miR-425-5p	1.03	0.036	Up
<b>RA vs. HC</b>				hsa-miR-671-3p	6.01	0.009	Up	hsa-miR-93-3p	2.34	0.036	Up
hsa-let-7a-2-3p	4.41	0.002	Up	hsa-miR-4497	7.90	0.010	Up	hsa-miR-1236-5p	-2.72	0.037	Down
hsa-miR-1245a	2.86	0.004	Up	hsa-miR-548aw	6.09	0.010	Up	hsa-miR-3146	-3.30	0.037	Down
hsa-miR-208b-3p	7.58	0.006	Up	hsa-miR-5683	-5.05	0.011	Down	hsa-miR-570-3p	2.18	0.038	Up
hsa-miR-4454	10.86	0.007	Up	hsa-miR-3679-3p	-4.45	0.011	Down	hsa-miR-362-3p	4.97	0.038	Up
hsa-miR-874-5p	-2.42	0.009	Down	hsa-miR-483-5p	-1.61	0.011	Down	hsa-miR-5193	5.30	0.039	Up
hsa-miR-6874-3p	-5.10	0.009	Down	hsa-miR-6874-3p	-4.88	0.011	Down	hsa-miR-30b-5p	1.37	0.039	Up
hsa-miR-1976	4.02	0.010	Up	hsa-miR-500a-5p	6.23	0.012	Up	hsa-miR-363-3p	1.26	0.040	Up
hsa-miR-502-3p	1.79	0.012	Up	hsa-miR-365a-3p	2.11	0.012	Up	hsa-miR-4742-3p	5.35	0.040	Up
hsa-miR-145-5p	1.40	0.012	Up	hsa-miR-3187-3p	5.71	0.013	Up	hsa-miR-4734	-4.42	0.041	Down
hsa-miR-129-5p	2.64	0.014	Up	hsa-miR-576-5p	1.31	0.013	Up	hsa-miR-4647	-4.46	0.041	Down
hsa-miR-3146	-2.88	0.015	Down	hsa-miR-6889-5p	-4.88	0.014	Down	hsa-miR-873-3p	6.08	0.041	Up
hsa-miR-548h-5p	6.45	0.018	Up	hsa-miR-3529-5p	-2.40	0.015	Down	hsa-miR-19b-2-5p	5.57	0.041	Up
hsa-miR-3529-5p	-2.33	0.023	Down	hsa-miR-769-5p	2.92	0.015	Up	hsa-miR-6752-5p	-4.57	0.042	Down
hsa-miR-1296-5p	5.89	0.025	Up	hsa-miR-188-5p	6.03	0.016	Up	hsa-miR-4511	5.22	0.042	Up
hsa-miR-4448	3.68	0.025	Up	hsa-miR-17-3p	5.89	0.016	Up	hsa-miR-548l	5.28	0.042	Up
hsa-miR-1303	3.33	0.027	Up	hsa-miR-708-5p	5.11	0.016	Up	hsa-miR-200b-3p	-1.08	0.043	Down
hsa-miR-500a-5p	3.37	0.030	Up	hsa-miR-214-3p	6.03	0.016	Up	hsa-let-7c-5p	1.21	0.043	Up
hsa-miR-369-5p	-1.64	0.032	Down	hsa-miR-3614-5p	5.70	0.016	Up	hsa-miR-122-3p	6.09	0.044	Up
hsa-miR-3138	-2.35	0.033	Down	hsa-miR-4714-3p	6.05	0.016	Up	hsa-miR-1908-5p	-1.32	0.045	Down
hsa-miR-708-5p	4.29	0.033	Up	hsa-miR-4491	7.45	0.017	Up	hsa-miR-4753-5p	-2.50	0.046	Down
hsa-miR-4492	5.02	0.035	Up	hsa-miR-3615	1.42	0.017	Up	hsa-miR-23c	-1.68	0.047	Down

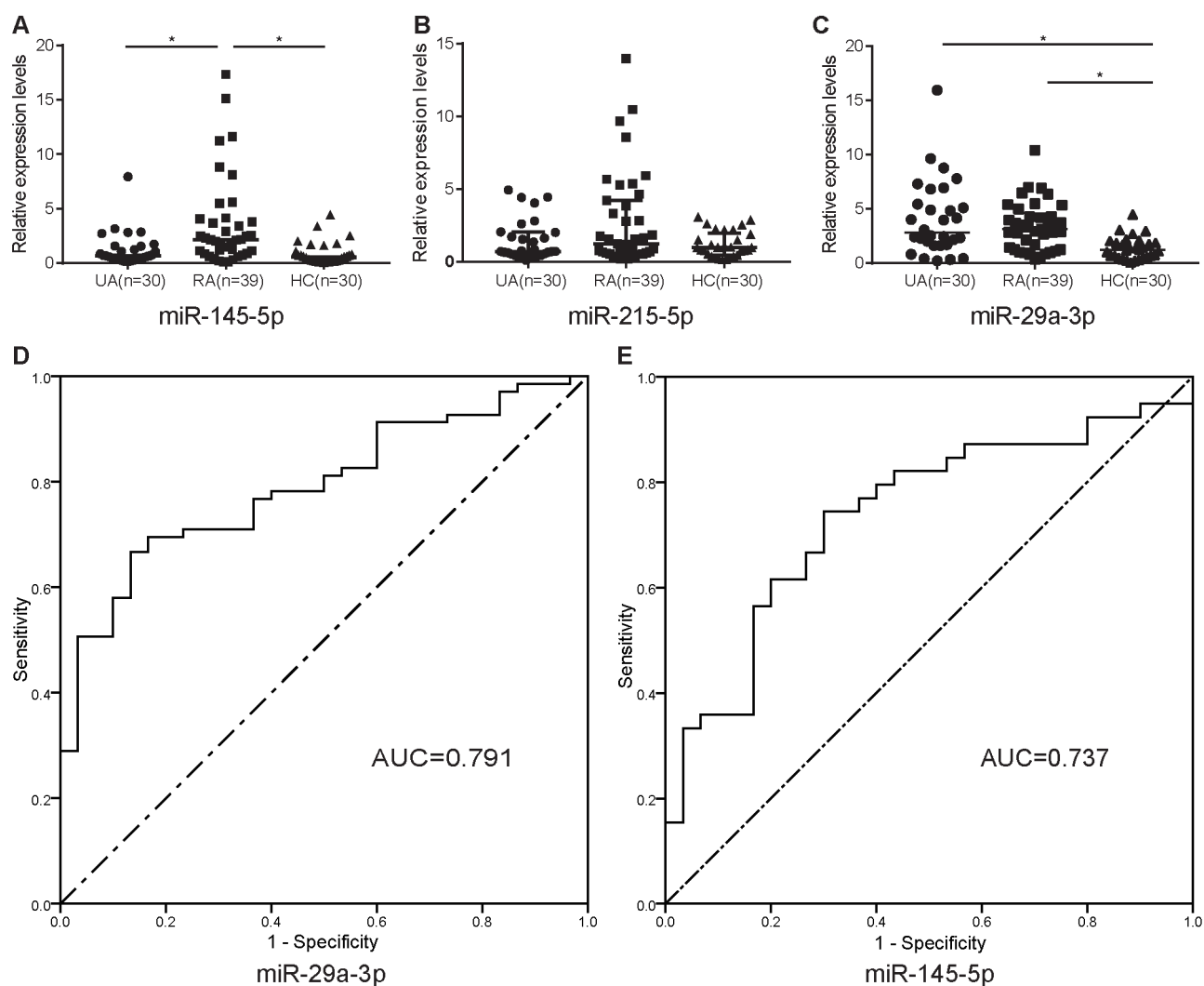
(Cont. Table 6)

Systematic Name	logFC	P-Value	Description
hsa-miR-4497	4.35	0.035	Up
hsa-miR-208a-3p	3.31	0.036	Up
hsa-miR-6803-3p	-2.02	0.037	Down
hsa-miR-3136-5p	-2.32	0.038	Down
hsa-miR-4511	5.19	0.043	Up
hsa-miR-4449	-3.13	0.045	Down
hsa-miR-214-3p	5.95	0.046	Up
hsa-miR-1237-3p	-2.53	0.048	Down
hsa-miR-6851-3p	5.63	0.048	Up
hsa-miR-133a-3p	2.44	0.049	Up
hsa-miR-6741-3p	-3.53	0.018	Down
hsa-miR-3180-3p	5.21	0.047	Up
hsa-miR-452-5p	3.40	0.019	Up
hsa-miR-6881-5p	-3.50	0.047	Down
hsa-miR-30d-5p	1.08	0.019	Up
hsa-miR-29c-3p	1.01	0.047	Up
hsa-miR-3074-5p	-2.14	0.020	Down
hsa-miR-137	5.49	0.048	Up
hsa-miR-543	5.77	0.020	Up
hsa-miR-369-3p	1.79	0.048	Up
hsa-miR-1228-5p	2.79	0.020	Up
hsa-miR-6851-3p	5.67	0.048	Up
hsa-miR-205-5p	1.80	0.020	Up
hsa-miR-653-3p	4.96	0.049	Up
hsa-miR-133a-3p	2.83	0.021	Up
hsa-miR-208b-5p	5.41	0.049	Up
hsa-miR-99a-3p	5.81	0.022	Up
hsa-miR-1180-3p	2.39	0.050	Up
hsa-miR-6806-3p	-3.61	0.024	Down

### Validation of the Sequencing Data by qRT-PCR Analysis

To validate the miRNAs identified by NGS, we performed qRT-PCR in an expanded sample cohort (Table 2). Although the microRNAs were randomly selected, the following criteria were used to enroll them: (I) The miRNAs must be differentially expressed between any two groups (e.g., in the UA compared with the HC, UA with RA, has-miR-145-5p satisfies this requirement), therefore, miR-145-5p, miR-202-5p, miR-1296-5p, and miR-215-5p were included in the validation experiment; (II) Such miRNAs are not in our differential gene list but has been reported in multiple aneurysm studies; 29a-3p meets this condition. Due to the sequence of miR-1296-5p, we found that the designed primers had high Tm and GC contents, and the specificity was poor during the small sample validation process. Thus, the expression level of miR-1296-5p was not verified. Furthermore, miR-202-5p was detectable only in a few samples, and it could not be amplified in the majority of samples. Among the verified miRNAs, miR-145-5p was significantly increased in UA and RA compared with the HC (Fig. 4A), which is consistent with the sequencing data. The expression level of miR-215-5p was higher in RA compared with HC and UA, although not statistically significant (Fig. 4B). Unexpectedly, miR-29a-3p was also significantly increased in both UA and RA in this study ( $p < 0.001$ ) (Fig. 4C).

These results suggested that miR-145-5p and miR-29a-3p may be biomarker miRNAs of IAs. Next, ROC curves were constructed to evaluate the potential value of plasma exosomal miR-145-5p and miR-29a-3p as biomarkers for the diagnosis of IA. Given that there is no significant difference in the expression of miR-29a-3p between UA and RA, samples of the two groups were combined, i.e., we only tested whether they had aneurysm regardless of whether it was ruptured or not. It was found that in distinguishing between aneurysms and healthy control group, the AUC of miR-29a-3p was 0.791 (95% confidence interval [CI], 0.702–0.879) (Fig. 4D). The expression levels of miR-29a-3p were not related with patient gender, diabetes mellitus, smoking, and drinking ( $p > 0.05$ ), but were associated with age and hypertension ( $p < 0.05$ ) (Table 7). Further multivariate logistic regression analysis showed that miR-29 is an independent diagnostic marker of IAs ( $p < 0.05$ ) (Table 8). Similarly, our analysis revealed that the AUC value of miR-145-5p was 0.737 (95% CI, 0.617–0.856) as a diagnostic marker for SAH or predictor of aneurysm rupture (Fig. 4E). The expression levels of miR-145-5p were not related with patient age, gender, hypertension, diabetes mellitus, smoking, drinking, and aneurysm location ( $p > 0.05$ ) but were related with aneurysm size ( $p < 0.05$ ) (Table 9). Further multivariate logistic regression analysis showed that miR-145-5p is an independent diagnostic marker of IAs ( $p$



**Fig. 4.** qRT-PCR analysis of selected miRNAs

A-C represents the relative plasma exosomal levels of miR-145-5p, -215-5p, and -29a-3p, respectively in UA, RA, and HC. The Y-axis depicts values normalized to miR-16-5p and all miR levels were presented as fold changes ( $2^{-\Delta\Delta Ct}$ ). \**P*-Value < 0.001. (D) The AUC of miR-29a-3p was 0.791 (*p*-value < 0.001). (E) The AUC curve of miR-145-5p was 0.737 (*P*-Value < 0.001).

< 0.05) (Table 10).

## Discussion

Screening for high-risk aneurysms and timely intervention is a major challenge in IA research and treatment. However, the current standard screening methods, MRA or CTA, are not suitable for large-scale population screening. Thus, identification of blood biomarkers with high sensitivity and specificity will be essential for population-wide, cost-effective screening tests to detect IAs, particularly asymptomatic IAs. Blood-based tests, such as measurement of circulating exosomal miRNAs, could offer an alternative diagnostic tool for screening and detection of IA.

Hence, we investigated the diagnostic potential of exosomal miRNAs using Illumina NGS by analyzing circulating exosomal miRNA profiles of IA patients and healthy individuals. To our knowledge, this is the first demonstration of changes in circulating exosomal miRNA expression in an IA cohort.

In this study, 181 miRNAs were significantly and differently expressed in the samples. Of which, 9 and 21 miRNAs were up-regulated, whereas 20 and 10 miRNAs were down-regulated in UA and RA patients, respectively, compared with healthy volunteers. In addition, compared with UA, 92 miRNAs in RA were up-regulated, and 29 were down-regulated. Therefore, it is reasonable to hypothesize that aneurysm formation, growth, and rupture have different molecular

**Table 7.** The association between mir-29a-3p expression and clinical features of subjects

Characteristics	Number	miR-29a-3p expression		P-Value
		Low	High	
Age (years)				0.002
< 50	39	27	12	
≥ 50	60	22	38	
Gender				0.909
Male	43	21	22	
Female	56	28	28	
Hypertension				0.002
Yes	44	14	30	
No	55	35	20	
Diabetes mellitus				0.563
Yes	12	5	7	
No	87	44	43	
Smoking				0.755
Yes	17	9	8	
No	82	40	42	
Drinking				0.747
Yes	15	8	7	
No	84	41	43	

**Table 8.** Multivariate logistic regression analysis for the risk factors of IA

Item	OR	95.0% Confidence Interval		P-Value
		Lower	Upper	
Age	2.895	0.929	9.015	0.067
Hypertension	4.260	1.133	16.016	0.032
miR-29a-3p	8.898	2.584	30.635	0.001

mechanisms, and further studies should explore the reasons for these variations. Interestingly, we found that the miRNA expression profiles of the unruptured and ruptured groups were not very similar, there may be some reasons for this phenomenon: first, the small amount of sequencing did not fully reflect the expression spectrum of the two groups; second, it may be caused by our criteria for screening differential genes; third, we prefer that the body compensates, resulting in up-regulated miRNA with decreased original expression and decreased compensatory miRNA with increased expression after aneurysm rupture. Moreover, we randomly selected some of the above miRNAs for QRT-PCR verification in another set of samples; miR-29a did not meet the defined differential gene inclusion criteria and was excluded. Given the role of the miR-29 family in aneurysms<sup>16-18</sup>), we additionally verified the expression of miR-29. The results show that the levels of miR-145-5p and miR-29a-3p in circulating exosomes of IA patients are different

from those of controls. This indicates the miRNAs had high discriminating power to distinguish IA patients from controls, including unruptured and ruptured status.

Cell-free miRNAs have emerged as attractive biomarkers since they are obtained through a noninvasive manner and have been reported to serve as diagnostic tools for diseases<sup>3</sup>), including IA<sup>10, 17, 19, 20</sup>). However, many circulating miRNAs are passively released from apoptotic and necrotic cells<sup>3, 6</sup>) and therefore may not precisely reflect the biological changes that occur in these vascular lesions. In contrast, exosomes are actively secreted into the peripheral blood by different cell types, including endothelial cells, smooth muscle cells, etc., and they play a role in cardiovascular protection and repair through miRNA transfer<sup>21</sup>). This indicates that exosomes carry specific miRNAs as well as their own miRNA biogenesis machinery. Therefore, exosomal miRNAs may truly represent specific molecular biomarkers compared with cell-free miRNAs.

**Table 9.** The association between miR-145-5p expression and clinical features of IA

Characteristics	Number	miR-145-5p expression		P-Value
		Low	High	
Age (years)				0.962
< 50	18	8	10	
≥ 50	51	23	28	
Gender				0.634
Male	29	14	15	
Female	40	17	23	
Hypertension				0.334
Yes	40	16	24	
No	29	15	14	
Diabetes mellitus				0.453
Yes	9	3	6	
No	60	28	32	
Smoking				0.473
Yes	13	7	6	
No	56	24	32	
Drinking				0.975
Yes	9	4	5	
No	60	27	33	
Aneurysm Location				0.299
Anterior Circulation	53	22	31	
Posterior Circulation	16	9	7	
Aneurysm size				0.022
≤ 5	34	20	14	
> 5	35	11	24	

**Table 10.** Multivariate logistic regression analysis for the risk factors of IA rupture

Item	OR	95.0% Confidence Interval		P-Value
		Lower	Upper	
Aneurysm size	1.938	0.654	5.739	0.232
miR-145-5p expression	5.884	1.989	17.407	0.001

Peripheral blood exosomes have been reported to be effective diagnostic and prognostic markers for cardiovascular and central nervous system diseases. Indeed, several reports have proposed the use of circulating miRNAs, including miR-133a, miR-143/145, miR-223, and miR-320b, in exosomes as diagnostic markers and predictors of the prognosis of vascular inflammation and atherosclerosis<sup>22)</sup>. For example, miR-133a has been shown to act as a diagnostic marker of myocardial infarction<sup>23)</sup>. Recently, in a study on the role of circulating exosomal miRNAs in neurodegenerative disorders, it was found that exosomal miR-384 was an ideal biomarker among three miRs (miR-135a, -193b, and -384) that discriminates Alzheimer's disease, vascular dementia, and Parkinson's

disease from dementia. In addition, a combination of the three miRNAs was found to be superior to one in the early diagnosis of Alzheimer's disease<sup>24)</sup>. Dolz *et al.*<sup>25)</sup> found that circulating exosomal miRNA expression profiles could offer a new strategy for the monitoring of asymptomatic carotid artery stenosis progression, hence boosting the initiation of therapeutic approaches to prevent the occurrence of ischemic stroke. Considering that the plasma exosomes populations are heterogeneous and can be derived from all types of cells, especially blood cells, future research should determine the origin of exosomes present in the peripheral blood and whether the level of miRNAs in circulating exosomes correlates with specific cell miRNA components.

It has been documented that miRNAs are involved in processes such as apoptosis, vascular wall activation, phagocyte migration, mononuclear leukocyte proliferation, and vascular smooth muscle cell (VSMC) modulation, all of which play a major role in aneurysm formation, growth, and subsequent rupture<sup>20</sup>. Several studies have profiled miRNA expression in body fluids (including serum, plasma, and cerebrospinal fluid) of patients with IA and compared with HCs, using microarray or PCR techniques, in an attempt to characterize the mechanisms of aneurysm. Jin *et al.*<sup>10</sup> used microarray technology to compare serum miRNA between experimental groups (patients with daughter aneurysms, aneurysm without daughter aneurysms, and RAs) and a control group. They identified 86 differently expressed miRNAs, but their results were not validated with qRT-PCR. Li *et al.*<sup>19</sup> compared plasma miRNAs between patients with RA or UAs and healthy volunteers to screen for candidate circulating miRNAs using two different microarray platforms, and then confirmed the results by qRT-PCR. They found that miR-16 and miR-25 could be used as biomarkers of IA occurrence. Of note, they used *C. elegans* miR-39-3p spike-in as the internal reference. Similarly, John *et al.*<sup>20</sup> identified three circulating miRNAs (miR-183-5p, miR-200a-3p, and miR-let7b-5p) that can discriminate between IA patients and controls by PCR array and qRT-PCR. It can be observed that these results are somewhat heterogeneous across studies, possibly due to differences in miRNA stability in different samples, the miRNA analysis platforms used, and different biofluids used in various studies, and population-based differences. These factors may explain why our results are inconsistent with some previously reported findings. Furthermore, it is noteworthy that the miRNAs we investigated are in circulating exosomes. As previously described, exosomes have unique advantages as diagnostic markers.

The most fatal complication of IA is rupture. In patients with SAH, CT scanning of the brain can confirm the diagnosis in most but not all instances. Moreover, the sensitivity of CT for subarachnoid blood decreases over time<sup>26</sup>, and the lumbar puncture is not suitable for some cases because of the risk of fatal herniation. These factors necessitate the search for markers that predict RA rupture. ROC curve analysis showed that the AUC of miR-145-5p as a diagnostic marker for SAH or predictor of aneurysm rupture was 0.737 (95% CI, 0.617–0.856). It should be noted that the increased expression of miR-145 may be a result of rupture, but it is not the cause. Nevertheless, in combination with the neurological exam, miR-145 may be an ideal diagnostic marker for SAH. Indeed,

miR-145 is an important regulator of VSMC phenotype and proliferation<sup>27, 28</sup>, and accumulating evidence suggests that VSMC phenotype modulation is involved in the pathogenesis of IA<sup>1</sup>. For example, Xu J *et al.*<sup>28</sup> found that miR-143/145 is down-regulated in sera of IA patients, and *in vitro* experiments confirmed that the miR-143/145 cluster reverses the regulation effect of KLF5 in VSMC with proliferation and contractility in IA. This is in contrast to the expression of miR-145 in circulating exosomes in our study, which may be ascribed to compensation. In fact, exosomes themselves could enhance cellular connections by transferring functional proteins, miRNAs, and other substances. Unexpectedly, in our study, exosomal miR-29a expression was also significantly increased in IA patients compared with HCs. This is consistent with the previous research<sup>17</sup>, in which serum miR-29a was found to be a biomarker for the diagnosis and prognosis of IA. One of the pathological features of IA is the degradation of the extracellular matrix<sup>1</sup>. The miR-29 family (miR-29a, miR-29b, and miR-29c) has been recognized previously to promote fibrosis through regulation of its target genes, including collagen, type I,  $\alpha 1$  (COL1A1), COL3A1, and COL5A1, as well as other key components of the arterial wall, such as fibrillin-1 and elastin<sup>18</sup>. In a mouse model of abnormal aortic aneurysm, inhibition of miR-29b prevented abdominal aortic aneurysm development<sup>18</sup>. Findings from these studies, together with our ROC analysis, provide a strong confirmation that miR-29a may be involved in the development of IA and can be a useful diagnostic marker of IA.

Despite these discussions, our study has several limitations. Given the small sample size and some other factors, such as ethnic differences, further validation is required using independent prospective IA cohorts. In addition, only a small number of miRNAs were verified by qRT-PCR. However, considering the AUC of miR-29a and miR-145 and the above analysis, we believe that they can be used for monitoring the formation and rupture of IA.

## Conclusions

In summary, this study investigated the exosome-derived miRNA profiles in plasma from patients with IA using direct miRNA sequencing and qRT-PCR. In particular, miR-29a-3p and miR-145 were highly expressed in patients with IA and RA. Our results support the hypothesis that circulating exosomal miRNA profiles can serve as noninvasive biomarkers of IA. However, multicenter large prospective studies would be necessary to confirm these findings.

## Additional File

**Supplementary Table 1** miRNA expression abundance statistics. UA: unruptured aneurysm; RA: ruptured aneurysm; HC: Healthy control.

## Acknowledgment

This work was supported by the National Natural Science Foundation of China [No. 81860222], Guangxi Key R&D Program [GUIKEAB16380204] and Youth Science Foundation of Guangxi Medical University [GXMUYSF201710].

## Conflict of Interest

The authors have no competing interest to declare.

## References

- Nohra C, Hoh BL, David H: Review of cerebral aneurysm formation, growth, and rupture. *Stroke*, 2013; 44(12): 3613-3622
- Zhou S, Dion PA, Rouleau GA: Genetics of Intracranial Aneurysms. *Stroke*, 2018; 49(3): 780-787
- Pritchard CC, Cheng HH, Muneesh T: MicroRNA profiling: approaches and considerations. *Nature Reviews Genetics*, 2012; 13(5): 358-369
- Bartel DP: MicroRNAs: genomics, biogenesis, mechanism, and function. *Cell*, 2004
- Reid G, Kirschner MB, Zandwijk NV: Circulating microRNAs: Association with disease and potential use as biomarkers. *Crit Rev Oncol Hematol*, 2011; 80(2): 193-208
- Maria Angelica C, Carlos BR, Jana F, Gabriel LB, Sood AK, Calin GA: MicroRNAs in body fluids—the mix of hormones and biomarkers. *Nature Reviews Clinical Oncology*, 2011; 8(8): 467-477
- Chen X, Ba Y, Ma L, Cai X, Yin Y, Wang K, Guo J, Zhang Y, Chen J, Guo X, Li Q, Li X, Wang W, Zhang Y, Wang J, Jiang X, Xiang Y, Xu C, Zheng P, Zhang J, Li R, Zhang H, Shang X, Gong T, Ning G, Wang J, Zen K, Zhang J, Zhang CY: Characterization of microRNAs in serum: a novel class of biomarkers for diagnosis of cancer and other diseases. *Cell Res*, 2008; 18(10): 997-1006
- Clotilde T, Laurence Z, Sebastian A: Exosomes: composition, biogenesis and function. *Nature Reviews Immunology*, 2002; 2(8): 569-579
- Valadi H, Ekstrom K, Bossios A, Sjostrand M, Lee JJ, Lotvall JO: Exosome-mediated transfer of mRNAs and microRNAs is a novel mechanism of genetic exchange between cells. *Nat Cell Biol*, 2007; 9(6): 654-659
- Jin H, Li C, Ge H, Jiang Y, Li Y: Circulating microRNA: a novel potential biomarker for early diagnosis of intracranial aneurysm rupture a case control study. *J Transl Med*, 2013; 11: 296
- Li P, Zhang Q, Wu X, Yang X, Zhang Y, Li Y, Jiang F: Circulating microRNAs serve as novel biological markers for intracranial aneurysms. *J Am Heart Assoc*, 2014; 3(5): e000972
- Meeuwssen JAL, van THFNG, van Rheenen W, Rinkel GJE, Veldink JH, Ruigrok YM: Circulating microRNAs in patients with intracranial aneurysms. *PLoS One*, 2017; 12(5): e0176558
- Xiao CL, Mai ZB, Lian XL, Zhong JY, Jin JJ, He QY, Zhang G: FANSe2: A Robust and Cost-Efficient Alignment Tool for Quantitative Next-Generation Sequencing Applications. *PLoS One*, 2014; 9(4): e94250
- Mortazavi A, Williams BA, McCue K, Schaeffer L, Wold B: Mapping and quantifying mammalian transcriptomes by RNA-Seq. *Nat Methods*, 2008; 5(7): 621-628
- Robinson MD, McCarthy DJ, Smyth GK: edgeR: a Bioconductor package for differential expression analysis of digital gene expression data. *Bioinformatics*, 2010; 26(1): 139-140
- Sun L, Zhao M, Zhang J, Lv M, Li Y, Yang X, Liu A, Wu Z: miR-29b Downregulation Induces Phenotypic Modulation of Vascular Smooth Muscle Cells: Implication for Intracranial Aneurysm Formation and Progression to Rupture. *Cell Physiol Biochem*, 2017; 41(2): 510-518
- Wang WH, Wang YH, Zheng LL, Li XW, Hao F, Guo D: MicroRNA-29a: A potential biomarker in the development of intracranial aneurysm. *J Neurol Sci*, 2016; 364(1): 84-89
- Lars M, Junya A, Ryuji T, Merk DR, Alicia D, Chin JT, Uwe R, Schoelmerich AM, Azad R, Leeper NJ: Inhibition of microRNA-29b reduces murine abdominal aortic aneurysm development. *J Clin Invest*, 2012; 122(2): 497-506
- Pengxiang L, Qunye Z, Xiao W, Xinjian Y, Yun Z, Youxiang L, Fan J: Circulating microRNAs serve as novel biological markers for intracranial aneurysms. *Journal of the American Heart Association*, 2014; 3(5): e000972-e
- Jal M, Fng VTH, Van RW, Gje R, Veldink JH, Ruigrok YM: Circulating microRNAs in patients with intracranial aneurysms. *PLoS One*, 2017; 12(5): e0176558
- Emanueli C, Shearn AIU, Angelini GD, Sahoo S: Exosomes and exosomal miRNAs in cardiovascular protection and repair. *Vascul Pharmacol*, 2015; 71: 24-30
- Lu M, Yuan S, Li S, Li L, Liu M, Wan S: The Exosome-Derived Biomarker in Atherosclerosis and Its Clinical Application. *J Cardiovasc Transl Res*, 2018: 1-7
- Chao C, Qiang W, Wenjie Y, Manhua C, Jiahong X: miRNAs as biomarkers of myocardial infarction: a meta-analysis. *PLoS One*, 2014; 9(2): e88566
- YANG Ting Ting, LIU Chen Geng, GAO Shi Chao, ZHANG Yi, WANG Pei Chang: The Serum Exosome Derived MicroRNA -135a, -193b, and -384 Were Potential Alzheimer's Disease Biomarkers. *Biomed Environ Sci*, 2018; 31(2): 87-96
- Dolz S, Górriz D, Tembl JJ, Sánchez D, Fortea G, Parkhutik V, Lago A: Circulating MicroRNAs as Novel Biomarkers of Stenosis Progression in Asymptomatic Carotid Stenosis. *Stroke*, 2017; 48(1): 10
- Connolly ES, Rabinstein AA, Carhuapoma JR, Derdeyn CP, Dion J, Higashida RT, Hoh BL, Kirkness CJ, Naidich AM, Ogilvy CS, Patel AB, Thompson BG, Vespa P: Guidelines for the management of aneurysmal subarach-

- noid hemorrhage: a guideline for healthcare professionals from the American Heart Association/American Stroke Association. *Stroke*, 2012; 43(6): 1711-1737
- 27) Cheng Y, Liu XJ: MicroRNA-145, a novel smooth muscle cell phenotypic marker and modulator, controls vascular neointimal lesion formation. *Circ Res*, 2009; 105(2): 158
- 28) Xu J, Yan S, Tan H, Ma L, Feng H, Han H, Pan M, Yu L, Fang C: The miR-143/145 cluster reverses the regulation effect of KLF5 in smooth muscle cells with proliferation and contractility in intracranial aneurysm. *Gene*, 2018; 679: 266-273



Supplementary Table 1.

