

Munge Data

Data from Individual Studies

Standardize Data

Glucose 0.10 0.10 3.20 0.52 0.10 2.30 1.00
Serine 0.34 8.02 1.43 0.99 2.32 1.00 0.74

Imputation: minimum measured value

Normalization: median normalize

Pan-Cancer Dataset

Assemble Pan-Cancer Data

	Pubchem	KEGG	HMDB	CHEBI
Glucose	5793	C0031	HMDB00122	NA

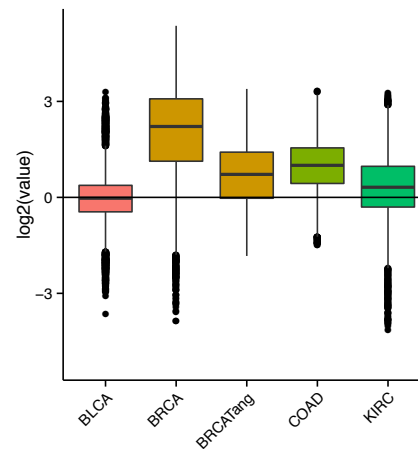
Map metabolite IDs: CHEBI, Pubchem, KEGG, HMDB

Merge metabolites across studies

Analyze Data

Study-by-Study Analysis

Tumor/Normal Comparison



Meta-Analysis of Cancer Types

Recurrent Metabolic Alterations and Clinical Data Analysis

