DESCRIPTION:

The following programs and data were utilized in the manuscript "*A min–max combination of biomarkers to improve diagnostic accuracy*" by Chunling Liu, Aiyi Liu and Susan Halabi. The programs were written by C,Liu. If you have any questions regarding the programs please contact A Liu (liua@mail.nih.gov). The analysis was originally completed in May of 2011 with R

The data in this file is: autism157.csv:

This file contains one R program,   MinMaxROC-Erratum-R-Codesl.R. It contains all of the necessary R functions and approaches through which the figures were obtained for the manuscript mentioned above.

FUNCTIONS IN the R_CODE MinMaxROC-Erratum-R-Codesl.R

minmax {},   function which is used with "optimize" to find the optimized combination of minimum and maximum values of the biomarkers,.

Npcom {},   function for Nonparametric linear combination,

Sen{},   function for empirical sensitivity

USAGE

 minmax {para},   Need to define Xmin, Xmax, Ymin, Ymax before calling this function

Npcom { para, X, Y},   function for Nonparametric linear combination, X is case, Y-Control

sen{ x,y, FPF},   function for empirical sensitivity

ARGUMENTS

para   initial parameters

X   case

Y   control

FPF   False positive

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