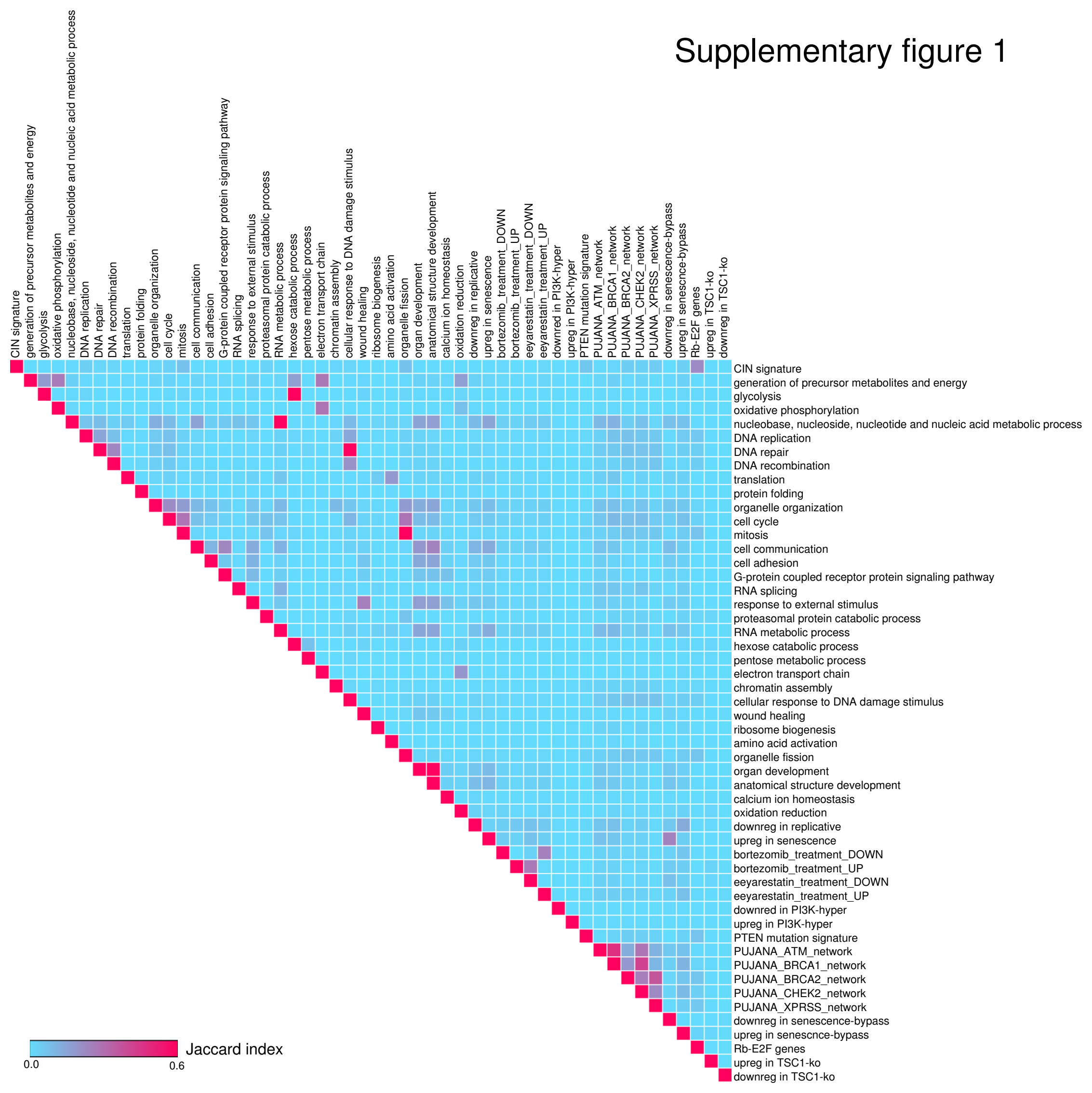
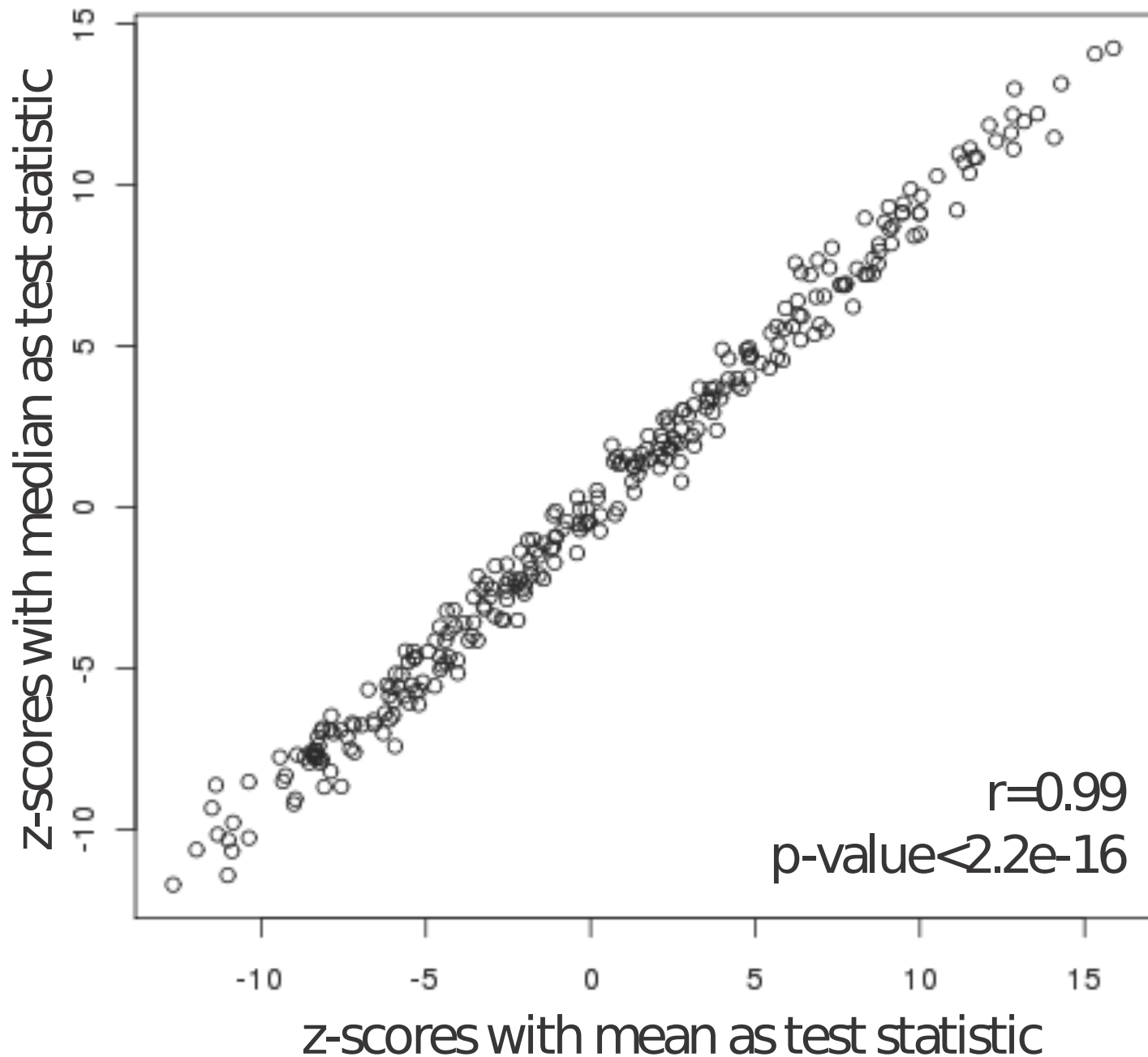


Supplementary figure 1



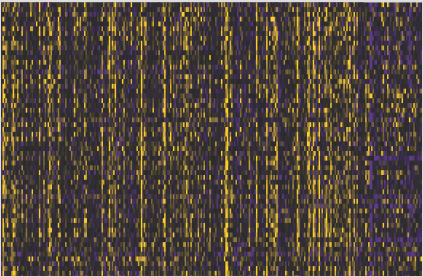
Supplementary figure 2



Supplementary figure 3

1 RANDOMIZATION

249 tumors



genes

expression profiles of breast tumors

Generate datasets with different number of tumors randomly selected from the original dataset.

→

datasets of 21 samples

datasets of 51 samples

datasets of 201 samples

...

- 1900 datasets organized in groups of 100 datasets with different sample sizes
- sample size varies from 21 to 201 with an increment of 10

2 NORMALIZATION AND SLEA

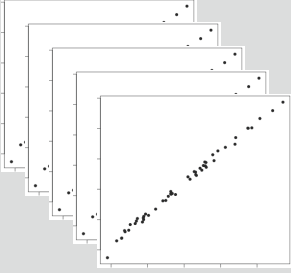


↓

Perform median centered normalization and SLEA with CIN signature for each dataset

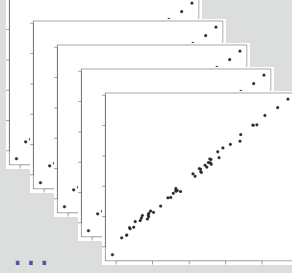
3 CORRELATIONS

datasets of 21 samples



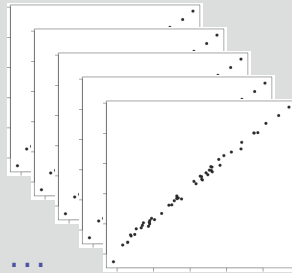
...

datasets of 51 samples



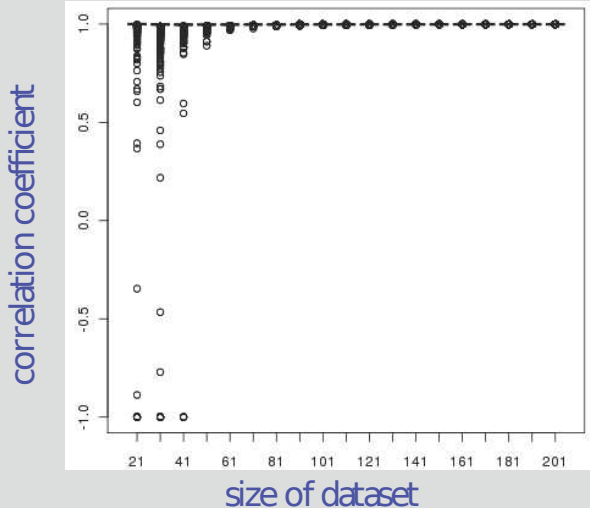
...

datasets of 201 samples



- Pairwise correlation between zscore results among the datasets with the same number of samples
- 100x100 correlations coefficients for each size

