Additional file 1. List of the implemented Bioconductor packages

PUBLIC DATA ACCESS PACKAGES
- GEOquery ---- Get data from NCBI Gene Expression Omnibus (GEO) [1]
- Geometadb ---- A compilation of metadata from NCBI GEO [2]
- ArrayExpress ---- Access the ArrayExpress Microarray Database at EBI and build Bioconductor data structures [3]

PREPROCESSING AND NORMALIZATION PACKAGES
- affy ---- Methods for processing Affymetrix oligonucleotide arrays [4]
- lumi ---- Methods for processing Illumina BeadArrays [5-7]
- vsn ---- Variance stabilization and calibration for microarray data [8]
- gcrma ---- Background adjustment method using sequence information [9]

QUALITY CONTROL PACKAGES
- arrayQualityMetrics ---- Quality metrics on ExpressionSets [10]
- made4 ---- Multivariate analysis of microarray data using ADE4 [12]

DIFFERENTIALLY EXPRESSED GENE DETECTION PACKAGES
- limma ---- Linear models for microarray data [13]
- siggenes ---- SAM and Efron's empirical Bayes approaches [14]
- RankProd ---- Rank product method for identifying differentially expressed genes with application in meta-analysis [15]
- maSigPro ---- Microarray significant gene expression profile – find differences in time course data [16]

POWER ANALYSIS PACKAGES
- ssize ---- Estimate microarray sample size [17]
References