

**Extracellular vesicles from bone marrow mesenchymal stem/stromal cells transport tumor regulatory microRNA, proteins, and metabolites**

**Supplementary Material**

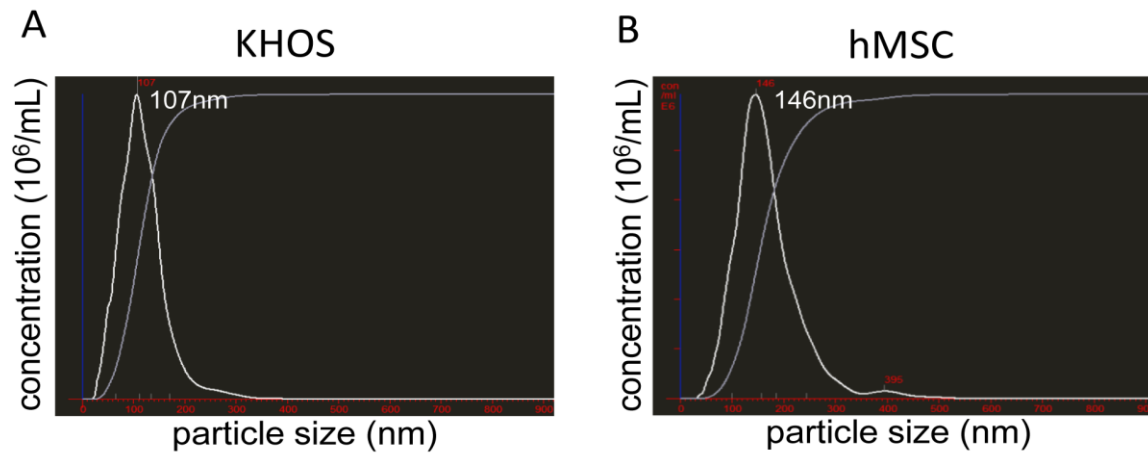


Figure S1: (A) Particle size distribution of purified KHOS EVs and (B) purified hMSCs EVs as determined by NanoSight

