

## Supplementary Data 3

### Selected KEGG Pathways predicted to be targeted by PCA component 1 miRNAs\*

KEGG pathway	p-value	#genes	#miRNAs
PI3K-Akt signaling pathway	4.50E-16	104	7
Focal adhesion	4.50E-16	70	7
MAPK signaling pathway	7.43E-16	86	8
Neurotrophin signaling pathway	1.29E-15	48	7
mTOR signaling pathway	2.82E-14	29	7
TGF-beta signaling pathway	5.46E-14	36	7
p53 signaling pathway	1.73E-13	30	7
Axon guidance	3.07E-13	49	7
Gap junction	1.83E-12	34	7
Regulation of actin cytoskeleton	1.00E-11	70	7
Endocytosis	1.49E-11	67	8
Wnt signaling pathway	4.73E-11	54	8
Insulin signaling pathway	5.40E-10	46	7
Glycosaminoglycan biosynthesis - chondroitin sulfate	1.07E-09	9	4
Fatty acid biosynthesis	2.98E-09	2	1
ErbB signaling pathway	5.00E-09	34	7
Calcium signaling pathway	7.23E-09	56	8

\*PCA component 1 miRNAs assessed:

Let-7a-5p  
Let-7d\*  
miR-15b-5p  
miR-19b-3p  
miR-20a-5p  
miR-34b-3p  
miR-570-3p  
miR-572  
miR-720  
miR-9-5p