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-6834-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6799-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6844	0	0	0	0	56.35275	0	15.5311	0	0	0	0	0	0	0	0	0
hsa-miR-2277-3p	165.4623	0	0	0	0	0	10.35406	50.02486	0	0	0	0	0	0	0	0
hsa-miR-183-3p	0	0	0	0	150.274	0	147.9152	0	34.24589	0	0	556.9957	0	8.73141	0	35.6254
hsa-miR-520a-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-598-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3529-3p	2468.099	9560.413	1249.725	3221.176	1734.685	890.8344	1355.032	2479.493	1250.719	4675.725	6437.659	5085.613	2375.61	2742.422	10861.23	2309.455
hsa-miR-548l	0	0	0	0	21.46771	300.2079	49.30507	190.5709	45.66118	0	0	0	0	61.11987	1699.375	35.6254
hsa-miR-505-5p	2884.983	6425.343	7096.651	1946.457	1105.587	7344.373	1656.65	1048.14	2967.977	16562.32	3525.385	1113.991	5463.904	2593.229	1699.375	1888.146
hsa-miR-449b-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-491-5p	36.36533	0	0	243.3072	171.7417	182.2691	118.3322	142.9282	34.24589	0	0	371.3305	0	69.85128	0	0
hsa-miR-4769-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-503-3p	0	0	0	0	0	0	9.412785	0	0	0	0	0	0	108.3489	0	0
hsa-miR-1263	0	0	0	0	0	0	9.861012	0	0	0	0	0	0	0	0	0
hsa-miR-92a-2-5p	133.3396	0	0	0	10.73386	117.9388	19.72202	47.64273	11.4153	0	0	0	86.72863	174.6282	0	0
hsa-miR-3675-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3183	0	0	0	0	10.73386	32.16513	0	47.64273	34.24589	0	0	0	0	130.9711	0	35.6254
hsa-miR-6784-3p	0	0	0	0	0	64.33027	0	0	0	0	0	0	0	0	0	0
hsa-miR-6827-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-187-5p	0	0	0	0	10.73386	0	4.930506	47.64273	0	0	0	0	0	0	0	0
hsa-miR-4638-5p	0	0	0	0	0	0	31.06219	0	0	0	0	0	0	0	0	0
hsa-miR-4430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3191-3p	0	0	0	0	0	0	0	0	0	0	160.2448	0	0	0	0	0
hsa-miR-487a-3p	0	0	0	0	0	0	0	0	5.707648	0	0	0	0	0	0	0
hsa-miR-6072	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-99b-3p	0	0	297.5535	60.82679	214.6771	182.2691	162.7067	571.7127	97.03001	0	1007.253	556.9957	0	200.8224	849.6877	106.8762
hsa-miR-29b-2-5p	12.12178	356.9635	178.5321	0	322.0157	192.9908	172.5677	571.7127	194.06	0	0	371.3305	346.9145	261.9423	424.8438	320.6286
hsa-miR-519b-3p	0	0	0	0	0	32.16513	0	0	0	0	0	0	0	0	0	0
hsa-miR-25-5p	725.4884	2123.933	609.2408	0	225.411	461.5697	1294.258	550.2735	443.4842	1089.03	2467.769	974.7425	455.3253	421.7271	892.1721	374.0667
hsa-miR-4316	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-133b	0	0	0	0	0	0	4.930506	238.2136	0	0	0	742.6609	0	8.73141	0	0
hsa-miR-224-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-556-3p	0	0	0	0	10.73386	0	73.9576	47.64273	0	0	335.7509	0	0	26.19423	0	106.8762
hsa-miR-3115	0	0	0	0	0	0	0	0	25.23381	0	0	0	0	0	0	0
hsa-miR-6799-3p	0	0	0	0	0	0	0	90.95429	0	0	0	0	0	0	0	0
hsa-miR-519c-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7159-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4423-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4501	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3176	141.4207	0	0	0	0	0	5.752257	0	39.95353	0	0	0	0	0	0	83.12593
hsa-miR-4756-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-34a-3p	496.9929	951.9026	0	0	912.3778	171.5474	419.093	666.9982	313.9206	1004.759	503.6264	742.6609	0	654.8557	0	391.8794
hsa-let-7f-5p	565250.6	571379.6	882439.5	365204.1	502365.9	355789.3	337946.8	388097.7	396618.7	622659.1	329203.8	452280.5	353072.3	349579.4	434190.4	429784.8
hsa-let-7d-5p	71288.18	79007.91	61147.24	50182.11	87588.27	35370.93	81875.99	72988.66	62721.34	58373.28	89309.74	94503.6	64265.91	35781.32	45883.14	42144.85
hsa-miR-1272	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-585-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-330-3p	138.8495	340.7379	340.834	406.4336	102.4595	81.87489	84.71507	136.4314	119.8606	2258.499	160.2448	177.2259	1572.942	308.3775	0	0
hsa-miR-193b-5p	1224.3	6187.367	2291.162	7664.176	1534.942	2873.419	443.7456	2525.064	336.7512	1264.052	4196.886	2042.318	1040.744	1091.426	7647.189	1425.016
hsa-miR-2276-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6815-5p	0	0	0	0	0	0	32.94475	0	0	0	0	0	0	0	0	0
hsa-miR-4735-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-5708	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4454	0	0	0	0	0	0	10.89901	26065.59	0	0	0	29139.67	0	0	0	0
hsa-miR-3616-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3135a	0	0	0	0	0	0	4.930506	47.64273	0	0	167.8755	371.3305	0	0	0	0
hsa-miR-4504	84.85245	0	0	0	0	0	118.3322	190.5709	39.95353	0	0	0	0	17.46282	0	0
hsa-miR-4474-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-195-5p	7522.169	3623.179	5420.681	2810.198	7077.905	4176.643	2484.975	8804.376	1654.076	7044.66	3172.846	7408.043	3369.407	2594.538	7583.463	3965.107
hsa-miR-8061	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-302b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-223-5p	19649.4	16301.33	12646.02	26702.96	24279.98	27619.13	10625.24	18294.81	13310.23	43237.07	20984.43	28778.11	13963.31	45743.86	24216.1	18703.34
hsa-miR-548ah-3p	0	0	0	0	10.73386	139.3823	0	0	62.78413	32.41159	0	0	0	0	0	0
hsa-miR-148a-3p	120345	92572.53	175601.2	170010.9	211360.4	227922.2	119007.6	534217.9	114843.6	272938	171400.8	149831.8	64179.18	112862.2	240036.8	97756.1
hsa-miR-4530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548f-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-25-3p	574911.7	739509.4	383784.5	337406.3	397689.4	380009.7	710076.8	1044329	547431.9	307586	768198.1	1235788	827824.8	445371.8	444386.7	546208.6
hsa-miR-5000-3p	0	0	0	0	0	0	4.930506	0	0	0	0	0	0	0	0	71.2508
hsa-miR-122-5p	3167372	3940877	6089254	1.22E+07	636947.1	9737159	294839.3	9676285	918229.3	4869161	3589513	1421639	2610445	3272646	1.45E+07	1187359
hsa-miR-5697	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6878-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-383-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	132.4264	0	0
hsa-miR-3653-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-637	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3181	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-31-3p	206.0702	594.9391	14.87768	0	322.0157	0	350.0659	666.9982	268.2594	0	0	556.9957	86.72863	261.9423	0	320.6286
hsa-miR-1908-5p	1260.059	5122.426	1765.236	4853.979	755.1268	743.0146	600.5357	150.0746	551.3588	2688.542	4406.73	1364.639	3733.667	1393.533	3122.602	635.9134
hsa-miR-125a-3p	496.9929	832.9148	297.5535	0	568.8944	439.5902	128.1932	381.1418	234.0135	1101.994	0	0	173.4573	148.434	0	356.254
hsa-miR-7-2-3p	96.97423	0	0	0	53.66928	96.49541	24.65253	47.64273	0	0	0	556.9957	0	0	424.8438	35.6254
hsa-miR-331-5p	133.3396	0	193.4098	0	128.8063	107.2171	221.8728	190.5709	45.66118	0	0	185.6652	0	69.85128	0	106.8762
hsa-miR-7155-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7850-5p	0	0	0	0	0	0	5.177032	0	0	0	0	0	0	0	0	0
hsa-miR-4731-3p	0	0	0	0	0	85.7737	14.79152	0	0	0	0	0	0	0	0	35.6254
hsa-miR-607	0	0	0	0	0	0	20.70813	0	0	0	0	0	0	0	0	37.40667
hsa-miR-208b-5p	0	0	0	0	257.6125	10.72171	59.16608	142.9282	0	0	0	371.3305	0	0	0	35.6254
hsa-miR-31-5p	229.1016	374.8116	15.62156	0	225.411	0	82.8325	1150.572	107.8745	1225.158	0	584.8455	0	201.6956	0	37.40667
hsa-miR-4450	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4519	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4795-5p	0	0	0	0	0	0	15.5311	0	11.98606	0	0	0	0	0	0	0
hsa-miR-3189-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6890-3p	723.4788	789.0771	0	0	628.778	556.9647	21.79803	315.9465	107.2437	0	0	410.4179	2204.733	424.6222	0	118.1263
hsa-miR-4700-5p	0	0	0	0	0	0	0	47.64273	0	0	0	0	0	0	0	0
hsa-miR-519e-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4731-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-638	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3194-5p	0	0	0	0	0	0	0	50.02486	35.95818	0	0	0	0	0	0	0
hsa-miR-4419b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-374a-5p	2084.946	4759.513	2499.449	3223.82	5495.734	4460.232	3471.076	7241.694	3327.559	4537.623	12087.03	6126.953	1821.301	5177.726	2973.907	4346.299
hsa-miR-3713	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4787-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-662	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4768-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4692	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-365b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-1180-5p	0	0	0	0	45.0822	0	15.5311	0	0	0	176.2692	0	0	0	0	37.40667
hsa-miR-6079	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-let-7e-5p	21249.48	57709.1	40705.32	36556.9	31707.81	18945.27	6059.592	29109.71	9451.864	62619.2	27195.82	24507.81	32870.15	15786.39	51830.95	13252.65
hsa-miR-8062	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7111-3p	0	118.9878	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548f-5p	96.97423	0	0	0	64.40314	0	49.30507	0	0	0	185.6652	0	122.2397	0	71.2508	0
hsa-miR-6734-3p	0	795.0551	0	0	30.73786	0	56.47671	45.47715	103.516	804.3968	0	177.2259	0	16.66905	0	34.00607
hsa-miR-1178-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-506-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5701	0	0	0	0	0	0	0	111.1664	0	0	0	0	0	0	0	0
hsa-miR-7976	268.6994	0	0	709.6459	525.959	1388.462	920.3612	1000.497	739.1404	491.5758	0	216.6094	1618.934	702.8785	2478.256	415.6297
hsa-miR-4317	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6858-5p	0	0	74.38837	0	0	117.9388	0	0	0	0	0	0	0	61.11987	0	0
hsa-miR-6515-3p	0	0	0	0	23.72747	0	0	0	0	0	556.6396	0	0	0	0	0
hsa-miR-363-5p	0	0	0	0	0	64.33027	69.02709	47.64273	79.90707	0	335.7509	0	52.38846	0	35.6254	0
hsa-miR-3689b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-524-5p	0	0	0	0	0	0	0	0	0	0	0	0	17.46282	0	0	0
hsa-miR-3198	72.73067	0	401.6972	182.4804	75.13699	85.7737	34.51355	0	28.53824	388.9391	0	0	34.92564	0	106.8762	0
hsa-miR-542-5p	902.5215	0	766.8765	1625.734	911.8899	962.03	621.2438	500.2486	691.9225	2722.574	0	531.6777	0	1675.24	1216.598	1020.182
hsa-miR-6875-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4720-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4632-3p	0	0	0	0	0	42.88685	0	0	0	0	0	0	0	0	0	0
hsa-miR-191-5p	191230.4	397981.8	405720.3	376531.7	190595.2	710909.4	171359.8	379143	338807.8	598316.6	197101	706245.3	325847.3	727029.2	255080.1	297961.1
hsa-miR-4712-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5197-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4778-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6506-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-532-5p	10752.02	10827.89	9045.626	7907.483	7202.417	16650.82	10487.19	26298.79	8184.767	15233.45	8729.523	28221.12	17172.27	16703.19	5522.97	13608.9
hsa-miR-4469	0	0	0	0	0	0	19.72202	0	0	0	0	0	0	0	0	0
hsa-miR-3939	121.2178	0	133.8991	0	75.13699	96.49541	49.30507	0	45.66118	0	0	185.6652	0	104.7769	0	0
hsa-miR-873-5p	0	0	0	0	112.7055	33.77339	67.30141	200.0995	0	1020.965	0	779.794	546.3904	366.7192	0	112.22
hsa-miR-3679-5p	92.56631	1022.214	539.6538	812.8672	245.9029	521.9525	258.8516	181.9086	315.9961	1206.595	1121.713	354.4518	413.9321	266.7049	0	306.0546
hsa-miR-3197	0	0	0	0	0	40.93745	0	0	0	0	0	0	0	0	0	0
hsa-miR-4690-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4786-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5682	0	0	0	0	10.73386	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-526b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3916	0	99.94978	0	0	0	0	80.03978	0	0	0	0	0	0	0	0	0
hsa-miR-1304-3p	0	0	0	0	0	10.72171	0	0	39.95353	0	0	0	0	0	0	0
hsa-miR-6779-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4493	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4480	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-92b-5p	303.0445	356.9635	981.9265	729.9216	193.2094	654.0244	798.742	47.64273	759.1171	745.4666	2182.381	0	954.0149	340.525	849.6877	463.1302
hsa-miR-3691-5p	0	0	0	0	0	81.87489	23.53196	0	0	0	0	0	58.34169	0	34.00607	0
hsa-miR-378h	12.72787	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6832-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78.75089
hsa-miR-4707-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3127-5p	0	0	340.834	0	30.73786	0	47.06392	45.47715	103.516	0	0	0	33.33811	0	34.00607	0
hsa-miR-5189-5p	0	543.2053	0	0	39.20191	117.4727	22.50883	0	0	0	0	0	0	0	0	0
hsa-miR-6877-5p	0	0	0	0	10.73386	0	73.9576	0	0	0	0	185.6652	0	0	0	106.8762
hsa-miR-6810-3p	0	0	0	0	0	0	9.412785	0	0	0	0	177.2259	0	0	0	0
hsa-miR-3934-5p	0	0	0	0	75.13699	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-1273g-5p	0	0	0	0	0	0	14.79152	0	5.707648	0	0	0	0	0	0	0
hsa-miR-4436a	0	0	0	0	0	0	5.177032	0	0	0	0	0	0	0	0	0
hsa-miR-1233-5p	0	0	0	0	0	0	0	0	0	0	0	556.9957	0	0	0	0
hsa-miR-6875-5p	0	0	0	0	0	0	5.177032	0	29.96515	0	0	0	0	0	0	0
hsa-miR-514a-5p	0	0	0	0	0	0	0	0	0	897.2119	0	0	0	0	0	0
hsa-miR-3131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	405.5328	0
hsa-miR-6741-3p	12.12178	1189.878	505.8409	0	32.20157	0	19.72202	95.28545	0	0	0	185.6652	0	0	0	71.2508
hsa-miR-520c-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-510-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6773-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6776-3p	0	0	0	0	0	122.8123	0	0	0	0	0	0	0	0	0	0
hsa-miR-6756-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4511	0	0	0	0	32.20157	107.2171	113.4016	0	57.07648	0	335.7509	0	0	0	0	0
hsa-miR-335-5p	62354.98	64626.62	89497.33	47901.1	49344.52	105854	32949.45	49069.84	50265.18	135509.9	29645.28	63624.1	48181.7	166357.2	40958.81	113682.3
hsa-miR-7159-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8089	0	0	0	0	0	0	0	0	0	0	0	0	0	7.972157	0	0
hsa-miR-5196-3p	63.63934	1249.372	62.48623	0	45.0822	0	0	50.02486	89.89545	0	176.2692	0	0	0	1338.258	37.40667
hsa-miR-6854-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-484	2327.381	7258.257	2201.896	2007.284	6547.652	3044.966	11009.82	14388.1	5279.574	8978.012	20816.56	16524.21	3902.788	2252.704	6372.658	6982.579
hsa-miR-6862-5p	0	0	0	0	0	0	19.72202	0	0	0	0	0	0	0	0	35.6254
hsa-miR-4482-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-619-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4639-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6821-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6882-5p	0	0	0	0	0	160.8257	4.930506	47.64273	0	0	0	0	0	0	0	0
hsa-miR-6733-3p	93.78429	0	0	739.5258	23.72747	165.9044	27.24754	0	37.85072	0	185.5466	0	0	86.85455	0	118.1263
hsa-miR-6740-5p	0	0	0	0	64.40314	10.72171	4.930506	0	22.83059	0	0	0	0	139.7026	0	0
hsa-miR-378j	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-124-3p	13.39775	0	0	0	59.31868	11.85031	114.4397	105.3155	0	0	2226.559	0	0	0	0	0
hsa-miR-6812-5p	0	728.8004	0	0	0	0	0	0	0	0	0	0	0	53.47989	0	0
hsa-miR-450b-3p	0	0	0	0	0	0	14.79152	0	0	0	0	0	0	96.04551	0	0
hsa-miR-1287-5p	145.4613	0	74.38837	0	311.2818	182.2691	295.8304	952.8545	376.7047	842.7014	0	556.9957	173.4573	427.8391	0	142.5016
hsa-miR-100-3p	642.4542	0	580.2293	912.4019	686.9668	192.9908	1045.267	619.3555	399.5353	0	167.8755	556.9957	0	253.2109	0	285.0032
hsa-miR-122-3p	0	0	0	0	75.13699	686.1896	0	524.07	0	0	0	0	0	43.65705	0	0
hsa-miR-4645-3p	121.2178	0	0	0	0	0	54.23557	0	0	0	0	0	0	0	0	35.6254
hsa-miR-4793-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4309	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-124-5p	0	0	0	0	0	0	4.930506	0	0	0	0	0	0	0	0	0
hsa-miR-718	0	0	0	0	0	0	0	50.02486	0	0	0	0	0	0	0	0
hsa-miR-4535	0	0	0	0	0	84.43348	0	0	0	0	0	0	0	0	0	0
hsa-miR-4790-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-675-5p	80.99551	0	0	0	61.47572	0	23.53196	0	0	0	0	0	0	8.334527	0	0
hsa-miR-6789-3p	0	0	0	319.3407	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-624-5p	0	0	0	0	214.6771	278.7645	197.2203	619.3555	171.2294	0	0	185.6652	0	165.8968	0	498.7556
hsa-miR-4766-3p	0	0	0	0	45.0822	0	20.70813	50.02486	47.94424	0	0	0	0	0	1784.344	37.40667
hsa-miR-342-3p	136049.3	285879.1	158274.8	138013.2	76158.17	74465.21	27005.28	159988.6	76193.2	215330.8	116978.7	155427.1	145869.7	167932.4	341458.6	93108.6
hsa-miR-1203	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-219b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4503	266.6791	0	0	0	42.93542	107.2171	133.1237	95.28545	0	0	0	0	0	61.11987	0	0
hsa-miR-4687-5p	0	356.9635	74.38837	243.3072	0	0	44.37456	47.64273	28.53824	0	335.7509	0	0	96.04551	424.8438	0
hsa-miR-6783-5p	60.60889	0	0	0	0	0	34.51355	0	22.83059	0	0	0	0	0	0	71.2508
hsa-miR-6787-5p	0	0	0	0	0	64.33027	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-200b-5p	339.4098	0	535.5963	0	96.60471	332.3731	88.74911	762.2836	234.0135	0	671.5018	556.9957	0	0	849.6877	35.6254
hsa-miR-6819-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5703	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-381-3p	557.6018	0	238.0428	547.4412	633.2975	0	276.1084	333.4991	102.7377	713.0551	839.3773	556.9957	607.1004	331.7936	424.8438	35.6254
hsa-miR-3121-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4676-3p	0	0	0	0	10.73386	0	0	95.28545	0	0	0	0	0	0	0	0
hsa-miR-1252-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-590-5p	1369.761	2736.72	1324.113	1824.804	987.5148	1672.587	1360.82	1429.282	1312.759	0	503.6264	185.6652	1647.844	3038.531	2549.063	1816.895
hsa-miR-615-3p	96.97423	0	0	0	107.3386	0	34.51355	381.1418	17.12294	0	0	371.3305	0	0	849.6877	0
hsa-miR-760	0	2630.257	246.6562	1747.97	237.2747	319.9585	256.1268	157.9733	100.9352	1289.64	185.5466	1231.254	287.5739	19.30101	0	275.6281
hsa-miR-4284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1271-3p	0	0	0	0	0	0	9.861012	0	0	0	0	0	0	0	0	0
hsa-miR-6734-5p	1226.504	3293.799	2158.615	812.8672	245.9029	685.7022	338.8603	136.4314	697.3708	2475.067	1442.203	177.2259	2400.806	833.4528	811.0656	272.0485
hsa-miR-4525	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548am-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-576-3p	424.2622	0	535.5963	0	418.6204	0	424.0236	190.5709	268.2594	0	0	742.6609	780.5577	192.091	1274.531	142.5016
hsa-miR-3170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4691-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-194-5p	93810.44	70202.82	45912.5	88563.81	28992.15	47314.91	28527.91	222634.5	30861.25	41551.66	63960.55	69067.47	36426.02	41116.21	90066.9	32632.87
hsa-miR-4745-5p	0	0	0	0	10.24595	0	9.412785	0	5.448209	0	0	0	0	0	0	0
hsa-miR-191-3p	1078.838	356.9635	1532.401	669.0947	633.2975	1940.63	414.1625	571.7127	1478.281	1426.11	167.8755	3527.639	1040.744	2243.972	2973.907	1140.013
hsa-miR-148a-5p	0	0	133.8991	0	268.3464	96.49541	54.23557	381.1418	91.32236	0	0	556.9957	0	130.9711	0	0
hsa-miR-302e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6873-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-642b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	17.46282	0	0
hsa-miR-5088-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4793-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-766-5p	0	0	178.5321	669.0947	257.6125	396.7033	29.58304	47.64273	68.49178	2074.342	0	185.6652	0	340.525	849.6877	213.7524
hsa-miR-548ap-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5197-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5571-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-582-3p	436.384	475.9513	0	121.6536	697.7007	643.3027	276.1084	238.2136	234.0135	1782.638	0	185.6652	0	523.8846	0	178.127
hsa-miR-3940-3p	472.7494	0	297.5535	0	42.93542	203.7125	290.8999	333.4991	473.7348	0	503.6264	556.9957	954.0149	200.8224	424.8438	249.3778
hsa-miR-362-3p	0	0	0	0	64.40314	107.2171	39.44405	95.28545	17.12294	0	0	371.3305	0	78.58269	0	106.8762
hsa-miR-4707-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-16-1-3p	351.5316	0	639.74	425.7876	193.2094	1179.388	655.7573	238.2136	924.6389	1037.171	167.8755	742.6609	0	715.9756	0	1211.264
hsa-miR-548ad-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6504-3p	0	0	0	0	0	0	10.89901	0	0	0	0	0	0	0	0	39.37544
hsa-miR-4529-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-376a-2-5p	0	749.6233	0	0	22.5411	0	36.23922	0	0	0	0	0	0	36.67192	0	0
hsa-miR-4446-3p	181.8267	475.9513	550.4739	486.6143	75.13699	814.8501	29.58304	142.9282	291.09	777.8782	671.5018	0	693.829	637.3929	0	0
hsa-miR-523-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-204-5p	436.384	1903.805	639.74	243.3072	1180.724	1329.492	330.3439	1715.138	194.06	1523.345	1175.128	1299.657	867.2863	698.5128	2124.219	498.7556
hsa-miR-301a-5p	0	0	0	0	75.13699	64.33027	39.44405	47.64273	79.90707	0	0	0	0	323.0622	0	0
hsa-miR-3940-5p	0	0	0	403.3777	0	23.70063	43.59606	52.65775	0	0	0	0	0	0	0	196.8772
hsa-miR-483-5p	22667.72	13802.59	18076.38	148599.9	21006.16	40506.63	3855.656	17484.88	2893.777	20808.24	36764.72	7612.274	13963.31	12171.58	67550.17	2850.032
hsa-miR-6878-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3924	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8083	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3168	0	0	0	0	0	0	0	0	7.491288	0	0	0	0	0	0	0
hsa-miR-1298-5p	0	0	0	0	0	64.33027	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-33a-3p	0	0	0	0	64.40314	0	14.79152	95.28545	51.36883	0	0	0	0	157.1654	424.8438	35.6254
hsa-miR-424-5p	11867.22	5830.403	8658.807	11435.44	32770.46	12415.74	14993.67	11958.32	10171.03	17048.5	15276.67	18937.85	22896.36	33991.38	12320.47	21268.36
hsa-miR-514b-3p	0	0	78.10779	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548c-5p	303.0445	0	505.8409	0	246.8787	182.2691	177.4982	238.2136	125.5683	0	0	185.6652	0	244.4795	424.8438	71.2508
hsa-miR-3691-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6772-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548as-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4293	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-374b-3p	145.4613	594.9391	803.3944	121.6536	139.5401	525.3639	157.7762	381.1418	216.8906	0	0	0	0	951.7236	0	213.7524
hsa-miR-1202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-218-2-3p	0	0	0	0	10.73386	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6845-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3618	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5680	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1976	133.9776	0	180.8812	672.2961	118.6374	154.0541	147.1367	52.65775	145.0944	1217.994	2783.198	205.2089	0	0	0	78.75089
hsa-miR-551a	127.2787	0	0	0	946.7261	326.4761	165.665	250.1243	71.91636	0	0	194.9485	0	146.6877	0	112.22
hsa-miR-4263	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4484	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4418	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-552-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5579-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6811-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-29a-3p	37104.76	44144.48	23164.54	30291.74	63319.02	31436.06	31851.07	251696.5	23812.31	43950.12	48683.88	122353.4	30181.56	67231.85	79020.95	45244.26
hsa-miR-431-3p	0	0	0	0	0	0	19.72202	47.64273	0	0	0	0	0	17.46282	0	0
hsa-miR-8065	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-154-3p	0	0	0	0	21.46771	0	0	0	22.83059	0	0	0	0	0	0	0
hsa-miR-6849-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-610	0	0	0	0	0	0	31.06219	50.02486	23.97212	0	0	0	0	64.17586	0	0
hsa-miR-331-3p	203.6459	999.4977	468.6468	702.5495	732.5857	630.4366	486.641	1550.771	827.0381	1905.802	3525.385	1559.588	182.1301	1540.221	1338.258	1197.013
hsa-miR-875-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-566	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3944-5p	0	0	0	0	0	0	0	0	53.93727	0	0	0	0	0	0	37.40667
hsa-miR-6499-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4277	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4536-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3689f	0	0	0	0	0	0	0	47.64273	0	0	0	0	0	0	0	0
hsa-miR-6516-3p	0	0	0	0	0	0	4.930506	0	0	0	0	0	0	0	0	0
hsa-miR-6721-5p	0	908.6343	127.8128	0	102.4595	30.70308	47.06392	90.95429	0	0	0	0	0	58.34169	0	68.01213
hsa-miR-4772-5p	0	0	0	0	0	0	0	47.64273	0	0	0	0	0	0	0	0
hsa-miR-1264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4637	12.12178	0	0	0	42.93542	53.60856	0	0	5.707648	0	0	0	0	0	0	0
hsa-miR-3655	0	0	0	0	22.5411	0	0	100.0497	5.99303	0	0	0	0	0	0	37.40667
hsa-miR-3143	328.8032	0	351.4851	0	159.6661	9.381498	224.338	333.4991	119.8606	0	0	812.2854	0	84.03982	0	31.17223
hsa-miR-128-3p	22706.52	36981.42	23885.36	26377.54	24152.79	47147.66	26226.84	56277.97	29959.16	40566.35	26792.92	78954.14	31781.71	71849.46	31226.02	34376.73
hsa-miR-338-3p	945.4987	3688.623	1219.969	425.7876	1728.151	1511.761	759.298	2477.422	747.7018	0	1510.879	1670.987	173.4573	1711.356	0	1816.895
hsa-miR-6771-3p	0	0	0	0	0	0	0	0	0	0	0	194.9485	0	0	0	0
hsa-miR-3681-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-216b-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3622b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-570-3p	133.3396	0	104.1437	0	279.0803	225.156	359.927	381.1418	473.7348	518.5855	0	556.9957	0	410.3763	0	498.7556
hsa-miR-548y	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-2467-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548as-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4655-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4265	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-376a-3p	0	374.8116	343.6743	1532.835	417.0103	168.867	222.6124	350.174	293.6585	0	3349.115	2339.382	0	1072.654	892.1721	448.88
hsa-miR-4302	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-412-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4445-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3664-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3065-5p	416.5484	1022.214	795.2794	2845.035	1260.252	2118.513	1393.092	1546.223	877.1617	185.63	2083.182	708.9036	1324.583	1683.575	2838.729	1190.212
hsa-miR-548j-3p	0	0	0	0	0	0	10.35406	50.02486	0	0	0	0	0	0	0	37.40667
hsa-miR-8088	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6083	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4706	0	0	0	0	0	0	8.628386	0	0	0	0	0	0	0	0	0
hsa-miR-653-3p	0	0	0	0	53.66928	0	64.09658	142.9282	85.61472	0	0	185.6652	0	130.9711	0	106.8762
hsa-miR-205-3p	0	0	0	0	0	0	20.70813	100.0497	0	0	0	389.897	0	0	0	0
hsa-miR-3611	178.1901	0	0	0	326.8459	236.4138	248.4975	50.02486	149.8258	1157.094	352.5385	0	182.1301	421.7271	0	635.9134
hsa-miR-6503-5p	0	0	0	0	10.24595	0	9.412785	0	0	0	0	0	0	0	0	0
hsa-miR-4289	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3648	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3688-5p	0	0	0	0	0	0	20.70813	0	0	0	0	0	0	0	0	0
hsa-miR-4783-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548aq-3p	48.48711	0	178.5321	0	118.0724	182.2691	93.67962	666.9982	0	0	0	0	0	279.4051	0	320.6286
hsa-miR-3186-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-382-3p	0	0	234.3234	319.3407	90.1644	67.54678	10.35406	150.0746	47.94424	0	0	0	0	275.0394	892.1721	0
hsa-miR-4760-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4693-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8072	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-let-7g-5p	276764.4	232978.2	344076	170071.7	261777.3	249826.6	235431.7	258604.7	401150.6	263603.5	156795.7	198661.8	158366.5	197792.6	185231.9	218455
hsa-miR-1915-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-580-5p	12.12178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5089-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34.00607
hsa-miR-7162-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3668	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-518c-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6792-5p	0	0	0	0	0	90.06238	0	0	0	0	0	0	0	0	0	0
hsa-miR-614	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-let-7e-3p	36.36533	0	639.74	0	139.5401	96.49541	24.65253	381.1418	125.5683	0	0	742.6609	0	209.5538	424.8438	106.8762
hsa-miR-518e-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6876-5p	0	0	0	0	0	0	0	0	11.4153	0	0	0	0	43.65705	0	0
hsa-miR-574-3p	7176.093	23440.6	12646.02	17700.6	5796.283	41975.5	5029.117	21010.44	10581.98	42005.43	24006.19	19494.85	13356.21	27469.02	28464.54	8300.719
hsa-miR-4521	0	0	0	0	0	0	24.65253	47.64273	0	0	0	185.6652	0	0	0	0
hsa-let-7g-3p	267.2852	0	218.7018	319.3407	360.6576	0	310.6219	400.1989	113.8676	0	705.0769	194.9485	1092.781	229.1995	446.086	224.44
hsa-miR-4999-5p	0	0	0	0	0	202.6404	20.70813	0	0	0	0	0	0	0	0	0
hsa-miR-7978	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7108-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1408.693	0
hsa-miR-4727-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4733-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3607-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3622b-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-188-3p	0	0	0	0	0	78.80458	0	0	0	0	0	194.9485	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-7109-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-411-5p	0	1249.372	203.0803	0	56.35275	0	51.77032	0	53.93727	0	176.2692	0	0	293.3754	0	149.6267
hsa-miR-491-3p	0	0	89.26604	0	32.20157	21.44342	39.44405	0	0	0	0	742.6609	780.5577	52.38846	0	106.8762
hsa-miR-616-3p	242.4356	0	119.0214	304.134	171.7417	139.3823	19.72202	47.64273	57.07648	1815.049	0	0	0	78.58269	0	106.8762
hsa-miR-5707	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-21-3p	509.1147	0	203.0803	574.8132	800.209	405.2807	414.1625	900.4475	341.6027	0	705.0769	779.794	0	1265.181	0	486.2867
hsa-miR-5704	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6507-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6882-3p	0	0	0	0	19.60096	0	9.003533	0	0	0	0	0	0	0	0	65.05508
hsa-miR-454-5p	84.85245	951.9026	0	243.3072	332.7495	343.0948	251.4558	714.6409	279.6747	3597.687	1175.128	556.9957	520.3718	130.9711	424.8438	285.0032
hsa-miR-6804-3p	0	0	0	0	0	0	0	47.64273	28.53824	0	0	0	0	0	849.6877	0
hsa-miR-3942-5p	121.2178	0	595.107	0	118.0724	192.9908	83.81861	0	17.12294	0	0	371.3305	0	0	0	35.6254
hsa-miR-6731-5p	24.24356	0	133.8991	0	0	0	0	0	22.83059	0	0	0	0	0	0	0
hsa-miR-6126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-494-3p	375.7751	0	431.4526	1763.977	0	310.9297	157.7762	1333.996	268.2594	0	0	556.9957	0	916.798	2124.219	106.8762
hsa-miR-8053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8074	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6791-3p	0	374.8116	0	0	0	0	20.70813	0	17.97909	0	352.5385	0	546.3904	0	0	0
hsa-miR-129-5p	1196.42	0	734.2133	1277.363	417.0103	810.5615	693.7222	500.2486	209.7561	0	1762.692	584.8455	0	73.34384	0	187.0334
hsa-miR-488-3p	0	0	0	127.7363	112.7055	0	10.35406	50.02486	0	0	0	0	0	0	0	0
hsa-miR-1273h-5p	0	0	124.9725	0	0	146.3514	10.35406	100.0497	53.93727	884.8365	1233.885	0	0	100.8478	0	224.44
hsa-miR-559	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-570-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-224-5p	1934.636	2373.807	1140.374	3512.748	1498.983	6529.522	828.3251	9754.849	928.9197	4356.118	2820.308	5848.455	1001.716	3713.032	4460.86	8341.688
hsa-miR-6794-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5011-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1281	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1238-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1206	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6772-3p	0	0	0	0	0	0	0	45.47715	0	0	320.4895	0	0	125.0179	0	0
hsa-miR-1197	0	0	0	0	0	0	5.177032	0	0	0	0	0	0	100.8478	0	0
hsa-miR-1255b-2-3p	0	0	0	0	0	10.72171	0	0	0	0	0	0	0	52.38846	0	0
hsa-miR-642a-5p	109.096	356.9635	818.2721	2798.033	375.685	0	88.74911	571.7127	359.5818	1231.641	335.7509	556.9957	520.3718	532.616	3398.751	178.127
hsa-miR-147b	133.3396	0	74.38837	0	42.93542	0	69.02709	95.28545	0	0	0	0	433.6432	52.38846	0	71.2508
hsa-miR-1288-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3064-5p	0	0	0	63.86813	22.5411	78.80458	41.41625	100.0497	119.8606	0	0	0	0	128.3517	0	0
hsa-miR-3621	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-210-3p	1915.241	2022.793	1026.56	1459.843	1180.724	2015.682	2524.419	4478.416	1449.743	0	2686.007	1299.657	2081.487	2540.84	849.6877	2778.781
hsa-miR-208a-3p	0	0	0	0	397.1527	96.49541	83.81861	2620.35	0	0	0	1856.652	0	52.38846	0	71.2508
hsa-miR-3150a-3p	0	0	193.4098	0	0	0	39.44405	95.28545	34.24589	680.6434	0	0	173.4573	87.31409	0	142.5016
hsa-miR-3184-3p	0	0	14.20142	0	10.24595	0	4.706392	0	0	0	0	0	0	8.334527	0	0
hsa-miR-5589-3p	0	0	0	0	0	0	0	90.95429	0	0	0	0	0	0	0	0
hsa-miR-24-3p	180541.8	187048.9	173920	190692	235522.3	267002.8	108249.3	253745.2	154232.1	323305.6	172576	270328.6	137898.5	297968.1	237487.7	140043.5
hsa-miR-557	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-452-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6883-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5591-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3130-5p	190.918	0	0	0	0	0	0	0	251.7073	0	0	0	0	9.16798	0	0
hsa-miR-337-5p	878.2228	749.6233	906.0504	510.9451	2659.85	652.9523	978.459	1550.771	737.1427	0	1233.885	584.8455	455.3253	2356.171	2230.43	935.1667
hsa-miR-431-5p	165.4623	0	546.7545	191.6044	383.1987	135.0936	93.18657	250.1243	371.5679	6193.855	881.3461	974.7425	1365.976	953.4699	446.086	224.44
hsa-miR-30b-3p	812.1591	1903.805	1859.709	2189.765	96.60471	2862.697	78.8881	1333.996	114.153	1134.406	167.8755	185.6652	1040.744	1300.98	3823.595	142.5016



