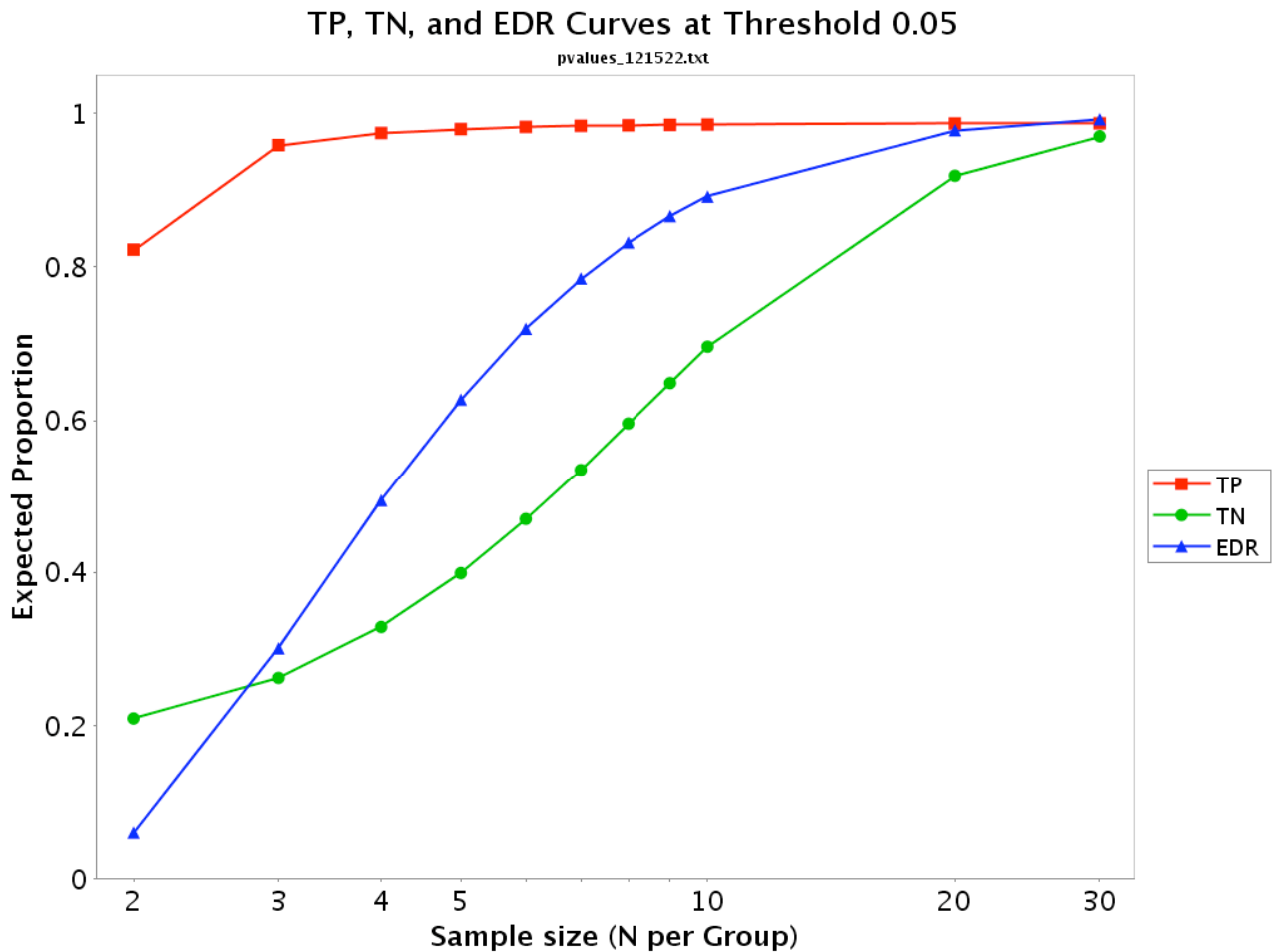


SUPPLEMENTARY MATERIAL

File 1

**Selection of the sample size through the PowerAtlas software**

The choice of sample size was performed by running p-values of expression data comparisons among groups, through the PowerAtlas software (6, 7). The figure shows that the selection of 5 samples per group allows to obtain an Expected Discovery Rate (EDR) equal to 63% and a True Positive Probability (TP) equal to 98%. Cut off limits at $p < 0.05$ for reliable data are: EDR higher than 40% and TP higher than 80%.

TN= True Negative probability.