

## 1. Supplementary Figures

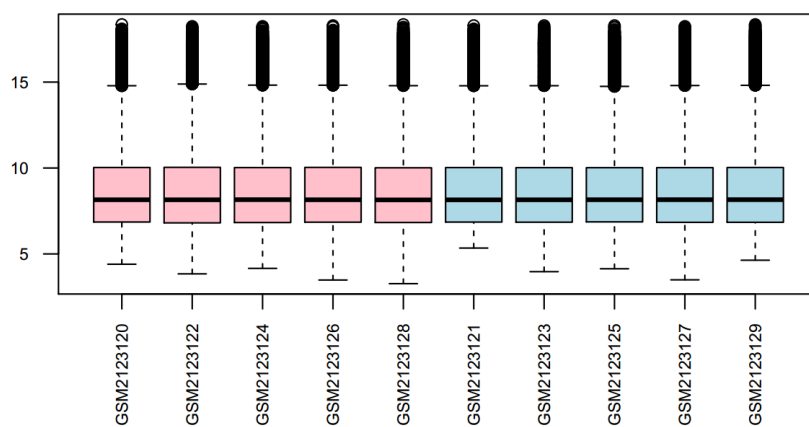


Figure 1: Boxplot dataset GSE80266.

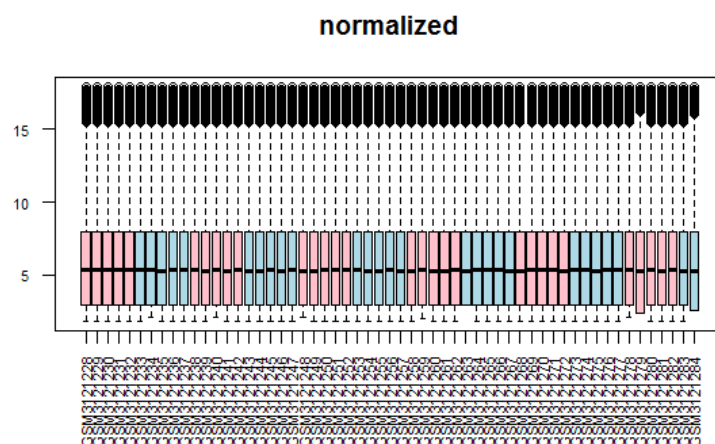


Figure 2: Boxplot dataset GSE113851.

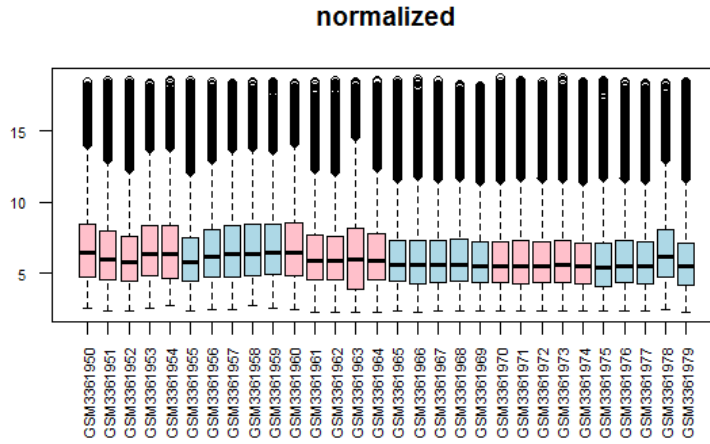


Figure 3: Boxplot dataset GSE119233.

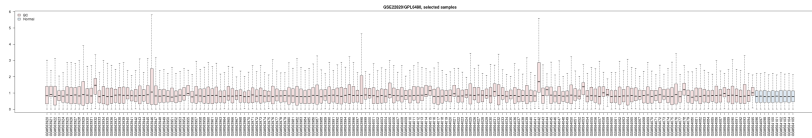


Figure 4: Boxplot dataset GSE22820.