(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-5691	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-2909	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-891a-5p	0	0	0	0	0	64.33027	19.72202	95.28545	0	0	0	0	0	0	0	0
hsa-miR-7703	0	0	0	0	0	0	0	272.8629	0	0	0	531.6777	0	58.34169	0	0
hsa-miR-30c-2-3p	84.85245	0	44.63302	0	118.0724	96.49541	54.23557	285.8564	39.95353	0	335.7509	928.3262	0	0	0	249.3778
hsa-miR-4703-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-517-5p	0	0	0	0	0	0	0	47.64273	0	0	0	0	0	0	0	0
hsa-miR-152-5p	0	0	213.0213	0	71.72168	173.9841	80.00867	272.8629	0	0	0	0	0	175.0251	0	0
hsa-miR-1257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-493-5p	0	0	0	425.7876	332.7495	0	19.72202	47.64273	57.07648	0	0	185.6652	0	26.19423	0	106.8762
hsa-miR-6790-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6853-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-422a	193.9485	0	0	0	10.73386	117.9388	69.02709	47.64273	182.6447	0	0	185.6652	0	288.1365	0	285.0032
hsa-miR-99a-5p	1442.492	1189.878	1294.358	2128.938	2060.9	1672.587	1316.445	23630.79	211.183	32.41159	3021.758	18380.86	1734.573	1117.62	2124.219	1175.638
hsa-miR-3190-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3150b-5p	0	0	0	0	0	85.7737	4.930506	0	28.53824	0	0	185.6652	0	0	0	0
hsa-miR-7157-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8073	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-215-5p	29617.75	11744.1	11013.2	6131.341	2163.946	2071.435	1004.344	7053.505	2103.553	3096.928	2644.038	5458.558	728.5205	5519.124	6691.291	7256.894
hsa-miR-6796-5p	0	0	0	0	0	0	0	0	27.24104	0	0	0	0	0	0	0
hsa-miR-6729-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4699-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-365a-5p	0	0	0	0	0	0	9.412785	0	0	0	320.4895	354.4518	0	0	0	34.00607
hsa-miR-4274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6764-5p	0	0	0	0	0	75.05199	19.72202	142.9282	0	0	503.6264	0	0	87.31409	0	0
hsa-miR-8057	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4462	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-152-3p	19168.17	16491.71	13044	21906.77	18878.17	9918.12	8930.38	31515.66	7071.775	14361.58	13925.27	24953.41	10017.16	19720.33	27211.25	13017.52
hsa-miR-4443	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-2054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7154-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3683	0	0	0	0	0	0	24.65253	0	17.12294	0	0	0	0	61.11987	0	0
hsa-miR-4679	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7856-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4476	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-99b-5p	8945.872	22726.68	14490.86	20681.11	13986.21	10121.3	3160.455	21915.65	3966.815	38537.38	22327.44	28035.45	22375.99	15454.59	35262.04	8443.22
hsa-miR-6777-3p	66.98878	0	147.9937	0	0	0	65.39408	0	82.00989	0	0	0	383.4318	57.90303	0	0
hsa-miR-216a-5p	884.8898	0	178.5321	0	257.6125	0	73.9576	285.8564	108.4453	0	0	185.6652	0	87.31409	0	0
hsa-miR-6789-5p	0	0	0	0	0	0	0	0	0	591.8639	0	508.5613	0	0	0	32.52754
hsa-miR-221-5p	424.2622	0	238.0428	121.6536	912.3778	42.88685	300.7609	524.07	108.4453	0	503.6264	371.3305	0	331.7936	0	285.0032
hsa-miR-409-3p	2036.459	10351.94	6724.709	8089.964	2780.069	3591.773	1035.406	1286.354	4029.599	4861.739	6211.392	5941.288	5116.989	10800.75	8072.033	2315.651
hsa-miR-4421	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71.2508
hsa-miR-190a-5p	3539.559	5830.403	2677.981	851.5751	2425.852	964.9541	2603.307	1619.853	2459.996	1004.759	1846.63	3527.639	2081.487	2863.902	4673.282	4310.673
hsa-miR-379-3p	133.3396	0	0	0	0	0	0	47.64273	11.4153	0	0	0	0	113.5083	0	0
hsa-miR-6743-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6826-5p	0	0	596.4595	0	10.24595	0	0	0	0	185.63	0	0	0	0	0	34.00607
hsa-miR-4690-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1273f	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-214-5p	290.9227	0	0	0	246.8787	128.6605	221.8728	381.1418	97.03001	0	0	0	0	113.5083	0	106.8762
hsa-miR-5194	0	0	0	0	0	0	0	0	34.24589	0	0	0	0	0	0	0
hsa-miR-6760-5p	0	0	0	0	0	0	0	45.47715	0	0	0	0	0	0	0	0
hsa-miR-1295b-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-186-3p	0	0	0	0	214.6771	364.5382	133.1237	142.9282	119.8606	0	0	185.6652	0	192.091	1274.531	320.6286
hsa-miR-7110-5p	0	0	0	0	22.5411	0	0	0	0	0	528.8077	0	0	0	0	0
hsa-miR-6506-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-421	1793.472	1249.372	1263.926	464.4955	1946.731	972.2643	2805.01	4775.101	1776.116	3341.341	0	5139.551	3394.243	1958.614	0	1768.315
hsa-miR-130a-5p	96.97423	0	357.0642	0	139.5401	160.8257	83.81861	190.5709	165.5218	1944.696	0	0	0	436.5705	0	106.8762
hsa-miR-8085	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548ak	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3670	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3663-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-629-5p	10882.33	16991.46	10482.07	14689.67	20760.35	21187.18	23855.76	4502.238	23546.62	11298.68	21152.31	15205.98	13386.56	4749.014	5353.033	9052.414
hsa-miR-432-5p	2614.998	10108.56	6518.45	10567.27	2633.21	5434.446	988.3424	1318.837	4778.08	8105.845	6249.545	2835.615	3642.603	9159.646	12165.98	3094.552
hsa-miR-181b-5p	1018.229	1249.372	340.834	1219.301	2254.11	747.1084	945.9849	3137.923	751.8528	1546.917	1281.958	3190.066	82.78642	1666.906	811.0656	2006.358
hsa-miR-4425	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-30a-5p	19625.16	22250.72	12586.51	14720.08	43515.05	23930.86	23079.7	87567.33	10285.18	13288.75	35421.72	44002.66	9540.149	26202.96	39510.48	21945.25
hsa-miR-6895-3p	0	0	0	0	0	0	24.65253	0	0	0	0	0	0	0	0	0
hsa-miR-520g-3p	0	0	0	0	0	0	0	43.49988	0	0	0	0	0	0	0	0
hsa-miR-4694-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-381-5p	0	0	0	0	0	0	9.861012	0	0	0	0	0	0	0	0	0
hsa-miR-4506	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7846-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7161-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4723-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-575	0	0	0	0	0	0	46.01806	0	0	0	0	0	0	0	0	0
hsa-miR-4307	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548ag	0	0	0	0	0	0	0	0	0	0	0	0	0	27.50394	0	0
hsa-miR-6726-5p	0	0	0	0	0	0	5.177032	0	0	0	0	0	0	9.16798	0	0
hsa-miR-548bb-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548t-5p	0	624.6861	0	0	56.35275	112.578	51.77032	50.02486	0	0	0	0	0	9.16798	0	0
hsa-miR-6752-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	18.33596	0	0
hsa-miR-552-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4775	0	0	0	486.6143	0	0	0	0	0	0	0	0	0	96.04551	0	0
hsa-miR-196b-3p	0	0	0	0	0	0	0	47.64273	0	0	0	0	0	0	0	0
hsa-miR-6763-5p	0	0	0	0	0	0	0	0	39.95353	0	0	0	0	0	0	0
hsa-miR-6856-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3607-3p	0	0	0	0	0	0	0	368.6042	0	0	0	410.4179	0	0	0	0
hsa-miR-6512-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-520d-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4505	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6737-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5091	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3922-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3651	0	0	0	0	0	0	0	43.49988	0	0	0	0	0	0	0	0
hsa-miR-6756-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6783-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5681a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4765	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4758-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5584-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4427	0	0	0	0	0	0	0	50.02486	0	0	0	0	0	0	0	0
hsa-miR-6760-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6736-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-548ao-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-let-7a-5p	1273963	1611809	2244461	1210879	1603466	937613.8	935292.4	789630.6	1114875	1573291	1249329	954319.3	1130768	676020.7	1469110	980624.8
hsa-miR-4665-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-148b-5p	24.24356	0	0	0	0	0	0	0	0	0	0	0	0	43.65705	0	0
hsa-miR-6722-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1238-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-891a-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1321	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4797-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1-5p	0	0	0	0	0	0	0	95.28545	0	0	167.8755	0	0	0	0	0
hsa-miR-6750-3p	0	0	0	0	0	0	10.35406	0	0	0	0	0	0	0	0	112.22
hsa-miR-382-5p	3648.655	14516.51	14223.06	14355.12	15886.11	8706.03	2918.86	5097.771	9326.296	9399.362	7050.769	9654.592	8152.491	16502.36	14019.85	8015.715
hsa-miR-361-5p	7745.816	16539.31	11158.26	17335.64	19728.83	8009.119	8445.957	29300.28	7214.467	11927.47	29546.08	32677.08	10233.98	11385.76	18268.29	10188.86
hsa-miR-4803	0	0	0	0	11.27055	78.80458	0	0	0	0	0	0	0	0	0	0
hsa-miR-1261	197.989	0	0	0	0	0	46.01806	0	79.90707	0	0	0	0	0	0	0
hsa-miR-6835-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-598-3p	181.8267	0	133.8991	121.6536	1105.587	1479.596	1193.182	2953.849	399.5353	1199.229	335.7509	4084.635	1908.03	1065.232	1699.375	676.8826
hsa-miR-4661-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3146	0	0	0	729.9216	21.46771	53.60856	14.79152	0	0	0	0	0	0	349.2564	0	106.8762
hsa-miR-4772-3p	157.5831	951.9026	178.5321	0	257.6125	96.49541	428.954	1000.497	239.7212	0	167.8755	3341.974	0	899.3352	0	605.6318
hsa-miR-6720-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3133	0	0	0	0	10.73386	0	9.861012	0	0	0	0	0	0	0	0	0
hsa-miR-4800-5p	0	0	0	0	11.27055	168.867	5.177032	0	23.97212	0	0	0	0	0	0	0
hsa-miR-4776-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3619-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548b-3p	0	951.9026	0	0	53.66928	246.5994	9.861012	190.5709	17.12294	0	0	0	0	61.11987	0	106.8762
hsa-miR-19a-5p	0	951.9026	0	0	246.8787	375.2599	650.8268	142.9282	302.5053	810.2898	0	0	346.9145	200.8224	424.8438	498.7556
hsa-miR-3145-3p	0	0	0	0	0	0	0	0	46.90197	0	0	0	0	0	0	0
hsa-miR-6128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6807-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6826-3p	0	0	29.75535	0	0	0	9.861012	0	0	0	0	0	0	0	0	0
hsa-miR-30d-3p	266.6791	0	580.2293	0	182.4756	407.425	310.6219	524.07	382.4124	0	0	371.3305	433.6432	715.9756	0	320.6286
hsa-miR-1249-3p	157.5831	0	0	0	32.20157	0	4.930506	142.9282	0	0	0	185.6652	0	0	1699.375	0
hsa-miR-93-3p	193.9485	118.9878	252.9205	0	203.9433	203.7125	759.298	1619.853	593.5953	0	1510.879	2042.318	260.1859	340.525	0	356.254
hsa-miR-875-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1208	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-511-3p	0	0	0	0	0	0	0	52.65775	0	0	0	0	0	0	0	0
hsa-miR-100-5p	2133.433	20822.87	2231.651	5596.065	3692.447	2112.177	1839.079	20772.23	833.3166	1490.933	36932.6	21537.17	11187.99	1589.117	39510.48	2137.524
hsa-miR-145-5p	5137.43	8404.867	3848.584	11670.45	30112.86	59471.88	17832.52	64895.89	10258.98	15407.29	24517.45	78865.53	6043.409	16877.42	22304.3	12106.16
hsa-miR-4680-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3151-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-597-5p	0	0	0	0	0	75.05199	0	0	0	0	0	0	0	0	0	0
hsa-miR-6857-3p	0	0	0	0	0	0	10.35406	0	0	0	0	0	0	27.50394	0	0
hsa-miR-891b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5572	0	0	0	0	0	0	5.177032	0	0	0	0	0	0	0	0	0
hsa-miR-4652-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8069	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4752	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8058	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4661-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4422	63.63934	0	0	0	0	0	10.35406	0	0	0	0	0	0	0	0	0
hsa-miR-7973	0	0	0	0	0	35.55094	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-492	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6738-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6793-3p	0	394.5386	246.6562	0	0	0	5.449507	0	0	0	0	205.2089	0	0	0	0
hsa-miR-3149	0	0	0	0	0	0	14.11918	0	0	0	0	0	0	0	0	0
hsa-miR-6715a-3p	0	0	0	0	0	45.03119	0	0	0	0	528.8077	389.897	0	0	0	0
hsa-miR-4704-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-625-5p	776.3999	3498.242	1312.211	1788.308	1870.911	3005.832	3240.822	1850.92	2127.526	5513.212	3172.846	2924.228	1092.781	2356.171	2676.516	1720.707
hsa-miR-2682-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4750-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3923	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1296-5p	12.12178	237.9757	654.6177	425.7876	193.2094	182.2691	103.5406	238.2136	39.95353	0	0	371.3305	0	0	0	0
hsa-miR-7112-3p	0	0	184.6184	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-433-3p	0	0	0	0	0	0	0	47.64273	0	1101.994	0	0	0	0	0	0
hsa-miR-548ai	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-26a-5p	216264.6	211084.4	229830.3	151397.9	277105.3	144732.4	123691.6	307105	210469.5	224547.5	173583.2	219642	183431	259969	234513.8	166050
hsa-miR-6775-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6829-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6866-5p	0	0	0	0	0	0	23.53196	0	32.68925	0	0	0	0	0	0	0
hsa-miR-4509	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-98-5p	6618.491	15468.42	9759.755	8089.964	9241.851	5028.483	8653.039	7098.766	7391.404	15071.39	8393.772	4827.296	7285.205	5387.28	7222.345	5557.563
hsa-miR-519d-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6786-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-125b-5p	56014.74	110301.7	62545.75	126337.3	65240.38	110733.8	40824.59	290954.1	22973.28	121284.2	154109.7	379685.4	59495.84	71824.58	226866.6	60385.05
hsa-miR-6771-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4455	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6511a-5p	0	0	0	0	30.73786	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1-3p	10097.44	94952.29	15457.9	50972.86	7771.312	6089.933	4590.301	290001.3	3241.944	11117.18	81083.84	693274	38680.97	6417.586	102387.4	6305.696
hsa-miR-548ad-5p	0	0	180.8812	0	0	0	0	82.00989	0	0	0	0	0	0	0	0
hsa-miR-6804-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4741	0	0	0	0	20.49191	81.87489	0	0	0	0	0	177.2259	0	0	0	0
hsa-miR-9-3p	0	0	833.1498	0	729.9022	2380.22	1084.711	666.9982	114.153	0	0	185.6652	0	436.5705	424.8438	249.3778
hsa-miR-6870-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1298-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6842-5p	24.24356	118.9878	119.0214	182.4804	0	139.3823	78.8881	47.64273	22.83059	0	0	0	0	78.58269	424.8438	0
hsa-miR-1229-5p	0	0	0	0	0	0	0	0	0	0	613.1104	0	0	0	0	0
hsa-miR-539-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	34.92564	0	0
hsa-miR-1287-3p	0	0	0	0	0	0	4.930506	0	0	0	0	0	0	0	0	0
hsa-miR-1246	2588	2359.925	5033.613	3832.088	3143.231	2176.508	1121.69	3057.075	2037.63	3289.777	1370.983	7364.721	1011.834	3891.298	6443.465	1122.2
hsa-miR-502-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-2682-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-16-2-3p	1175.813	832.9148	907.5381	547.4412	1577.877	1082.893	1069.92	1333.996	1312.759	939.9362	2182.381	1113.991	607.1004	1938.373	0	1710.019
hsa-miR-548c-3p	0	0	0	0	21.46771	0	14.79152	0	11.4153	0	0	0	0	0	0	0
hsa-miR-548ah-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-34b-3p	0	0	0	0	64.40314	96.49541	0	0	11.4153	0	0	185.6652	0	0	0	0
hsa-miR-371b-5p	0	0	0	0	21.46771	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6511b-5p	0	0	0	0	0	29.36817	0	0	0	0	0	0	0	0	0	0
hsa-miR-3179	0	0	178.5321	0	0	0	14.79152	0	68.49178	0	0	0	0	0	0	0
hsa-miR-887-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-202-3p	0	0	0	0	4662.448	0	98.09113	105.3155	56.77607	0	371.0931	0	1629.585	67.55354	469.5642	78.75089
hsa-miR-4783-3p	0	0	0	0	0	0	4.706392	0	0	0	0	0	0	33.33811	0	0
hsa-miR-3591-3p	12.12178	118.9878	29.75535	60.82679	10.73386	85.7737	4.930506	95.28545	39.95353	64.82319	0	0	0	113.5083	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-4328	684.1229	0	0	0	112.7055	450.3119	38.82774	0	127.3519	3190.516	0	243.6856	0	68.75985	0	93.51668
hsa-miR-371a-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-218-5p	140.0065	0	187.4587	0	631.1508	315.2183	320.976	800.3978	167.8048	0	705.0769	779.794	0	1063.486	0	448.88
hsa-miR-3160-5p	0	0	0	0	0	0	4.930506	0	0	0	0	0	0	0	0	0
hsa-miR-17-5p	16650.36	13629.51	35744.96	15328.35	15184.5	68426.94	27937.15	13506.71	43552.98	58473.46	10095.42	13114.72	13411.4	28304.05	12165.98	36726.55
hsa-miR-744-3p	0	0	0	0	32.20157	75.05199	39.44405	47.64273	0	0	0	0	0	0	0	0
hsa-miR-4310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6500-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548av-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1468-5p	470.9311	1249.372	812.321	2618.594	225.411	1362.193	248.4975	1000.497	389.547	1157.094	0	779.794	637.4554	962.6379	0	1084.793
hsa-miR-7106-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-302f	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-518b	169.7049	0	223.1651	0	75.13699	225.156	0	95.28545	57.07648	0	0	0	0	148.434	0	106.8762
hsa-miR-18b-5p	0	0	0	0	0	214.9216	183.5493	272.8629	92.61955	0	0	0	0	100.0143	0	68.01213
hsa-miR-6757-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1291	0	0	0	0	19.60096	0	9.003533	0	0	0	0	0	0	0	0	0
hsa-miR-6872-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-203a-3p	1236.421	4164.574	3555.764	2007.284	9499.463	2980.636	2080.674	5764.77	1341.297	9561.42	6379.267	4641.631	10927.81	1920.91	11895.63	2173.149
hsa-miR-2114-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548ax	0	0	0	1034.056	118.0724	171.5474	64.09658	142.9282	97.03001	0	0	185.6652	0	375.4506	0	0
hsa-miR-4695-5p	0	0	0	0	0	0	0	0	0	0	335.7509	0	0	0	0	0
hsa-miR-635	0	0	0	0	0	0	4.706392	45.47715	0	0	0	0	0	0	0	0
hsa-miR-21-5p	867264.8	423120.7	405491	331019.4	507979.8	219645	300396	654468.1	207672.8	474084.4	357239	534715.9	266170.2	386967.3	457556.8	332278.1
hsa-miR-4264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4701-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1251-5p	0	0	0	0	11.27055	0	10.35406	0	0	0	0	0	0	0	0	0
hsa-miR-6132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7152-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1245b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4733-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-140-5p	9951.979	3926.598	15457.9	9245.673	10304.5	25785.72	9155.95	10671.97	12362.76	38180.86	8393.772	6126.953	4249.703	21680.09	9771.408	15497.05
hsa-miR-593-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8077	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-29c-5p	448.5058	1308.866	758.7614	364.9608	1373.934	1190.11	1040.337	2143.923	770.5325	2495.693	1007.253	3341.974	0	2584.497	424.8438	890.635
hsa-miR-892c-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4524b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3927-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1185-2-3p	0	0	0	0	42.93542	0	0	0	79.90707	0	503.6264	0	0	0	0	0
hsa-miR-611	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6809-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8080	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5690	0	0	0	0	22.5411	0	5.177032	0	0	0	0	0	0	0	0	0
hsa-miR-449b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-2355-3p	96.97423	0	327.3088	0	1073.386	171.5474	152.8457	142.9282	79.90707	0	0	185.6652	0	602.4673	0	71.2508
hsa-miR-3074-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3663-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4727-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-579-3p	439.6899	227.1586	198.8198	0	184.4272	143.2811	282.3835	45.47715	212.4802	0	320.4895	0	0	708.4348	0	68.01213
hsa-miR-4527	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3119	0	0	0	0	0	0	0	52.65775	0	0	0	410.4179	0	0	0	0
hsa-miR-5004-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3689e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-373-3p	0	0	0	0	0	0	9.412785	0	38.13746	0	0	0	0	8.334527	0	0
hsa-miR-3148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4487	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-184	10897.48	53187.56	13494.05	36800.21	6955.539	2916.306	2169.423	4573.702	3373.22	10825.47	67150.18	14667.55	28186.8	2313.823	83269.39	2778.781
hsa-miR-3117-3p	0	0	0	0	33.81165	0	25.88516	0	0	0	0	0	0	0	0	0
hsa-miR-5195-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3165	0	0	0	0	0	0	4.930506	0	0	0	0	0	0	0	0	0
hsa-miR-449a	0	0	0	0	32.20157	150.104	39.44405	95.28545	0	0	0	0	0	0	0	0
hsa-miR-2355-5p	0	0	0	0	56.35275	213.8982	5.177032	50.02486	0	0	0	0	0	0	0	74.81334
hsa-miR-616-5p	0	0	0	0	21.46771	0	9.861012	0	0	0	0	0	260.1859	0	0	0
hsa-miR-506-5p	0	0	0	0	42.93542	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4720-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-877-5p	334.9439	526.0515	1414.162	0	177.956	758.42	239.7783	526.5775	391.1241	0	0	205.2089	1437.869	559.7293	1878.257	669.3825
hsa-miR-8056	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6768-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3144-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1199-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4804-5p	101.8229	0	0	0	0	247.6716	25.88516	0	0	0	0	0	0	0	0	0
hsa-miR-4426	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4475	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6894-3p	0	0	109.3509	0	0	0	5.177032	0	0	0	0	0	0	0	0	0
hsa-miR-495-3p	0	594.9391	0	0	53.66928	75.05199	34.51355	47.64273	51.36883	0	0	0	61.11987	0	0	71.2508
hsa-miR-6894-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6801-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4522	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548h-3p	219.845	1249.372	326.6326	348.3716	327.8705	388.9057	263.558	409.2943	294.2033	897.2119	0	1063.355	0	341.7156	811.0656	238.0424
hsa-miR-196b-5p	4242.623	4759.513	3734.296	2189.765	4594.091	4588.893	9363.031	1333.996	3361.804	4343.153	4532.637	2413.648	693.829	2139.195	7222.345	3918.794
hsa-miR-581	0	0	0	0	0	0	10.35406	0	77.90939	0	0	0	0	9.16798	0	0
hsa-miR-489-3p	133.3396	0	0	0	64.40314	0	34.51355	238.2136	51.36883	0	0	556.9957	0	26.19423	0	0
hsa-miR-1185-5p	0	0	0	0	0	0	0	50.02486	0	0	0	0	0	0	0	0
hsa-miR-7113-5p	0	874.5605	343.6743	0	0	0	0	0	0	0	881.3461	194.9485	819.5856	64.17586	0	0
hsa-miR-4662a-3p	0	0	0	0	0	0	9.861012	0	0	0	0	0	0	0	0	0
hsa-miR-3129-5p	0	0	0	121.6536	0	0	0	95.28545	0	0	0	0	0	0	0	0
hsa-miR-3140-3p	0	0	0	0	0	0	29.58304	0	0	0	0	0	0	0	0	35.6254
hsa-miR-4524a-5p	0	0	0	0	0	96.49541	0	0	0	0	0	0	0	0	0	0
hsa-miR-186-5p	8436.758	18324.13	10667.29	11252.96	15091.8	11440.07	19524.8	42830.81	17642.34	20711.01	23670.44	31748.75	19080.3	26744.31	22091.88	17135.82
hsa-miR-548a-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3202	0	0	0	0	0	75.05199	0	0	0	0	0	0	0	0	0	71.2508
hsa-miR-127-3p	60.60889	475.9513	89.26604	608.2679	193.2094	53.60856	93.67962	381.1418	39.95353	226.8811	503.6264	556.9957	173.4573	227.0166	424.8438	178.127
hsa-miR-8485	0	0	0	0	0	11.2578	0	0	0	0	0	0	0	9.16798	0	0
hsa-miR-6820-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-550a-3-5p	0	0	0	0	71.18242	0	81.74261	52.65775	50.46762	0	556.6396	0	575.1478	0	0	118.1263
hsa-miR-3914	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4460	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4268	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3689c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-2116-5p	241.8295	0	390.539	0	281.7637	0	51.77032	250.1243	59.9303	0	0	194.9485	273.1952	394.2231	0	261.8467
hsa-miR-4444	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6869-5p	0	0	0	0	10.73386	0	9.861012	0	0	0	0	0	0	34.92564	0	0
hsa-miR-34a-5p	5212.365	4878.501	1368.746	8880.712	7803.514	4653.223	3688.019	16770.24	1541.065	4958.974	8393.772	7983.605	4162.974	3300.473	6797.501	2066.273