4 ROBUSTNESS OF SLEA AMONG DATASET WITH DIFFERENT SAMPLE SIZES



correlation coefficient

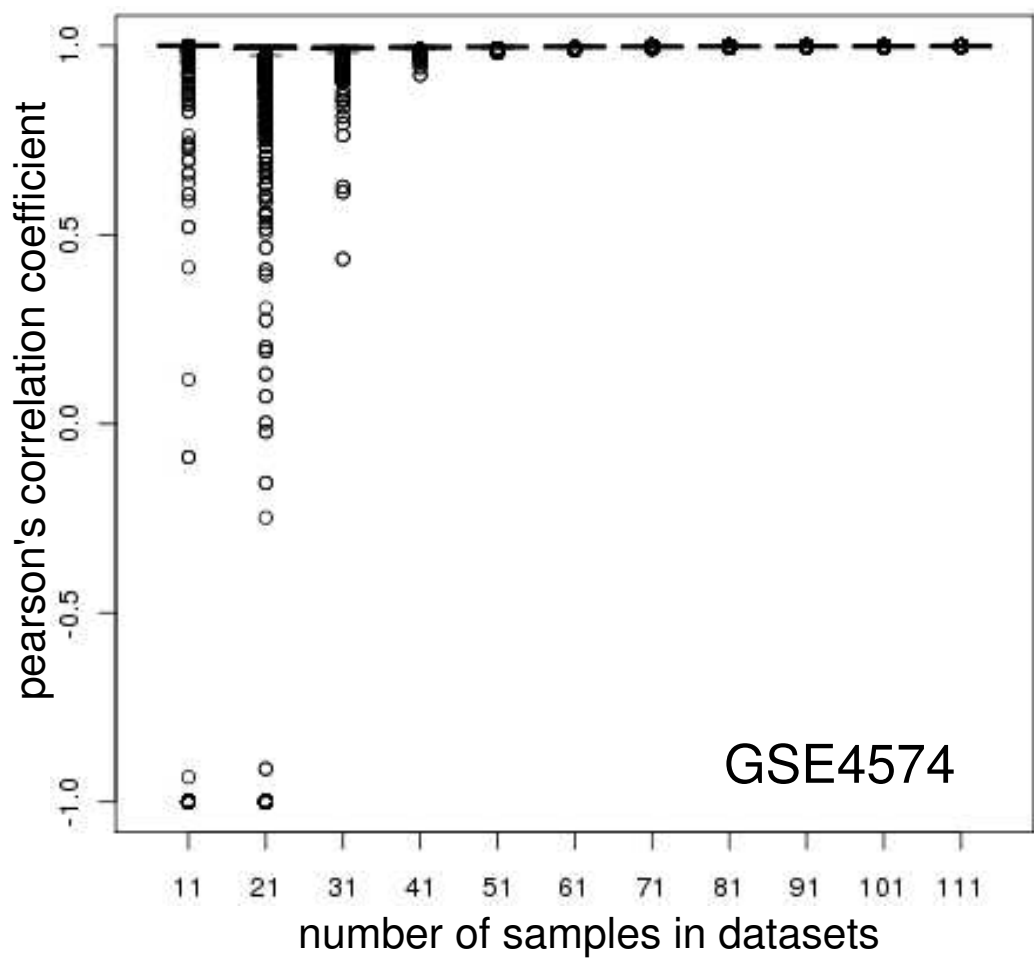
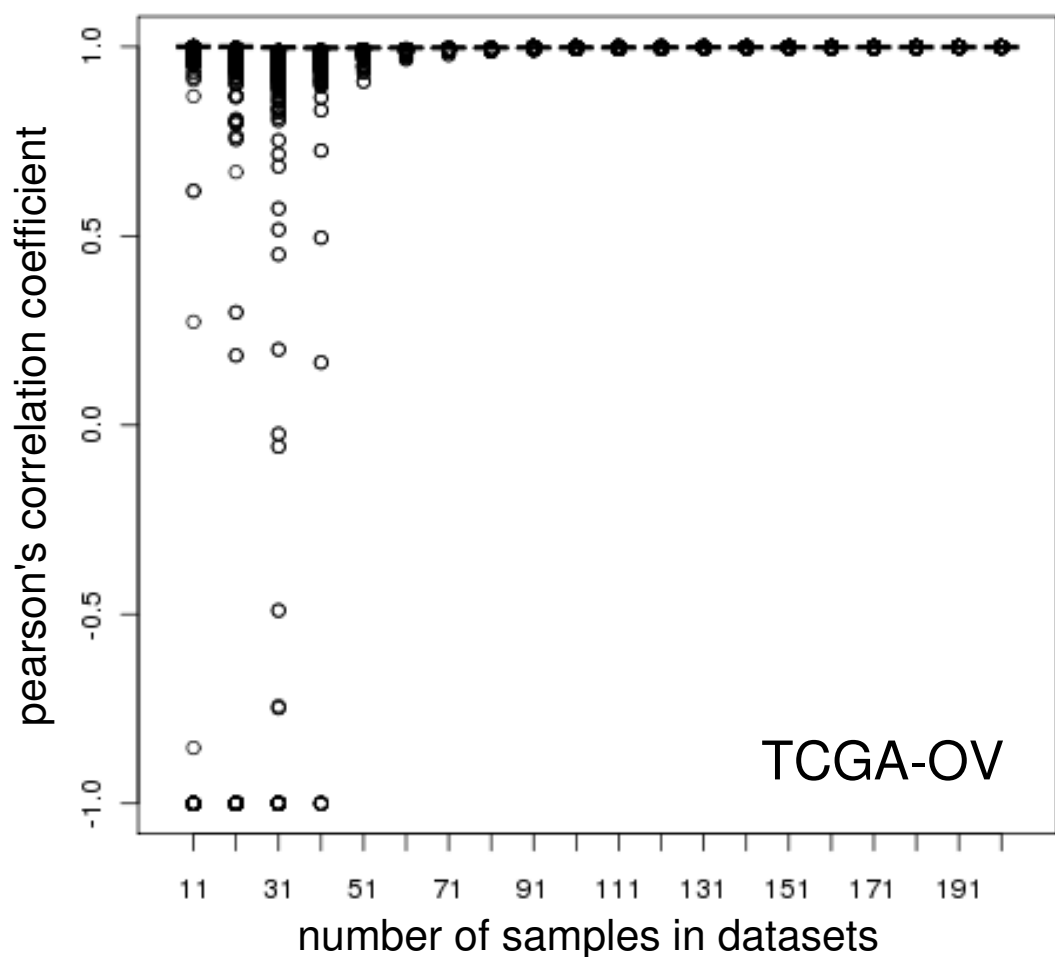
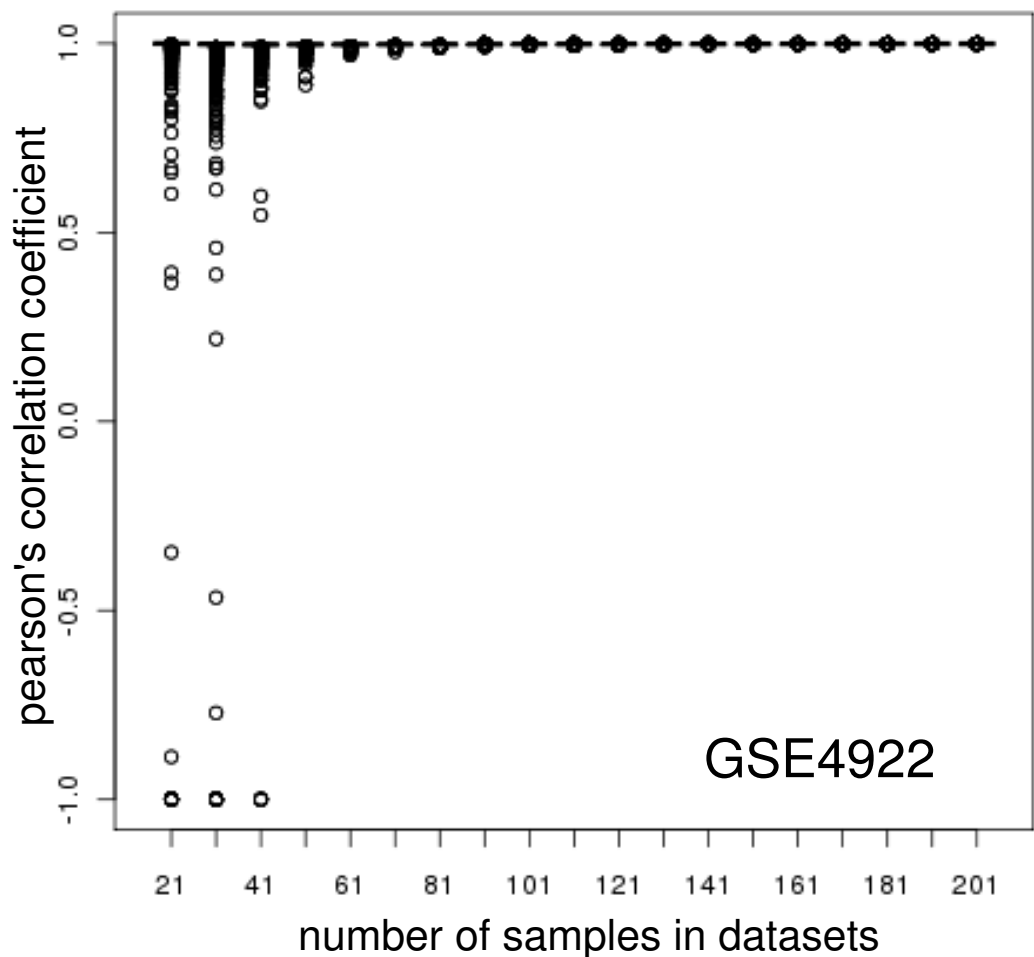
size of dataset

