**Data availability**

All the data appeared in this study can be obtained in the GEO datasets in NCBI, GSE83286 was available at <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE83286>, GSE77791 was available at <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE77791>, GSE113620 was available at [https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE113620.](https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE113620.%20%20%20%20R) R code used during the research was provided as Supplementary file 4 named Burn-ceRNA with rmd format which can be reappeared in Rstudio platform. The data analysis code library mentioned in this article and the code to generate numbers, tables, etc.have been uploaded to the GitHub repository.