## Omics Flowchart

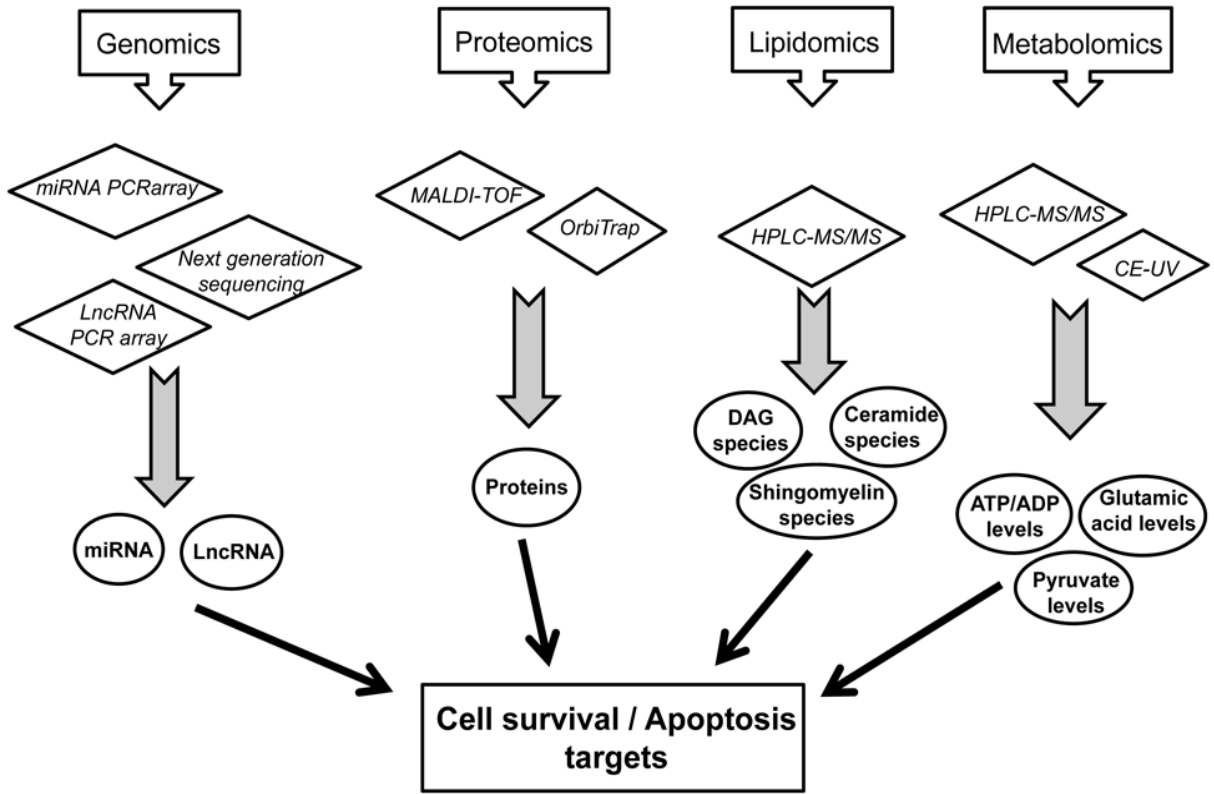


Figure S2: Flow chart of the genomics, proteomics, lipidomics and metabolomics data analysis.

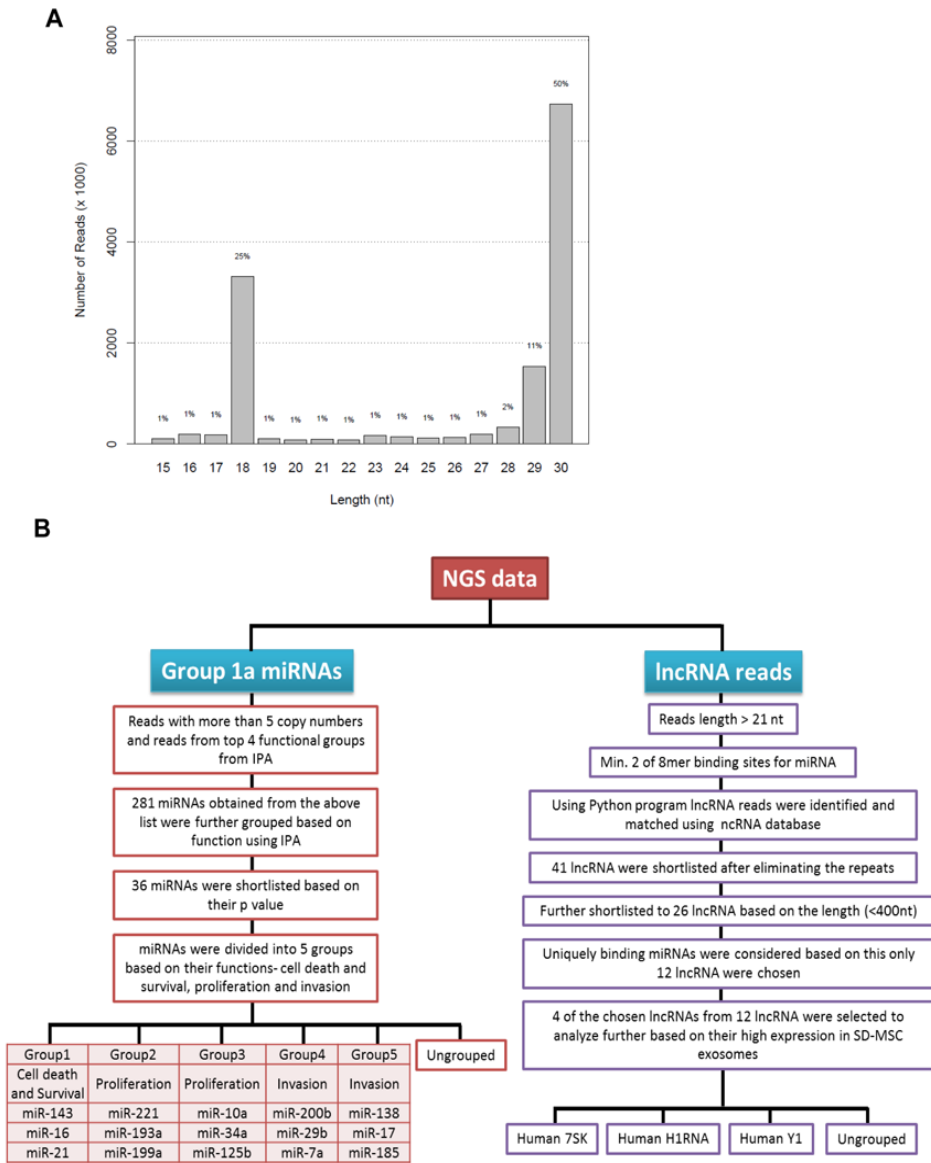


Figure S3: (A) Distribution of hMSC EVs small RNA species population (~16 million reads) sorted by nucleotides length (cutoff at 30 nts). (B) Flowchart of miRNA and lncRNA data analysis.