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-4536-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-449c-5p	0	0	0	0	0	0	4.314193	0	0	0	0	0	0	0	0	0
hsa-miR-4658	80.99551	0	0	0	40.98381	0	0	45.47715	0	0	0	0	0	0	0	0
hsa-miR-4697-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6723-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548at-5p	0	0	0	0	10.73386	96.49541	64.09658	0	62.78413	0	0	0	0	0	0	35.6254
hsa-miR-617	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5095	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-2117	0	0	0	0	22.5411	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-345-3p	84.85245	0	119.0214	0	10.73386	0	0	0	28.53824	0	0	0	0	0	0	0
hsa-miR-4747-3p	0	0	0	0	21.46771	0	24.65253	0	0	0	0	0	0	0	0	0
hsa-miR-3150a-5p	0	0	0	0	0	0	0	47.64273	0	0	0	371.3305	0	43.65705	0	0
hsa-miR-6508-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4513	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6845-3p	0	0	0	0	22.5411	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-423-3p	4906.014	13061.62	5680.567	7083.557	10256.2	6273.664	7276.083	7139.912	7665.63	24812.55	16825.7	9215.747	9354.865	6800.974	20276.64	7413.322
hsa-miR-4795-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3937	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4719	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1914-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3615	1883.724	5497.238	1530.913	1660.572	8937.546	1711.185	5182.208	7103.53	2648.919	3913.7	12867.65	10917.12	2731.952	1778.588	5799.119	2581.06
hsa-miR-218-1-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6871-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3151-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-34b-5p	0	0	0	0	0	0	23.53196	0	0	0	0	0	0	0	0	0
hsa-miR-4533	0	0	0	0	0	0	0	95.28545	0	0	0	0	0	0	0	0
hsa-miR-6836-5p	0	0	0	0	0	0	4.930506	0	22.83059	0	0	0	0	0	0	0
hsa-miR-4417	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3190-3p	0	0	0	0	30.73786	92.10925	23.53196	0	0	0	0	0	0	0	0	0
hsa-miR-3163	133.3396	0	119.0214	0	0	75.05199	9.861012	95.28545	0	0	0	185.6652	0	34.92564	0	0
hsa-miR-3975	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4767	0	0	0	0	0	92.10925	9.412785	0	0	0	160.2448	0	0	0	0	0
hsa-miR-499b-5p	0	0	0	0	67.6233	0	88.00954	50.02486	0	0	0	194.9485	0	0	0	0
hsa-miR-487b-3p	36.36533	951.9026	0	0	268.3464	85.7737	103.5406	381.1418	91.32236	0	167.8755	742.6609	0	410.3763	0	320.6286
hsa-miR-3189-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6811-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6829-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3680-5p	0	0	0	0	0	0	24.65253	0	0	0	0	0	0	61.11987	0	71.2508
hsa-miR-6858-3p	0	0	0	0	0	0	0	47.64273	0	0	0	371.3305	0	0	0	0
hsa-miR-4517	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1470	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548aa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3678-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4315	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3690	0	0	0	0	0	0	28.23836	45.47715	43.58567	0	0	0	0	75.01075	0	0
hsa-miR-4999-3p	0	0	0	0	94.90989	0	27.24754	0	0	0	0	0	0	0	0	0
hsa-miR-5696	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	142.5016
hsa-miR-6735-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-143-3p	100562.9	23863.01	38022.88	64379.08	128608.2	71250.6	85053.45	156427.8	38948.7	45466.98	77205.92	77589.5	33056.62	30474.37	70481.59	52182.3
hsa-miR-6839-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1915-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4303	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-4467	0	0	74.38837	364.9608	42.93542	0	345.1354	142.9282	57.07648	0	0	185.6652	0	0	0	0
hsa-miR-145-3p	606.0889	0	818.2721	182.4804	2071.634	4942.709	991.0318	3954.346	633.5489	0	1007.253	5384.292	0	1440.683	0	1033.137
hsa-miR-4433b-5p	1425.521	6871.547	3171.176	5173.319	1205.949	1013.202	517.7032	1000.497	1414.355	6057.727	7579.577	3509.073	2367.692	3694.696	12936.5	748.1334
hsa-miR-4708-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7705	0	0	0	0	10.24595	0	14.11918	90.95429	59.9303	0	0	0	0	0	0	0
hsa-miR-6780b-5p	0	0	0	0	0	0	4.706392	0	10.89642	0	0	0	0	0	0	0
hsa-miR-4710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4305	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4777-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-30c-5p	9025.215	27826.93	14201.42	9289.91	22274.7	24388.48	18486.71	95274.63	18834.46	22708.74	21633.04	142312.4	25746.58	42397.74	23926.43	23056.11
hsa-miR-3922-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4682	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548x-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1179	0	0	0	0	112.7055	0	10.35406	50.02486	23.97212	0	352.5385	0	0	0	0	37.40667
hsa-miR-6808-3p	0	0	0	0	0	0	15.5311	0	0	0	0	0	273.1952	0	0	0
hsa-miR-325	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-563	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-let-7c-5p	9806.519	14635.5	19787.31	8394.098	19535.62	17261.96	5684.874	77895.86	5416.558	39704.2	28370.95	92646.95	10407.44	5212.651	33562.66	12326.39
hsa-miR-10a-5p	22273.77	23510.91	10012	19450.75	31537.05	11155.45	11502.42	71944.84	4925.181	24657.86	22113.78	61320.16	9603.225	15652.24	36092.42	11017.96
hsa-miR-940	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4784	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-377-5p	0	0	0	0	32.20157	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-376c-3p	76.3672	0	0	0	371.9281	0	56.94735	450.2238	77.90939	0	0	0	455.3253	403.3911	446.086	187.0334
hsa-miR-5582-5p	0	0	119.0214	0	0	0	9.861012	0	0	0	0	0	0	0	0	0
hsa-miR-5588-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548g-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	91.6798	0	0
hsa-miR-6133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-380-3p	0	0	0	0	0	0	0	0	0	0	0	185.6652	0	0	0	0
hsa-miR-6786-3p	104.1371	0	0	0	0	0	4.706392	45.47715	5.448209	0	0	0	0	66.67622	0	102.0182
hsa-miR-4531	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5581-3p	0	0	0	0	0	0	19.72202	47.64273	0	0	0	0	0	69.85128	0	0
hsa-miR-20b-5p	14232.07	12266.56	10807.28	4354.646	8842.258	12557.56	20077.47	28968.94	19978.58	8693.673	8332.728	23039.37	26905.59	13735.3	8110.655	14180.53
hsa-miR-892c-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-937-3p	0	594.9391	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-105-3p	0	0	0	0	0	0	0	0	22.83059	0	0	0	0	0	0	0
hsa-miR-512-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-2115-5p	0	0	0	0	161.0078	0	34.51355	0	0	0	167.8755	185.6652	0	0	0	0
hsa-miR-520h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7843-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-892a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-2277-5p	0	0	0	0	0	0	13.5053	0	0	0	0	0	0	0	0	0
hsa-miR-151a-5p	9494.989	13743.09	23526.07	8175.121	7393.48	28842.48	5182.208	6603.282	18758.18	35903.94	10047.35	18325.16	15025.74	23451.69	5799.119	11222
hsa-miR-212-3p	0	0	0	0	0	0	0	100.0497	0	170.1609	0	194.9485	0	0	0	0
hsa-miR-6802-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548ab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8064	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6847-5p	0	0	0	0	0	0	0	0	0	0	480.7343	0	0	0	0	0
hsa-miR-454-3p	5079.576	5906.123	13448.74	6386.813	7715.203	8064.677	5153.5	7276.344	9659.675	9559.946	4807.343	12051.36	5049.972	5759.158	6894.057	7685.371
hsa-miR-664a-5p	3530.6	7387.592	10106.47	9607.989	2979.345	6167.315	1692.664	2087.994	3554.127	5652.3	8890.101	2203.766	6334.961	4910.849	10861.23	2276.928
hsa-miR-4659b-3p	0	0	0	0	21.46771	0	0	142.9282	28.53824	0	0	0	0	0	0	0
hsa-miR-6850-3p	0	0	0	0	0	0	5.449507	0	0	0	0	0	0	0	0	39.37544
hsa-miR-1271-5p	0	0	0	0	0	0	9.861012	285.8564	22.83059	0	0	0	0	0	0	0



(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-1250-5p	0	1499.247	0	574.8132	191.5993	258.9294	82.8325	100.0497	17.97909	0	0	0	0	155.8557	0	37.40667
hsa-miR-216b-3p	0	0	0	0	0	0	0	0	31.26798	0	0	0	0	63.77725	0	0
hsa-miR-622	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-134-5p	1660.684	3212.671	4745.978	2250.592	7062.877	2701.871	1064.989	1953.352	2203.152	1101.994	2014.505	3898.97	2341.673	4811.007	8072.033	1888.146
hsa-miR-298	0	108.6411	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4261	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-653-5p	0	0	0	0	45.0822	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-497-5p	1540.072	0	781.0779	191.6044	1544.065	2195.271	838.6791	4252.113	377.5609	1599.512	2644.038	3509.073	637.4554	2035.292	5799.119	1571.08
hsa-miR-3185	0	0	0	0	0	0	42.35753	0	0	0	0	0	0	0	0	0
hsa-miR-5586-5p	0	0	0	0	0	0	9.861012	0	0	0	0	0	0	0	0	0
hsa-miR-7152-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	8.73141	0	0
hsa-miR-548al	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4716-3p	0	0	0	0	0	53.60856	19.72202	47.64273	28.53824	0	0	0	0	0	0	0
hsa-miR-200c-3p	5368.846	7950.55	2471.046	13760.68	2100.421	2323.2	941.2785	9413.77	2162.939	18284.56	8012.238	1240.581	3725.389	2800.401	811.0656	4080.728
hsa-let-7a-3p	2431.023	2373.807	1624.642	1341.231	3775.634	5189.845	2531.569	12906.41	2505.087	5751.437	4583	7992.888	6465.619	8801.261	3122.602	4488.8
hsa-miR-6889-5p	0	0	0	696.7433	20.49191	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4762-3p	0	0	0	0	0	0	19.72202	0	0	0	0	0	0	0	0	0
hsa-miR-5195-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-181a-2-3p	2897.105	3450.647	2782.125	608.2679	2554.658	1683.309	1203.044	3144.42	1329.882	5283.09	4196.886	3527.639	867.2863	3833.089	1274.531	2315.651
hsa-miR-4751	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-127-5p	0	0	0	0	0	0	34.51355	0	34.24589	0	0	0	0	61.11987	0	0
hsa-miR-2113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-499b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6851-3p	0	0	0	0	11.27055	0	36.23922	0	35.95818	918.8687	0	194.9485	0	0	0	0
hsa-miR-517b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6864-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4641	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1277-5p	1715.495	7822.156	1453.484	2887.95	1920.894	1008.307	1337.025	434.9988	948.4622	0	4291.772	0	2613.171	3531.665	6206.415	780.6609
hsa-miR-6816-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-515-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	23.91647	0	0
hsa-miR-6883-3p	0	0	148.7767	0	42.93542	0	9.861012	47.64273	0	0	671.5018	0	0	0	0	0
hsa-miR-5591-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37.40667
hsa-miR-3120-3p	25.45573	0	187.4587	0	101.4349	78.80458	25.88516	350.174	215.7491	0	0	584.8455	0	614.2546	0	74.81334
hsa-miR-924	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6873-3p	196.7034	0	0	0	30.73786	0	28.23836	90.95429	0	0	320.4895	0	0	58.34169	0	0
hsa-miR-4636	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-639	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5692c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-511-5p	165.4623	874.5605	406.1605	0	631.1508	472.8275	191.5502	300.1492	221.7421	0	2291.5	779.794	637.4554	357.5512	1784.344	261.8467
hsa-miR-6749-3p	0	0	0	0	78.89384	0	51.77032	50.02486	35.95818	0	528.8077	0	0	0	1784.344	149.6267
hsa-miR-6820-3p	109.096	594.9391	0	0	42.93542	107.2171	24.65253	0	39.95353	0	0	0	0	87.31409	0	0
hsa-miR-4755-5p	0	0	193.4098	790.7484	21.46771	0	4.930506	47.64273	0	0	0	371.3305	0	0	0	0
hsa-miR-302a-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6837-3p	0	0	0	0	10.24595	0	9.412785	45.47715	0	0	0	0	0	50.00716	0	0
hsa-miR-3650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-466	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-328-3p	4679.006	25106.43	7007.385	19099.61	5538.67	8941.908	4003.571	7432.265	5701.94	17048.5	30049.71	14853.22	15090.78	7727.297	24216.1	3633.791
hsa-miR-4325	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6511b-3p	69.42473	681.4758	0	116.1239	153.6893	470.7806	98.83424	90.95429	76.27493	0	160.2448	177.2259	993.437	58.34169	1622.131	204.0364
hsa-miR-6737-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5006-3p	0	0	0	0	0	123.8358	0	0	0	0	0	0	0	0	0	0
hsa-miR-6716-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-4718	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6753-5p	0	0	0	0	0	0	4.930506	47.64273	0	0	0	0	0	0	0	0
hsa-miR-2052	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8068	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-139-5p	1758.76	3407.379	2783.478	870.9291	4528.711	2415.309	1477.807	5821.075	953.4366	2258.499	640.979	5671.229	1655.728	2450.351	4055.328	1836.328
hsa-miR-1250-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3919	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5685	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548m	0	0	0	0	0	0	0	0	5.99303	0	0	0	0	0	0	0
hsa-miR-573	66.40627	0	13.58396	0	78.40382	0	0	0	31.26798	0	0	0	0	207.2761	0	65.05508
hsa-miR-3660	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3150b-3p	76.3672	0	140.594	0	101.4349	225.156	62.12438	0	53.93727	0	0	389.897	0	27.50394	0	224.44
hsa-miR-198	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-142-5p	130766.1	126936.2	109554	119241.8	122984.2	116473.2	92234	48874.29	125619.9	223012.8	106114.1	36650.32	113831.3	431500.2	120443.2	213367.6
hsa-miR-34c-3p	0	832.9148	0	0	32.20157	0	0	142.9282	0	0	0	0	0	0	0	0
hsa-miR-379-5p	547.2983	749.6233	624.8623	0	1735.665	776.788	491.818	250.1243	839.0242	2212.091	881.3461	584.8455	2185.562	1696.076	892.1721	860.3534
hsa-miR-4769-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-504-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1909-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1306-3p	0	0	0	0	0	0	0	0	0	0	414.7511	0	0	0	0	0
hsa-miR-4477b	0	0	0	0	10.73386	0	9.861012	0	0	0	0	0	0	0	0	0
hsa-miR-320e	0	0	110.2698	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-23a-5p	1103.082	0	490.9633	1581.497	1202.192	814.8501	428.954	2429.779	365.2895	194.4696	1510.879	1856.652	86.72863	881.8724	424.8438	748.1334
hsa-miR-3529-5p	448.5058	3569.635	446.3302	486.6143	96.60471	343.0948	98.61013	190.5709	5.707648	0	1007.253	185.6652	520.3718	384.182	4673.282	213.7524
hsa-miR-654-5p	0	0	0	0	0	0	9.861012	0	0	0	0	0	0	78.58269	0	0
hsa-miR-4778-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4532	0	780.8576	0	0	42.26456	98.50573	19.41387	812.904	0	0	1322.019	731.0569	0	0	1115.215	0
hsa-miR-1236-5p	181.8267	0	0	182.4804	10.73386	0	19.72202	0	22.83059	0	0	0	0	0	0	35.6254
hsa-miR-30e-5p	53626.75	39979.91	28981.71	33211.43	82028.13	34556.08	59723.22	84613.48	39907.87	40903.43	57245.53	38247.04	37033.13	65145.05	79870.64	53758.73
hsa-miR-7111-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4651	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-182-3p	50.91147	0	0	0	22.5411	0	15.5311	50.02486	23.97212	0	352.5385	0	0	91.6798	0	0
hsa-miR-425-5p	15875.12	45318.14	13079.5	31295.39	33873.13	20038.88	40046.7	87225.17	23340.13	41735.82	99511.99	80815.02	50168.57	26670.49	39742.21	23158.13
hsa-miR-1538	92.56631	0	284.0283	0	51.22977	0	56.47671	45.47715	49.03388	0	0	0	0	16.66905	0	34.00607
hsa-miR-767-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4474-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5092	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6763-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3064-3p	0	0	0	0	0	0	0	45.47715	0	0	0	0	0	0	0	0
hsa-miR-6739-5p	0	0	0	0	0	0	9.861012	0	0	0	0	185.6652	0	0	0	0
hsa-miR-4780	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3653-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-494-5p	0	0	0	0	30.73786	0	0	90.95429	0	0	0	0	0	0	0	0
hsa-miR-6887-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-889-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4695-3p	0	118.9878	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4516	47.7295	0	0	0	84.52912	0	19.41387	125.0622	7.491288	0	0	974.7425	0	194.8196	0	46.75834
hsa-miR-558	0	0	0	0	0	0	11.50451	0	59.9303	0	0	0	0	0	0	0
hsa-miR-3195	0	0	0	0	0	0	0	125.0622	0	0	0	487.3712	0	0	0	0
hsa-miR-3617-5p	0	0	0	0	10.73386	0	9.861012	0	45.66118	0	0	0	0	0	0	0
hsa-miR-6893-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-337-3p	12.12178	0	178.5321	243.3072	64.40314	0	49.30507	142.9282	51.36883	0	0	371.3305	0	288.1365	0	106.8762