Box-and-whisker plots of correlation coefficients for each of the dataset sizes

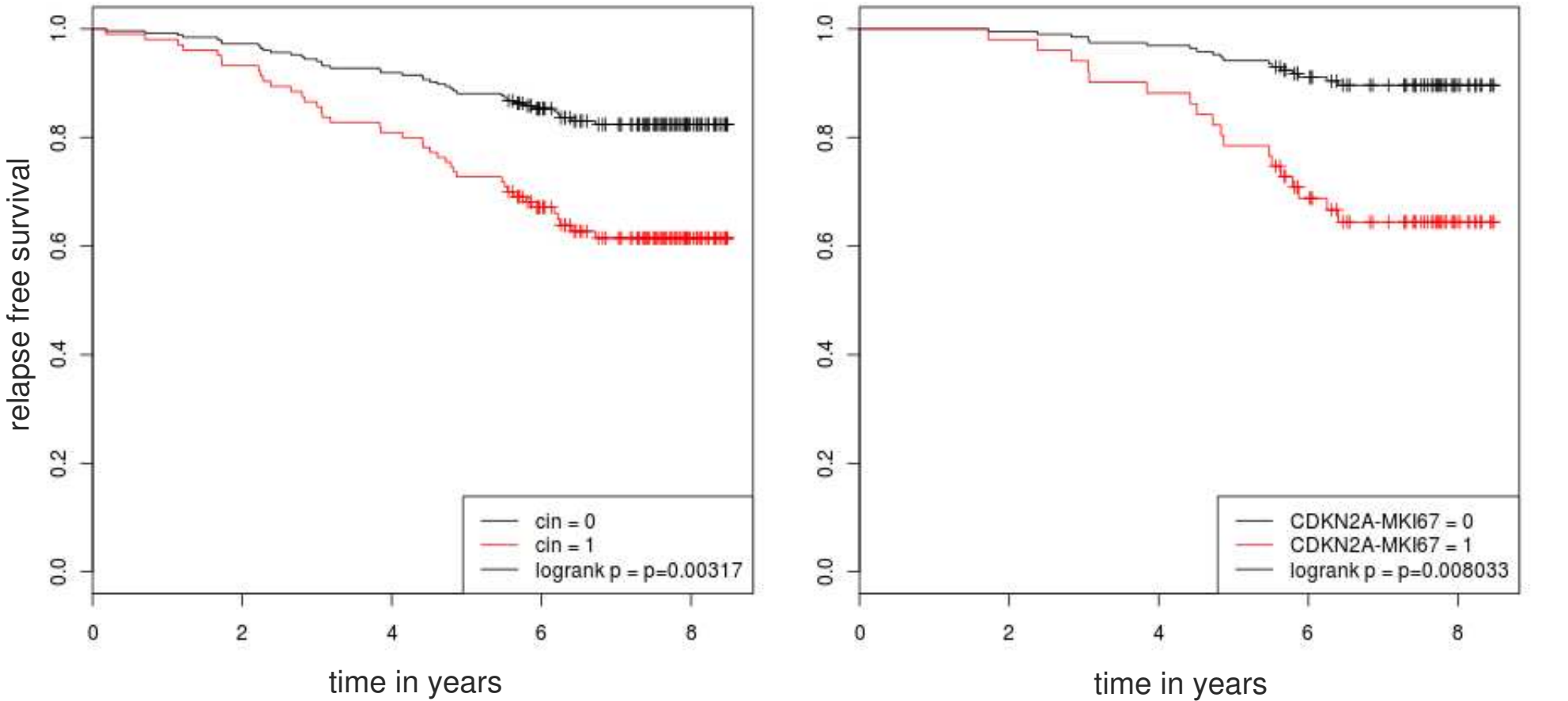
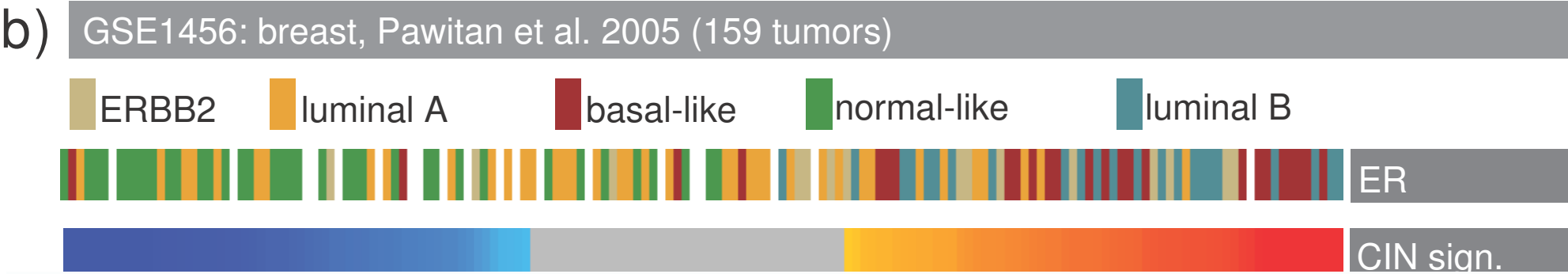
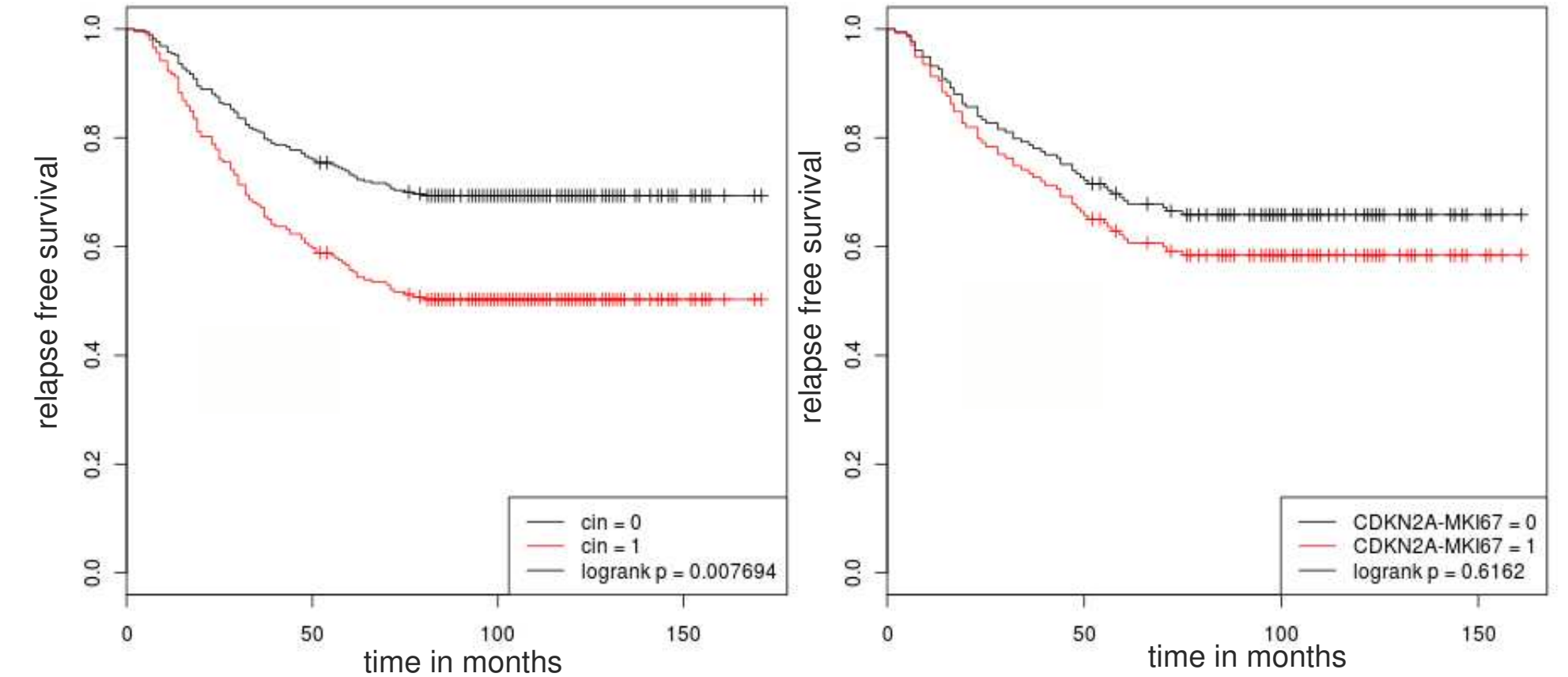
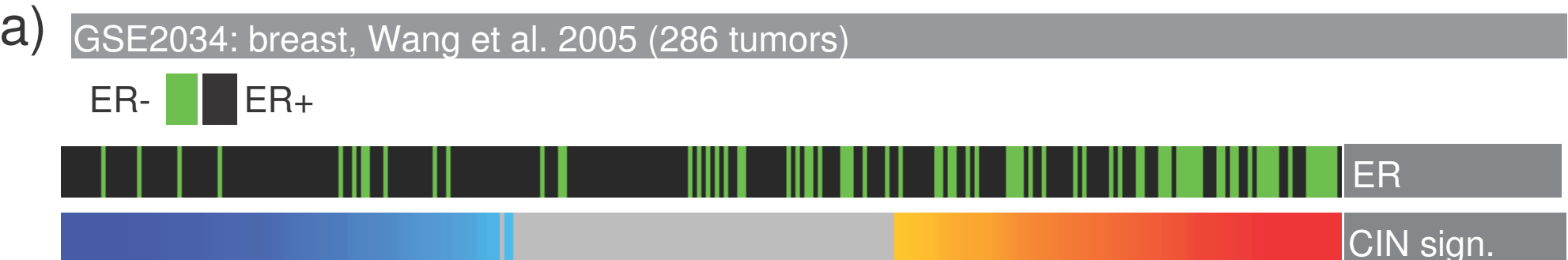
CONCLUSION

Random data sets of sample size > 71 have highly-correlated EA results.