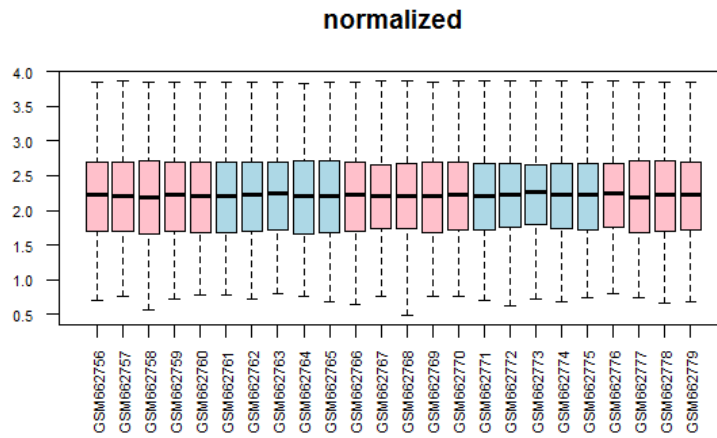


Figure 5: Boxplot dataset GSE26910.

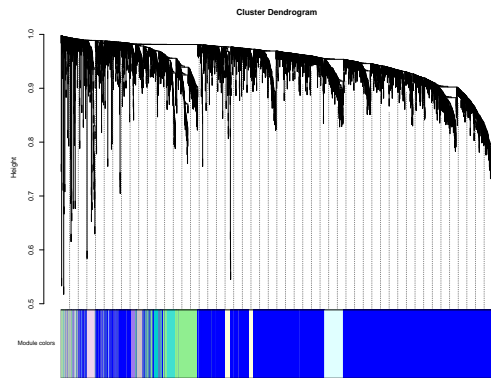


Figure 6: **Cluster Dendrogram of dataset GSE113851.** Branches of the dendrogram correspond to modules with correlated genes represented by different colors

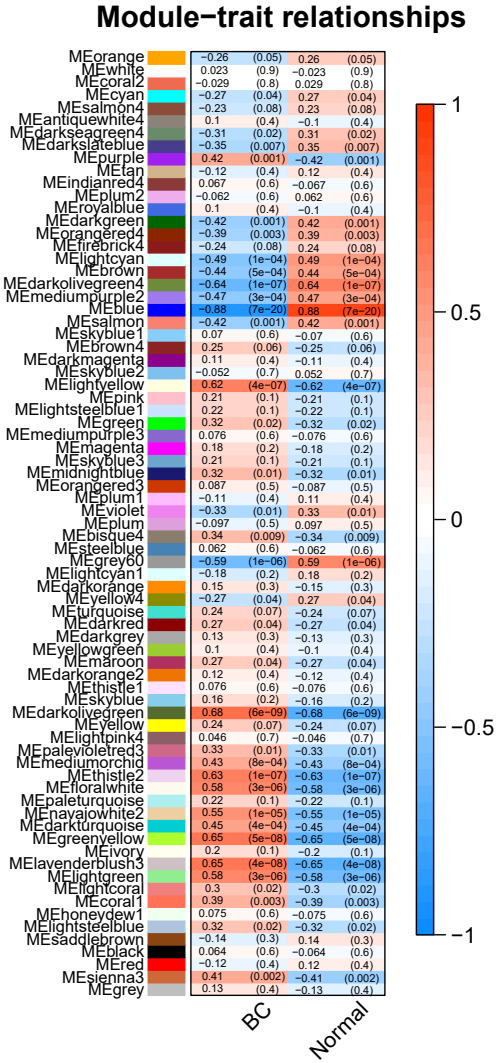


Figure 7: **Module-Trait relationship of GSE113851.** There are 75 modules, along with a color name, correlation and p-values. Module with dark red color in the heat map, i.e. MEblue shows a high correlation of 88% along with its significant p-value of 7e-20

