This list contains the meta-analysis of 302,951 eRNA loci in multiple datasets.

- 1. eRNA loci annotation: the genomic location of 302,951 eRNA loci is provided in the file TCGA 300k peaks all.bed, while eRNA loci for each specific TCGA cancer type are provided in peaks XXXX.bed where XXXX stands for the cancer type. These files are in the UCSC bed format.
- 2. eRNA expression in TCGA samples (9,284 tumor samples and 720 normal samples of 32 cancer types). The file RPKM 300k peaks XXXX.tsv.gz provides the RPKMs of 302,951 eRNAs in TCGA samples of the XXXX cancer type. The first row contains the sample_id and each of the other rows contains an eRNA locus and the RPKMs of samples in the first row.
- 3. eRNA expression in GTEx samples (9,664 samples). The file GTEx RPKM 300k peaks XXXX.tsv.gz provides the RPKMs of 302,951 eRNAs in GTEx samples of the XXXX tissue type. The first row contains the sample_id and each of the other rows contains an eRNA locus and the RPKMs of samples in the first row.
- 4. eRNA expression in CCLE samples (925 cell lines). The file CCLE eRNA 300k peak.tsv.gz provides the RPKMs of 302,951 eRNAs in 925 CCLE cell lines. The first row contains the sample_id and each of the other rows contains an eRNA locus and the RPKMs of samples in the first row.
- 5. Pan-Cancer analysis of the eRNAs: the association between 49,849 eRNAs and patient survival times can be found in the file Association between patient survial and eRNA expression.tsv; the list of 4,725 non-coding focal copy-number changes affecting eRNA loci can be found in the file eRNA loci in TCGA focal CNV.tsv; the level of 3,919 CpG methylation within eRNA loci can be found here.
- 6. The 164 eRNA and 36 target genes associated with immunotherapy response can be found here.
- 7. The 32,298 Hi-C interactions between eRNA loci and gene promoters can be found in the file Hi-C interaction between promoter and eRNA loci.tsv. Each eRNA/gene pair shows consistence co-expression in at least three TCGA cancer types. The Spearman's *Rho* and adjusted p-values of co-expression are also provided. The TF

- binding signal from cistrome database in each eRNA locus can be find in the file cistrome TF binding in eRNA loci.tsv.gz.
- 8. The information of all samples included in this dataset can be found in the file Sample info.xlsx.
- 9. For questions about the data, please contact hliang1@mdanderson.org