**Supplementary File**

**A systematic way to infer the regulation relations of miRNAs on target genes and critical miRNAs in cancers**

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Figure S1. String database：PPI: 19576 nodes, 11353056 interactions . The protein ID in PPI network were converted to Gene symbol ID by R software package “biomaRt”, al last 10048286 interactions were got between the 18014 nodes.