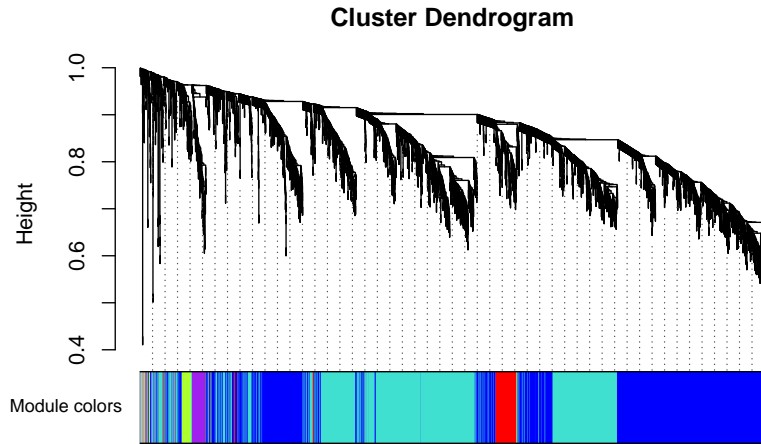


Figure 8: **Cluster Dendrogram of dataset GSE119233.** Branches of the dendrogram correspond to modules with correlated genes represented by different colors

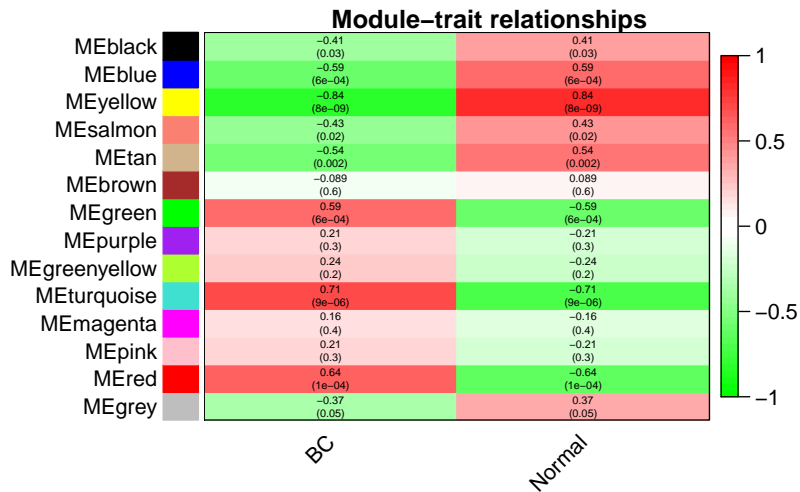


Figure 9: **Module-Trait relationship of GSE119233.** Total 14 modules along with a color name, correlation and respective p-values are represented in R plot. Module with dark red color in the heat map, i.e. MEyellow and shows a high correlation of 84% along with its significant p-value of 8e-09

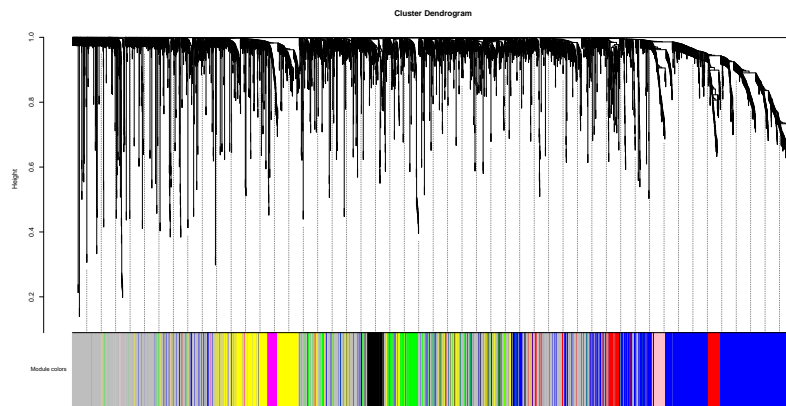


Figure 10: **Cluster Dendrogram of dataset GSE22820.** Branches of the dendrogram correspond to modules with correlated genes represented by different colors