Supplementary figure 4

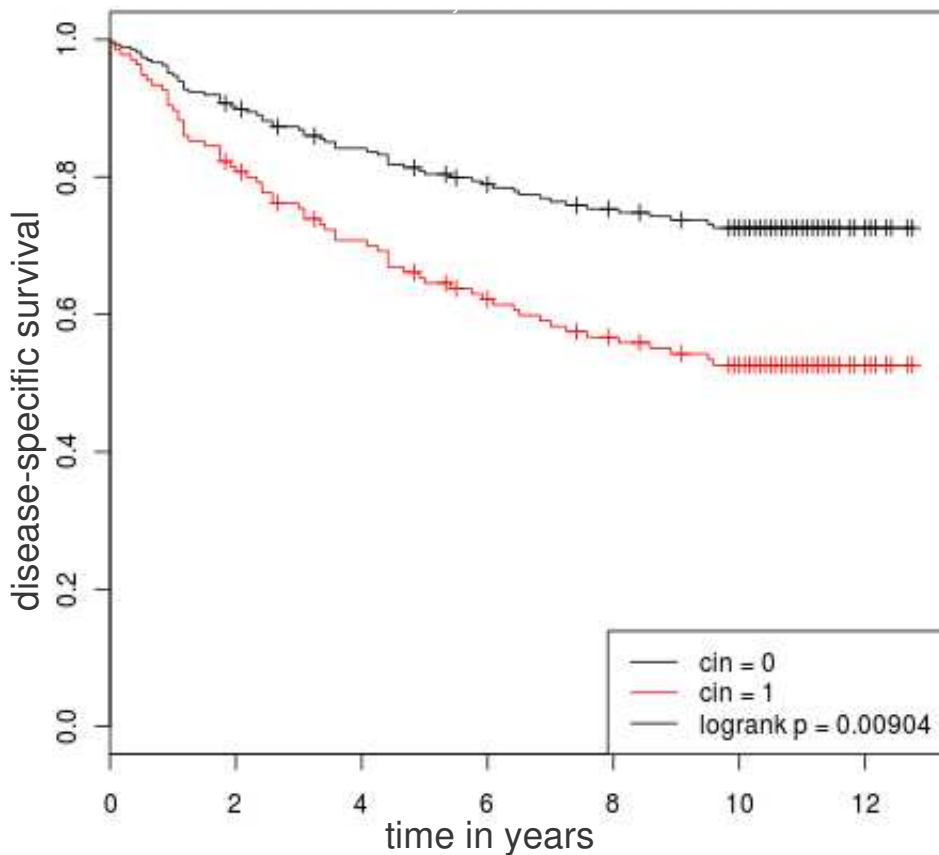


Supplementary figure 5



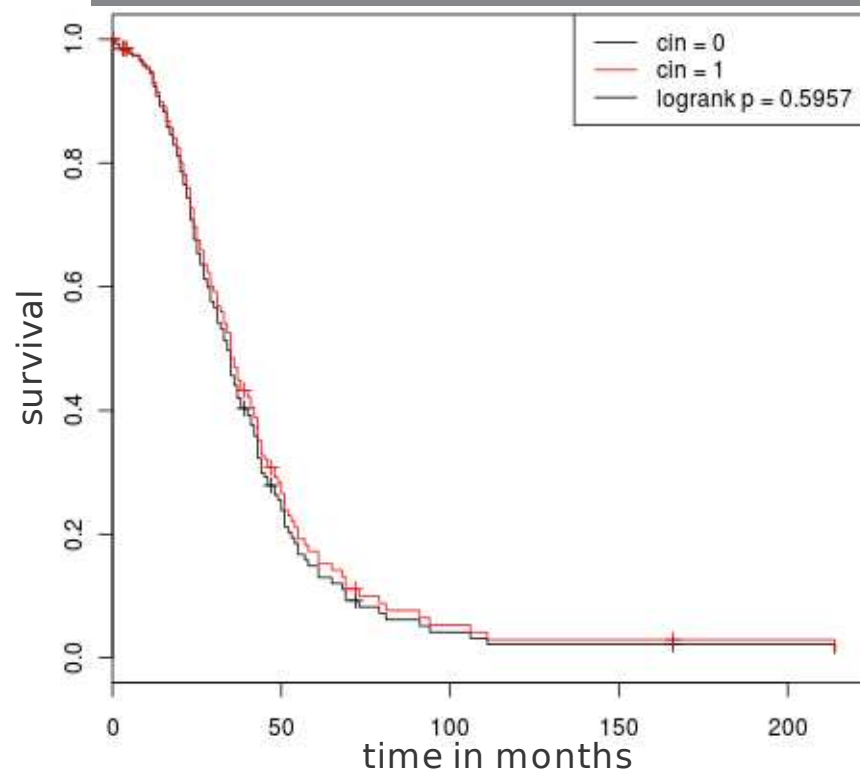
Supplementary Figure 6

GSE4922: breast, Ivshina et al. 2006

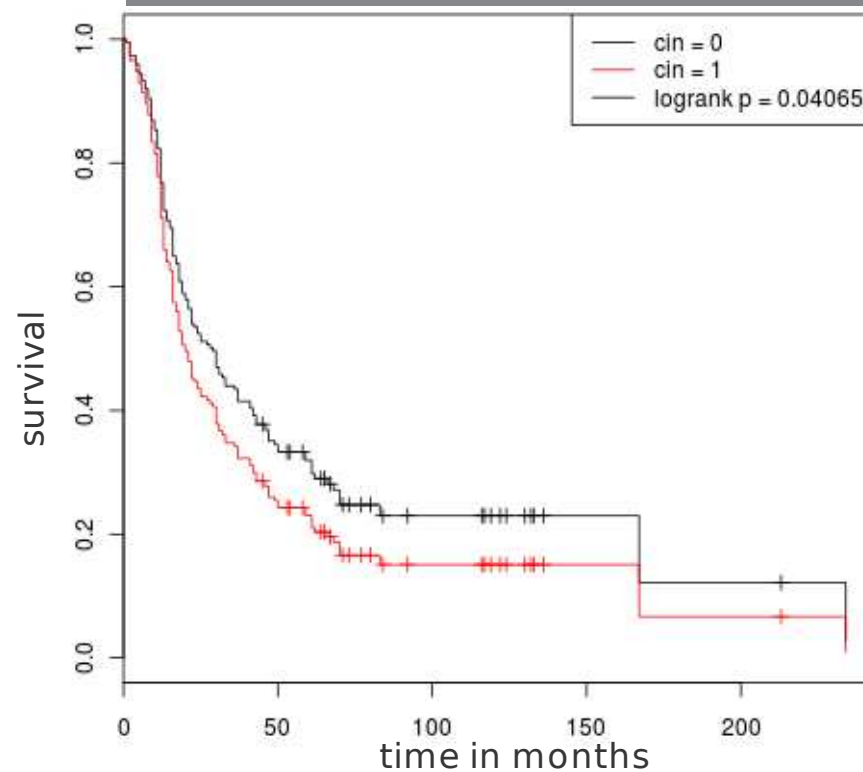


Supplementary figure 7

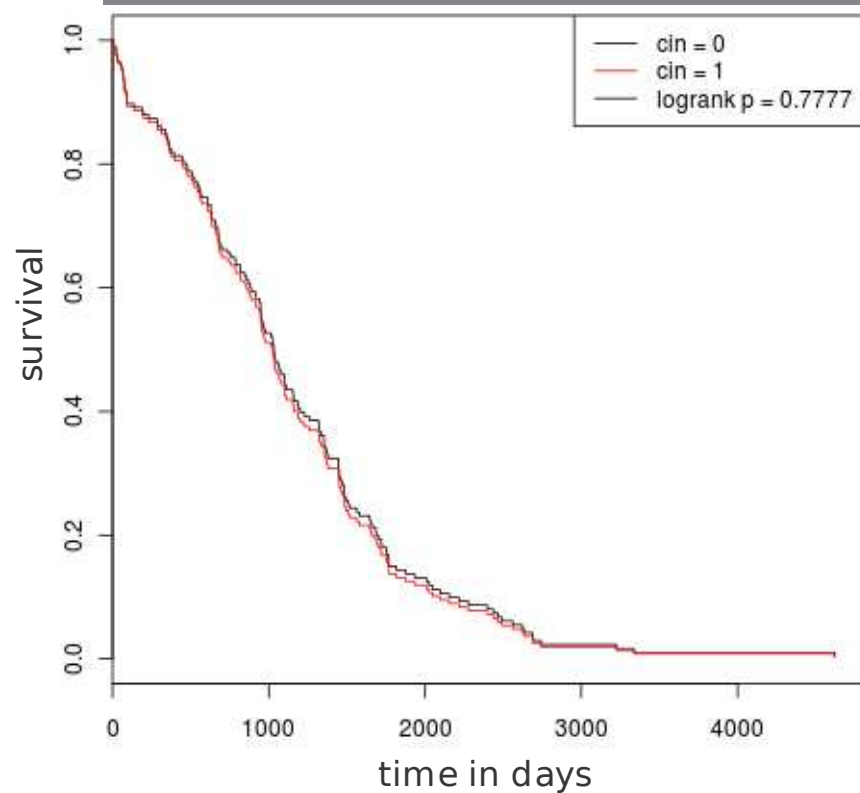
GSE9891: ovary, Tothill et al. 2008



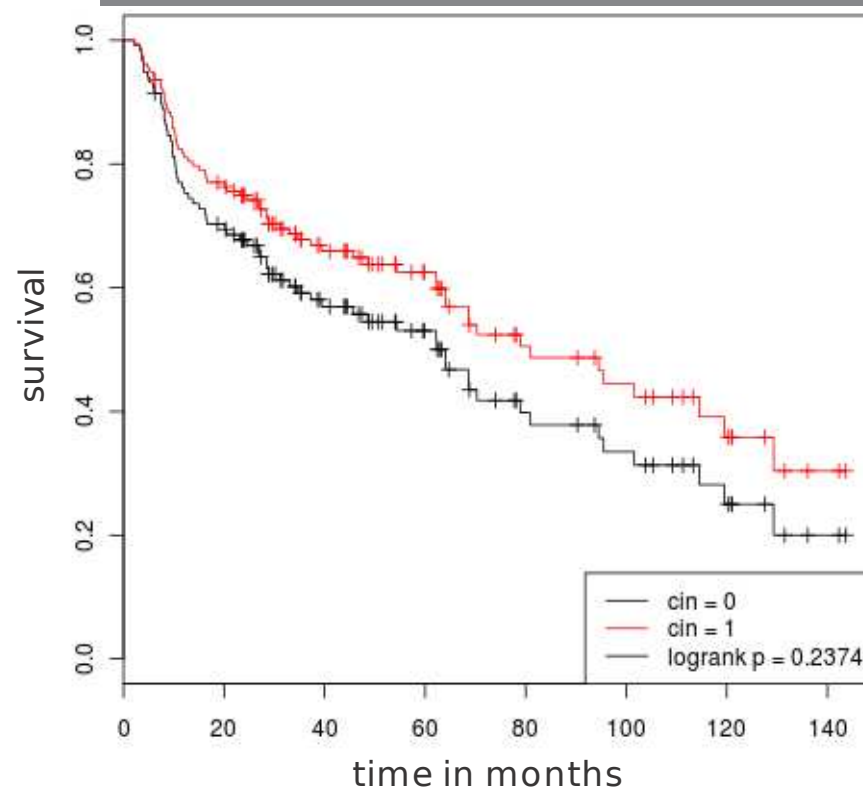
GSE13876: ovary, Crijns et al. 2009



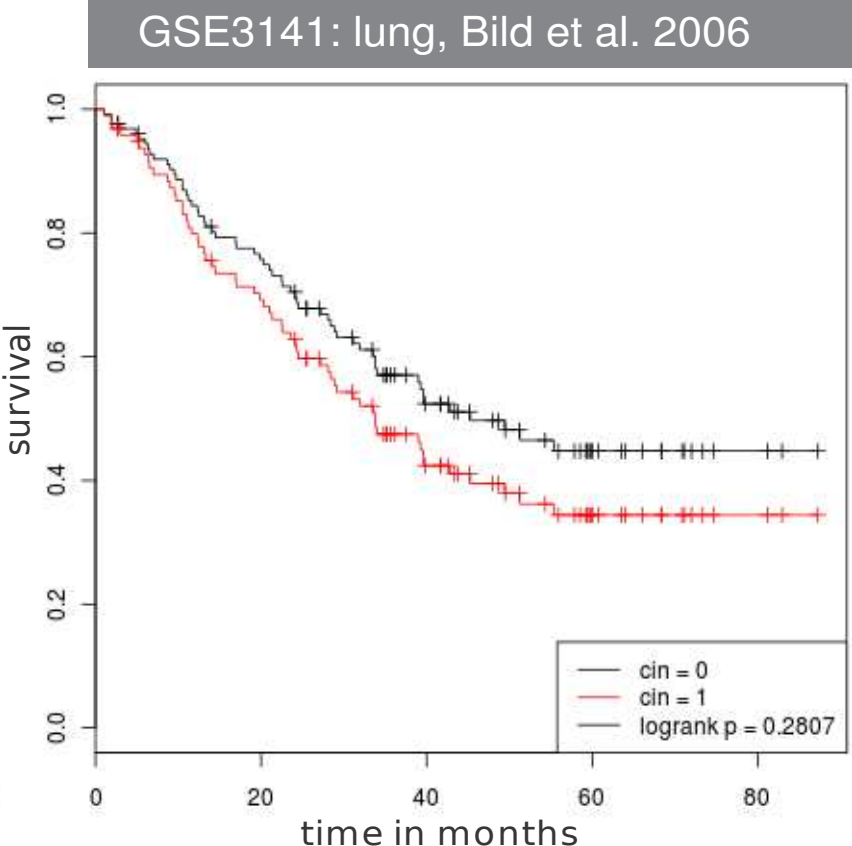
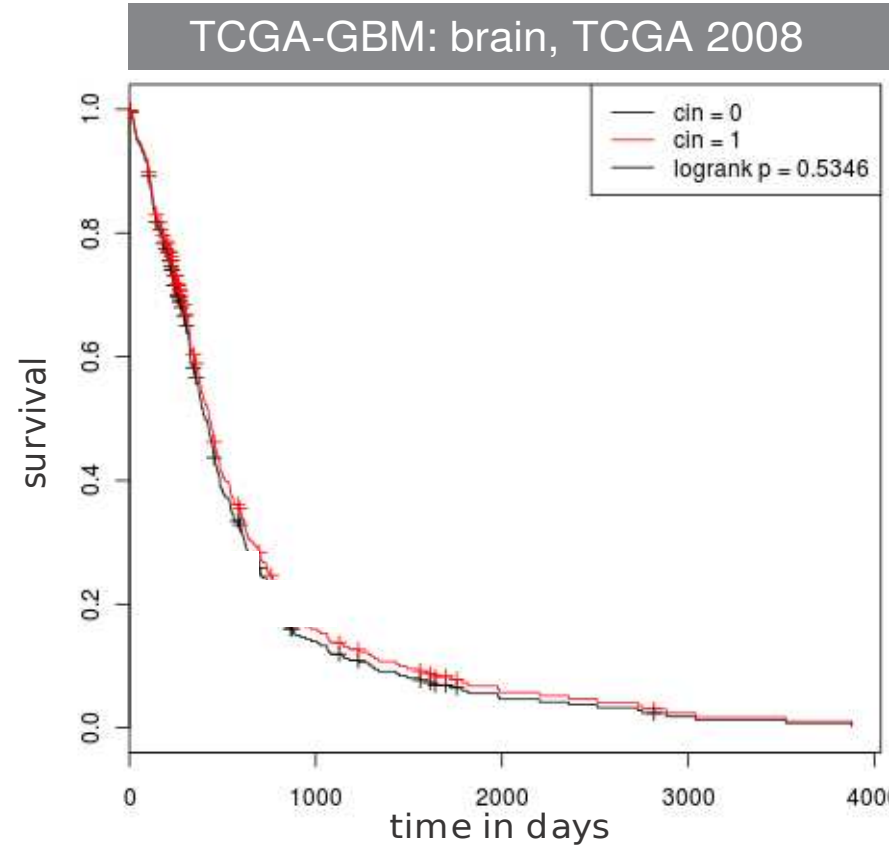
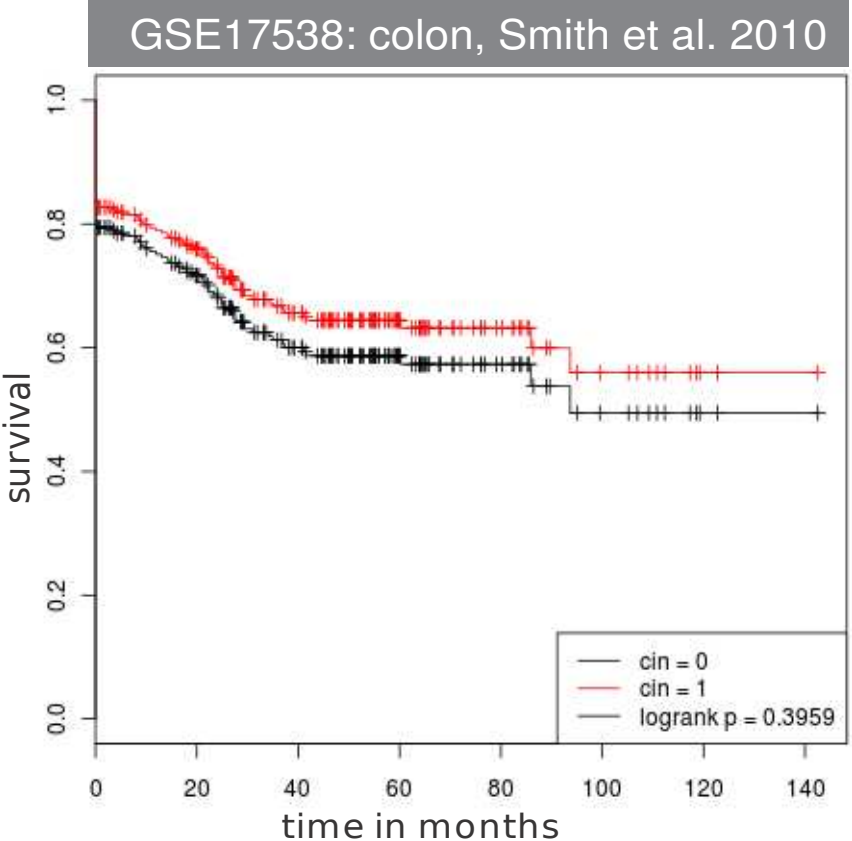
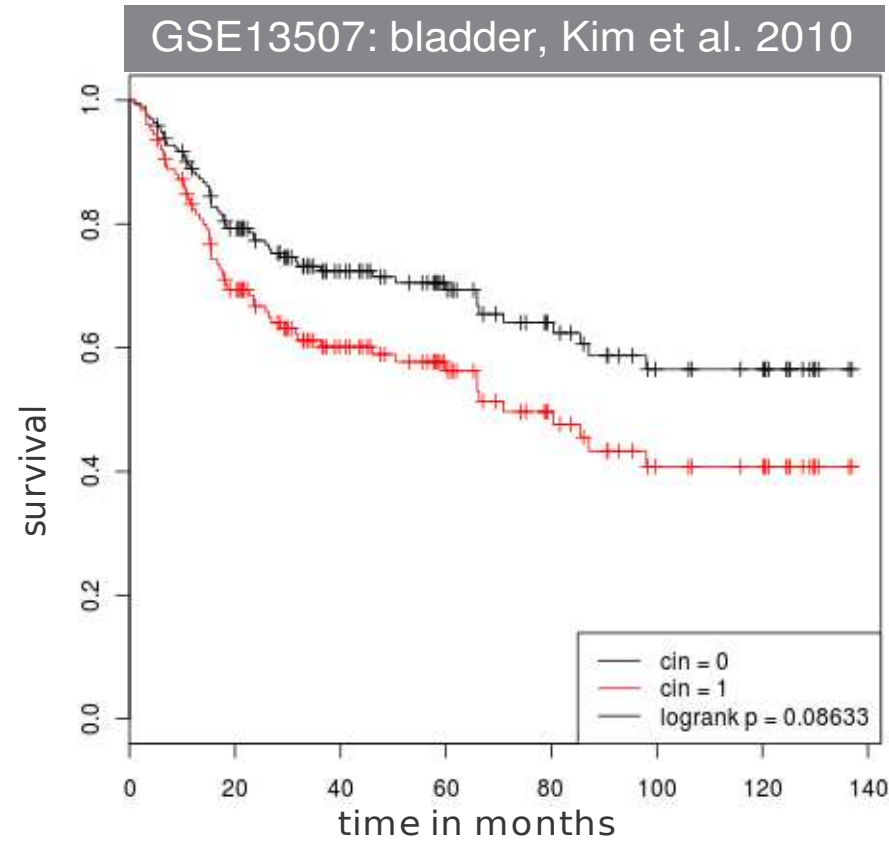
TCGA-OV: ovary, TCGA et al. 2011