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-150-5p	299832.2	928819	382564.5	345496.2	234062.5	81560.06	47589.25	306819.2	222461.3	373316.7	336926	417189.8	314738.2	353726.9	996258.8	234379.5
hsa-miR-518e-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-708-3p	0	0	0	0	75.13699	0	34.51355	142.9282	0	0	0	0	0	0	0	178.127
hsa-miR-188-5p	0	0	0	0	338.1165	0	170.842	200.0995	65.92333	0	0	389.897	0	192.5276	0	0
hsa-miR-937-5p	66.98878	0	0	0	0	0	10.89901	52.65775	0	0	0	0	0	0	0	0
hsa-miR-519c-5p	0	0	0	0	42.93542	0	29.58304	47.64273	28.53824	0	0	0	0	43.65705	0	35.6254
hsa-miR-6803-3p	484.8711	2022.793	252.9205	1094.882	150.274	32.16513	221.8728	142.9282	245.4288	0	1175.128	556.9957	3035.502	148.434	849.6877	320.6286
hsa-miR-548aj-3p	0	0	0	0	0	0	5.177032	0	0	0	0	0	0	0	0	0
hsa-miR-6816-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3617-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5693	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-517c-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-134-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3177-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3659	0	0	0	0	0	0	0	50.02486	0	0	0	0	0	0	0	0
hsa-miR-877-3p	0	499.7489	218.7018	702.5495	56.35275	0	46.59328	150.0746	29.96515	0	528.8077	194.9485	637.4554	27.50394	0	149.6267
hsa-miR-96-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6881-3p	0	0	0	0	0	0	4.930506	0	0	0	0	0	0	0	0	0
hsa-miR-4744	0	0	0	0	30.73786	10.23436	0	0	0	0	0	0	0	0	0	0
hsa-miR-4715-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6746-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-27b-5p	4666.885	951.9026	3912.828	2980.513	1760.352	10485.83	1020.615	3239.705	2345.843	907.5246	167.8755	3156.309	3122.231	5684.147	5947.814	2636.28
hsa-miR-620	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3678-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6750-5p	33.20313	651.8464	380.351	0	58.80286	185.9984	189.0742	0	213.6646	680.6434	766.3879	0	0	143.4988	0	0
hsa-miR-6846-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-376a-5p	0	0	0	0	0	128.6605	0	47.64273	0	0	0	0	0	17.46282	0	0
hsa-miR-6843-3p	38.1836	0	0	0	33.81165	0	0	0	23.97212	0	0	0	364.2603	0	0	0
hsa-miR-106b-3p	1151.569	2379.757	1800.199	2433.072	2232.642	3152.183	4846.688	17580.17	3036.469	6028.556	8058.022	13182.23	5724.089	2034.418	5098.126	2422.527
hsa-miR-4677-3p	0	0	0	0	42.93542	0	39.44405	47.64273	34.24589	0	0	185.6652	0	0	0	0
hsa-miR-6846-3p	0	0	0	0	11.27055	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1537-5p	109.096	0	0	425.7876	0	0	0	0	0	0	0	0	0	8.73141	0	0
hsa-miR-4798-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-371a-3p	0	0	0	0	0	30.70308	0	0	0	0	0	0	0	0	0	68.01213
hsa-miR-22-5p	545.48	475.9513	1175.336	425.7876	826.507	439.5902	1040.337	2953.849	439.4889	0	2014.505	2970.644	0	951.7236	424.8438	498.7556
hsa-miR-5687	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1277-3p	181.8267	0	595.107	0	322.0157	536.0856	404.3015	95.28545	405.243	0	0	0	0	1440.683	2124.219	178.127
hsa-miR-8082	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6865-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3977	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6885-3p	0	0	0	0	0	0	0	50.02486	17.97909	0	0	0	0	0	0	0
hsa-miR-4300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548az-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4789-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5694	0	0	0	0	33.81165	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-455-5p	230.3138	713.9269	0	0	139.5401	0	59.16608	238.2136	0	0	0	0	0	52.38846	424.8438	0
hsa-miR-615-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-2110	606.0889	3688.623	1785.321	1216.536	1406.135	1115.058	2110.257	1953.352	1815.032	2852.22	4196.886	2042.318	3469.145	1213.666	1274.531	2351.276
hsa-miR-642a-3p	1442.492	237.9757	2082.875	0	729.9022	310.9297	69.02709	905.2118	365.2895	3824.568	0	1113.991	86.72863	349.2564	424.8438	463.1302
hsa-miR-6746-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4314	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-4650-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-323b-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	8.334527	0	0
hsa-miR-6893-3p	0	0	0	0	21.46771	0	44.37456	0	57.07648	0	0	0	0	0	0	142.5016
hsa-miR-4528	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4713-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1225-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4638-3p	0	0	0	0	0	0	4.706392	0	27.24104	0	0	0	0	0	0	0
hsa-miR-512-3p	0	0	327.3088	0	42.93542	107.2171	0	0	0	0	0	0	0	0	0	0
hsa-miR-4785	0	0	0	0	0	0	41.41625	200.0995	0	0	0	0	0	45.8399	0	0
hsa-miR-7158-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-516a-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4645-5p	127.2787	0	0	0	50.09133	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-452-5p	60.60889	0	0	0	128.8063	42.88685	236.6643	190.5709	91.32236	1166.817	0	742.6609	0	130.9711	0	534.381
hsa-miR-373-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6859-5p	92.56631	0	14.20142	522.5575	20.49191	112.578	103.5406	181.9086	103.516	0	0	0	331.1457	100.0143	0	68.01213
hsa-miR-2467-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-770-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-520e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-30a-3p	4097.161	3212.671	3481.376	1946.457	4476.018	5800.446	2573.724	16674.96	2168.906	6028.556	4196.886	20423.18	2428.402	9002.083	2549.063	5913.816
hsa-miR-182-5p	37641.28	42695.94	56115.36	43819.09	75502.88	143541.8	50280.23	37453.4	97566.53	45573.52	47516.05	40006.82	60182.13	66049.32	22498.25	106560.2
hsa-miR-133a-5p	0	0	0	0	75.13699	0	44.37456	95.28545	0	0	0	185.6652	0	0	0	0
hsa-miR-4520-2-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3194-3p	109.096	0	0	0	0	0	0	142.9282	0	0	0	0	0	0	0	0
hsa-miR-4442	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-621	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5588-5p	127.2787	0	0	0	0	0	0	200.0995	0	0	0	0	0	0	0	0
hsa-miR-4729	0	0	0	0	0	0	14.79152	0	0	0	0	0	0	0	0	0
hsa-miR-3685	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-411-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5695	0	0	0	0	32.20157	117.9388	19.72202	0	11.4153	0	0	0	0	78.58269	0	0
hsa-miR-519d-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4269	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4479	0	0	0	0	32.20157	0	4.930506	95.28545	0	0	0	0	0	0	0	0
hsa-miR-5580-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7853-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3913-3p	0	0	0	0	42.93542	0	0	47.64273	0	0	0	0	0	0	0	0
hsa-miR-4667-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37.40667
hsa-miR-6753-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6860	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4653-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4802-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-597-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3138	221.3542	0	271.6793	0	137.2067	68.52573	58.52297	0	20.84532	0	0	0	0	271.0533	1551.604	32.52754
hsa-miR-3129-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-377-3p	0	0	0	0	193.2094	0	19.72202	0	0	0	167.8755	371.3305	0	69.85128	0	0
hsa-miR-6886-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-451b	703.0631	0	669.4954	364.9608	1127.055	868.4587	709.9929	381.1418	1044.5	2819.809	503.6264	371.3305	2862.045	812.0211	849.6877	712.508
hsa-miR-3178	0	0	19.52695	0	0	225.156	12.94258	0	0	0	0	0	0	0	0	93.51668
hsa-miR-7706	387.3699	1520.975	733.5341	0	235.2115	597.1528	715.7809	826.4977	599.303	0	0	339.0409	871.0571	135.5267	775.8018	618.0233
hsa-miR-515-3p	0	0	133.8991	0	21.46771	0	0	47.64273	0	0	0	0	0	0	0	0
hsa-miR-6742-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6834-5p	0	0	0	0	0	0	10.35406	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-518a-3p	0	0	0	0	42.93542	0	4.930506	0	0	0	0	0	0	0	0	0
hsa-miR-4259	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6889-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4701-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3912-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-574-5p	2429.865	1930.848	2329.032	870.9291	1229.515	3274.996	1115.415	1773.609	1743.427	1299.41	3044.65	3367.292	4222.107	2600.373	1216.598	2550.455
hsa-miR-223-3p	894926.6	1894048	1304668	6175745	2193260	4063475	1831742	1603845	2596381	4891558	1854184	3493106	1629978	6079105	2319223	1855157
hsa-miR-1913	0	0	0	0	0	0	0	0	0	0	503.6264	0	0	0	0	0
hsa-miR-4313	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3945	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6740-3p	0	0	0	0	0	0	9.861012	0	0	0	0	0	0	0	0	0
hsa-miR-548d-5p	1733.414	951.9026	431.4526	0	1470.538	1844.135	2613.168	1524.567	1352.713	939.9362	1175.128	1670.987	1647.844	1082.695	849.6877	3206.286
hsa-miR-2681-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3973	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5583-3p	0	0	208.2874	0	32.20157	0	4.930506	47.64273	5.707648	0	671.5018	185.6652	173.4573	157.1654	0	0
hsa-miR-582-5p	80.99551	0	440.2439	1683.796	655.741	184.2185	324.7411	363.8172	245.1694	928.1501	640.979	1063.355	248.3593	1108.492	0	476.0849
hsa-miR-3960	0	0	0	0	0	0	0	52.65775	31.54226	0	0	0	0	0	0	0
hsa-miR-130b-3p	15115.86	7734.209	17302.74	4683.663	7996.723	11204.19	4565.649	8194.549	8104.86	13710.1	6547.143	11325.58	7979.034	14441.75	13170.16	8407.595
hsa-miR-4771	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-640	0	124.9372	234.3234	0	56.35275	0	31.06219	0	71.91636	0	0	0	0	27.50394	0	0
hsa-miR-3677-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3124-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4448	0	0	0	0	47.45494	0	76.2931	473.9197	69.39298	0	1855.466	1231.254	0	48.25253	0	0
hsa-miR-6089	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4498	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-33a-5p	330.9245	2248.87	921.6719	2554.725	631.1508	878.1082	698.8993	200.0995	203.763	1633.544	2820.308	389.897	1639.171	1787.756	1784.344	1197.013
hsa-miR-4470	0	0	0	0	0	0	10.35406	0	0	0	0	0	0	0	0	0
hsa-miR-6780a-5p	242.9866	1135.793	539.6538	0	71.72168	40.93745	197.6685	90.95429	228.8248	0	160.2448	177.2259	496.7185	41.67264	0	204.0364
hsa-miR-6813-5p	0	454.3172	0	0	20.49191	133.0467	32.94475	45.47715	81.72314	0	0	177.2259	0	0	0	34.00607
hsa-miR-320d	254.5573	0	659.5769	141.9292	1064.441	162.6126	253.0993	555.8318	193.1087	189.0676	0	1299.657	0	417.6524	495.6512	290.9408
hsa-miR-648	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4472	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6821-5p	0	0	0	0	30.73786	102.3436	18.82557	45.47715	59.9303	0	0	177.2259	0	25.00358	0	0
hsa-miR-8063	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-493-3p	181.8267	356.9635	0	0	75.13699	0	34.51355	0	91.32236	842.7014	0	185.6652	607.1004	270.6737	1274.531	71.2508
hsa-miR-670-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-378i	38.1836	0	15.62156	0	11.27055	11.2578	0	0	0	0	0	0	0	9.16798	0	74.81334
hsa-miR-802	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6505-3p	114.5508	0	0	0	56.35275	0	20.70813	0	65.92333	0	0	0	0	0	0	0
hsa-miR-146a-5p	251223.8	516883.1	301049.8	359243.1	228792.2	228404.6	88517.38	477713.6	147970.8	548566.2	376208.9	615294.6	312570	405565.3	531904.5	134200.9
hsa-miR-4789-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6809-5p	0	0	0	0	0	0	0	0	62.78413	0	0	0	0	52.38846	0	0
hsa-miR-4734	133.3396	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-522-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3135b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-301a-3p	4639.886	3180.22	4757.475	3890.15	3913.954	12823.66	4993.482	3547.218	7044.535	8848.365	3845.874	1240.581	11093.38	13776.97	3649.795	10269.83
hsa-miR-29b-3p	24877.2	22488.7	21557.75	10973.71	24682.5	17255.13	17046.55	48615.07	28657.58	27163.86	16505.21	36154.09	18378.58	54416.13	31631.55	35536.34
hsa-miR-4660	0	0	0	0	40.98381	255.859	32.94475	181.9086	103.516	0	0	0	0	0	0	0
hsa-miR-19b-2-5p	0	0	0	0	42.93542	246.5994	123.2627	0	171.2294	0	0	0	0	69.85128	0	71.2508
hsa-miR-548s	0	0	0	0	0	0	0	45.47715	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-4799-5p	0	0	0	0	0	0	0	0	17.12294	0	0	0	0	0	0	0
hsa-miR-3122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6876-3p	44.27084	0	0	0	19.60096	39.15756	13.5053	86.99976	15.63399	0	0	0	0	0	0	0
hsa-miR-3646	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-500a-5p	0	0	0	0	10.24595	143.2811	197.6685	682.1572	54.48209	0	0	177.2259	0	25.00358	0	0
hsa-miR-605-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4445-3p	0	0	0	0	67.6233	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-450a-5p	0	0	238.0428	0	0	0	44.37456	190.5709	0	0	0	0	0	78.58269	0	35.6254
hsa-miR-4678	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1471	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-151b	29.94792	0	73.51321	0	132.5947	0	97.45001	0	70.50623	0	0	0	0	32.35758	0	0
hsa-let-7f-2-3p	206.0702	2260.769	74.38837	0	203.9433	321.6514	221.8728	1048.14	273.9671	972.3478	0	371.3305	0	1004.112	1274.531	498.7556
hsa-miR-628-5p	424.2622	1546.842	818.2721	973.2287	740.6361	589.6942	428.954	905.2118	450.9042	0	1343.004	556.9957	954.0149	672.3185	0	285.0032
hsa-miR-4452	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4440	0	0	0	851.5751	53.66928	0	49.30507	47.64273	102.7377	0	671.5018	371.3305	346.9145	0	0	0
hsa-miR-625-3p	6291.203	14040.56	4805.489	11435.44	4486.752	7440.868	5532.028	6527.054	5930.246	10177.24	8225.897	13739.23	9800.335	4976.903	8496.877	5664.438
hsa-miR-6823-5p	0	0	0	0	0	0	0	0	29.96515	0	0	0	0	0	0	0
hsa-miR-6082	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1909-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6732-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6785-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-554	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6855-3p	0	0	0	0	0	0	9.861012	47.64273	0	0	0	0	0	0	0	0
hsa-miR-3622a-3p	0	0	0	0	32.20157	0	4.930506	0	0	0	0	0	0	0	0	0
hsa-miR-3136-5p	0	0	198.8198	0	61.47572	0	94.12785	0	38.13746	0	0	0	579.5049	83.34528	0	136.0243
hsa-miR-181b-2-3p	0	0	98.66248	0	0	0	0	52.65775	0	0	0	0	0	19.30101	0	0
hsa-miR-30b-5p	1927.363	7139.27	2603.593	2128.938	4443.816	5618.177	3303.439	19485.88	4257.905	1134.406	7554.396	25621.8	7198.476	9849.03	7222.345	3990.045
hsa-miR-596	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1178-3p	203.6459	0	0	0	0	0	36.23922	0	47.94424	0	0	0	0	55.00788	0	0
hsa-miR-6719-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4329	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4424	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8067	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6837-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6815-3p	0	0	0	0	0	0	0	0	29.96515	0	0	0	0	0	0	0
hsa-miR-4534	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-487b-5p	0	0	0	0	32.20157	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-155-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-26b-5p	205262.3	298724.9	259036.7	211211.9	334566.3	253503.1	159975.5	312405.3	243317	322761.1	148771.2	275072.3	205989.2	410982.2	246685.6	240973.8
hsa-miR-125a-5p	45311.21	97885.59	53126.88	62979.54	69348.18	83738.44	32736.85	156251.6	25384.39	155482.6	83536.29	148330.4	58044.08	76787.81	131110.5	47913.07
hsa-miR-5583-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-342-5p	0	0	0	0	169.0582	0	0	50.02486	161.8118	0	0	0	91.06506	128.3517	0	37.40667
hsa-miR-4790-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-759	0	0	0	0	0	0	0	0	0	0	0	0	0	43.65705	0	0
hsa-miR-3164	0	0	0	0	32.20157	0	54.23557	47.64273	34.24589	0	0	0	0	43.65705	0	0
hsa-miR-6817-3p	0	0	0	0	12.52283	0	0	0	33.29461	0	0	0	0	0	0	0
hsa-miR-6841-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-23a-3p	181766.7	251498.6	144858.7	195628.1	366709.9	204407.8	101055.7	690893.4	96619.63	299210.9	352891	712146.9	170200.6	309639.4	438502.6	152731.4
hsa-miR-425-3p	387.8969	3926.598	490.9633	1763.977	933.8455	1136.501	1301.654	2239.208	884.6854	3597.687	1007.253	3341.974	1040.744	1667.699	5098.126	997.5112
hsa-miR-412-5p	428.1192	681.4758	127.8128	696.7433	112.7055	0	65.8895	45.47715	16.34463	835.3351	0	177.2259	0	275.0394	0	102.0182
hsa-miR-3145-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-4712-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6728-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4520-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-487a-5p	0	0	0	0	10.73386	0	14.79152	0	0	0	0	0	0	0	0	0
hsa-miR-6781-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6803-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4275	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1256	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-153-5p	0	118.9878	14.87768	0	10.73386	117.9388	19.72202	47.64273	57.07648	0	0	0	0	52.38846	0	285.0032
hsa-miR-450a-2-3p	96.97423	0	0	608.2679	85.87085	0	19.72202	47.64273	114.153	0	0	0	0	34.92564	0	35.6254
hsa-miR-1288-3p	0	0	0	0	0	0	0	0	11.98606	0	0	0	0	0	0	0
hsa-miR-4499	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3913-5p	460.6276	0	0	0	118.0724	192.9908	340.2049	285.8564	28.53824	0	335.7509	185.6652	0	183.3596	0	178.127
hsa-miR-4304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6798-3p	0	0	0	0	0	0	0	50.02486	47.94424	0	0	0	0	0	0	0
hsa-miR-4524a-3p	0	0	0	0	0	0	0	142.9282	0	0	167.8755	0	0	0	0	71.2508
hsa-miR-4659b-5p	0	0	0	0	0	0	23.00903	0	0	0	0	0	0	0	0	0
hsa-miR-4672	63.63934	0	0	0	33.81165	0	77.65547	50.02486	65.92333	0	0	0	0	0	0	0
hsa-miR-299-3p	36.36533	0	0	0	53.66928	0	24.65253	47.64273	79.90707	0	0	0	0	96.04551	0	142.5016
hsa-miR-4287	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3934-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-643	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4796-3p	0	0	0	0	0	117.9388	14.79152	0	34.24589	0	0	0	0	0	0	142.5016
hsa-miR-1237-3p	0	0	0	255.4725	67.6233	90.06238	0	0	125.8536	0	528.8077	194.9485	0	155.8557	3568.688	149.6267
hsa-miR-659-3p	0	0	0	0	0	64.33027	0	0	0	0	0	0	0	52.38846	0	0
hsa-miR-194-3p	0	0	0	0	32.20157	0	0	142.9282	0	0	0	0	0	8.73141	0	71.2508
hsa-miR-4680-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-655-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6770-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7160-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-514b-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1245a	954.59	0	93.72935	0	270.4932	889.366	98.3636	450.2238	125.8536	2212.091	881.3461	779.794	0	201.6956	0	0
hsa-miR-632	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-664b-5p	641.9272	0	285.2632	0	29.40143	97.89389	36.01413	130.4996	171.9739	0	153.2776	0	0	71.74941	775.8018	97.58262
hsa-miR-6762-3p	0	0	0	0	0	71.64053	28.23836	0	21.79284	0	0	0	0	0	0	102.0182
hsa-miR-2276-3p	0	0	0	0	42.93542	0	19.72202	47.64273	0	0	0	185.6652	0	0	0	0
hsa-miR-330-5p	0	0	0	0	118.0724	0	64.09658	0	5.707648	0	0	185.6652	520.3718	148.434	0	0
hsa-miR-1253	0	0	171.8371	0	0	168.867	113.8947	0	0	0	0	389.897	0	0	0	112.22
hsa-miR-3616-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-221-3p	33185.02	106991.7	41354.53	68803.4	84959.45	49861.81	31236.33	122515.4	32487.67	107046.6	94544.41	170314.1	68133.22	77094.38	103816.4	37304.65
hsa-miR-6797-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7-1-3p	533.3582	713.9269	550.4739	1885.631	461.5558	943.5107	226.8033	1048.14	559.3495	291.7043	671.5018	185.6652	0	1012.844	0	498.7556
hsa-miR-6818-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3929	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-526b-5p	0	0	0	0	40.98381	51.17181	9.412785	45.47715	0	0	0	0	0	0	0	0
hsa-miR-3928-3p	121.2178	0	193.4098	669.0947	53.66928	85.7737	157.7762	238.2136	171.2294	0	0	185.6652	0	183.3596	0	178.127
hsa-miR-6838-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4747-5p	0	0	148.7767	0	53.66928	21.44342	128.1932	0	97.03001	0	0	0	433.6432	270.6737	0	71.2508
hsa-miR-670-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6078	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-4483	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-410-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-339-5p	3158.825	30212.09	5723.171	7896.424	5666.013	7839.521	7101.946	18327.29	7839.973	10519.04	14422.03	20203.75	7119.632	9334.671	13382.58	4046.722
hsa-miR-619-5p	0	0	0	0	0	0	0	47.64273	0	0	0	0	0	0	0	0
hsa-miR-3689a-5p	0	0	0	0	0	0	0	0	0	0	0	185.6652	0	0	0	0
hsa-miR-6836-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-34c-5p	0	0	0	0	174.1812	225.156	4.706392	45.47715	0	0	0	0	0	0	0	0
hsa-miR-3137	0	0	0	0	0	0	0	43.49988	0	0	0	0	0	0	0	0
hsa-miR-196a-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6727-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548an	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6778-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4746-5p	57.85394	0	0	0	0	92.10925	47.06392	45.47715	49.03388	0	0	0	0	8.334527	0	102.0182
hsa-miR-1303	84.85245	475.9513	267.7982	669.0947	118.0724	32.16513	128.1932	4907.201	108.4453	0	1678.755	8169.27	0	52.38846	0	320.6286
hsa-miR-1228-5p	0	0	78.10779	0	157.7877	225.156	103.5406	100.0497	53.93727	442.4182	705.0769	194.9485	0	128.3517	0	149.6267
hsa-miR-4252	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5699-5p	0	0	0	0	0	0	14.79152	0	0	0	0	0	0	0	0	0
hsa-miR-668-3p	0	0	0	0	51.22977	0	14.11918	45.47715	0	0	0	0	0	0	0	0
hsa-miR-3126-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3158-3p	218.192	0	208.2874	0	42.93542	0	113.4016	0	39.95353	0	0	0	0	0	0	0
hsa-miR-1537-3p	0	0	0	0	246.8787	0	54.23557	0	114.153	0	0	185.6652	0	52.38846	424.8438	0
hsa-miR-6504-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6794-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8087	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-129-2-3p	0	0	163.6544	0	21.46771	0	0	0	68.49178	0	0	0	0	0	0	0
hsa-miR-4466	0	0	0	0	0	0	6.090626	0	0	0	0	0	0	0	0	0
hsa-miR-764	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5698	0	0	0	121.6536	0	32.16513	0	0	28.53824	0	0	0	346.9145	0	0	71.2508
hsa-miR-571	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1302	0	0	0	0	11.27055	0	119.0717	50.02486	5.99303	0	0	0	0	91.6798	0	0
hsa-miR-4754	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-520f-5p	0	0	0	0	0	107.2171	0	0	0	0	0	0	0	0	0	0
hsa-miR-33b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548e-5p	0	0	862.9052	0	118.0724	482.4771	118.3322	285.8564	171.2294	0	671.5018	185.6652	780.5577	681.0499	0	285.0032
hsa-miR-367-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-613	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3661	0	0	0	0	10.73386	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3180-3p	0	0	0	0	21.46771	160.8257	24.65253	238.2136	119.8606	0	0	0	0	0	0	35.6254
hsa-miR-1247-3p	0	0	0	0	0	0	9.003533	0	0	0	0	169.5204	0	0	0	0
hsa-miR-4717-3p	0	0	0	0	0	56.28899	5.177032	0	0	0	0	0	0	0	0	0
hsa-miR-548ae-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-513b-5p	0	0	0	0	42.93542	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-376c-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	64.17586	0	0
hsa-miR-4253	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4798-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-208b-3p	84.85245	0	0	0	1191.458	332.3731	650.8268	142.9282	0	0	0	1113.991	0	0	0	0
hsa-miR-7852-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6808-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4666b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-514a-3p	0	0	0	0	101.4349	0	20.70813	0	0	0	0	0	0	0	0	0
hsa-miR-541-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-2114-3p	0	0	0	0	56.35275	0	0	0	53.93727	0	0	0	0	0	0	0
hsa-miR-203b-5p	72.73067	356.9635	0	0	128.8063	0	44.37456	142.9282	39.95353	0	0	0	433.6432	0	0	71.2508
hsa-miR-646	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-323a-3p	394.5639	2998.493	640.4839	2171.517	980.5378	202.6404	191.5502	400.1989	149.8258	884.8365	0	1364.639	1365.976	531.7429	1338.258	224.44
hsa-miR-3920	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4538	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7161-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7843-3p	36.36533	1308.866	386.8195	608.2679	139.5401	160.8257	24.65253	142.9282	79.90707	3727.333	1678.755	1113.991	1127.472	270.6737	424.8438	213.7524
hsa-miR-3186-3p	0	0	0	0	22.5411	146.3514	0	0	0	0	0	0	0	0	0	0
hsa-miR-6075	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6503-3p	216.3737	499.7489	0	0	191.5993	45.03119	150.1339	150.0746	101.8815	544.5148	0	194.9485	91.06506	394.2231	0	374.0667
hsa-miR-7162-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6717-5p	121.2178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6754-5p	0	0	0	0	0	0	4.930506	0	0	0	0	0	0	0	0	0
hsa-miR-5580-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3944-3p	0	0	0	0	0	0	0	45.47715	0	0	0	0	0	0	0	0
hsa-miR-302d-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3201	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-890	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6748-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4685-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6514-5p	115.7079	0	255.6255	0	30.73786	122.8123	89.42146	0	65.37851	0	0	177.2259	331.1457	100.0143	0	136.0243
hsa-miR-518d-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-651-3p	0	0	0	0	32.20157	0	29.58304	47.64273	28.53824	0	0	0	0	0	0	71.2508
hsa-miR-550b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6765-5p	201.5246	0	0	0	84.52912	168.867	8.628386	41.68739	0	0	0	0	0	0	0	0
hsa-miR-4804-3p	0	0	0	0	0	0	5.177032	0	0	0	0	0	0	0	0	37.40667
hsa-miR-4438	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4486	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1292-5p	487.9016	624.6861	872.2037	798.3517	432.0377	609.7974	595.3586	250.1243	868.9894	0	146.891	649.8283	2048.964	412.5591	371.7384	1433.922
hsa-miR-208a-5p	0	0	0	0	0	0	4.930506	333.4991	0	0	0	371.3305	0	0	0	0
hsa-miR-519b-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-101-5p	152964.7	150400.6	139299.7	88563.81	87341.39	198919.9	191732.6	87900.83	152325.7	140601.5	87798.86	71666.78	264262.1	342140.3	104086.7	367654.1
hsa-miR-4508	0	0	0	0	28.17637	14.07225	6.47129	937.9662	59.9303	0	0	1462.114	113.8313	0	0	0
hsa-miR-629-3p	545.48	0	386.8195	547.4412	107.3386	278.7645	108.4711	381.1418	285.3824	583.4087	671.5018	556.9957	0	235.7481	849.6877	71.2508
hsa-miR-2278	72.73067	0	461.2079	0	21.46771	160.8257	93.67962	0	182.6447	0	0	0	0	165.8968	0	106.8762
hsa-miR-6805-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5699-3p	193.9485	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5193	0	0	0	0	107.3386	257.3211	0	95.28545	62.78413	0	0	185.6652	0	104.7769	0	35.6254
hsa-miR-4782-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3654	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5009-3p	0	0	0	182.4804	0	0	19.72202	0	22.83059	0	0	0	0	8.73141	0	0
hsa-miR-92a-3p	217816.2	620402.6	164457.8	389474	386300.8	158767.1	304296.1	397340.3	253528	319124.5	1804661	701443.3	726959.4	188729.4	776189.7	260029.8
hsa-miR-513b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3614-3p	0	0	0	0	61.47572	0	9.412785	136.4314	70.82672	0	0	0	0	0	0	34.00607
hsa-miR-4662a-5p	375.7751	118.9878	0	0	75.13699	0	93.67962	381.1418	136.9836	0	0	0	0	427.8391	424.8438	213.7524
hsa-miR-5093	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-545-3p	266.6791	0	178.5321	0	107.3386	0	142.9847	0	74.19942	0	0	0	0	69.85128	0	0
hsa-miR-3912-3p	0	0	0	1021.89	67.6233	0	5.177032	0	41.95121	0	0	0	0	174.1916	0	0
hsa-miR-4478	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7974	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-299-5p	0	0	0	0	0	0	0	0	97.03001	0	0	0	0	0	0	0
hsa-miR-6726-3p	133.9776	0	0	0	0	165.9044	0	0	0	0	0	205.2089	0	0	0	0
hsa-miR-372-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-32-5p	8497.366	5711.416	7825.657	7420.869	18676.91	7580.25	16310.12	18485.38	9177.897	10047.59	10576.15	11139.91	6157.732	13140.77	1274.531	15639.55
hsa-miR-548v	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-132-3p	1115.204	1308.866	818.2721	851.5751	1191.458	343.0948	517.7032	1476.925	331.0436	1134.406	1343.004	1299.657	0	750.9012	4248.438	783.7588
hsa-miR-6847-3p	0	0	0	0	0	0	9.861012	0	0	0	0	0	0	0	0	0
hsa-miR-5094	0	0	0	0	0	0	14.79152	0	0	0	0	0	0	0	0	0
hsa-miR-4523	0	0	0	0	0	0	0	50.02486	0	0	0	0	0	9.16798	0	0
hsa-miR-6768-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-132-5p	0	0	0	0	0	0	49.30507	190.5709	34.24589	0	0	0	0	0	0	71.2508
hsa-miR-4728-3p	0	0	0	0	18.78425	0	0	0	0	0	0	0	0	0	0	31.17223
hsa-miR-6129	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3200-5p	84.85245	0	0	0	118.0724	0	9.861012	47.64273	57.07648	0	0	0	0	0	0	0
hsa-miR-4758-5p	0	0	0	0	0	0	14.11918	0	0	0	0	0	0	0	0	0
hsa-miR-196a-5p	630.3325	0	1041.437	0	568.8944	364.5382	157.7762	666.9982	142.6912	583.4087	503.6264	0	0	157.1654	2549.063	320.6286
hsa-miR-6748-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4667-5p	0	0	74.38837	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1207-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-378b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548w	0	0	14.20142	0	0	0	14.11918	45.47715	0	0	0	0	0	0	0	0
hsa-miR-6761-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-584-5p	7454.894	42359.67	12065.79	13077.76	11485.23	12329.97	11281	9623.831	13007.73	27420.21	26020.7	10211.59	15090.78	12171.58	24640.94	6305.696
hsa-miR-4676-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4489	50.91147	0	0	0	0	0	25.88516	0	11.98606	0	0	0	0	0	0	74.81334
hsa-miR-181b-3p	0	0	0	0	0	0	0	100.0497	0	0	0	0	0	110.0158	0	0
hsa-miR-496	0	0	312.4312	0	10.73386	107.2171	19.72202	190.5709	39.95353	0	0	185.6652	0	0	0	35.6254
hsa-miR-505-3p	872.768	1665.83	267.7982	0	1030.45	2240.838	783.9505	5097.771	702.0406	1037.171	1510.879	2413.648	520.3718	1763.745	849.6877	712.508
hsa-miR-6499-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-486-3p	2303.744	4622.677	2093.289	2490.857	991.8083	1553.576	3354.717	850.4227	2936.585	374.3539	6169.423	3314.125	2367.692	1155.166	4014.774	2281.807
hsa-miR-612	0	0	0	0	0	0	0	41.68739	0	0	0	0	0	0	0	0
hsa-miR-5010-3p	121.2178	0	223.1651	0	10.73386	0	19.72202	0	74.19942	0	0	185.6652	0	0	424.8438	0
hsa-miR-3162-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-586	0	0	0	0	0	0	14.79152	0	0	0	0	0	0	0	0	0
hsa-miR-513a-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-30e-3p	3054.688	8091.172	7513.226	8759.059	6032.427	10603.77	5734.179	16436.74	6107.183	7325.02	6379.267	31006.09	8499.405	27111.03	13170.16	10830.12
hsa-miR-4788	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6069	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6733-5p	0	0	0	0	0	0	4.930506	0	39.95353	0	0	0	0	0	0	0
hsa-miR-4649-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-888-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6516-5p	0	0	0	0	0	0	0	95.28545	0	0	0	0	0	0	0	0
hsa-miR-3620-3p	0	0	0	0	0	0	9.861012	47.64273	0	972.3478	0	0	0	0	0	0
hsa-miR-340-3p	545.48	713.9269	535.5963	0	483.0235	1147.223	310.6219	142.9282	839.0242	0	503.6264	928.3262	1040.744	1073.963	849.6877	285.0032
hsa-miR-3688-3p	751.5502	594.9391	238.0428	243.3072	536.6928	1040.006	1129.086	285.8564	1364.128	0	1007.253	556.9957	954.0149	165.8968	0	783.7588
hsa-miR-8060	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3657	0	0	0	0	0	22.51559	5.177032	0	23.97212	0	0	0	0	0	0	0
hsa-miR-3199	0	0	0	0	71.72168	122.8123	32.94475	0	54.48209	0	0	0	0	0	0	68.01213
hsa-miR-6838-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8084	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6515-5p	0	0	140.594	0	33.81165	168.867	25.88516	0	41.95121	0	0	0	0	27.50394	0	37.40667
hsa-miR-192-3p	109.096	1308.866	0	0	0	160.8257	29.58304	381.1418	0	0	0	185.6652	0	218.2852	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-3139	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68.01213
hsa-miR-193a-5p	6279.081	12493.72	7647.125	14841.74	13288.51	8813.247	4309.263	27061.07	2842.408	10857.88	21152.31	12068.24	4423.16	6941.471	36961.41	5557.563
hsa-miR-211-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	9.16798	0	0
hsa-miR-5187-5p	254.5573	0	1041.437	973.2287	225.411	225.156	19.72202	95.28545	176.9371	1199.229	0	185.6652	0	515.1532	424.8438	35.6254
hsa-miR-1343-3p	0	0	0	0	42.93542	42.88685	24.65253	142.9282	28.53824	0	0	556.9957	0	0	0	0
hsa-miR-3173-5p	1818.267	3331.659	1502.645	729.9216	1019.716	686.1896	473.3286	333.4991	593.5953	1231.641	1846.63	556.9957	3035.502	506.4218	2124.219	819.3842
hsa-miR-219a-5p	0	0	0	0	0	0	67.30141	0	0	0	0	0	0	0	0	0
hsa-miR-3680-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3925-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1231	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-938	0	0	0	0	0	0	0	0	17.12294	0	0	0	0	0	0	0
hsa-miR-7154-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3159	0	0	0	0	21.46771	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6074	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-376b-5p	0	0	0	0	85.87085	0	9.861012	47.64273	0	0	0	185.6652	0	0	0	0
hsa-miR-4288	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-765	165.4623	0	0	0	0	0	0	0	23.97212	0	0	0	0	45.8399	0	0
hsa-miR-423-5p	156113.1	281108.8	232519.8	294257.9	248823	158898.7	151489.4	121924.2	185566	320459.3	476247.4	129374.9	209449.6	92271.55	311043.6	116300.7
hsa-miR-7107-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6775-3p	0	0	0	0	22.5411	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6818-3p	0	0	178.5321	0	0	0	0	0	22.83059	0	0	0	0	0	0	0
hsa-miR-6755-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-144-5p	14206.72	15825.38	20144.37	9793.114	15338.68	31243.07	27650.28	16436.74	32510.76	20743.42	12926.41	18752.19	25931.86	48607.76	11045.94	70110.79
hsa-miR-2861	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5003-5p	0	0	0	0	30.73786	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1908-3p	25.45573	0	234.3234	0	112.7055	0	5.177032	0	0	510.4826	0	194.9485	0	55.00788	0	0
hsa-miR-3679-3p	145.4613	0	0	304.134	0	0	9.861012	0	0	0	0	0	0	0	0	0
hsa-miR-128-1-5p	150.4202	0	0	0	10.24595	0	32.94475	90.95429	98.06776	0	0	177.2259	0	50.00716	0	0
hsa-miR-4796-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3619-3p	0	0	0	0	10.73386	0	4.930506	0	34.24589	0	0	0	0	61.11987	0	0
hsa-miR-6827-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6509-3p	0	0	0	0	0	0	14.79152	0	0	0	0	0	0	0	0	0
hsa-miR-1972	0	0	0	0	42.93542	0	19.72202	0	0	0	503.6264	0	0	122.2397	0	0
hsa-miR-5004-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-634	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6741-5p	109.096	237.9757	416.5749	0	53.66928	128.6605	207.0813	0	216.8906	0	167.8755	0	173.4573	139.7026	0	285.0032
hsa-miR-628-3p	2596.485	2498.744	4483.387	3448.879	1375.007	3748.847	1351.205	1200.597	3014.494	3096.928	2644.038	1559.588	1821.301	4006.407	1338.258	1832.927
hsa-miR-1268b	0	0	0	0	0	0	0	0	0	0	0	0	0	9.650505	0	0
hsa-miR-6077	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-603	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4502	0	0	0	0	0	0	9.861012	0	0	0	0	0	0	0	0	0
hsa-miR-6076	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4735-5p	0	0	0	0	0	0	0	47.64273	0	0	0	0	0	0	0	0
hsa-miR-4662b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-95-3p	2654.669	2498.744	2291.162	486.6143	3456.302	3388.061	2332.13	6002.983	1152.945	3305.982	1343.004	6312.618	2601.859	3911.672	6797.501	2386.902
hsa-miR-6890-5p	0	0	0	0	45.0822	0	0	0	11.98606	0	0	0	0	0	0	37.40667
hsa-miR-4762-5p	0	0	0	0	0	0	5.177032	0	0	0	0	0	0	0	0	0
hsa-miR-4634	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6833-3p	0	0	0	0	45.0822	0	0	100.0497	0	0	0	0	0	0	0	0
hsa-miR-4668-5p	196.7034	0	0	0	20.49191	153.5154	9.412785	0	59.9303	0	0	0	0	41.67264	0	136.0243
hsa-miR-3154	339.4098	0	282.6758	912.4019	397.1527	847.0153	103.5406	0	148.3988	5574.794	0	371.3305	780.5577	585.0045	424.8438	0
hsa-miR-500b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-7157-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-126-5p	358136.7	505745.9	300590	305417.4	372739.6	293648.4	173927.6	758176.8	192394.3	685271.8	374043.3	748602.3	444488.6	885076.8	543778.9	331049
hsa-miR-527	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3606-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548ac	0	0	0	0	0	0	9.861012	0	34.24589	0	0	0	0	0	0	0
hsa-miR-199b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-103a-3p	50541.2	117554.6	61264.91	64622.94	89979.97	53382.43	90165.07	182681.7	62926.82	98414.86	95826.36	216747.3	80716.76	84478.77	96516.8	63081.25
hsa-miR-509-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-513a-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6888-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7158-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-301b-3p	161.991	0	0	0	40.98381	388.9057	235.3196	227.3857	283.3069	0	0	0	0	266.7049	0	204.0364
hsa-miR-4447	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548ay-3p	96.97423	0	0	0	32.20157	0	34.51355	0	0	0	0	185.6652	0	43.65705	0	0
hsa-miR-101-3p	282838.7	267990.3	204986.1	170336.3	316184	241637.4	508612.3	182590.8	252875.9	224646.4	246776.9	121452.9	357157.2	347127.2	181110.9	508207
hsa-miR-4324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-658	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6767-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4688	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1825	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3918	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-27a-5p	169.7049	0	0	0	364.9511	343.0948	207.0813	95.28545	142.6912	615.8203	503.6264	185.6652	0	427.8391	0	142.5016
hsa-miR-335-3p	12.12178	1665.83	193.4098	121.6536	150.274	225.156	138.0542	47.64273	102.7377	32.41159	671.5018	556.9957	0	567.5416	0	106.8762
hsa-miR-3174	0	0	0	0	10.24595	0	37.65114	0	0	0	0	0	0	0	0	0
hsa-miR-3116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6793-5p	0	0	0	0	0	0	0	0	0	0	0	0	433.6432	0	0	0
hsa-miR-4433a-3p	0	0	0	0	11.27055	0	0	0	0	34.03217	0	0	0	0	0	0
hsa-miR-3941	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1245b-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6880-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5089-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7109-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3974	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-943	0	0	0	0	0	0	10.35406	0	0	0	0	0	0	0	0	0
hsa-miR-5587-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-28-3p	15006.76	46048.29	21587.51	30048.44	7599.57	21443.42	5073.491	23059.08	9246.39	27160.91	18466.3	37318.71	19340.48	33100.77	34412.35	9832.61
hsa-miR-3175	0	0	0	0	0	0	24.65253	47.64273	0	0	0	0	0	0	0	0
hsa-miR-1323	48.48711	0	0	0	10.73386	235.8777	0	0	0	0	0	0	0	43.65705	0	35.6254
hsa-miR-3118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6839-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6769b-3p	216.3737	0	0	0	11.27055	0	15.5311	50.02486	0	0	0	0	0	174.1916	0	0
hsa-miR-4515	48.48711	356.9635	193.4098	0	0	85.7737	9.861012	0	39.95353	0	0	0	0	87.31409	0	71.2508
hsa-miR-6759-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6754-3p	0	356.9635	44.63302	0	0	0	4.930506	0	0	0	0	0	0	0	0	0
hsa-miR-5590-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-93-5p	461269.5	688176.9	471742.7	366487	355842	546320.4	749060	546407.9	585273.9	522393.8	418399	625253	958335.6	664345.2	314693.4	696104.1
hsa-miR-550a-5p	323.9821	0	454.4453	0	307.3786	440.0775	381.2178	90.95429	310.5479	0	640.979	177.2259	0	175.0251	0	476.0849
hsa-miR-3667-5p	0	0	0	0	225.411	0	157.7762	142.9282	28.53824	0	0	185.6652	0	0	0	0
hsa-miR-5047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-378d	0	0	0	0	0	0	0	0	0	0	0	410.4179	0	0	0	39.37544
hsa-miR-548ar-5p	0	0	0	0	11.27055	0	0	0	0	0	0	0	0	55.00788	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-18b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-146a-3p	36.36533	0	0	304.134	107.3386	203.7125	73.9576	238.2136	79.90707	745.4666	0	0	0	384.182	0	142.5016
hsa-miR-1827	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6782-5p	0	0	0	0	0	103.1965	34.51355	0	0	0	0	0	0	0	0	0
hsa-miR-6874-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3714	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1199-3p	0	0	0	0	0	0	0	0	0	0	0	194.9485	0	0	0	0
hsa-miR-5706	0	0	0	0	0	0	9.861012	0	0	0	0	0	0	0	0	0
hsa-miR-433-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-486-5p	1021854	2721371	907181.1	849081.3	1005988	591334.6	1933710	968529	1193543	886781.2	3761753	1685840	2145927	474918.8	1655617	1264132
hsa-miR-4773	145.4613	0	0	243.3072	75.13699	0	34.51355	0	39.95353	0	0	0	0	0	0	0
hsa-miR-641	0	0	203.7595	0	49.00239	0	36.01413	173.9995	62.53596	0	0	0	0	0	0	32.52754
hsa-miR-1296-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3684	0	0	0	0	0	0	0	0	0	0	0	194.9485	0	0	0	0
hsa-miR-15a-3p	2242.529	4521.538	3600.397	2493.899	2500.989	2734.037	3066.775	2572.707	3709.971	4570.035	2518.132	6126.953	7545.391	8775.066	5098.126	5308.185
hsa-miR-3157-5p	169.7049	0	163.6544	0	171.7417	192.9908	251.4558	95.28545	222.5983	1328.875	0	371.3305	0	288.1365	0	71.2508
hsa-miR-4539	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6867-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4698	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4770	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-133a-3p	1503.1	10589.92	818.2721	6569.294	3735.382	793.4067	1587.623	85899.84	747.7018	3370.806	27531.57	188264.5	5637.361	506.4218	19542.82	855.0096
hsa-miR-6866-3p	181.8267	0	0	0	0	0	14.79152	0	0	0	0	0	0	0	0	0
hsa-miR-6500-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4446-5p	0	0	0	0	0	0	0	0	5.707648	0	0	0	0	0	0	0
hsa-miR-4750-5p	193.9485	0	0	0	42.93542	117.9388	34.51355	47.64273	68.49178	777.8782	0	185.6652	0	52.38846	0	106.8762
hsa-miR-543	0	0	0	0	75.13699	0	9.861012	95.28545	142.6912	583.4087	0	185.6652	0	96.04551	0	71.2508
hsa-miR-521	0	0	0	0	0	0	0	47.64273	0	0	0	0	0	0	0	0
hsa-miR-378e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4465	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6852-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3936	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4699-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4495	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-339-3p	1214.933	1930.848	1320.732	2438.602	2551.242	1156.483	2899.138	5457.258	2931.136	1763.485	4326.608	4607.874	2483.593	2883.747	6894.057	2414.43
hsa-miR-1587	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-190a-3p	0	0	0	0	0	0	0	100.0497	0	0	0	0	0	0	0	0
hsa-miR-103a-2-5p	11.57079	0	0	0	10.24595	0	32.94475	227.3857	0	0	0	0	0	125.0179	0	0
hsa-miR-548au-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4656	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1468-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3605-3p	3008.405	6246.861	3592.958	3077.283	1875.01	2292.497	955.3976	909.543	1182.261	990.0269	5288.077	1063.355	4304.894	1566.891	8921.721	1972.352
hsa-miR-595	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4458	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5589-5p	0	0	0	0	0	0	0	300.1492	0	0	0	0	0	0	0	0
hsa-miR-892b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-136-3p	145.4613	0	0	0	504.4912	0	128.1932	619.3555	74.19942	0	0	185.6652	0	227.0166	849.6877	71.2508
hsa-miR-942-5p	3975.943	3093.684	1472.89	2372.245	2586.859	1908.465	3017.47	2953.849	2705.425	745.4666	5204.139	4455.966	3295.688	1458.145	1699.375	1745.645
hsa-miR-1226-3p	400.0187	2855.708	1041.437	2068.111	354.2173	85.7737	187.3592	95.28545	456.6118	1685.403	839.3773	556.9957	2168.216	812.0211	849.6877	320.6286
hsa-miR-24-1-5p	351.5316	0	0	0	96.60471	160.8257	14.79152	47.64273	51.36883	0	167.8755	185.6652	433.6432	270.6737	0	0
hsa-miR-202-5p	0	0	0	0	8694.424	214.4342	325.4134	571.7127	119.8606	0	1175.128	185.6652	0	253.2109	0	1246.889
hsa-miR-6848-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-636	46.28315	0	213.0213	0	204.9191	153.5154	145.8982	181.9086	168.8945	0	480.7343	177.2259	331.1457	108.3489	0	306.0546