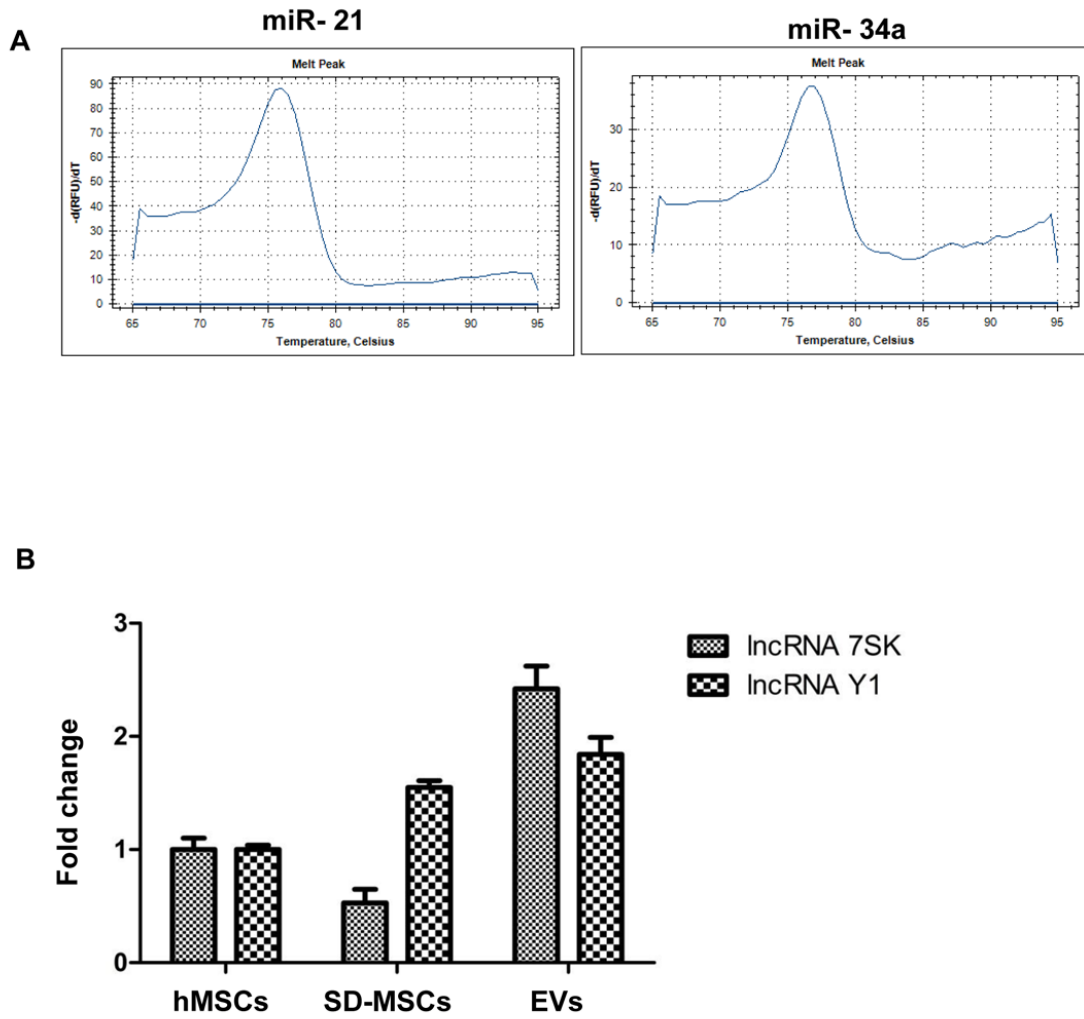


Figure S4: (A) Dissociation curves of miRNAs- 21 and -34a confirming the specificity of their respective primers. (B) Relative expression of lncRNAs 7SK and Y1 in hMSCs, SD-MSCs and SD-MSCs EVs.