GSE4573: lung, Raponi et al. 2006

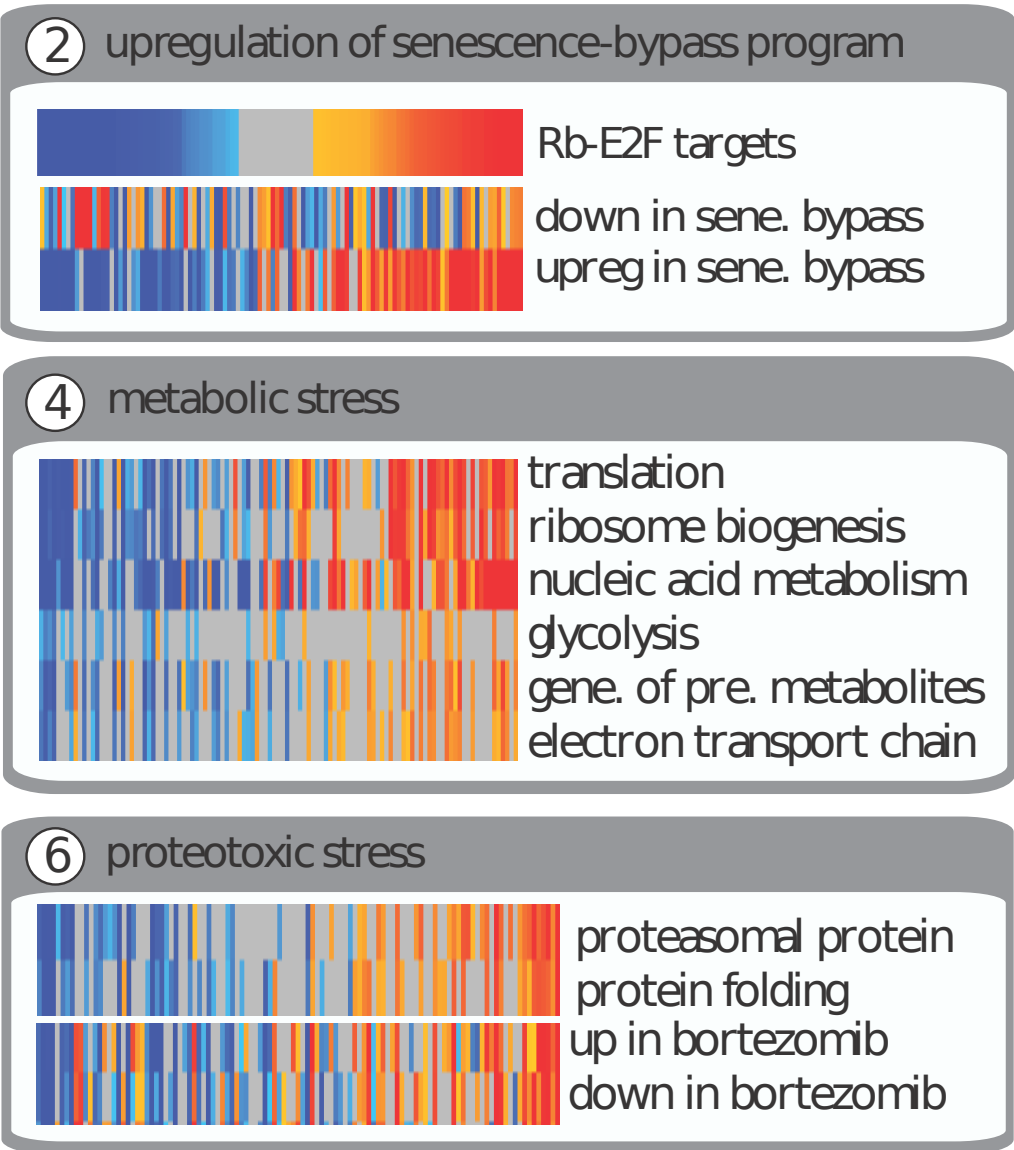
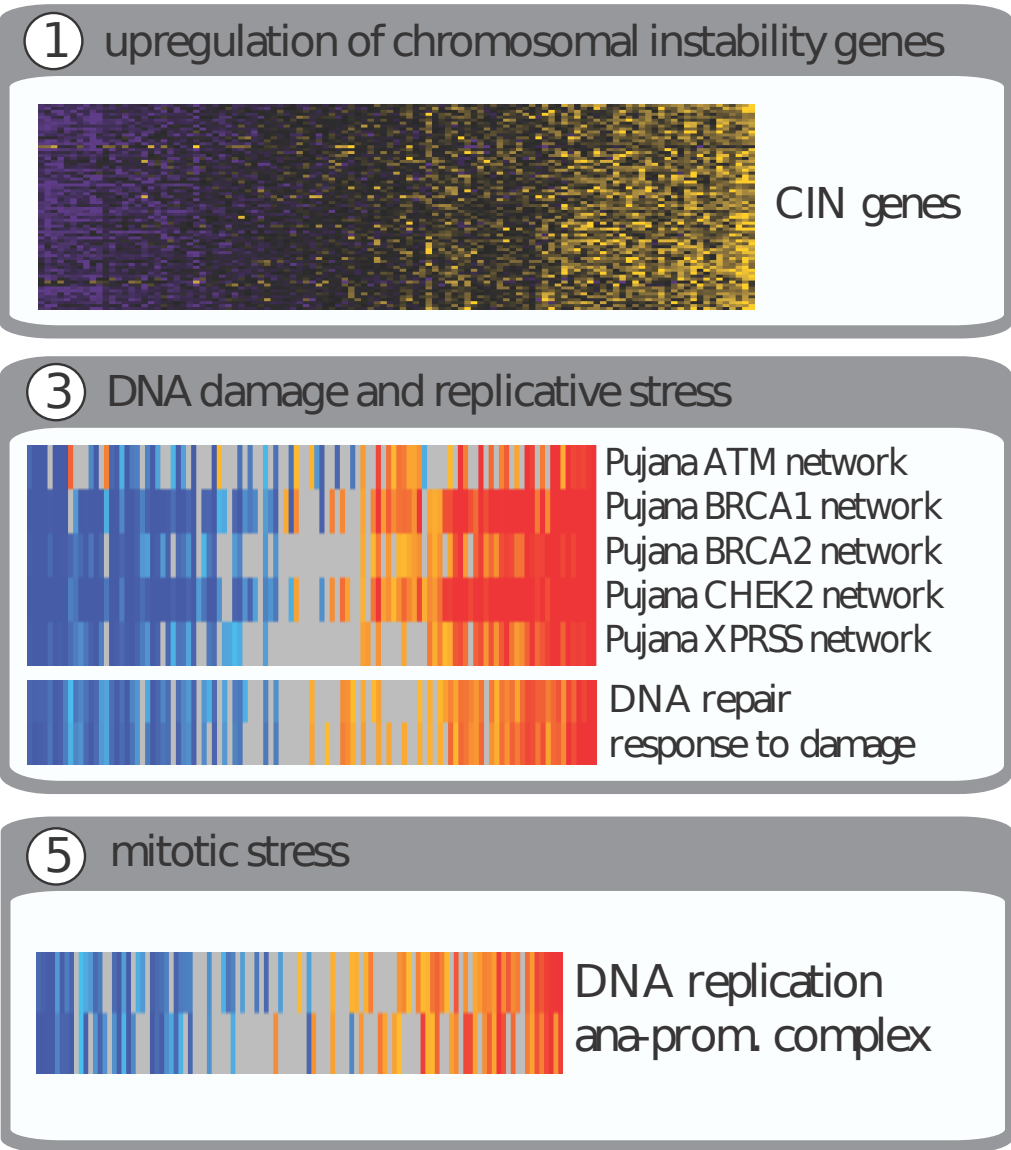