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-6070	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-130b-5p	560.0261	1998.995	968.5366	0	721.3152	911.8816	217.4353	700.3481	317.6306	952.9008	0	0	91.06506	1081.822	0	299.2534
hsa-miR-941	624.8226	0	1249.725	1916.044	788.9385	1002.967	1129.534	3001.492	375.9264	928.1501	3525.385	708.9036	0	941.8016	0	748.1334
hsa-miR-5584-5p	133.3396	0	133.8991	0	53.66928	0	4.930506	0	11.4153	1004.759	0	0	0	113.5083	0	35.6254
hsa-miR-29c-3p	54281.32	49022.98	29814.86	41240.57	97119.93	47443.57	117779.9	130541.1	49673.66	61160.68	76886.96	78536.39	61577.33	128482.7	93890.49	86035.34
hsa-miR-16-5p	2.91E+07	2.18E+07	2.35E+07	1.63E+07	2.84E+07	1.95E+07	3.17E+07	1.54E+07	3.09E+07	1.69E+07	2.22E+07	2.00E+07	2.74E+07	1.87E+07	1.22E+07	2.94E+07
hsa-miR-4675	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4439	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-375	9054.968	19395.02	7632.247	31264.97	2576.125	2616.098	2997.748	18342.45	3704.263	17891.2	21152.31	16152.88	12402.19	6050.867	28464.54	4061.296
hsa-miR-4500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-500b-5p	0	0	0	0	0	0	18.27188	0	0	0	0	0	0	0	0	0
hsa-miR-4435	0	594.9391	0	0	32.20157	53.60856	64.09658	0	28.53824	0	0	0	0	52.38846	0	71.2508
hsa-miR-106a-5p	57.85394	0	85.2085	0	71.72168	214.9216	192.9621	45.47715	207.032	123.7534	0	0	82.78642	91.6798	0	136.0243
hsa-miR-4434	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6790-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3649	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5088-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3120-5p	750.9442	0	0	0	135.2466	123.8358	227.7894	400.1989	119.8606	0	1410.154	194.9485	0	229.1995	0	74.81334
hsa-miR-6831-5p	0	0	203.7595	0	0	0	0	0	31.26798	0	0	0	0	0	0	0
hsa-miR-30d-5p	50535.69	118035.9	76501	81325.42	122108.4	95187.36	93921.22	441791	90015.31	111722.8	160321.1	297621.4	85687.88	102489.3	143172.4	79052.77
hsa-miR-302c-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-520b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3162-5p	0	0	0	638.6813	0	0	0	0	0	0	0	177.2259	0	33.33811	0	0
hsa-miR-3666	0	0	0	0	0	0	5.177032	0	0	0	0	0	0	0	0	0
hsa-miR-4715-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3610	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4280	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6868-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-520f-3p	109.096	0	0	0	53.66928	42.88685	14.79152	0	0	0	0	0	0	87.31409	0	71.2508
hsa-miR-6778-3p	0	0	0	0	0	0	10.35406	0	0	0	0	0	0	0	0	0
hsa-miR-410-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-664a-3p	138.8495	0	213.0213	1161.239	481.5598	173.9841	164.7237	545.7258	201.5837	2165.684	1602.448	531.6777	745.0778	308.3775	405.5328	340.0606
hsa-miR-18a-5p	2314.158	908.6343	2300.629	2554.725	3176.246	6355.539	6052.421	3547.218	5900.411	2908.204	1762.692	2126.711	3145.884	3342.146	2027.664	3910.697
hsa-miR-3667-3p	0	0	0	0	0	0	0	0	22.83059	0	0	0	0	8.73141	0	71.2508
hsa-miR-550a-3p	0	0	0	0	161.0078	32.16513	330.3439	333.4991	222.5983	0	671.5018	742.6609	0	0	424.8438	0
hsa-miR-4327	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5010-5p	533.3582	1903.805	654.6177	973.2287	171.7417	922.0673	774.0895	95.28545	730.5789	0	1510.879	185.6652	1474.387	26.19423	424.8438	427.5048
hsa-miR-489-5p	0	0	0	0	53.66928	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7855-5p	109.096	0	0	0	0	42.88685	14.79152	0	0	1199.229	167.8755	0	0	0	0	0
hsa-miR-4766-5p	0	0	0	0	11.27055	22.51559	5.177032	50.02486	0	0	0	0	0	91.6798	0	37.40667
hsa-miR-589-3p	0	1303.693	0	444.3001	127.4062	58.73634	108.0424	217.4994	192.8192	976.5754	919.6655	169.5204	1346.179	71.74941	0	227.6928
hsa-miR-4635	0	0	0	0	0	33.77339	0	0	0	0	0	0	0	0	0	0
hsa-miR-6087	0	0	0	0	0	0	12.18125	470.8222	0	0	0	0	229.3512	0	0	0
hsa-miR-3613-3p	0	0	0	0	88.2043	352.418	148.5583	608.9984	26.05665	0	459.8328	678.0817	0	87.69373	0	65.05508
hsa-miR-6868-3p	114.5508	0	0	0	56.35275	157.6092	62.12438	0	95.88848	0	0	0	0	0	0	0
hsa-miR-935	69.42473	0	14.20142	0	307.3786	0	65.8895	545.7258	10.89642	1670.67	0	177.2259	0	175.0251	405.5328	0
hsa-miR-3187-3p	0	0	0	0	47.45494	130.3535	114.4397	315.9465	82.00989	0	0	410.4179	0	106.1556	0	157.5018
hsa-miR-4799-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5702	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4485-3p	0	0	0	0	0	0	0	0	0	0	0	205.2089	0	0	0	0
hsa-miR-7704	98.99452	0	0	0	75.13699	0	0	1723.079	0	605.0164	0	2382.704	0	101.8664	1982.605	124.6889

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-199a-5p	9788.887	31802.2	21642.96	21076.48	15625.08	25872.47	9215.116	18554.68	15380.29	27163.86	17947.41	23393.82	16226.14	47873.52	23115.37	21117.77
hsa-miR-6828-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-370-5p	0	0	0	0	32.20157	0	9.861012	0	57.07648	0	0	0	0	0	0	0
hsa-miR-4777-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3921	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7975	0	0	0	0	0	0	0	58.85278	0	0	0	0	0	0	0	0
hsa-miR-6744-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1304-5p	0	0	0	0	0	0	0	0	17.12294	0	0	0	0	0	0	0
hsa-miR-4669	96.97423	356.9635	0	0	246.8787	0	24.65253	0	0	0	0	0	0	0	0	0
hsa-miR-6735-5p	63.63934	520.5717	0	0	75.13699	56.28899	47.45612	0	139.8374	28.36014	293.782	0	0	743.4767	0	0
hsa-miR-6514-3p	0	0	0	0	0	56.28899	25.88516	0	35.95818	0	0	0	0	0	0	112.22
hsa-miR-1285-3p	84.85245	0	312.4312	0	53.66928	0	138.0542	0	5.707648	0	0	0	0	87.31409	0	0
hsa-miR-6840-3p	121.2178	0	0	0	32.20157	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-507	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1469	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6774-3p	0	0	0	0	0	0	0	50.02486	0	0	0	0	0	0	0	0
hsa-miR-1193	0	0	0	0	0	0	0	0	0	0	0	0	0	41.67264	0	0
hsa-miR-23c	145.4613	832.9148	267.7982	121.6536	96.60471	96.49541	49.30507	142.9282	34.24589	226.8811	0	0	173.4573	52.38846	424.8438	35.6254
hsa-miR-921	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4267	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-181a-3p	509.1147	0	862.9052	2676.379	364.9511	257.3211	325.4134	1715.138	234.0135	1004.759	839.3773	3898.97	0	733.4384	1274.531	178.127
hsa-miR-4802-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4711-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-567	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6769a-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6758-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	28.95152	0	0
hsa-miR-1282	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4256	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-151a-3p	98488.23	143927.7	160636.5	132079.3	63926.55	197720.7	58345.15	80339.93	119956.5	221515.4	120215.6	135489.2	119204.2	304872	168620.5	102232.4
hsa-miR-326	937.8428	6181.104	1825.256	2621.955	889.7802	1896.05	910.0677	4370.593	895.8003	4907.797	3339.838	4104.179	4409.466	2460.879	2347.821	590.6317
hsa-miR-128-2-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-671-5p	127.2787	908.6343	525.4524	0	573.7734	51.17181	160.0173	318.34	190.6873	1144.719	0	177.2259	579.5049	183.3596	0	238.0424
hsa-miR-329-5p	0	0	255.6255	0	0	0	0	0	43.58567	0	0	0	0	50.00716	0	0
hsa-miR-4514	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3177-3p	0	0	0	0	0	0	15.5311	0	0	0	352.5385	0	0	0	0	0
hsa-miR-4791	0	0	0	0	0	0	12.18125	0	0	0	0	0	0	0	0	0
hsa-miR-517a-3p	0	0	0	0	0	0	4.930506	0	39.95353	0	0	0	173.4573	0	0	0
hsa-miR-3612	0	0	0	0	0	0	54.23557	0	0	0	0	0	0	0	0	142.5016
hsa-miR-2116-3p	114.5508	0	203.0803	0	33.81165	33.77339	5.177032	0	17.97909	0	0	0	0	36.67192	0	74.81334
hsa-miR-4774-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-561-5p	0	0	0	0	10.73386	0	39.44405	0	28.53824	0	503.6264	0	0	0	0	35.6254
hsa-miR-4278	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1273g-3p	63.63934	0	0	0	22.5411	11.2578	20.70813	400.1989	0	0	0	1364.639	0	27.50394	0	0
hsa-miR-3155b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6806-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548bb-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-210-5p	0	0	0	0	21.46771	42.88685	14.79152	47.64273	0	0	0	0	0	0	0	0
hsa-miR-29b-1-5p	4283.204	5106.13	6194.288	222.15	1911.093	6255.42	2962.163	9134.975	5654.293	12813.85	1072.943	10001.71	6176.587	11591.52	1163.703	5041.769
hsa-miR-6850-5p	169.7049	0	0	0	0	128.6605	152.8457	0	165.5218	0	503.6264	185.6652	346.9145	0	0	106.8762
hsa-miR-33b-5p	241.1596	1052.103	0	0	106.7736	260.7069	790.1785	263.2888	113.5521	0	0	0	144.7576	0	0	630.0071
hsa-miR-524-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-378g	13.39775	0	0	0	0	0	5.449507	0	6.308453	0	0	0	0	0	0	0
hsa-miR-192-5p	70257.83	60844.43	38179.09	30912.18	27297.27	73457.13	42337.77	180289.6	42814.21	49176.49	32962.34	42108.88	47535.96	86169.84	95462.41	58840.69
hsa-miR-6511a-3p	327.288	594.9391	0	912.4019	193.2094	364.5382	167.6372	190.5709	382.4124	0	839.3773	556.9957	780.5577	288.1365	0	213.7524
hsa-miR-5189-3p	101.8229	0	78.10779	0	101.4349	371.5073	124.2488	100.0497	0	0	0	194.9485	0	119.1837	0	37.40667
hsa-miR-149-5p	0	0	0	0	0	51.17181	0	1136.929	16.34463	0	801.2238	6202.907	0	0	811.0656	0
hsa-miR-6892-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-876-5p	0	0	0	0	0	0	24.65253	0	0	0	0	0	0	0	0	0
hsa-miR-4652-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1227-3p	0	0	0	0	0	0	27.24754	0	25.23381	0	371.0931	0	0	0	0	0
hsa-miR-6781-5p	0	0	0	0	0	0	15.5311	0	0	0	0	0	0	55.00788	0	0
hsa-miR-4757-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5692a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3675-5p	0	0	0	0	0	0	14.11918	0	0	0	0	0	0	0	0	0
hsa-miR-409-5p	983.517	2158.007	2868.686	2264.416	1127.055	1350.936	404.7498	909.543	2043.078	897.2119	1762.692	1240.581	331.1457	7284.377	3649.795	1360.243
hsa-miR-4537	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4677-5p	0	0	0	0	0	0	14.79152	47.64273	0	0	0	0	0	0	0	35.6254
hsa-miR-5739	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1914-3p	0	0	0	0	0	0	0	0	17.12294	0	0	0	0	0	0	0
hsa-miR-8086	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4319	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6800-3p	38.1836	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-146b-3p	812.1591	0	178.5321	729.9216	493.7574	804.1284	320.4829	1143.425	490.8577	518.5855	839.3773	185.6652	1561.115	1108.889	0	712.508
hsa-miR-3074-5p	280.0131	999.4977	390.539	702.5495	45.0822	371.5073	124.2488	200.0995	35.95818	0	0	0	0	238.3675	0	37.40667
hsa-miR-1254	0	0	0	0	0	420.9437	112.5442	0	93.80395	147.966	0	0	0	0	0	130.1102
hsa-miR-499a-5p	649.1212	1124.435	296.8096	574.8132	2073.781	529.1165	1418.507	2501.243	167.8048	0	705.0769	4483.815	0	614.2546	0	448.88
hsa-miR-7106-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4722-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1273e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6819-3p	25.45573	0	0	0	0	0	15.5311	0	0	0	0	0	0	0	0	0
hsa-miR-3184-5p	143.8802	1303.693	828.6218	1332.9	450.822	450.3119	445.6749	608.9984	380.4271	355.1183	2758.997	508.5613	1029.431	398.6078	0	260.2203
hsa-miR-608	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-18a-3p	404.9776	0	85.2085	812.8672	71.72168	51.17181	150.6046	272.8629	92.61955	0	0	708.9036	0	191.6941	0	136.0243
hsa-miR-4306	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6728-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7114-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-885-5p	848.5245	475.9513	595.107	2372.245	450.822	2219.394	108.4711	14006.96	342.4589	64.82319	3525.385	2970.644	1127.472	1021.575	7222.345	213.7524
hsa-miR-6774-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6738-5p	0	681.4758	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-663a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1289	0	0	0	0	0	0	18.82557	0	0	0	0	0	0	0	0	0
hsa-miR-4251	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-320b	678.8196	0	2097.752	1763.977	1395.401	793.4067	981.1708	952.8545	1312.759	1037.171	2350.256	1113.991	867.2863	296.8679	1274.531	676.8826
hsa-miR-4453	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6739-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1273h-3p	109.096	0	133.8991	0	193.2094	75.05199	73.9576	142.9282	376.7047	0	1175.128	1113.991	0	122.2397	424.8438	71.2508
hsa-miR-4697-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-200b-3p	6545.76	4283.562	3198.7	11313.78	1008.982	3591.773	1045.267	6908.195	1506.819	7908.429	3525.385	2413.648	693.829	2374.943	5947.814	2280.026
hsa-miR-5692b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-24-2-5p	36.36533	0	0	0	0	53.60856	4.930506	0	68.49178	0	0	0	0	0	0	0
hsa-miR-1234-3p	0	0	178.5321	0	0	0	14.79152	47.64273	0	0	167.8755	0	0	0	0	0
hsa-miR-3142	351.5316	0	0	0	42.93542	75.05199	93.67962	47.64273	148.3988	972.3478	0	0	0	331.7936	0	178.127



(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-549a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-655-3p	0	0	0	0	0	0	44.37456	0	0	0	0	0	0	8.73141	0	71.2508
hsa-miR-4298	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8055	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-92a-1-5p	173.5618	0	0	58.06194	317.6246	30.70308	310.6219	591.2029	245.1694	1113.78	0	2481.163	1655.728	525.0752	1622.131	476.0849
hsa-miR-485-5p	242.4356	356.9635	133.8991	0	869.4424	150.104	128.1932	47.64273	216.8906	1199.229	1846.63	185.6652	346.9145	218.2852	0	178.127
hsa-miR-135a-5p	0	0	0	0	30.73786	0	4.706392	45.47715	0	0	0	0	0	83.34528	0	34.00607
hsa-miR-125b-1-3p	0	0	0	0	64.40314	75.05199	4.930506	47.64273	0	0	0	335.7509	185.6652	0	0	0
hsa-miR-4740-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-106b-5p	2392.839	499.7489	2889.988	383.2088	3798.175	3974.003	7781.079	3851.914	6868.013	5002.729	1762.692	2729.279	1457.041	1696.076	1338.258	4226.954
hsa-miR-4464	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-626	0	0	0	0	0	0	23.00903	0	0	0	0	0	0	0	0	0
hsa-miR-4640-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4646-3p	0	0	328.0527	0	33.81165	0	10.35406	0	65.92333	0	0	0	0	55.00788	446.086	0
hsa-miR-6796-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6831-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	45.8399	0	0
hsa-miR-4696	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6886-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4281	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-762	0	0	0	0	0	0	0	47.64273	0	0	0	0	0	0	0	0
hsa-miR-6777-5p	0	0	0	0	20.49191	0	18.82557	0	21.79284	0	0	0	0	0	0	0
hsa-miR-1284	0	0	490.9633	0	354.2173	321.6514	162.7067	285.8564	34.24589	0	335.7509	556.9957	0	130.9711	424.8438	71.2508
hsa-miR-4428	0	0	0	60.82679	0	10.72171	0	0	0	64.82319	0	0	86.72863	8.73141	0	0
hsa-miR-3147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4724-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4436b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-302b-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4301	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4449	0	0	0	0	21.46771	0	49.30507	0	0	0	0	0	607.1004	0	0	0
hsa-miR-20b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-99a-3p	0	0	0	0	10.73386	225.156	29.58304	428.7845	34.24589	0	503.6264	0	0	122.2397	1699.375	106.8762
hsa-miR-8079	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-217	92.56631	0	0	0	10.24595	0	18.82557	0	38.13746	0	0	0	0	0	0	0
hsa-miR-6131	0	0	0	0	0	0	0	0	6.658922	0	0	0	0	0	0	0
hsa-miR-6805-5p	0	0	74.38837	547.4412	64.40314	278.7645	34.51355	0	108.4453	0	167.8755	0	0	0	0	71.2508
hsa-miR-4477a	0	0	0	0	0	0	0	0	22.83059	1069.583	0	0	0	0	0	0
hsa-miR-8059	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1251-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4684-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3674	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4524b-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4642	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3124-5p	127.2787	0	0	0	45.0822	67.54678	160.488	150.0746	107.8745	0	176.2692	0	0	128.3517	892.1721	224.44
hsa-miR-1911-5p	0	0	0	0	20.49191	143.2811	0	0	0	0	0	0	0	0	0	0
hsa-miR-4518	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-181d-3p	0	0	0	0	0	67.54678	67.30141	50.02486	0	0	0	0	0	91.6798	0	0
hsa-miR-197-5p	80.99551	227.1586	1079.308	1045.115	112.7055	992.7331	371.805	45.47715	435.8567	866.2735	0	0	1490.156	175.0251	811.0656	238.0424
hsa-miR-3909	0	594.9391	0	0	42.93542	75.05199	64.09658	0	0	0	0	0	607.1004	0	0	0
hsa-miR-96-5p	266.1281	0	142.0142	174.1858	3750.019	501.4837	2033.161	3956.512	1269.433	0	4967.587	3190.066	4056.534	925.1326	1622.131	2040.364
hsa-miR-1260a	104.8177	0	0	75.13898	198.892	0	12.18125	823.9389	0	0	414.7511	1376.107	0	0	0	0
hsa-miR-562	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4321	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-3689a-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4283	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-203b-3p	0	0	0	0	0	112.578	0	0	0	0	0	0	0	0	0	0
hsa-miR-6767-5p	0	0	440.2439	116.1239	0	143.2811	23.53196	45.47715	223.3766	0	320.4895	0	496.7185	150.0215	405.5328	0
hsa-miR-329-3p	206.0702	0	1413.379	60.82679	762.1038	1683.309	1464.36	2239.208	3652.895	2528.104	335.7509	1670.987	260.1859	2767.857	424.8438	1852.521
hsa-miR-135a-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-26b-3p	1527.344	1546.842	1919.22	5535.238	1760.352	3806.208	1148.808	2000.995	2077.584	2690.162	1678.755	1856.652	607.1004	2724.2	424.8438	1745.645
hsa-miR-5002-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5684	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5003-3p	0	0	0	0	33.81165	0	10.35406	0	0	0	0	0	0	0	0	0
hsa-miR-4724-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5187-3p	0	0	0	0	0	0	5.177032	0	0	0	0	0	0	0	0	0
hsa-miR-4749-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4786-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8052	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1226-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548z	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548ae-3p	0	0	0	0	0	90.06238	0	0	0	0	0	0	0	0	0	0
hsa-miR-4730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-520a-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-301b-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	69.85128	0	0
hsa-miR-4526	133.3396	0	0	0	0	0	34.51355	95.28545	0	0	0	0	0	0	0	0
hsa-miR-758-3p	0	0	0	0	21.46771	0	0	0	0	0	0	185.6652	0	0	0	0
hsa-miR-4322	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-let-7a-2-3p	169.7049	0	684.373	0	64.40314	375.2599	98.61013	190.5709	228.3059	1815.049	167.8755	185.6652	0	26.19423	0	0
hsa-miR-5100	0	0	0	0	0	0	47.64273	0	0	0	0	0	0	0	0	0
hsa-miR-539-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-509-3-5p	0	0	0	0	32.20157	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3180-5p	0	0	0	0	18.78425	0	0	166.7495	0	0	0	0	0	0	0	93.51668
hsa-miR-7844-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5009-5p	0	0	0	0	0	0	22.50883	43.49988	20.84532	0	0	0	0	0	0	0
hsa-miR-3652	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1255a	11.57079	0	14.20142	0	10.24595	0	32.94475	0	43.58567	0	0	0	0	0	0	0
hsa-miR-645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6751-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-137	0	0	0	0	61.47572	0	84.71507	45.47715	21.79284	0	801.2238	0	0	33.33811	1622.131	68.01213
hsa-miR-548e-3p	387.8969	0	922.4158	0	440.0881	246.5994	162.7067	333.4991	131.2759	421.3507	0	0	693.829	550.0788	0	356.254
hsa-miR-1266-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106.8762
hsa-miR-106a-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6891-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-384	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-623	0	0	0	0	20.49191	0	37.65114	0	38.13746	0	0	531.6777	0	0	0	0
hsa-miR-6865-5p	0	0	0	0	10.24595	0	0	0	0	0	0	0	0	0	405.5328	0
hsa-miR-20a-3p	4957.807	5235.464	2752.37	3527.954	4164.736	2004.96	3308.37	4097.274	2180.322	3468.041	2686.007	5569.957	4249.703	2165.39	2124.219	1745.645
hsa-miR-4745-3p	0	0	113.6113	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6840-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4473	0	0	0	0	0	0	14.79152	0	0	0	0	0	0	0	0	0
hsa-miR-3152-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5585-3p	0	0	0	0	21.46771	0	49.30507	0	0	0	0	0	0	0	0	0
hsa-miR-1297	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-644a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-4794	109.096	0	0	0	32.20157	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-374a-3p	921.2551	713.9269	595.107	669.0947	1030.45	997.1192	448.6761	524.07	936.0542	777.8782	839.3773	742.6609	86.72863	3134.576	424.8438	2458.153
hsa-miR-6765-3p	0	0	0	0	45.0822	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1267	0	0	93.72935	0	0	0	5.177032	0	0	0	0	0	0	0	0	0
hsa-miR-4468	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4512	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3613-5p	33480.35	22607.69	24012.57	10158.08	11506.69	6658.183	20101.67	6002.983	16837.56	8621.483	13597.91	11696.91	14917.32	7997.971	6797.501	14535.16
hsa-miR-1305	0	0	0	0	21.46771	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4420	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6891-5p	452.5464	0	763.7206	0	563.5275	150.104	23.00903	0	159.8141	0	0	216.6094	0	71.30651	0	41.56297
hsa-miR-3935	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6892-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6885-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-627-5p	1781.901	1546.842	2276.284	1155.709	2146.771	1211.553	1755.26	1000.497	6677.948	1069.583	0	371.3305	1994.758	3527.49	2124.219	1638.768
hsa-miR-551b-3p	0	0	0	0	0	146.3514	10.35406	100.0497	29.96515	0	0	194.9485	0	146.6877	1784.344	74.81334
hsa-miR-4726-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-370-3p	860.6462	1189.878	5891.559	2068.111	2361.448	3409.504	394.4405	762.2836	1666.633	1361.287	2182.381	1670.987	1561.115	8443.273	2973.907	1389.391
hsa-miR-711	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4763-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-532-3p	1127.325	1070.891	1472.89	608.2679	3112.818	2927.027	2603.307	4001.989	3047.884	2657.751	4700.513	7983.605	1214.201	2680.543	5098.126	1674.394
hsa-miR-2392	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6795-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3156-3p	0	0	0	0	0	90.06238	0	0	0	0	0	0	0	0	0	0
hsa-miR-6830-3p	0	0	0	0	0	0	0	0	0	0	0	177.2259	0	0	0	0
hsa-miR-500a-3p	1103.082	1308.866	1815.076	486.6143	1212.926	1179.388	951.5877	3620.847	713.456	615.8203	671.5018	4641.631	520.3718	698.5128	1274.531	570.0064
hsa-miR-378a-5p	278.8009	2855.708	371.9419	0	397.1527	975.6758	384.5795	3144.42	582.1801	2139.165	335.7509	5198.626	607.1004	969.1865	1274.531	320.6286
hsa-miR-4294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4743-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4687-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-590-3p	1692.806	874.5605	249.9449	1149.626	1848.37	1395.967	1537.578	1750.87	797.073	1293.223	1410.154	779.794	728.5205	1256.013	446.086	1533.673
hsa-miR-769-5p	12.12178	0	0	486.6143	515.2251	257.3211	749.437	1476.925	342.4589	1458.522	2182.381	556.9957	0	462.7647	1274.531	285.0032
hsa-miR-3928-5p	0	0	0	0	0	0	4.706392	45.47715	0	0	0	0	0	0	0	0
hsa-miR-4659a-3p	0	0	0	0	10.73386	0	88.74911	190.5709	102.7377	0	503.6264	185.6652	0	69.85128	0	71.2508
hsa-miR-495-5p	0	0	0	0	64.40314	0	0	0	0	0	0	0	0	69.85128	0	0
hsa-miR-1283	0	0	252.9205	0	107.3386	75.05199	34.51355	190.5709	0	0	0	0	0	130.9711	0	0
hsa-miR-219b-5p	36.36533	0	0	486.6143	21.46771	0	39.44405	0	39.95353	0	0	0	0	0	0	0
hsa-miR-4782-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4653-3p	0	0	0	0	0	0	28.23836	0	0	0	0	0	0	0	0	0
hsa-miR-4510	0	0	14.87768	0	0	0	0	47.64273	0	0	0	0	86.72863	0	0	0
hsa-miR-6872-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7854-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-138-5p	104.1371	0	0	0	61.47572	0	0	45.47715	0	0	0	177.2259	0	0	0	0
hsa-miR-5480-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-675-3p	0	0	0	0	94.90989	0	10.89901	263.2888	0	895.5835	0	205.2089	0	0	0	0
hsa-miR-9500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6825-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-934	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1539	445.4753	999.4977	437.4036	0	349.387	0	346.8611	800.3978	185.7839	0	176.2692	1754.536	0	513.4069	0	411.4734
hsa-miR-3978	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3153	0	0	0	58.06194	30.73786	30.70308	14.11918	0	27.24104	0	0	0	331.1457	75.01075	0	0
hsa-miR-4749-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1278	0	0	0	0	0	182.2691	19.72202	95.28545	57.07648	0	0	0	0	87.31409	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-6877-3p	0	0	0	0	0	0	20.70813	0	0	0	0	0	0	0	0	0
hsa-miR-5000-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4755-3p	133.3396	0	0	0	10.73386	0	9.861012	0	114.153	0	0	0	0	0	0	0
hsa-miR-19b-3p	69320.59	73940.12	46211.41	28508.41	73320.05	75703.57	118878.8	114784.3	82856.37	56245.9	76757.23	88612.95	84276.57	106698.6	56369.05	112458.1
hsa-miR-338-5p	12.12178	951.9026	0	0	10.73386	214.4342	0	95.28545	17.12294	129.6464	0	556.9957	0	0	0	0
hsa-miR-6134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6088	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4736	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4743-5p	80.99551	340.7379	0	0	0	0	18.82557	0	0	804.3968	0	0	0	0	0	0
hsa-miR-568	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1248	0	0	0	0	0	0	0	153.9227	0	0	0	0	0	0	0	0
hsa-miR-4529-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4451	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-876-3p	0	0	89.26604	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4709-3p	69.42473	0	0	0	61.47572	0	9.412785	0	16.34463	0	0	354.4518	0	0	405.5328	0
hsa-miR-1293	109.096	0	0	0	21.46771	0	34.51355	0	11.4153	0	0	0	0	0	0	106.8762
hsa-miR-3908	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4686	0	0	0	0	0	0	0	181.9086	0	0	0	0	0	0	0	0
hsa-miR-3130-3p	0	0	0	0	22.5411	0	5.177032	100.0497	0	0	0	0	0	0	0	0
hsa-miR-6830-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1295b-3p	0	0	0	0	0	0	14.79152	0	0	0	0	0	0	0	0	0
hsa-miR-4647	0	0	156.2156	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-324-3p	13.39775	0	49.33124	134.4592	676.233	82.95219	283.3744	368.6042	214.4874	1719.52	556.6396	410.4179	0	173.7091	0	236.2527
hsa-miR-153-3p	96.97423	0	238.0428	0	107.3386	203.7125	231.7338	95.28545	91.32236	0	167.8755	556.9957	433.6432	157.1654	0	142.5016
hsa-miR-577	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4670-5p	0	0	0	0	0	0	4.930506	0	0	0	0	0	0	0	0	0
hsa-miR-6874-3p	115.7079	0	71.00708	0	0	0	0	0	0	0	0	0	0	175.0251	0	34.00607
hsa-miR-103b	127.2787	0	184.6184	0	20.49191	61.40617	56.47671	45.47715	65.37851	0	0	177.2259	0	0	0	68.01213
hsa-miR-6769a-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6841-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4273	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-545-5p	206.0702	0	178.5321	243.3072	0	0	167.6372	47.64273	576.4724	0	0	0	520.3718	864.4095	0	213.7524
hsa-miR-544a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6798-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-519e-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4639-5p	0	0	0	0	21.46771	0	14.79152	0	0	0	0	0	0	0	0	0
hsa-miR-6895-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1255b-5p	2509.208	2141.781	4433.547	547.4412	1330.998	3977.755	729.715	476.4272	3213.406	7616.724	0	3156.309	2862.045	1100.158	0	3241.911
hsa-miR-3915	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-518c-3p	0	0	0	0	81.96763	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-378f	0	0	16.44375	0	11.86374	11.85031	5.449507	52.65775	0	0	0	0	0	28.95152	0	0
hsa-miR-767-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4271	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-320a	53432.8	67585.09	75400.05	65571.29	129364.4	47486.46	76585.55	96952.95	64239.57	95128.02	150584.3	136649.6	61664.05	38767.46	76896.73	63092.59
hsa-miR-6802-5p	0	0	0	0	0	0	0	0	31.54226	0	0	410.4179	0	86.85455	0	0
hsa-miR-548t-3p	296.9836	0	260.3593	0	0	93.81498	25.88516	41.68739	49.94192	0	0	0	0	45.8399	0	31.17223
hsa-miR-663b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5581-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6833-5p	133.3396	0	386.8195	0	0	0	39.44405	47.64273	62.78413	0	167.8755	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-7114-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4648	0	0	0	0	23.72747	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4471	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6879-3p	0	0	0	0	0	0	20.70813	0	0	0	0	0	0	36.67192	0	0
hsa-miR-4664-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-27a-3p	133820.8	94827.35	74889.75	68913.72	150089.9	121167.7	67197.88	196497.7	76279.29	120916.3	99944.65	202161.6	74764.41	290790	132933.6	122207.6
hsa-miR-1225-5p	0	0	0	60.82679	21.46771	0	14.79152	0	0	486.1739	335.7509	0	0	0	0	0
hsa-miR-4282	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3614-5p	0	0	0	0	51.22977	102.3436	32.94475	90.95429	174.3427	0	0	531.6777	0	50.00716	0	34.00607
hsa-miR-520c-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4295	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3664-3p	0	0	0	0	0	64.33027	0	0	0	0	0	0	0	0	0	0
hsa-miR-1224-5p	636.3934	2221.106	347.1458	354.823	87.65983	350.2426	201.329	166.7495	546.0316	0	391.7094	216.6094	2023.668	509.3322	0	540.3185
hsa-miR-3156-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6863	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6785-5p	0	0	0	0	10.73386	53.60856	0	0	11.4153	0	0	0	0	0	0	0
hsa-miR-181a-5p	3633.228	4770.33	1789.379	3715.964	9600.459	2374.372	4395.771	9595.678	3982.641	9095.872	8973.706	14886.98	2235.233	7526.078	7705.123	6767.207
hsa-miR-939-5p	0	0	0	0	0	0	9.003533	0	10.42266	532.6775	0	0	0	0	0	0
hsa-miR-656-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-601	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548g-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-212-5p	0	0	0	0	0	0	4.706392	0	0	0	0	0	0	0	0	0
hsa-miR-3173-3p	0	0	0	0	0	0	19.72202	0	0	0	0	0	0	0	0	0
hsa-miR-3158-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4664-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4272	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3911	0	0	0	0	0	0	9.861012	0	0	0	0	0	0	0	0	0
hsa-miR-4496	0	713.9269	0	790.7484	0	0	0	1905.709	11.4153	0	0	1670.987	0	43.65705	0	0
hsa-miR-1273d	0	0	0	0	9.392124	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4708-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4311	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3155a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-578	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-125b-2-3p	375.7751	1070.891	0	851.5751	10.73386	75.05199	49.30507	666.9982	0	0	0	185.6652	0	698.5128	0	106.8762
hsa-miR-3192-5p	0	0	0	0	40.98381	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-651-5p	642.4542	0	0	121.6536	847.9747	0	522.6337	571.7127	365.2895	0	0	928.3262	607.1004	288.1365	0	213.7524
hsa-miR-4488	0	0	0	0	26.51894	0	0	0	0	0	0	0	0	0	0	88.01569
hsa-miR-587	0	0	0	0	0	0	20.70813	0	47.94424	0	0	0	0	0	0	0
hsa-miR-3144-3p	0	0	0	0	0	0	47.64273	0	0	0	0	0	0	0	0	0
hsa-miR-4276	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-214-3p	0	0	0	0	193.2094	53.60856	113.4016	714.6409	51.36883	0	0	0	0	0	0	0
hsa-miR-548am-3p	0	0	0	0	0	0	19.72202	0	0	0	0	0	0	0	0	0
hsa-miR-4670-3p	0	0	0	0	10.73386	0	19.72202	0	0	0	0	0	0	0	0	35.6254
hsa-miR-6755-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35.6254
hsa-miR-4746-3p	0	0	234.3234	0	0	0	15.5311	50.02486	0	0	0	0	0	0	0	0
hsa-miR-361-3p	5403.558	16696.16	6575.256	15676.72	4723.385	9855.69	4311.056	14552.69	9000.441	10302.47	11056.89	19849.3	8940.934	14777.12	13788.11	9759.74
hsa-miR-1243	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-556-5p	0	0	490.9633	0	10.73386	192.9908	44.37456	0	159.8141	0	0	185.6652	0	392.9134	0	0
hsa-miR-28-5p	0	356.9635	0	60.82679	332.7495	192.9908	83.81861	285.8564	239.7212	1101.994	0	0	86.72863	454.0333	424.8438	35.6254
hsa-miR-580-3p	36.36533	0	267.7982	0	0	0	0	47.64273	45.66118	0	0	185.6652	0	130.9711	0	0
hsa-miR-9-5p	474.4023	3407.379	326.6326	0	1711.074	3796.948	809.4995	909.543	266.9622	495.0134	8172.482	2126.711	2483.593	616.755	3649.795	816.1455