## Module-trait relationships

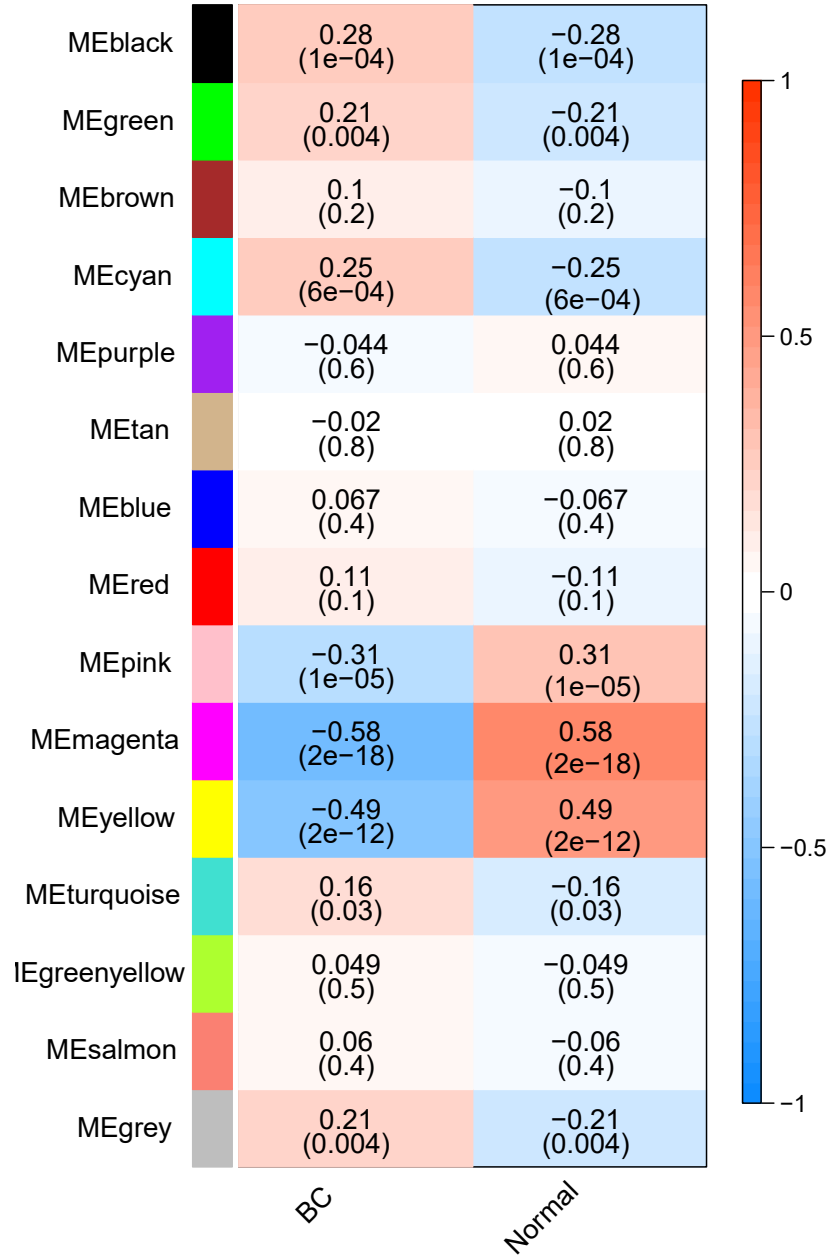


Figure 11: **Module-Trait relationship of GSE22820.** The heat map shows total 15 modules correlated with external traits, i.e. breast cancer and normal. Moreover, MEMagenta was the only module shown in dark red color to hold a 58% correlation with a least p-value of  $2e^{-18}$