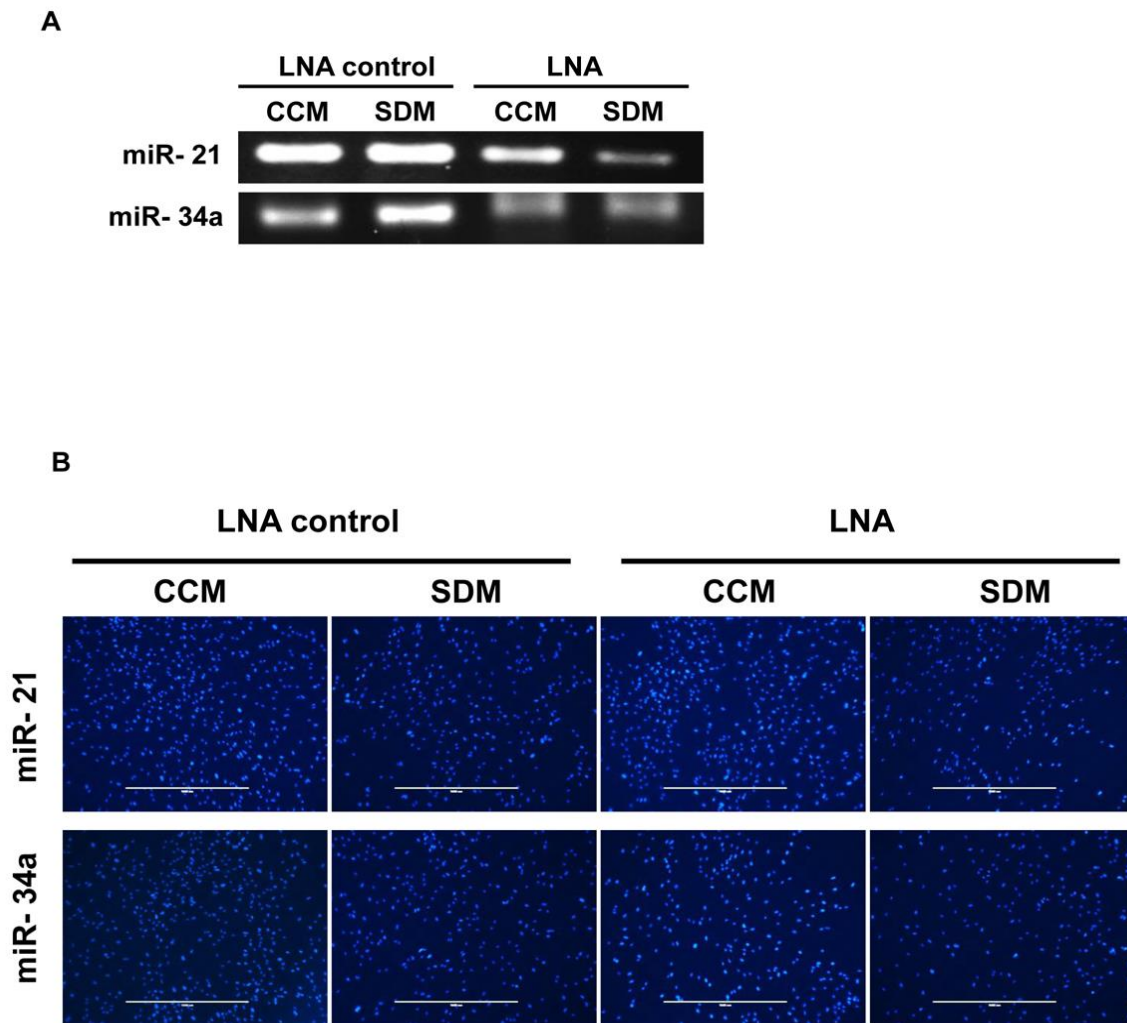


Figure S5: (A) Gel electrophoresis of miR- 21 and miR- 34a amplified product confirming silencing of respective miRNAs. (B) Representative pictures showing DAPI (blue) stained nucleus for Celigo cell survival analysis after transfections without or with miR- 21 or miR-34a LNAs inhibitors.