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-873-3p	0	0	0	0	10.73386	0	39.44405	190.5709	0	1296.464	0	0	0	0	0	0
hsa-miR-1229-3p	104.1371	0	284.0283	0	0	204.6872	37.65114	45.47715	0	0	160.2448	354.4518	248.3593	66.67622	0	136.0243
hsa-miR-3132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-922	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-204-3p	50.91147	0	140.594	0	529.7158	56.28899	98.3636	300.1492	167.8048	0	705.0769	194.9485	0	128.3517	0	0
hsa-miR-193a-3p	0	237.9757	0	0	0	160.8257	44.37456	95.28545	45.66118	0	0	0	0	218.2852	0	106.8762
hsa-miR-5705	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7156-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8075	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6867-5p	0	0	0	0	10.24595	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3927-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-656-3p	0	0	0	0	78.89384	123.8358	82.8325	0	0	0	0	389.897	0	119.1837	0	0
hsa-miR-296-3p	36.36533	0	0	0	53.66928	0	19.72202	142.9282	51.36883	0	0	0	173.4573	122.2397	0	71.2508
hsa-miR-522-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6513-3p	547.2983	874.5605	406.1605	191.6044	270.4932	180.1248	232.9664	50.02486	269.6863	0	176.2692	194.9485	0	119.1837	0	374.0667
hsa-miR-4663	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6828-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-148b-3p	23479.88	54258.45	23625.75	41909.66	45704.76	22697.87	35544.02	52645.21	26340.79	40157.96	45494.25	45673.65	36859.67	34637.5	48432.2	21767.12
hsa-miR-4654	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6881-5p	121.2178	0	0	0	0	0	4.930506	0	0	0	0	0	0	0	0	0
hsa-miR-4492	0	0	195.2695	0	14.08819	0	0	2000.995	44.94773	0	881.3461	4386.341	0	0	0	46.75834
hsa-miR-6758-5p	0	0	113.6113	0	0	40.93745	0	0	10.89642	0	0	0	0	33.33811	0	34.00607
hsa-miR-1286	0	0	0	0	0	0	5.177032	0	0	0	0	0	0	0	0	0
hsa-miR-6854-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6852-5p	127.2787	0	203.0803	830.2858	383.1987	247.6716	160.488	200.0995	227.7351	1191.126	705.0769	584.8455	546.3904	632.5906	0	149.6267
hsa-miR-660-3p	0	0	0	0	56.35275	0	0	0	65.92333	0	0	0	0	0	0	0
hsa-miR-302d-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-429	3297.124	2974.696	729.006	1338.189	686.9668	836.2935	581.7997	2429.779	547.9342	5445.147	839.3773	1299.657	1040.744	890.6038	2124.219	1246.889
hsa-miR-3180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4787-3p	0	0	0	0	0	0	0	0	15.63399	0	0	0	0	79.72157	0	0
hsa-miR-3200-3p	133.3396	0	416.5749	0	150.274	225.156	463.4676	1095.783	684.9177	0	0	556.9957	1127.472	253.2109	2549.063	427.5048
hsa-miR-1306-5p	7563.99	27486.19	11902.14	20376.98	5678.21	7151.382	3870.448	2572.707	5154.006	14520.39	32399.96	8726.266	24891.12	11080.16	21667.04	7873.213
hsa-miR-5011-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4725-3p	0	0	0	0	0	0	0	0	11.4153	0	0	0	0	0	0	0
hsa-let-7d-3p	26110.31	39741.93	39217.55	52067.74	45973.11	53876.6	27403.75	41592.1	40752.61	47547.81	69668.31	87262.66	53077.92	71981.74	69249.55	38902.94
hsa-miR-6718-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1180-3p	436.384	237.9757	0	0	1212.926	450.3119	1193.182	571.7127	587.8877	0	2182.381	1299.657	260.1859	235.7481	2973.907	570.0064
hsa-miR-5186	0	0	0	0	0	56.28899	10.35406	0	0	0	0	0	0	0	0	0
hsa-miR-3692-3p	0	869.1285	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6795-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6762-5p	0	0	0	0	0	0	0	0	5.448209	0	0	0	0	0	0	0
hsa-miR-5008-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6848-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6749-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4296	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-542-3p	3333.489	356.9635	1815.076	2980.513	2823.004	1951.352	1474.221	1905.709	884.6854	2754.985	0	1856.652	693.829	5553.177	1274.531	2386.902
hsa-miR-498	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-631	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4485-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3672	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-139-3p	2059.6	7950.55	5226.122	3890.15	1659.844	3367.105	988.3424	1637.177	1236.744	6651.743	2563.916	1595.033	3145.884	2058.628	5271.926	1870.333
hsa-miR-23b-5p	436.384	1546.842	609.9847	182.4804	515.2251	739.7982	261.3168	1143.425	468.0271	1101.994	2518.132	1485.322	693.829	628.6615	849.6877	142.5016

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-6812-3p	0	249.8744	0	0	0	0	0	0	95.88848	0	0	0	0	0	0	0
hsa-miR-138-2-3p	0	0	0	0	0	0	93.67962	0	51.36883	0	0	0	0	52.38846	849.6877	0
hsa-miR-509-3p	0	0	0	0	450.822	0	64.09658	47.64273	34.24589	0	0	0	0	0	0	178.127
hsa-miR-7702	0	0	0	0	10.73386	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-142-3p	120775.9	215232.8	152210.8	133426.3	345257.9	79848.49	95619.77	88589.48	87449.2	224210.1	110408.6	77979.4	111016.6	146687.7	198305.5	124938.3
hsa-miR-4738-5p	0	0	0	0	10.73386	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4646-5p	0	237.9757	252.9205	0	10.73386	42.88685	0	47.64273	0	0	0	0	0	52.38846	0	178.127
hsa-miR-4456	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7641	0	0	0	283.8584	175.3197	0	28.76129	1778.662	0	0	0	6065.064	0	50.93322	1982.605	166.2519
hsa-miR-1301-3p	664.0626	4345.643	869.3737	2999.025	1332.865	1360.725	594.2332	782.9979	1281.987	1213.321	1072.943	1864.725	2296.423	2734.45	2715.306	975.8262
hsa-miR-520g-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6766-3p	0	0	0	0	0	0	4.930506	0	0	0	0	0	0	0	0	0
hsa-miR-510-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4308	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-136-5p	0	0	0	290.3097	153.6893	0	70.59589	90.95429	27.24104	0	0	0	0	91.6798	0	0
hsa-miR-4285	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-211-5p	96.97423	0	133.8991	1155.709	53.66928	0	54.23557	190.5709	79.90707	842.7014	0	0	0	139.7026	3398.751	142.5016
hsa-miR-3692-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6787-3p	0	0	0	0	0	0	0	0	22.83059	0	0	0	0	0	0	71.2508
hsa-miR-1279	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548a-3p	84.85245	0	0	0	214.6771	150.104	123.2627	47.64273	131.2759	0	503.6264	0	867.2863	707.2442	0	0
hsa-miR-508-5p	0	0	0	0	40.98381	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-488-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7108-5p	0	0	0	0	0	0	0	0	35.95818	0	0	0	0	0	0	0
hsa-miR-3152-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-888-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-939-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-874-3p	1333.396	951.9026	505.8409	1824.804	2855.206	1436.709	1518.596	5097.771	1335.59	0	5707.766	5198.626	780.5577	2505.915	2973.907	1460.641
hsa-miR-4650-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4763-3p	0	0	0	0	0	0	0	0	0	0	0	0	316.748	0	0	0
hsa-miR-1273c	48.48711	0	0	790.7484	53.66928	139.3823	133.1237	142.9282	51.36883	0	0	185.6652	0	218.2852	0	213.7524
hsa-miR-6766-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4674	0	0	0	0	0	0	0	0	0	0	176.2692	0	0	0	0	0
hsa-miR-19a-3p	18883.53	26236.82	13704.37	11147.89	24108.73	28113.79	47167.46	20692.1	26783.4	12004.08	20190.84	7620.714	22186.76	35480.08	17437.91	42303.54
hsa-miR-193b-3p	0	0	0	0	75.13699	0	4.930506	95.28545	0	0	0	0	0	0	0	106.8762
hsa-miR-553	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1224-3p	165.4623	0	0	0	33.81165	0	25.88516	0	0	0	0	0	0	0	0	0
hsa-miR-665	375.1371	0	98.66248	0	308.4572	0	92.64162	263.2888	0	0	0	205.2089	0	115.8061	0	157.5018
hsa-miR-518a-5p	0	0	0	0	0	0	10.89901	0	0	0	0	0	0	0	0	0
hsa-miR-6857-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3182	0	0	0	0	0	0	0	0	0	0	0	0	0	137.5197	0	0
hsa-miR-516b-5p	0	0	0	0	0	0	0	0	0	810.2898	0	0	0	0	0	0
hsa-miR-585-3p	0	0	0	0	0	0	23.00903	0	0	0	0	0	0	0	0	0
hsa-miR-140-3p	54602.55	47226.27	74983.48	33466.9	39841.39	92651.67	75118.73	97148.28	101468	127790.8	52528.23	93770.23	52908.8	77707.8	29887.77	85997.94
hsa-miR-7-5p	30616.3	23738.07	19356.53	8360.92	10092.26	16293.1	20938.74	18509.2	21678.42	18996.14	25318.67	22153.24	18792.52	22778.26	19060.04	21831.89
hsa-miR-4437	0	0	0	0	11.27055	112.578	0	50.02486	11.98606	0	0	0	0	100.8478	0	0
hsa-miR-5587-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1233-3p	0	0	0	0	0	0	10.89901	0	0	0	0	0	0	0	0	0
hsa-miR-3677-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6791-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6870-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-4768-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5002-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-126-3p	1471996	1833483	1947265	1053034	1961076	1918457	558320.7	1647104	839908.9	4417700	903002.1	1689182	1252535	5031169	1712546	1969479
hsa-miR-4671-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	112.22
hsa-miR-5586-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-95-5p	101.8229	0	218.7018	0	33.81165	45.03119	10.35406	50.02486	17.97909	0	0	0	0	110.0158	0	112.22
hsa-miR-1265	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1269a	157.5831	0	0	0	118.0724	117.9388	49.30507	0	51.36883	0	0	0	0	183.3596	0	213.7524
hsa-miR-5001-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6742-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6716-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-942-3p	12.12178	0	0	0	64.40314	53.60856	34.51355	47.64273	45.66118	194.4696	0	0	0	69.85128	0	0
hsa-miR-544b	0	0	0	0	0	0	0	0	39.95353	0	0	0	0	0	0	0
hsa-miR-7848-3p	0	0	156.2156	0	30.73786	143.2811	0	0	32.68925	742.5201	0	177.2259	0	0	0	0
hsa-miR-6801-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-508-3p	0	0	184.6184	0	512.2977	0	14.11918	227.3857	0	0	0	0	0	0	0	0
hsa-miR-183-5p	8921.629	10470.93	13032.84	3892.915	19707.36	22472.71	16768.65	14721.6	14885.54	10436.53	13597.91	10025.92	9453.421	6924.008	6797.501	19023.96
hsa-miR-4291	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4714-3p	0	0	0	0	32.20157	0	93.67962	142.9282	131.2759	842.7014	0	0	0	26.19423	0	35.6254
hsa-miR-4753-5p	72.73067	0	535.5963	0	0	75.05199	34.51355	47.64273	11.4153	0	0	0	0	0	0	106.8762
hsa-miR-4441	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7153-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3136-3p	0	0	0	0	10.73386	0	0	0	0	0	839.3773	0	0	0	0	0
hsa-miR-548ba	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4681	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6720-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6810-5p	0	0	14.20142	0	0	51.17181	0	0	5.448209	0	0	0	0	0	0	0
hsa-miR-497-3p	0	0	0	0	0	107.2171	9.861012	0	0	0	0	0	0	0	0	0
hsa-miR-6788-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-155-5p	9765.745	13629.51	13221.52	8070.61	13893.51	4677.103	2819.129	8413.272	7513.081	22151.85	8012.238	10810.78	7119.632	9593.041	17843.44	7515.34
hsa-miR-4497	0	0	0	0	42.26456	0	0	2751.367	7.491288	0	440.6731	4386.341	0	68.75985	0	0
hsa-miR-98-3p	278.8009	1070.891	669.4954	0	246.8787	1007.841	182.4287	905.2118	228.3059	0	503.6264	1299.657	1300.929	1650.236	1699.375	534.381
hsa-miR-6862-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4717-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4286	31.81967	468.5146	0	2075.714	563.5275	337.7339	323.5645	4877.424	269.6863	0	1101.683	5117.398	341.494	813.6583	0	280.55
hsa-miR-302a-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4714-5p	0	0	0	0	0	0	4.930506	0	0	0	0	0	0	0	0	0
hsa-miR-15b-5p	82537.19	87337.06	83880.33	56933.88	121614.6	78204.17	142185.9	255841.4	140853.3	76880.3	124563.6	342552.3	108063.9	120860.2	51406.11	142002.8
hsa-miR-1182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-572	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-15b-3p	5976.037	8329.147	9610.978	6690.947	9113.044	25367.57	16946.15	39448.18	20347.76	21035.12	13765.79	43260	18733.38	19593.28	5098.126	22408.38
hsa-miR-380-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6824-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5006-5p	0	0	0	0	0	0	0	0	17.97909	0	0	0	0	0	0	0
hsa-miR-1322	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-383-5p	0	0	59.5107	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6788-5p	0	0	0	0	0	0	0	0	41.95121	0	0	0	0	0	0	0
hsa-miR-3926	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-885-3p	327.288	713.9269	609.9847	3345.474	139.5401	1115.058	59.16608	1524.567	85.61472	388.9391	1175.128	185.6652	867.2863	366.7192	5947.814	35.6254
hsa-miR-4689	0	0	0	0	0	0	9.861012	0	0	842.7014	0	0	0	0	0	0
hsa-miR-548ao-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-661	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-3658	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6757-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3167	0	0	0	0	21.46771	0	0	0	39.95353	0	0	0	0	0	0	249.3778
hsa-miR-591	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-let-7f-1-3p	181.8267	0	952.1712	2250.592	590.3621	1747.639	493.0506	1953.352	724.8713	1231.641	839.3773	1670.987	0	1912.179	1699.375	1282.514
hsa-miR-604	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-107	1596.769	1930.848	2925.492	1219.301	3350.427	3367.105	4273.404	6321.324	3906.366	6961.126	4647.098	6380.132	5381.117	3467.163	2027.664	3230.576
hsa-miR-4716-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4292	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4279	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-154-5p	0	0	0	0	139.5401	10.72171	64.09658	238.2136	119.8606	0	503.6264	185.6652	0	209.5538	0	71.2508
hsa-miR-1227-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7977	0	0	0	0	0	0	0	117.7056	0	0	0	229.3512	0	0	0	0
hsa-miR-519a-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1269b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4326	107.182	263.0257	0	0	130.5011	0	343.3189	157.9733	138.786	0	0	205.2089	0	48.25253	0	157.5018
hsa-miR-6780a-3p	0	0	0	0	0	0	0	100.0497	29.96515	0	0	0	0	0	0	0
hsa-miR-369-3p	178.1901	0	296.8096	0	687.5035	562.8899	165.665	650.3232	299.6515	1327.255	528.8077	389.897	728.5205	1659.404	0	710.7267
hsa-miR-374c-5p	0	0	0	0	0	10.72171	0	0	0	0	0	185.6652	0	52.38846	0	35.6254
hsa-miR-4323	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5579-3p	0	0	0	0	0	0	0	0	28.53824	0	0	0	0	0	0	0
hsa-miR-3622a-5p	0	0	0	0	53.66928	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-605-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7110-3p	0	0	0	0	0	0	9.861012	0	0	0	0	0	0	0	0	0
hsa-let-7i-5p	537006.9	391707.9	527607	278525.9	514828	312537.9	529886.4	397864.4	531787.3	414609.1	383931.2	276084.2	294530.4	296483.8	297815.5	410796.5
hsa-miR-4429	53.59102	0	32.88749	0	11.86374	0	10.89901	0	12.61691	35.82334	0	0	0	0	0	0
hsa-miR-513c-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6770-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4774-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-541-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6081	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4728-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-185-3p	133.3396	832.9148	401.6972	60.82679	493.7574	332.3731	655.7573	571.7127	239.7212	2884.632	335.7509	1299.657	607.1004	200.8224	1699.375	106.8762
hsa-miR-4723-3p	0	0	0	0	0	75.05199	54.23557	47.64273	0	0	0	185.6652	0	8.73141	0	0
hsa-miR-518f-3p	114.5508	0	0	0	22.5411	45.03119	0	50.02486	0	0	0	0	0	73.34384	0	0
hsa-miR-4640-5p	0	0	0	0	0	0	0	0	0	0	0	177.2259	0	0	0	0
hsa-miR-181c-3p	206.0702	1546.842	0	0	193.2094	85.7737	64.09658	619.3555	159.8141	0	839.3773	556.9957	0	235.7481	849.6877	0
hsa-miR-4520-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4665-5p	0	0	0	0	0	20.46872	18.82557	0	0	0	160.2448	354.4518	0	50.00716	0	0
hsa-miR-30c-1-3p	157.5831	0	505.8409	182.4804	96.60471	96.49541	49.30507	47.64273	171.2294	875.113	503.6264	742.6609	0	427.8391	849.6877	178.127
hsa-miR-6825-5p	0	0	0	0	0	0	9.861012	0	0	0	0	0	0	0	0	0
hsa-miR-3606-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-372-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	405.5328	0
hsa-miR-944	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3117-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6502-3p	0	0	0	0	0	0	0	50.02486	0	0	0	0	0	0	0	0
hsa-miR-1343-5p	0	0	0	0	0	0	14.79152	0	0	0	0	0	0	61.11987	0	0
hsa-miR-6822-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1290	98.99452	0	0	0	0	0	0	0	13.31784	0	0	0	0	10.18664	0	0
hsa-miR-2681-3p	0	0	0	0	0	0	0	34.51355	0	0	0	0	0	0	0	0
hsa-miR-6125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3196	0	0	0	0	0	0	0	58.85278	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-3591-5p	6329.221	9654.239	12085.41	10451.15	706.9708	41469.63	630.6566	11505.72	1923.218	11230.62	4486.853	2126.711	5381.117	6392.583	37309.02	4148.74
hsa-miR-6800-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-516a-5p	0	0	0	0	40.98381	40.93745	14.11918	227.3857	0	0	0	0	0	0	0	0
hsa-miR-6780b-3p	89.09507	0	0	0	45.0822	0	36.23922	0	41.95121	510.4826	0	0	0	0	0	0
hsa-miR-6736-5p	0	0	0	0	0	0	15.5311	0	0	0	0	0	0	0	0	0
hsa-miR-92b-3p	1406.126	2974.696	624.8623	3041.34	2254.11	793.4067	1548.179	1619.853	924.6389	1588.168	17626.92	2784.979	3816.06	1335.906	14019.85	2458.153
hsa-miR-5787	0	0	0	0	0	0	0	52.65775	0	0	0	0	0	0	0	0
hsa-miR-6745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548b-5p	169.7049	0	0	0	21.46771	182.2691	9.861012	95.28545	45.66118	0	0	0	0	0	0	35.6254
hsa-miR-6715b-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-190b	3156.511	3748.116	2952.475	3640.484	2355.545	3366.082	1418.507	1900.945	2391.219	3267.089	1057.615	2144.433	1457.041	3117.113	4906.946	2842.907
hsa-miR-555	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5590-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4732-3p	4671.127	14742.59	6732.892	4726.242	4835.065	8645.988	8997.681	3601.79	10038.33	6432.081	26792.92	10722.17	24678.63	3749.704	8029.549	9800.548
hsa-miR-369-5p	157.5831	0	312.4312	1763.977	1373.934	192.9908	315.5524	524.07	439.4889	0	167.8755	742.6609	1474.387	1493.071	4248.438	534.381
hsa-miR-525-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6832-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4318	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4659a-5p	0	0	0	0	0	0	14.79152	0	0	0	0	0	0	69.85128	0	106.8762
hsa-miR-4290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1276	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4312	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5188	0	0	0	0	20.49191	0	23.53196	45.47715	32.68925	0	0	0	0	0	0	0
hsa-miR-561-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3140-5p	0	0	140.594	0	0	45.03119	10.35406	50.02486	11.98606	0	0	0	0	36.67192	0	0
hsa-miR-5689	12.12178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4668-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5007-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4764-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-2053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548at-3p	0	0	0	0	0	0	0	50.02486	29.96515	0	0	0	0	0	0	0
hsa-miR-3157-3p	0	0	193.4098	0	0	0	93.67962	0	0	0	0	185.6652	0	139.7026	0	0
hsa-miR-6776-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6744-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-365b-5p	0	0	0	0	0	0	9.861012	0	0	0	0	0	0	0	0	0
hsa-miR-181c-5p	0	0	0	0	0	0	49.30507	0	5.707648	0	0	0	0	61.11987	424.8438	0
hsa-miR-502-3p	654.576	118.9878	357.0642	60.82679	858.7085	911.3455	1010.754	3144.42	730.5789	2884.632	3357.509	2413.648	954.0149	375.4506	0	320.6286
hsa-miR-4632-5p	57.85394	0	0	0	0	0	4.706392	0	0	0	0	0	0	0	0	0
hsa-miR-205-5p	933.3769	4997.489	1591.911	3892.915	6923.337	2744.758	3638.714	44831.8	1021.669	11117.18	4029.011	7797.94	5203.718	2890.097	6372.658	1816.895
hsa-miR-6084	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6086	0	0	0	0	0	0	0	368.6042	0	0	0	0	0	0	0	0
hsa-miR-676-5p	0	0	0	0	0	0	10.35406	50.02486	0	0	0	194.9485	0	0	0	0
hsa-miR-4673	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-187-3p	0	0	0	0	32.20157	0	29.58304	190.5709	0	0	0	185.6652	0	52.38846	0	142.5016
hsa-miR-4779	0	0	0	0	0	171.5474	29.58304	0	51.36883	0	0	0	173.4573	78.58269	0	71.2508
hsa-miR-4299	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-513c-5p	0	237.9757	0	0	322.0157	0	4.930506	95.28545	0	0	0	0	0	43.65705	0	142.5016
hsa-miR-4433a-5p	0	0	0	383.2088	101.4349	191.3826	31.06219	50.02486	35.95818	0	528.8077	584.8455	0	0	1338.258	187.0334
hsa-miR-6779-5p	50.91147	0	0	0	0	0	10.35406	0	23.97212	0	0	0	0	9.16798	0	0
hsa-miR-1910-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	48.25253	0	0
hsa-miR-3127-3p	0	0	0	0	0	0	9.861012	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-6887-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-200a-5p	121.2178	0	133.8991	729.9216	75.13699	10.72171	83.81861	476.4272	39.95353	64.82319	0	185.6652	0	165.8968	0	0
hsa-miR-6773-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6797-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3605-5p	763.672	908.6343	1093.509	754.8052	450.822	511.7181	174.1365	363.8172	697.3708	0	0	531.6777	662.2913	650.0931	0	204.0364
hsa-miR-4258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-671-3p	0	0	0	0	45.0822	90.06238	56.94735	250.1243	89.89545	782.74	0	0	364.2603	128.3517	446.086	37.40667
hsa-miR-135b-3p	1090.96	594.9391	3793.807	729.9216	375.685	3527.443	709.9929	809.9263	2009.092	5185.855	0	1113.991	260.1859	2497.183	1274.531	1460.641
hsa-miR-4482-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-744-5p	4497.18	17729.19	7870.29	12773.63	6569.12	9606.654	4748.078	5812.413	6894.838	17275.38	4700.513	9097.597	8239.22	12031.88	12745.32	4417.55
hsa-miR-920	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6835-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-657	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6880-3p	76.3672	0	0	0	0	112.578	0	0	0	0	0	0	0	0	0	0
hsa-miR-6507-5p	0	0	0	0	0	0	0	0	35.95818	0	0	0	0	0	0	0
hsa-miR-3187-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-345-5p	375.7751	1903.805	297.5535	1642.323	2576.125	450.3119	2169.423	5669.484	896.1007	550.9971	2853.883	3156.309	693.829	969.1865	2124.219	926.2604
hsa-miR-6784-5p	0	0	0	0	0	0	0	37.85072	0	0	0	0	0	0	0	0
hsa-miR-647	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6861-3p	0	0	0	0	53.03788	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4633-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1910-5p	0	0	15.62156	0	33.81165	0	10.35406	0	53.93727	0	0	194.9485	273.1952	27.50394	0	0
hsa-miR-618	0	0	0	0	0	0	14.11918	45.47715	5.448209	0	0	0	0	0	0	0
hsa-miR-6724-5p	69.42473	0	0	0	71.72168	0	0	45.47715	38.13746	0	0	177.2259	0	50.00716	0	34.00607
hsa-miR-6871-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1252-3p	0	0	0	0	0	0	59.16608	0	39.95353	0	0	0	0	61.11987	0	0
hsa-miR-432-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-652-3p	700.0327	4872.552	2905.61	1085.758	957.9967	2566.778	1030.229	1150.572	1648.083	5172.89	1410.154	1169.691	2003.431	2622.042	892.1721	1384.047
hsa-miR-520d-3p	0	0	0	0	21.46771	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-219a-1-3p	109.096	0	0	0	42.93542	117.9388	9.861012	0	0	0	0	0	0	0	0	71.2508
hsa-miR-3662	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4711-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5480-3p	242.4356	475.9513	238.0428	0	85.87085	418.1468	177.4982	142.9282	382.4124	388.9391	0	0	0	628.6615	0	285.0032
hsa-miR-3689d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-518f-5p	0	0	0	0	0	0	0	47.64273	0	0	0	0	0	0	0	0
hsa-miR-3609	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-374c-3p	0	0	0	0	10.73386	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4739	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-323a-5p	181.8267	0	59.5107	0	601.0959	139.3823	98.61013	47.64273	268.2594	0	503.6264	1299.657	0	148.434	1274.531	641.2572
hsa-miR-4461	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6856-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6513-5p	69.42473	0	0	0	0	81.87489	65.8895	45.47715	87.17135	0	0	0	0	66.67622	0	0
hsa-miR-548d-3p	0	0	0	0	171.7417	75.05199	118.3322	47.64273	91.32236	0	0	0	0	61.11987	0	106.8762
hsa-miR-340-5p	6303.325	11184.86	4701.345	8576.578	7739.11	4449.511	4831.896	9004.476	4069.553	13288.75	9736.776	5569.957	6157.732	8740.141	11470.78	4773.804
hsa-miR-5681b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4657	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4270	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6509-5p	0	0	0	0	0	0	25.88516	0	35.95818	0	0	0	0	0	0	0
hsa-miR-758-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3121-3p	0	0	0	0	0	0	9.861012	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-1294	3588.046	1784.817	4760.856	1946.457	1642.28	1897.743	3796.49	1000.497	3869.785	1296.464	4532.637	1856.652	1127.472	890.6038	1274.531	2814.407
hsa-miR-6782-3p	0	0	213.0213	0	0	0	28.23836	45.47715	98.06776	0	0	0	0	0	0	0
hsa-miR-4459	0	0	0	0	0	0	0	95.28545	0	0	0	0	0	0	0	0
hsa-miR-4722-5p	115.7079	0	0	0	0	0	18.82557	0	0	0	0	0	0	0	405.5328	0
hsa-miR-3938	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1273a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4704-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-624-3p	0	0	78.10779	0	0	33.77339	20.70813	250.1243	83.90242	0	705.0769	0	0	0	0	149.6267
hsa-miR-32-3p	193.9485	0	565.3516	0	64.40314	1115.058	157.7762	238.2136	422.3659	972.3478	0	185.6652	0	951.7236	1274.531	320.6286
hsa-miR-5582-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-200a-3p	2945.592	2022.793	624.8623	3223.82	1975.03	1501.04	966.3793	7670.479	1181.483	1815.049	2182.381	2413.648	3122.231	1685.162	2973.907	2351.276
hsa-miR-1247-5p	0	118.9878	0	0	203.9433	53.60856	123.2627	0	39.95353	0	167.8755	0	0	0	0	35.6254
hsa-miR-5008-3p	0	0	0	0	0	0	5.177032	0	0	0	0	0	0	0	0	0
hsa-miR-22-3p	68209.24	106375.1	58603.16	78405.74	128945.8	40260.03	113860.2	114247.3	69884.44	80315.93	161831.9	138320.6	107803.7	78460.45	82844.55	65158.86
hsa-miR-659-5p	0	0	0	0	0	0	4.930506	0	57.07648	0	0	0	0	0	0	0
hsa-miR-627-3p	0	0	0	0	47.45494	201.4553	0	0	0	0	0	0	0	0	0	0
hsa-miR-141-5p	315.1662	0	461.2079	0	118.0724	182.2691	54.23557	524.07	62.78413	291.7043	0	371.3305	0	392.9134	0	106.8762
hsa-miR-4507	0	0	0	268.9185	0	0	10.89901	421.262	0	0	0	410.4179	0	0	0	0
hsa-miR-761	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5196-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-490-5p	80.38653	0	0	0	0	0	0	0	0	0	0	0	0	28.95152	0	0
hsa-miR-649	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-222-5p	0	0	148.7767	0	21.46771	0	19.72202	95.28545	0	0	0	0	0	61.11987	0	71.2508
hsa-miR-519a-3p	0	0	0	0	0	64.33027	0	0	0	0	0	0	0	0	0	0
hsa-miR-4693-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-564	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6823-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-490-3p	0	0	0	0	0	0	0	476.4272	0	0	0	185.6652	0	0	0	0
hsa-miR-503-5p	2129.025	1930.848	1533.753	928.9911	2551.242	1821.716	1826.08	2182.903	1928.666	990.0269	1762.692	4076.196	2318.02	1500.215	1622.131	2584.461
hsa-miR-15a-5p	94949.89	68893.95	45376.91	42396.28	87255.52	37118.57	93191.5	159793.7	69068.24	38310.5	81923.22	195876.8	106242.6	87069.62	38235.95	96295.46
hsa-miR-4761-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-550b-2-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6884-3p	0	0	0	0	40.98381	0	23.53196	0	0	0	0	354.4518	0	0	0	34.00607
hsa-miR-1268a	0	0	0	0	92.81629	0	85.26876	470.8222	42.30374	0	0	458.7023	0	0	0	220.0392
hsa-miR-4436b-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35.6254
hsa-miR-1237-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1260b	84.85245	0	0	141.9292	37.5685	112.578	11.50451	944.9141	39.95353	37.81353	0	3465.751	101.1834	61.11987	0	0
hsa-miR-3160-3p	0	0	0	0	0	0	4.930506	0	114.153	0	0	0	0	0	0	0
hsa-miR-3910	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8078	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6864-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4742-5p	0	0	170.417	0	0	0	9.412785	0	0	0	0	0	0	0	0	0
hsa-miR-6727-3p	0	0	0	0	0	0	5.449507	0	0	0	0	0	0	0	0	0
hsa-miR-5090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-589-5p	206.0702	0	282.6758	243.3072	1137.789	514.6422	1592.554	1238.711	365.2895	939.9362	839.3773	2413.648	780.5577	541.3474	849.6877	783.7588
hsa-miR-6879-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-10a-3p	72.73067	356.9635	1279.48	121.6536	1277.329	428.8685	478.2591	3239.705	194.06	2268.812	335.7509	2413.648	0	1431.951	0	570.0064
hsa-miR-3942-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-29a-5p	4278.988	4164.574	5162.553	1094.882	3928.592	5232.195	2583.585	18247.16	3926.862	3370.806	3189.634	12996.57	3729.331	12372.41	4248.438	6234.445
hsa-miR-6747-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-324-5p	3818.36	3180.22	5183.517	3367.593	2510.259	6908.194	3849.829	6093.938	5148.558	7208.633	4326.608	6557.358	3063.097	5584.133	5271.926	4556.813
hsa-miR-105-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-3976	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-676-3p	343.6524	0	718.5917	0	315.5754	619.1789	155.3109	350.174	71.91636	0	0	0	1092.781	183.3596	0	261.8467
hsa-miR-4691-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1207-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4742-3p	0	0	0	0	0	276.3278	56.47671	45.47715	87.17135	0	0	177.2259	0	75.01075	0	34.00607
hsa-miR-215-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-887-3p	12.12178	0	119.0214	0	75.13699	0	157.7762	238.2136	91.32236	0	839.3773	185.6652	0	78.58269	849.6877	142.5016
hsa-miR-8081	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6792-3p	0	0	0	0	32.20157	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-199b-5p	613.2518	1362.952	184.6184	4412.708	1618.861	2517.653	1374.267	2592.198	1046.056	2598.821	2884.406	2126.711	2235.233	3992.239	2838.729	2992.534
hsa-miR-1266-5p	0	0	0	0	0	0	18.82557	0	0	0	0	0	0	0	0	0
hsa-miR-4666a-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-297	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3065-3p	0	0	0	0	20.49191	0	9.412785	136.4314	38.13746	0	0	0	0	108.3489	0	0
hsa-miR-548aj-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-766-3p	0	0	0	0	0	343.0948	83.81861	190.5709	91.32236	0	335.7509	371.3305	607.1004	52.38846	849.6877	0
hsa-miR-6747-3p	89.09507	0	0	0	101.4349	78.80458	41.41625	100.0497	0	0	0	0	0	91.6798	0	0
hsa-miR-4419a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-606	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-504-5p	290.9227	0	0	0	21.46771	96.49541	59.16608	428.7845	57.07648	0	335.7509	742.6609	0	165.8968	849.6877	249.3778
hsa-miR-548aw	0	0	0	0	35.59121	402.9106	141.6872	157.9733	75.70143	0	0	615.6268	383.4318	125.4566	0	236.2527
hsa-miR-1307-3p	6279.081	13921.58	4061.605	10766.34	3831.987	5682.507	4200.792	7241.694	3835.539	11246.82	10576.15	7612.274	14136.77	6164.375	16144.07	2636.28
hsa-miR-7155-3p	0	0	0	0	0	0	17.25677	0	0	0	0	0	0	0	0	0
hsa-miR-4725-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4432	0	0	0	0	0	11.85031	0	0	0	0	0	0	0	0	0	0
hsa-miR-4491	0	0	0	0	64.40314	0	14.79152	1238.711	0	0	0	2970.644	0	0	0	71.2508
hsa-miR-7112-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6849-3p	0	0	0	0	0	0	4.930506	0	11.4153	0	0	0	0	0	0	0
hsa-miR-185-5p	76633.88	142666.4	104262.7	49817.14	91516.86	83382.76	261982.5	206578.9	144894.3	89002.23	143533.5	179724	86121.53	39055.59	67550.17	173673.8
hsa-miR-4738-3p	181.8267	0	0	0	75.13699	42.88685	39.44405	0	0	0	167.8755	0	0	34.92564	0	0
hsa-miR-4297	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8066	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-149-3p	101.8229	0	0	0	56.35275	0	15.5311	0	77.90939	0	0	194.9485	0	229.1995	0	0
hsa-miR-4320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-660-5p	3212.271	1903.805	2663.104	1520.67	8200.666	6422.306	7252.775	19819.38	3824.124	1069.583	15444.54	10954.25	7111.748	8321.033	11470.78	6412.572
hsa-miR-3681-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6855-5p	0	0	0	0	0	0	4.314193	0	0	0	293.782	0	0	0	0	0
hsa-miR-3141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3193	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-363-3p	2763.765	8329.147	981.9265	1824.804	7299.022	2948.471	7469.717	12720.61	4765.886	2917.043	8561.648	10954.25	8152.491	3719.581	3398.751	5949.442
hsa-miR-548av-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-20a-5p	41828.4	54518.06	40928.48	33327.55	78914.34	41408.23	129181.1	67715.48	71300.71	59494.43	63617.17	43420.35	54970.18	36546.9	40553.28	51485.18
hsa-miR-1292-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4694-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6806-3p	145.4613	0	282.6758	0	0	0	14.79152	47.64273	0	0	0	0	0	0	0	35.6254
hsa-miR-4760-5p	0	0	0	0	21.46771	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6732-3p	0	0	0	0	0	0	9.412785	0	0	0	0	0	0	0	0	0
hsa-miR-6813-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4703-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1301-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-576-5p	1781.901	3331.659	1606.789	1399.016	3724.648	1908.465	3865.517	5621.842	2408.627	5801.675	9904.651	7612.274	7718.848	2828.977	7647.189	3206.286