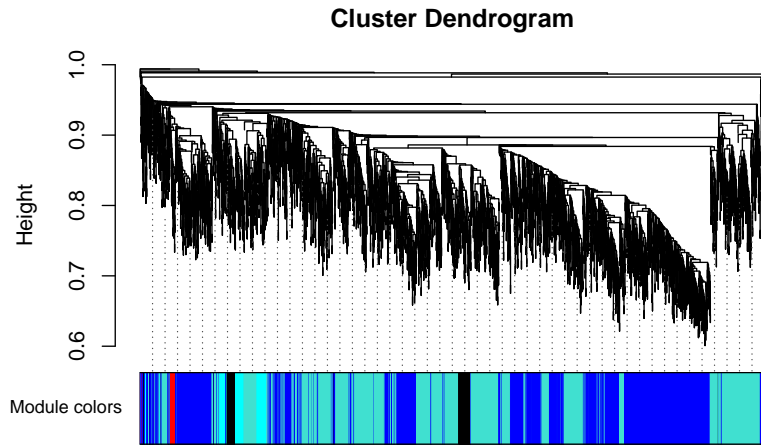


Figure 12: **Cluster Dendrogram of dataset GSE26910.** Branches of the dendrogram correspond to modules with correlated genes represented by different colors



## Module-trait relationships

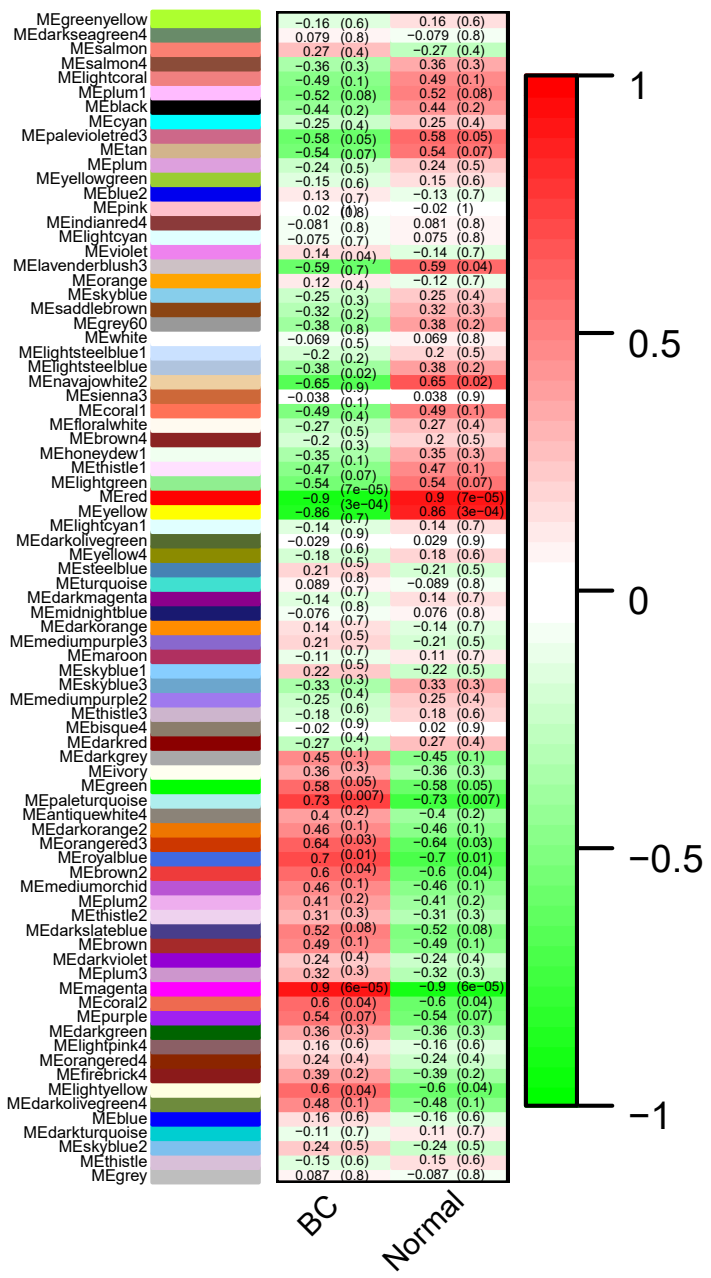


Figure 13: **Module-Trait relationship of GSE26910.** The heat map displays total 81 modules significantly correlated with external traits, i.e. breast cancer and normal. Only two modules MEMagenta and MERed shown in dark red color hold a significant correlation with a least p-value