Supplementary figure 7 cont'd

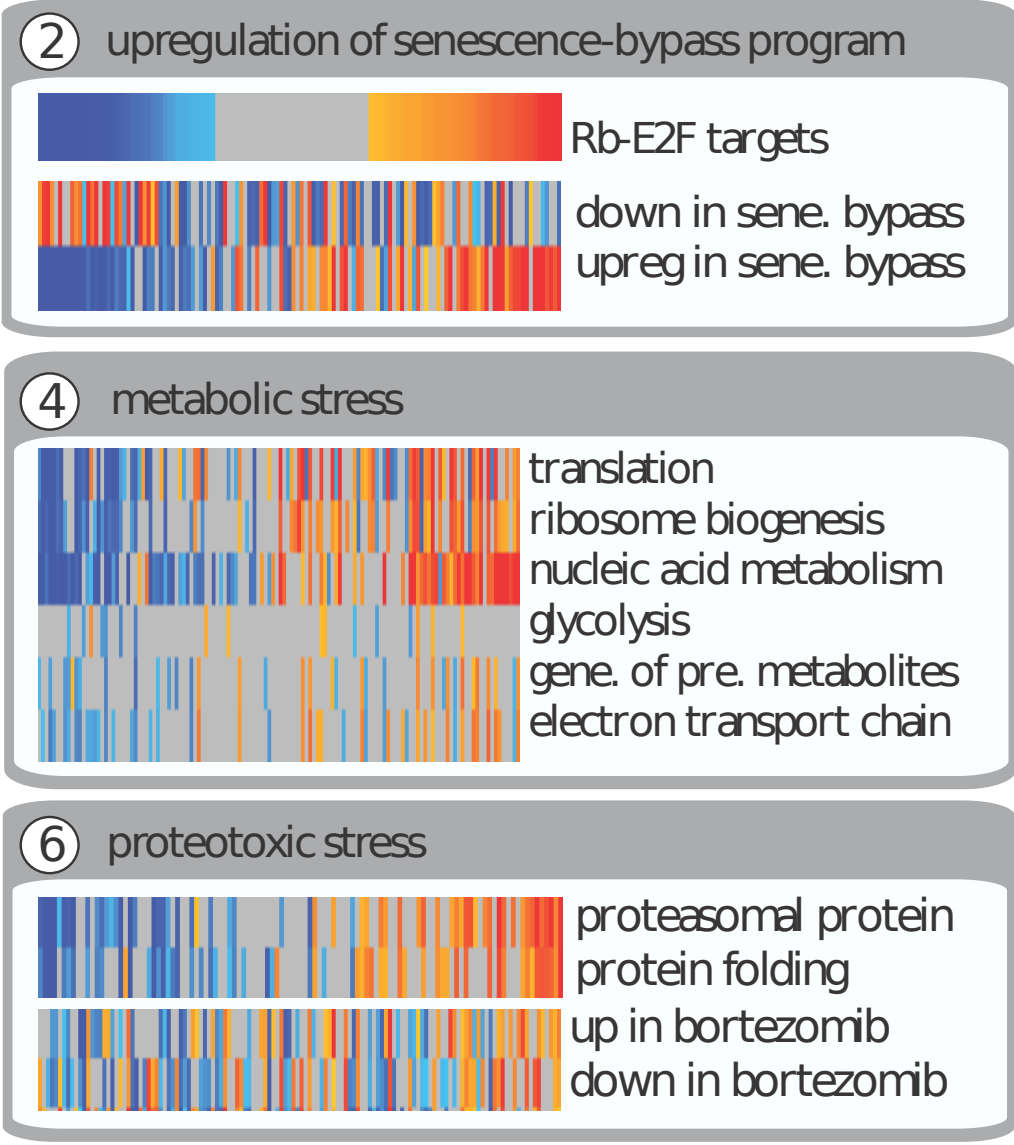
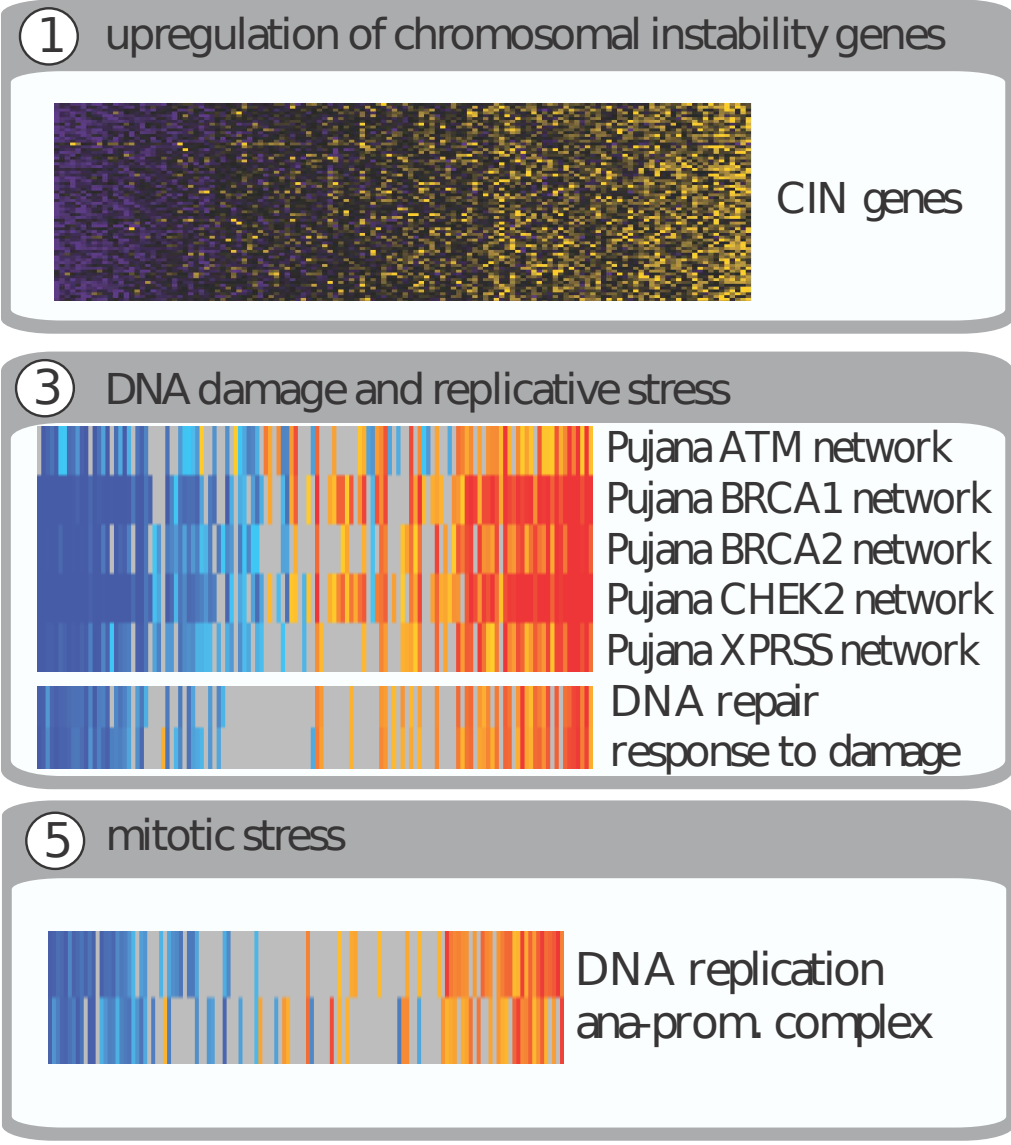


Supplementary Figure 8

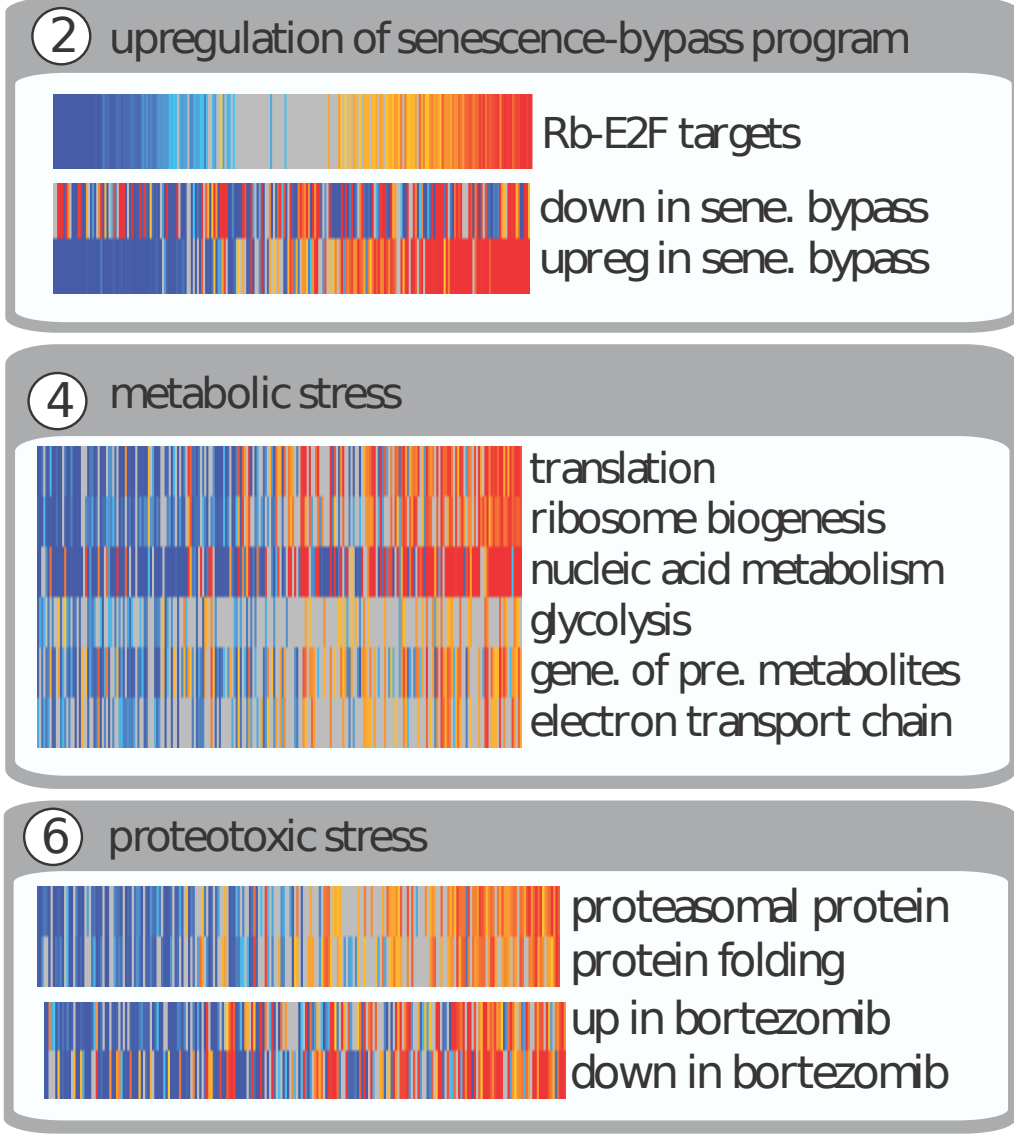
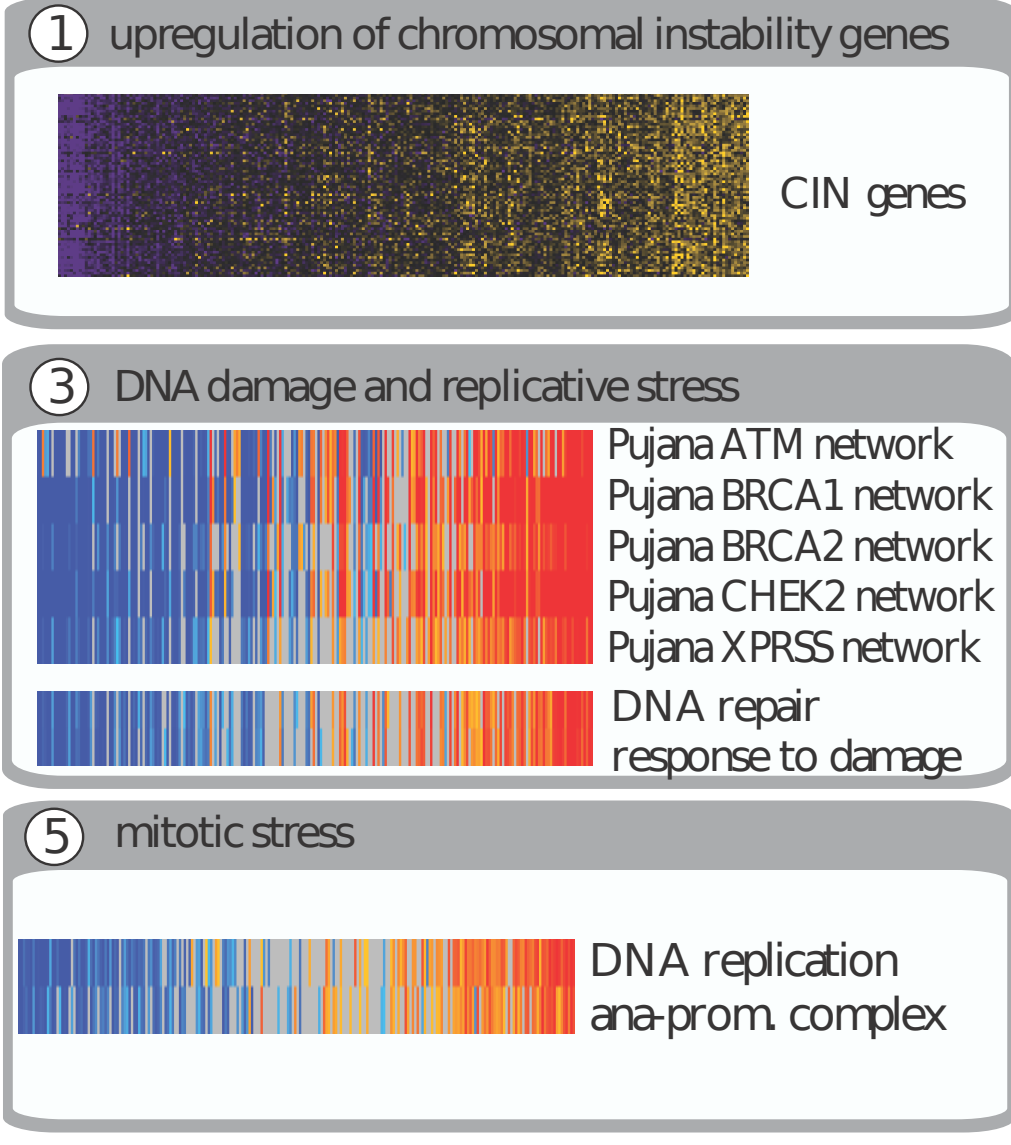
GSE3141: lung, Bild 2006