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-3192-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8070	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-206	20134.27	25106.43	61355.53	22688.39	17034.63	25957.27	10275.18	14388.1	11968.94	21067.54	20984.43	23022.49	16912.08	30979.04	33137.82	16173.93
hsa-miR-378c	201.5246	0	0	0	56.35275	9.381498	17.25677	125.0622	9.988383	0	0	0	0	106.9598	0	0
hsa-miR-23b-3p	7585.809	13368.28	8904.288	9388.616	13175.27	15569.53	4814.64	40420.09	4620.626	16369.47	7050.769	27877.63	7740.53	14173.7	28103.42	8566.128
hsa-miR-1262	0	0	0	425.7876	96.60471	0	34.51355	95.28545	131.2759	0	0	0	0	0	0	0
hsa-miR-5683	0	1195.052	0	0	0	0	13.5053	0	0	0	0	0	0	0	0	0
hsa-miR-302c-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-19b-1-5p	115.7079	340.7379	0	0	0	112.578	23.53196	0	32.68925	0	0	0	0	0	0	102.0182
hsa-miR-320c	281.3528	0	0	470.6073	379.6396	94.80251	76.2931	157.9733	0	1146.347	0	0	0	231.6121	0	275.6281
hsa-miR-584-3p	0	0	0	0	0	96.49541	49.30507	0	79.90707	0	0	0	0	0	0	35.6254
hsa-miR-26a-2-3p	703.0631	1665.83	624.8623	364.9608	536.6928	761.2416	285.9694	1000.497	319.6283	1004.759	0	928.3262	0	689.7814	0	748.1334
hsa-miR-3925-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4683	0	0	0	0	0	0	0	45.47715	0	0	0	0	0	0	0	34.00607
hsa-miR-548aq-5p	206.0702	713.9269	0	0	0	203.7125	88.74911	0	0	0	0	0	0	52.38846	0	106.8762
hsa-miR-6814-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548au-5p	0	0	0	0	67.6233	0	10.35406	0	0	0	0	0	0	0	0	0
hsa-miR-222-3p	16838.97	3623.179	8466.885	6003.604	18325.91	10886.29	8759.538	19159.52	10739.51	13136.42	19213.35	34895.78	8833.311	18400.14	8029.549	10847.93
hsa-miR-296-5p	127.2787	0	249.9449	0	56.35275	90.06238	429.6936	100.0497	29.96515	0	1938.962	0	819.5856	183.3596	0	224.44
hsa-miR-569	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6764-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-499a-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7847-3p	0	0	0	0	0	0	0	5.99303	34.03217	0	389.897	0	0	0	0	0
hsa-miR-6817-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548ap-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-501-5p	0	0	14.87768	0	0	85.7737	0	142.9282	0	615.8203	0	0	0	0	0	0
hsa-miR-6851-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-769-3p	0	0	113.6113	0	122.9514	81.87489	127.0726	90.95429	0	0	320.4895	0	41.67264	0	0	0
hsa-miR-3907	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-let-7b-3p	8945.872	14159.55	13434.54	12287.01	9724.874	15696.59	4629.746	13625.82	7157.39	18993.19	15948.17	14853.22	15264.24	17349.31	24640.94	8051.34
hsa-miR-6501-5p	0	0	0	0	0	0	19.72202	0	0	0	0	0	0	17.46282	0	0
hsa-miR-548q	181.8267	0	0	0	407.8865	461.0336	216.9423	95.28545	216.8906	1458.522	1007.253	0	607.1004	340.525	0	320.6286
hsa-miR-144-3p	39643.96	31168.55	35830.92	29513.8	74883.91	50103.13	104646.9	26960.77	73935.06	33602.29	52695.22	20520.89	40835.49	59138.3	57286.84	146043.5
hsa-miR-501-3p	654.576	1546.842	862.9052	121.6536	1771.086	300.2079	1355.889	2334.494	753.4095	0	2350.256	3156.309	1734.573	707.2442	2124.219	819.3842
hsa-miR-4262	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5087	0	0	0	0	0	0	23.53196	0	0	0	0	0	0	0	0	0
hsa-let-7i-3p	763.672	2141.781	996.8042	243.3072	1910.626	1232.997	1454.499	2382.136	1449.743	2106.754	3357.509	2599.313	2948.773	2907.559	0	1282.514
hsa-miR-1295a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-219a-2-3p	0	0	0	0	0	10.72171	4.930506	0	0	0	0	0	0	0	0	0
hsa-miR-374b-5p	375.7751	2022.793	595.107	304.134	1395.401	1072.171	640.9658	2763.278	804.7783	2787.397	0	3156.309	693.829	1100.158	2549.063	961.8858
hsa-miR-3126-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6715b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-150-3p	1684.927	2379.757	1919.22	2068.111	1212.926	257.3211	128.1932	1095.783	816.1936	1977.107	3021.758	1113.991	1387.658	1283.517	9346.564	712.508
hsa-miR-483-3p	3932.911	7121.421	2374.477	15519.96	5511.299	2600.551	533.2343	7903.928	521.3936	9733.201	13925.27	5848.455	4371.123	2291.995	26765.16	1084.793
hsa-miR-4481	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4423-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548h-5p	72.73067	0	0	0	150.274	0	177.4982	238.2136	165.5218	842.7014	0	0	0	0	0	0
hsa-let-7b-5p	805467.9	998902.8	1670302	778157.2	770991.4	1072150	730212.9	762236	945106.6	1185324	897797.9	651499.3	736673	362318.6	794882.8	591524.1
hsa-miR-5688	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6761-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6508-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6502-5p	0	0	0	0	0	0	4.930506	0	0	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-4643	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1236-3p	0	0	0	0	0	0	0	0	0	0	0	0	433.6432	0	0	0
hsa-miR-668-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4756-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3682-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-10b-5p	32826.32	27372.61	20776.67	11844.64	40922.34	16088.42	17230.1	95502.01	9261.956	35857.54	27722.34	69118.1	17385.15	26253.76	52719.26	22852.07
hsa-miR-27b-3p	142653.9	105197.1	138469.5	133356.7	122308	239070.6	62258.98	366832.3	98069.95	149026.9	117924.1	204501	80865.77	294154.7	253823	121010.6
hsa-miR-1258	89.09507	0	0	0	0	0	0	0	0	0	0	194.9485	0	0	0	0
hsa-miR-10b-3p	1672.805	2022.793	2916.024	608.2679	2672.73	1007.841	783.9505	4383.131	593.5953	2884.632	839.3773	2970.644	0	1894.716	5522.97	1389.391
hsa-miR-200c-5p	0	0	282.6758	0	53.66928	42.88685	44.37456	381.1418	0	0	0	185.6652	0	0	0	35.6254
hsa-miR-6859-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3191-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4792	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-362-5p	110.6771	543.2053	230.9274	0	68.60334	29.36817	54.0212	173.9995	119.8606	0	0	1017.123	0	71.74941	0	227.6928
hsa-miR-3671	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-138-1-3p	303.0445	0	342.1865	0	203.9433	235.8777	54.23557	381.1418	342.4589	0	0	928.3262	0	646.1243	424.8438	213.7524
hsa-miR-525-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-450b-5p	993.9858	0	163.6544	1338.189	1953.562	611.1376	581.7997	2048.637	313.9206	129.6464	167.8755	1485.322	1821.301	916.798	849.6877	356.254
hsa-miR-551b-5p	206.0702	0	0	0	0	0	0	0	0	680.6434	0	0	0	69.85128	0	0
hsa-miR-548i	133.3396	0	0	0	42.93542	0	0	47.64273	57.07648	32.41159	0	0	0	0	0	0
hsa-miR-6869-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4801	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-592	0	0	0	0	42.93542	21.44342	0	0	0	0	0	0	0	26.19423	424.8438	0
hsa-miR-548ar-3p	89.09507	0	171.8371	0	0	0	82.8325	0	35.95818	0	0	0	0	0	0	0
hsa-miR-6080	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5192	0	0	0	0	10.73386	0	0	0	45.66118	0	0	0	0	0	0	0
hsa-miR-424-3p	216.3737	0	0	0	473.3631	22.51559	176.0191	150.0746	377.5609	2382.252	352.5385	194.9485	364.2603	623.4227	0	336.66
hsa-miR-4737	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6759-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4732-5p	18466.98	32370.1	30447.84	24618.26	8832.013	22372.31	10485.84	3865.558	19368.38	15716.68	25959.65	7797.94	29637.54	9209.652	16626.84	15268.72
hsa-miR-146b-5p	2339.503	3688.623	2469.694	547.4412	2060.9	343.0948	1449.569	7908.692	1038.792	291.7043	2182.381	5569.957	1040.744	2200.315	0	1710.019
hsa-miR-4748	0	0	234.3234	0	45.0822	0	25.88516	0	125.8536	0	0	0	0	0	0	112.22
hsa-miR-4781-5p	0	0	0	0	11.27055	0	15.5311	0	0	0	0	0	0	55.00788	0	37.40667
hsa-miR-7153-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4797-3p	0	0	0	0	0	0	0	0	0	1599.512	0	0	0	0	0	37.40667
hsa-miR-6730-5p	0	0	0	0	71.72168	0	0	0	92.61955	0	0	0	0	0	0	0
hsa-miR-548az-5p	12.12178	0	0	0	0	0	0	47.64273	0	0	0	0	0	0	1274.531	35.6254
hsa-miR-199a-3p	141970.3	131957.5	116566.6	143855.4	201496	128038.7	138537.4	237594.3	77155.98	223380.7	186845.4	225583.3	109191.3	161103.2	235363.5	126470.2
hsa-miR-609	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4463	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-129-1-3p	0	0	14.87768	0	10.73386	0	64.09658	190.5709	22.83059	0	1007.253	0	0	69.85128	0	35.6254
hsa-miR-7151-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-933	0	0	0	0	0	107.2171	44.37456	0	5.707648	0	0	0	0	69.85128	0	0
hsa-miR-6888-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-652-5p	0	0	0	0	0	18.763	0	0	19.97677	0	0	162.4571	0	99.31979	0	124.6889
hsa-miR-448	0	0	0	0	64.40314	107.2171	9.861012	47.64273	34.24589	0	0	0	0	26.19423	0	71.2508
hsa-miR-1973	14.14207	0	0	496.7522	0	262.6819	11.50451	555.8318	26.63569	0	2154.402	2382.704	0	20.37329	0	124.6889
hsa-miR-7156-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4740-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548u	0	0	0	0	0	0	4.706392	0	0	0	0	0	0	8.334527	0	0
hsa-miR-6730-3p	0	0	297.5535	0	0	75.05199	9.861012	0	51.36883	0	0	0	0	0	0	0

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-548n	387.8969	832.9148	0	0	10.73386	182.2691	113.4016	47.64273	119.8606	0	0	0	173.4573	750.9012	0	35.6254
hsa-miR-516b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6729-5p	72.73067	0	0	0	32.20157	0	59.16608	0	0	0	0	0	0	0	0	0
hsa-miR-135b-5p	0	0	0	0	122.9514	0	4.706392	909.543	0	0	0	0	0	0	0	0
hsa-miR-1275	0	0	0	0	42.26456	0	0	0	37.45644	0	661.0096	0	0	11.45998	0	0
hsa-miR-5585-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1249-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6501-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-455-3p	0	0	124.9725	0	67.6233	394.0229	15.5311	300.1492	0	0	0	0	0	0	0	0
hsa-miR-3171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-526a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8071	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-8076	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6505-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3687	0	0	0	0	0	0	0	86.99976	0	0	0	0	0	0	0	0
hsa-miR-6822-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4671-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3188	0	0	0	0	0	0	4.706392	0	0	0	0	0	0	0	0	0
hsa-miR-5571-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3682-3p	0	0	0	0	56.35275	0	15.5311	0	41.95121	0	0	0	0	0	0	74.81334
hsa-miR-2115-3p	0	0	0	0	96.60471	246.5994	14.79152	95.28545	0	0	0	185.6652	86.72863	148.434	0	71.2508
hsa-miR-602	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6751-5p	0	0	0	0	0	102.3436	0	0	0	0	0	0	0	0	0	0
hsa-miR-6842-3p	0	0	0	0	32.20157	0	69.02709	0	91.32236	0	0	185.6652	0	0	0	106.8762
hsa-miR-3917	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3166	0	0	0	0	0	61.40617	0	0	0	0	0	0	0	0	0	0
hsa-miR-4255	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7851-3p	0	0	0	0	0	0	19.72202	0	0	0	0	0	0	0	0	0
hsa-miR-4753-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1912	0	0	0	0	0	0	0	47.64273	0	0	0	0	0	0	0	0
hsa-miR-874-5p	69.42473	2044.427	284.0283	0	235.6569	163.7498	98.83424	181.9086	21.79284	0	0	0	1076.223	200.0287	1622.131	102.0182
hsa-miR-346	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-195-3p	363.6534	0	490.9633	0	364.9511	461.0336	192.2897	333.4991	85.61472	939.9362	0	928.3262	0	270.6737	0	213.7524
hsa-miR-5001-3p	0	475.9513	0	0	0	0	39.44405	0	22.83059	0	839.3773	556.9957	0	0	0	0
hsa-miR-6073	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4776-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4655-5p	72.73067	0	0	0	42.93542	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4757-5p	0	0	0	0	0	0	18.82557	0	0	0	0	0	0	0	0	0
hsa-miR-1228-3p	0	0	0	0	35.59121	0	32.69704	0	0	0	556.6396	0	0	9.650505	0	0
hsa-miR-328-5p	0	0	0	0	20.49191	0	4.706392	45.47715	0	0	0	177.2259	0	0	0	0
hsa-miR-7113-3p	46.28315	0	0	0	20.49191	0	0	0	0	0	0	177.2259	0	0	0	0
hsa-miR-7107-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6814-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-708-5p	11.57079	0	0	0	40.98381	0	56.47671	227.3857	38.13746	1887.239	0	354.4518	0	0	0	34.00607
hsa-miR-4644	0	0	0	0	0	0	0	0	16.34463	0	0	0	0	0	0	0
hsa-miR-323b-3p	351.5316	2379.757	252.9205	547.4412	622.5637	514.6422	83.81861	381.1418	228.3059	194.4696	839.3773	2042.318	0	2287.629	0	427.5048
hsa-miR-6769b-5p	34.71236	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3161	0	0	0	0	0	368.437	0	0	0	30.93834	0	0	331.1457	408.3918	0	0
hsa-miR-1307-5p	267.2852	624.6861	0	0	2355.545	123.8358	962.9279	2751.367	485.4354	136.1287	1938.962	584.8455	364.2603	1155.166	4014.774	374.0667
hsa-miR-6071	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4266	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-523-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-130a-3p	49759.9	48547.04	55702.02	34063	37096.21	41074.88	22483.11	28776.21	29622.69	78403.64	26356.45	46973.3	31222.31	96351.11	25915.47	25507.79
hsa-miR-4649-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3656	79.54917	156.1715	0	0	98.61731	0	32.35645	62.53108	44.94773	0	0	974.7425	0	0	0	140.275
hsa-miR-1285-5p	0	0	0	0	0	67.54678	25.88516	150.0746	119.8606	0	0	0	0	192.5276	0	37.40667
hsa-miR-4726-5p	0	0	28.40283	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6807-5p	48.48711	0	178.5321	243.3072	75.13699	85.7737	19.72202	0	39.95353	0	0	185.6652	0	0	0	0
hsa-miR-583	190.918	2748.619	187.4587	0	78.89384	67.54678	134.6028	0	71.91636	0	176.2692	194.9485	0	238.3675	892.1721	74.81334
hsa-miR-26a-1-3p	424.2622	1784.817	595.107	0	375.685	1029.284	152.8457	190.5709	622.1336	1490.933	839.3773	1299.657	0	1772.476	1699.375	391.8794
hsa-miR-6510-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	34.92564	0	0
hsa-miR-450a-1-3p	0	0	178.5321	0	214.6771	192.9908	9.861012	95.28545	39.95353	0	0	0	0	61.11987	0	106.8762
hsa-miR-367-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4685-3p	0	0	0	0	53.66928	0	54.23557	47.64273	102.7377	0	0	185.6652	260.1859	0	424.8438	35.6254
hsa-miR-4705	72.73067	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4764-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7160-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6731-3p	0	0	0	0	22.5411	0	20.70813	0	17.97909	0	0	0	0	0	0	0
hsa-miR-6722-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548x-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-143-5p	3321.367	0	699.2507	304.134	1062.652	3999.199	1646.789	3144.42	570.7648	842.7014	1846.63	3341.974	1214.201	1266.054	2973.907	1674.394
hsa-miR-889-3p	63.63934	0	0	0	191.5993	0	56.94735	200.0995	59.9303	0	352.5385	194.9485	0	119.1837	0	74.81334
hsa-miR-6510-3p	50.91147	0	0	0	0	101.3202	0	0	0	0	0	0	0	0	0	0
hsa-miR-664b-3p	60.60889	1189.878	0	182.4804	107.3386	0	49.30507	0	0	0	0	0	0	122.2397	0	106.8762
hsa-miR-633	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-599	0	0	0	0	11.86374	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4713-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-5007-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6068	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4431	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3943	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-371b-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6743-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-147a	0	0	0	0	11.86374	0	0	0	0	0	0	0	0	0	0	0
hsa-let-7c-3p	169.7049	1546.842	0	912.4019	118.0724	493.1988	93.67962	333.4991	39.95353	0	1007.253	1299.657	1127.472	139.7026	1274.531	142.5016
hsa-miR-7845-5p	0	0	0	0	0	78.80458	0	0	0	0	0	0	0	0	0	0
hsa-miR-4633-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-593-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6085	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4666a-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-518d-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4759	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-548k	0	0	0	0	0	0	24.65253	190.5709	0	0	0	185.6652	0	113.5083	0	0
hsa-miR-6884-5p	0	0	0	0	0	128.6605	49.30507	47.64273	5.707648	0	0	0	0	0	0	0
hsa-miR-3689b-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3665	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1181	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-365a-3p	1212.178	1189.878	193.4098	1459.843	2468.787	1511.761	986.1013	21629.8	502.273	3273.571	3525.385	7426.609	2515.13	1615.311	4248.438	1638.768
hsa-miR-4721	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4433b-3p	89.09507	0	187.4587	383.2088	225.411	202.6404	77.65547	0	533.3797	0	352.5385	194.9485	0	806.7822	0	149.6267
hsa-miR-451a	257721.1	260464.4	282422.9	205837.9	624549.4	412464.3	895715.3	1226800	528448.3	473403.7	886214.5	1649450	384468	564983.3	229415.7	641364.1

(Cont. Supplementary Table 1)

geneID	UA-1	UA-2	UA-3	UA-4	RA-1	RA-2	RA-3	RA-4	RA-5	RA-6	RA-7	RA-8	HC-1	HC-2	HC-3	HC-4
hsa-miR-654-3p	157.5831	0	654.6177	425.7876	966.0471	428.8685	167.6372	714.6409	553.6418	0	503.6264	2413.648	260.1859	1266.054	1274.531	391.8794
hsa-miR-1299	593.9671	118.9878	0	0	289.8141	0	207.0813	142.9282	228.3059	0	0	0	1214.201	392.9134	1274.531	0
hsa-miR-449c-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3972	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4494	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-376b-3p	12.12178	0	0	304.134	128.8063	0	9.861012	47.64273	39.95353	0	0	185.6652	173.4573	43.65705	424.8438	35.6254
hsa-miR-4684-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6853-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4761-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4709-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-588	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-579-5p	60.60889	0	0	0	193.2094	171.5474	73.9576	0	39.95353	0	0	0	0	52.38846	0	71.2508
hsa-miR-17-3p	0	0	0	0	289.8141	21.44342	212.0118	95.28545	57.07648	0	0	185.6652	780.5577	61.11987	0	391.8794
hsa-miR-378a-3p	6654.856	7734.209	8480.274	3649.608	6279.306	5918.385	7173.887	28395.06	3818.416	6806.435	8561.648	29706.44	3642.603	12346.21	11470.78	9120.103
hsa-miR-6824-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-1185-1-3p	169.7049	951.9026	0	0	289.8141	0	64.09658	95.28545	45.66118	0	0	0	0	550.0788	0	249.3778
hsa-miR-197-3p	8776.167	23321.61	8569.541	31204.15	13213.38	6797.565	4486.761	10147.9	3333.266	21553.71	44990.62	17452.53	15697.88	8548.05	57778.76	5557.563
hsa-miR-936	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4781-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4457	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6752-5p	0	0	178.5321	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7849-3p	0	0	0	0	0	0	0	47.64273	0	0	0	0	0	0	0	0
hsa-miR-1911-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-4700-3p	0	0	87.48073	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-7151-5p	0	0	0	0	0	0	4.706392	0	65.37851	0	0	0	0	0	0	0
hsa-miR-3620-5p	0	0	89.26604	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-141-3p	33783.39	10708.9	12199.69	31082.49	8952.036	9585.211	4945.298	10767.26	11506.62	26836.8	14269.41	5012.961	8325.948	18554.25	18693.13	18347.08
hsa-miR-181d-5p	0	0	0	232.2478	327.8705	0	56.47671	45.47715	38.13746	0	0	0	0	91.6798	0	34.00607
hsa-miR-5096	0	0	0	0	0	0	10.35406	100.0497	5.99303	0	0	0	0	0	0	0
hsa-miR-548ay-5p	0	0	124.9725	0	0	0	0	0	113.8676	0	0	0	0	0	0	0
hsa-miR-485-3p	1018.229	1784.817	1696.055	2068.111	536.6928	1275.884	1109.364	1286.354	878.9777	2171.577	2014.505	2599.313	2862.045	1624.042	7222.345	1389.391
hsa-miR-548j-5p	12.12178	0	0	121.6536	214.6771	160.8257	93.67962	95.28545	17.12294	0	0	556.9957	0	87.31409	0	213.7524
hsa-miR-642b-5p	0	0	0	0	0	0	4.930506	0	0	0	0	0	0	0	0	0
hsa-miR-216a-3p	193.9485	0	0	425.7876	107.3386	0	14.79152	0	0	0	0	0	0	17.46282	0	0
hsa-miR-4800-3p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-203a-5p	10.60656	0	0	0	28.17637	0	17.25677	41.68739	0	0	0	0	0	0	0	93.51668
hsa-miR-1270	937.2338	1022.214	1775.177	580.6194	215.165	2087.81	536.5287	272.8629	544.8209	835.3351	1762.692	531.6777	1904.088	366.7192	0	1394.249
hsa-miR-6861-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-6512-5p	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hsa-miR-3686	0	0	0	0	0	0	14.79152	0	0	0	0	0	0	0	0	0