

Supplementary Table 1 Bioinformatics researches related to t (4; 14) Multiple myeloma

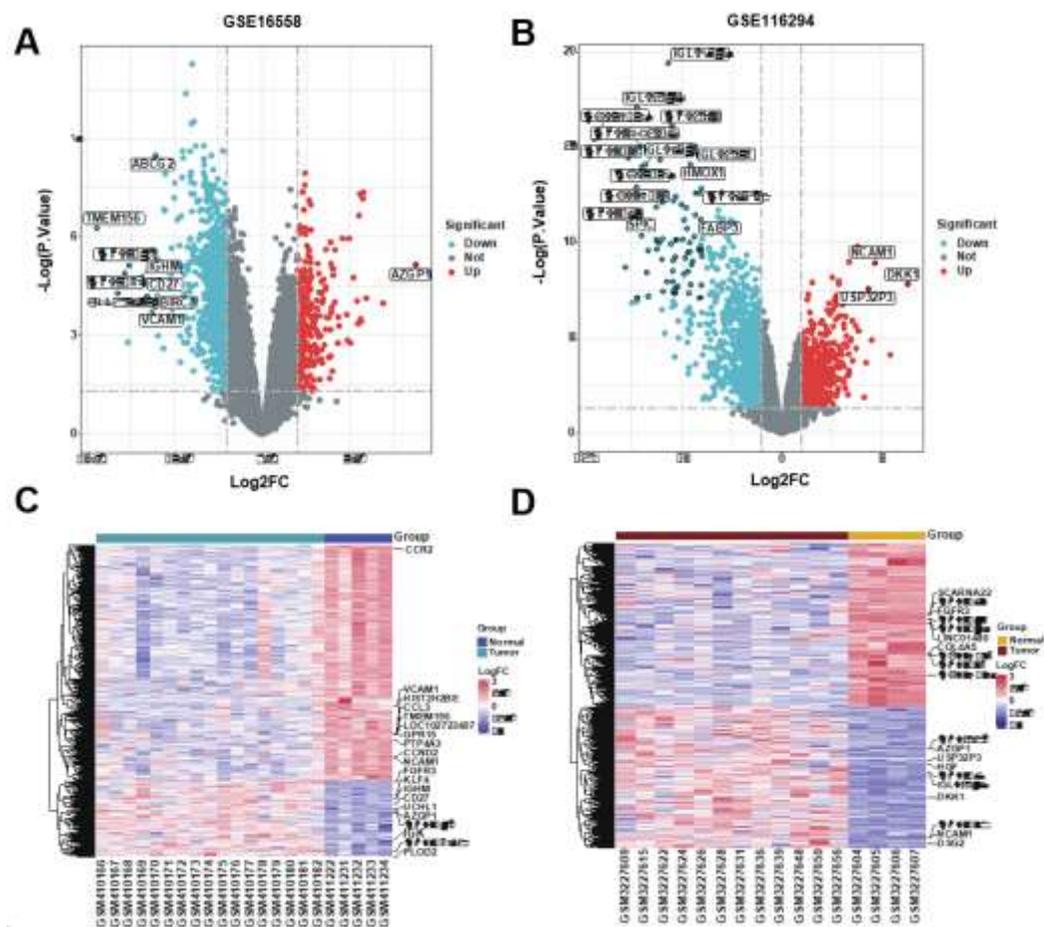
Study	Study Area	Study Objectives	Screening of Drug candidates	Molecular Docking	In vivo experimental verification
Enrica et al.,2016	t (4;14) MM	To explore miRNA regulatory networks in t (4; 14) MM	NO	NO	NO
Kai hong et al.2019	t (4;14) MM	To investigate the potential involvement of miRNA in t (4;14) MM	NO	NO	Yes
Hang et al., 2019	MM	To Exploring potential drug targets and prognostic markers of MM	Yes	NO	NO
Jin et al.,2019	MM	To identify the most significantly molecular pathways during MM progression	NO	NO	NO
Steven et al.,2020	MM	To explore the prognostic relevance of fusions of MM	NO	NO	NO

Cody et al.,2022	MM	To investigate the role of transcriptional deregulation by structural variants of MM	NO	NO	NO
Our Study	t (4;14) MM	To explore small molecule drugs for the treatment of MM	Yes	Yes	Yes

MM: multiple myeloma.

Supplementary Table 2 List of genome expression datasets analyzed in this study

S.no	Geo ID	Sample count (case: control)	Platform information	Tissues
1.	GSE16558	17:5	GPL6244, Affymetrix Human Gene 1.0 ST Array	bone marrow
2.	GSE116294	15:4	GPL25249, Affymetrix Human Gene 2.0 ST Array	bone marrow



Supplementary Figure 1 Differential gene expression in t(4;14) multiple myeloma samples versus controls. A: Volcano plot showing differentially expressed genes from GSE16558. Red indicates up-regulated genes; blue indicates genes that are down-regulated. B: Heatmap of the GSE16558 base genes comparing the control to t(4;14) multiple myeloma(MM) samples. Columns

represent samples; rows represent genes. Red denotes up-regulated differentially expressed genes (DEGs); blue denotes down-regulated DEGs. C: Volcano plot illustrating DEGs from GSE116294. Red indicates up-regulated genes; blue indicates down-regulated genes. D: Heatmap of the hub genes derived from GSE116294 comparing control to t(4;14) MM samples. Columns represent samples; rows represent genes. Red denotes up-regulated DEGs; blue denotes down-regulated DEGs.