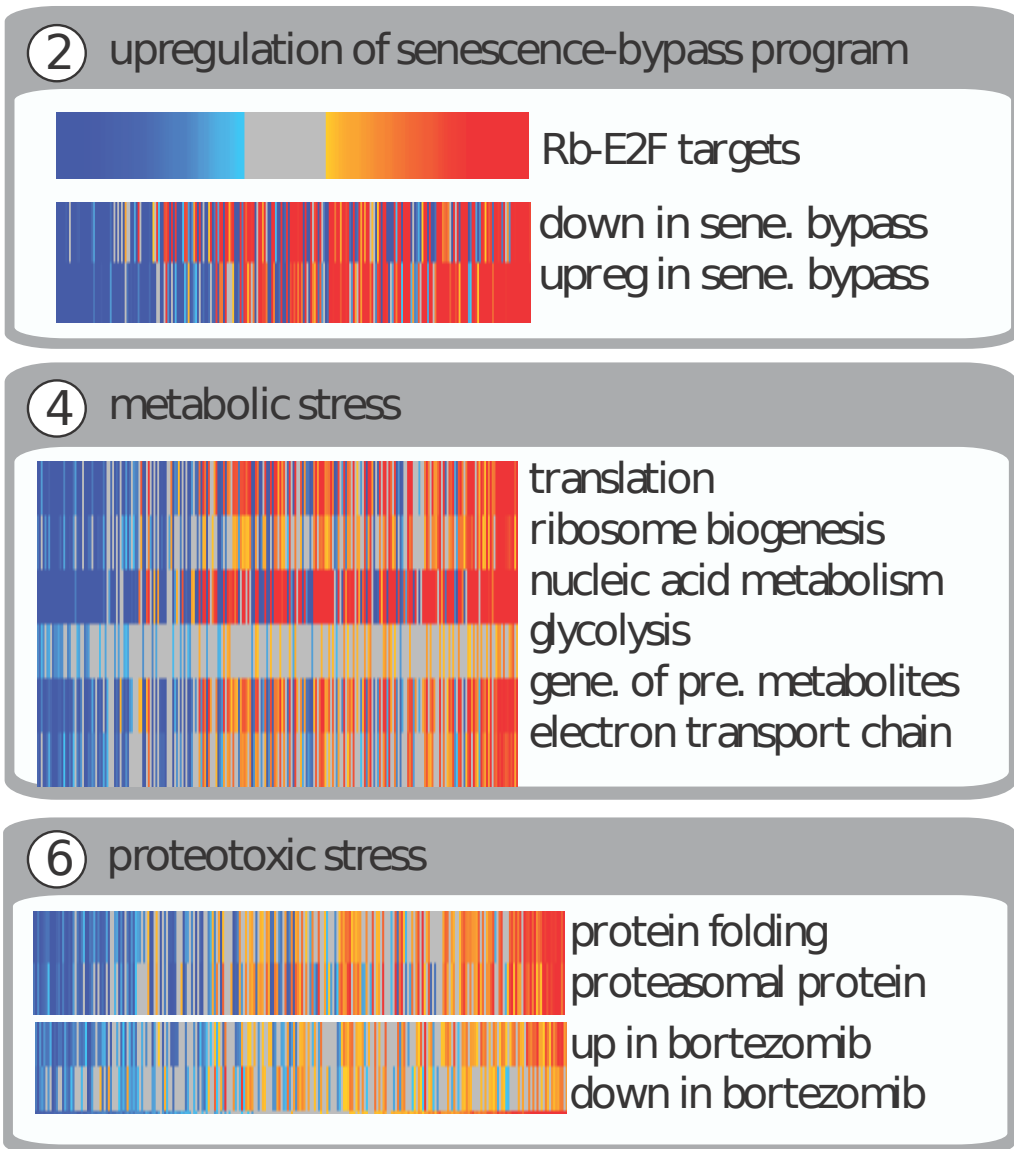
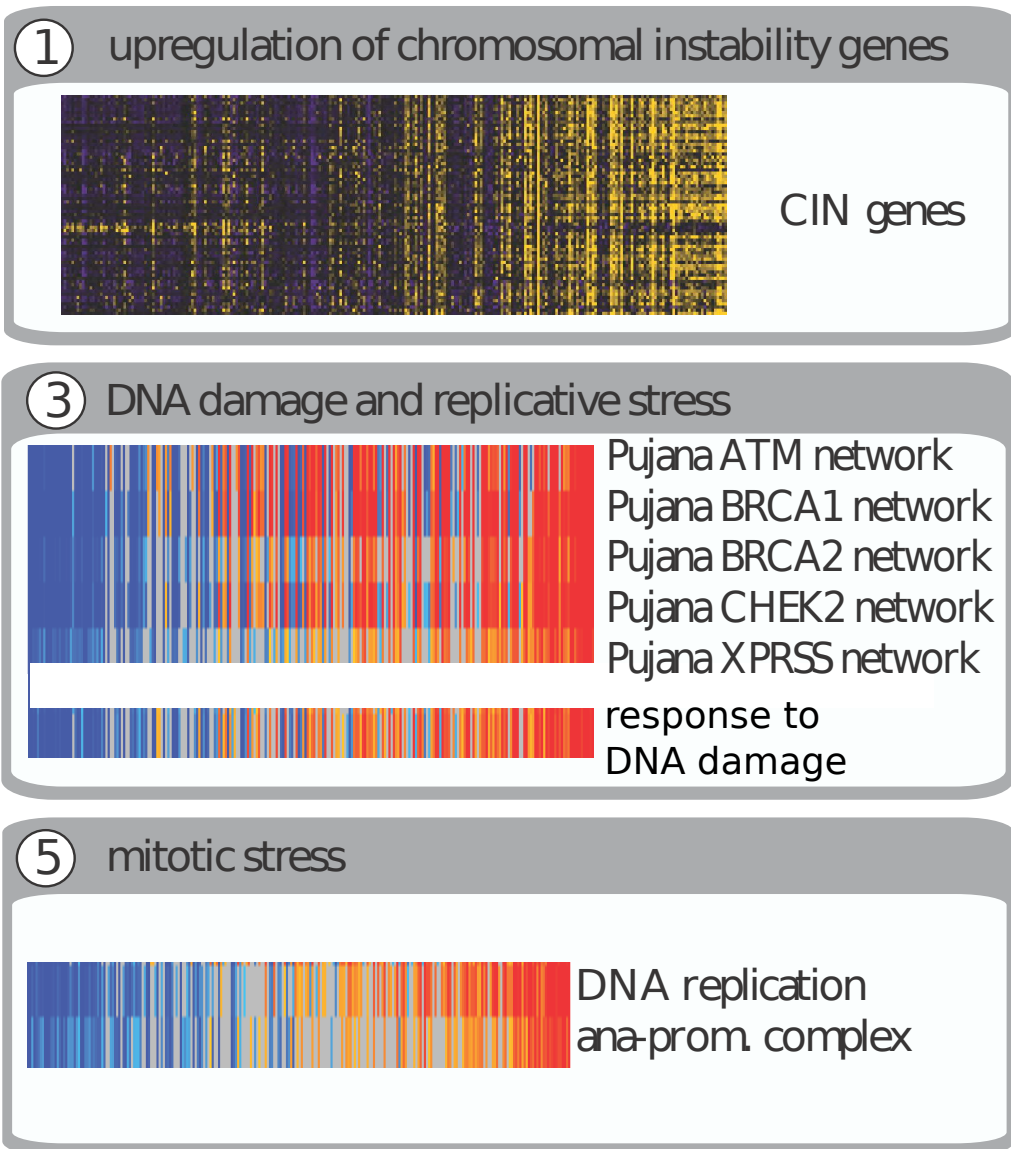
GSE4573: lung, Raponi 2006



GSE17538: colon, Smith 2010

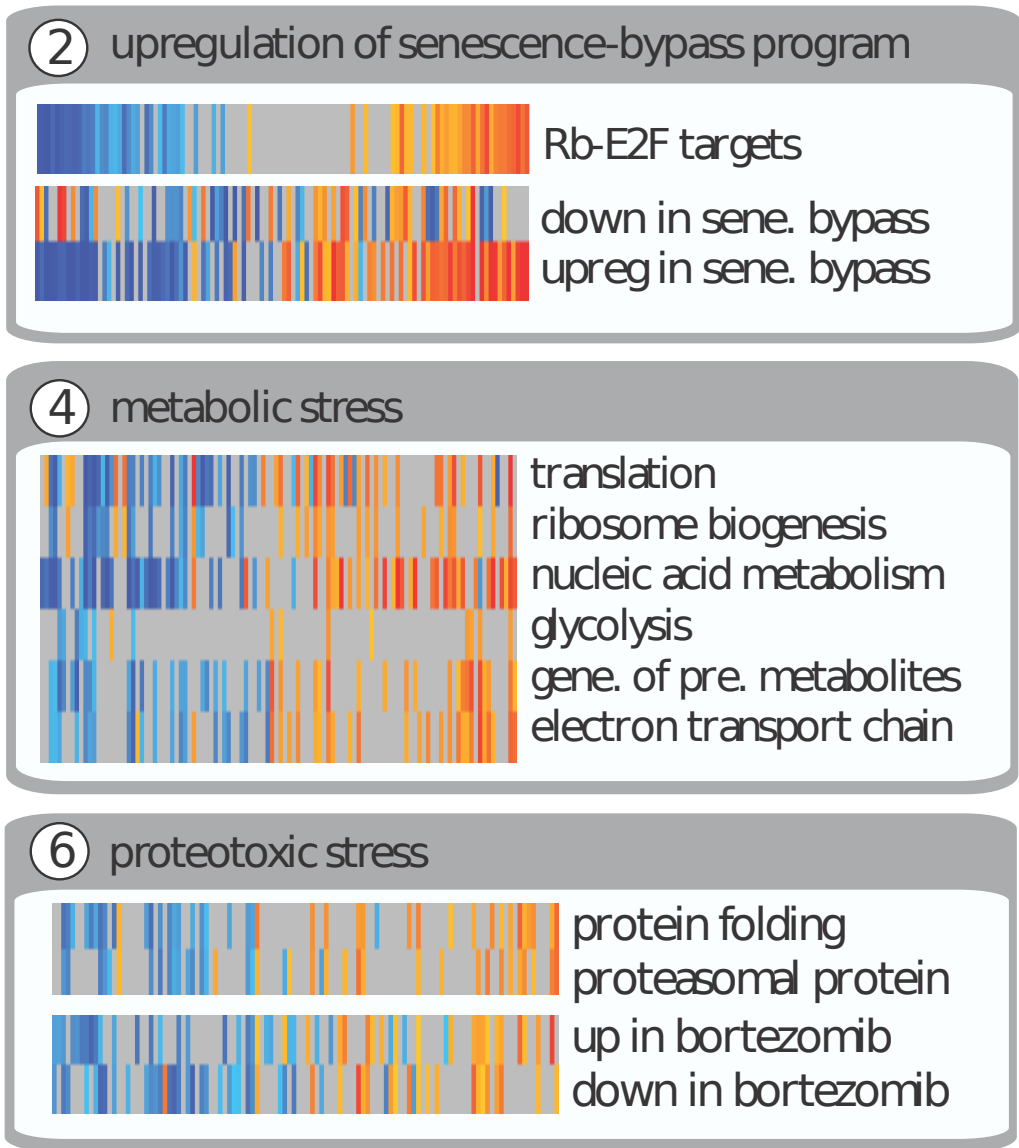
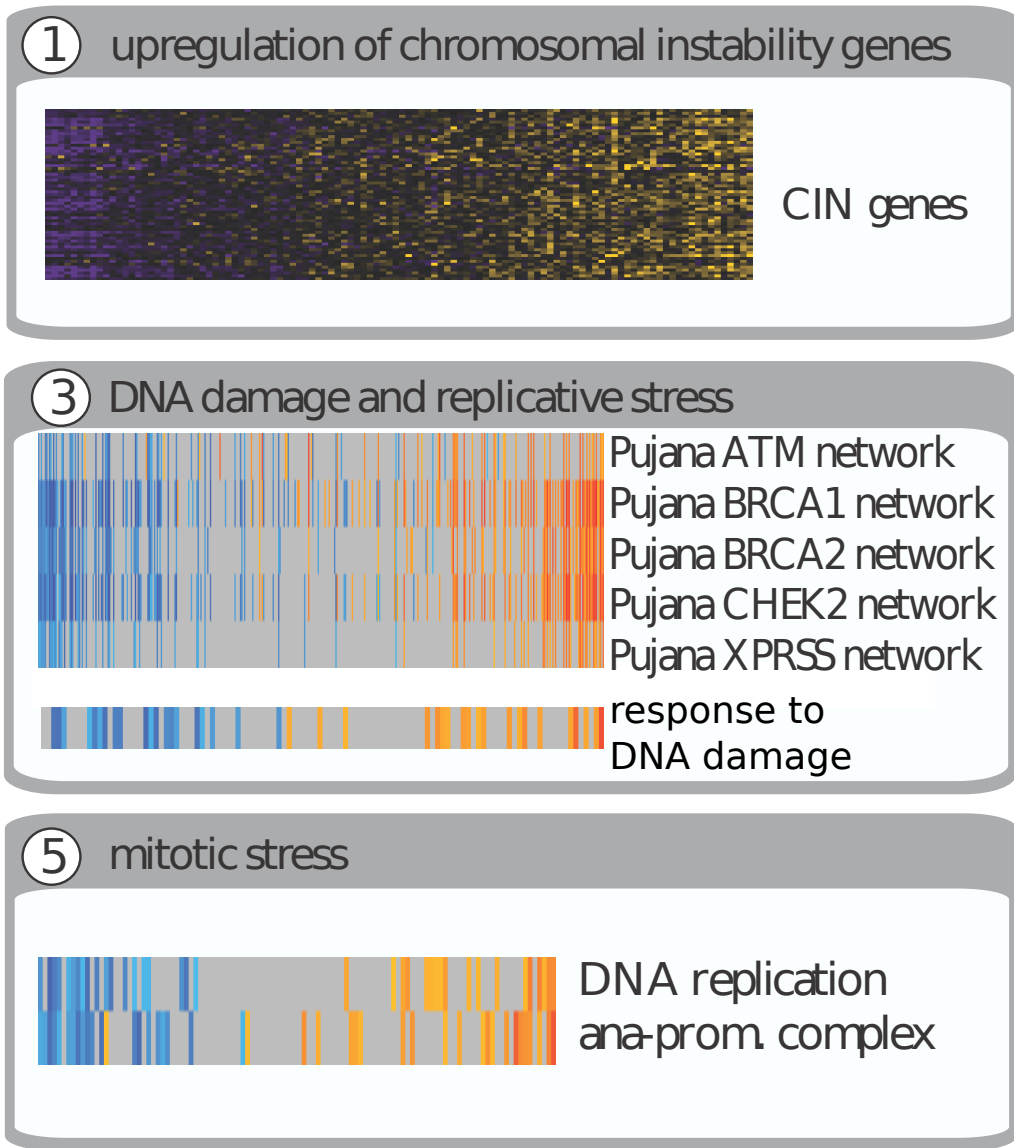


GSE13507: bladder, Kim 2010

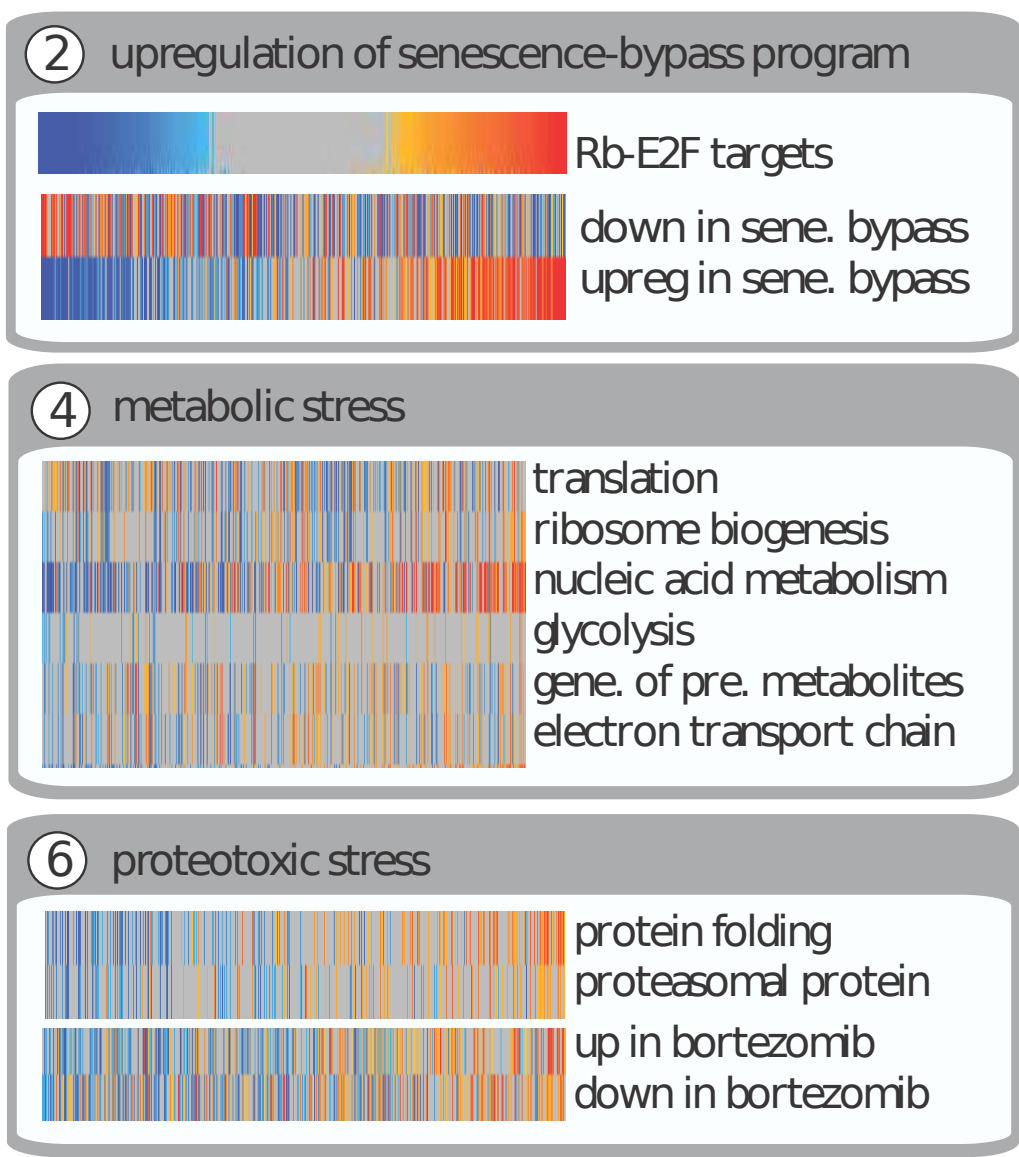
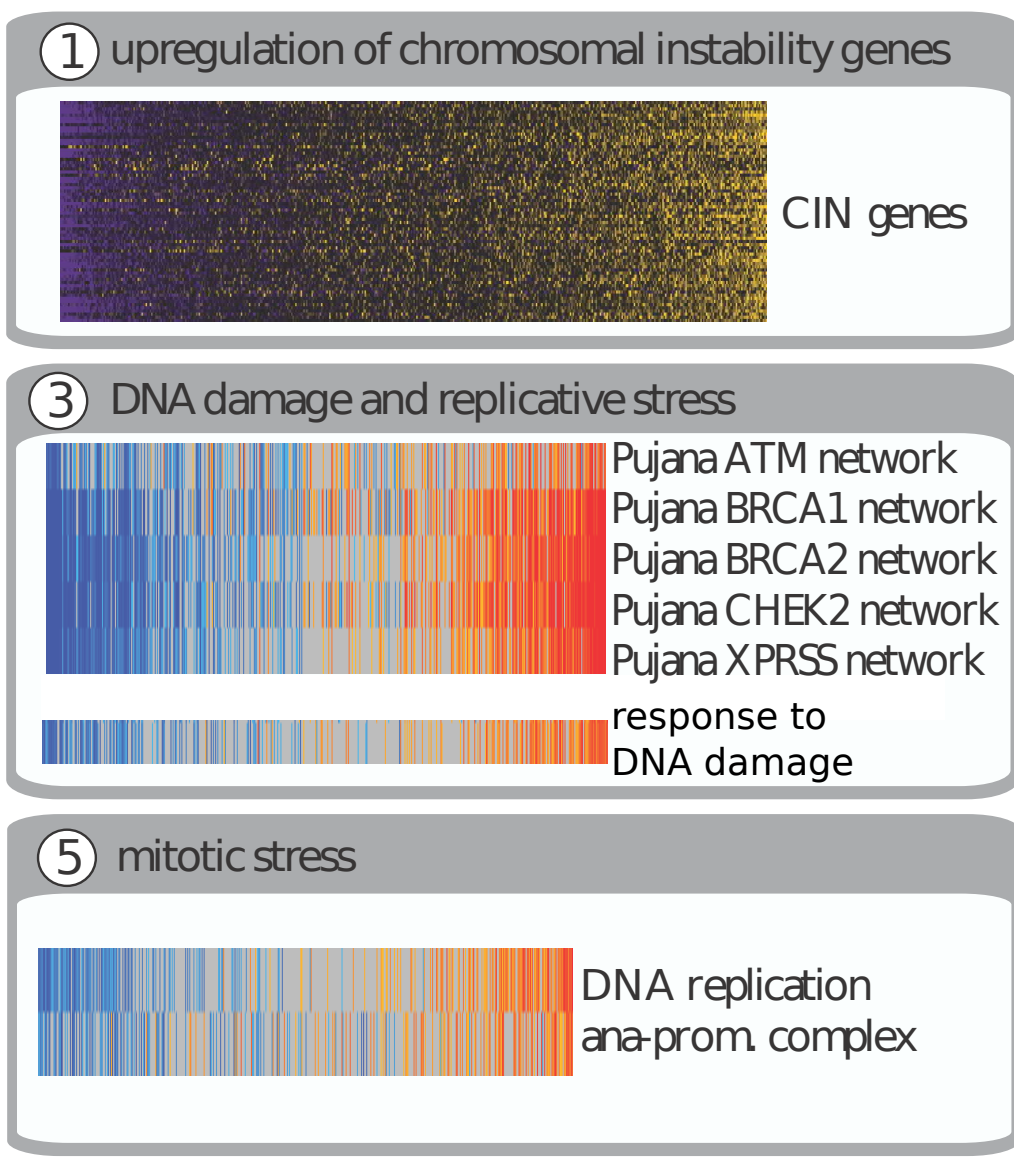


Supplementary Figure 8 cont'd

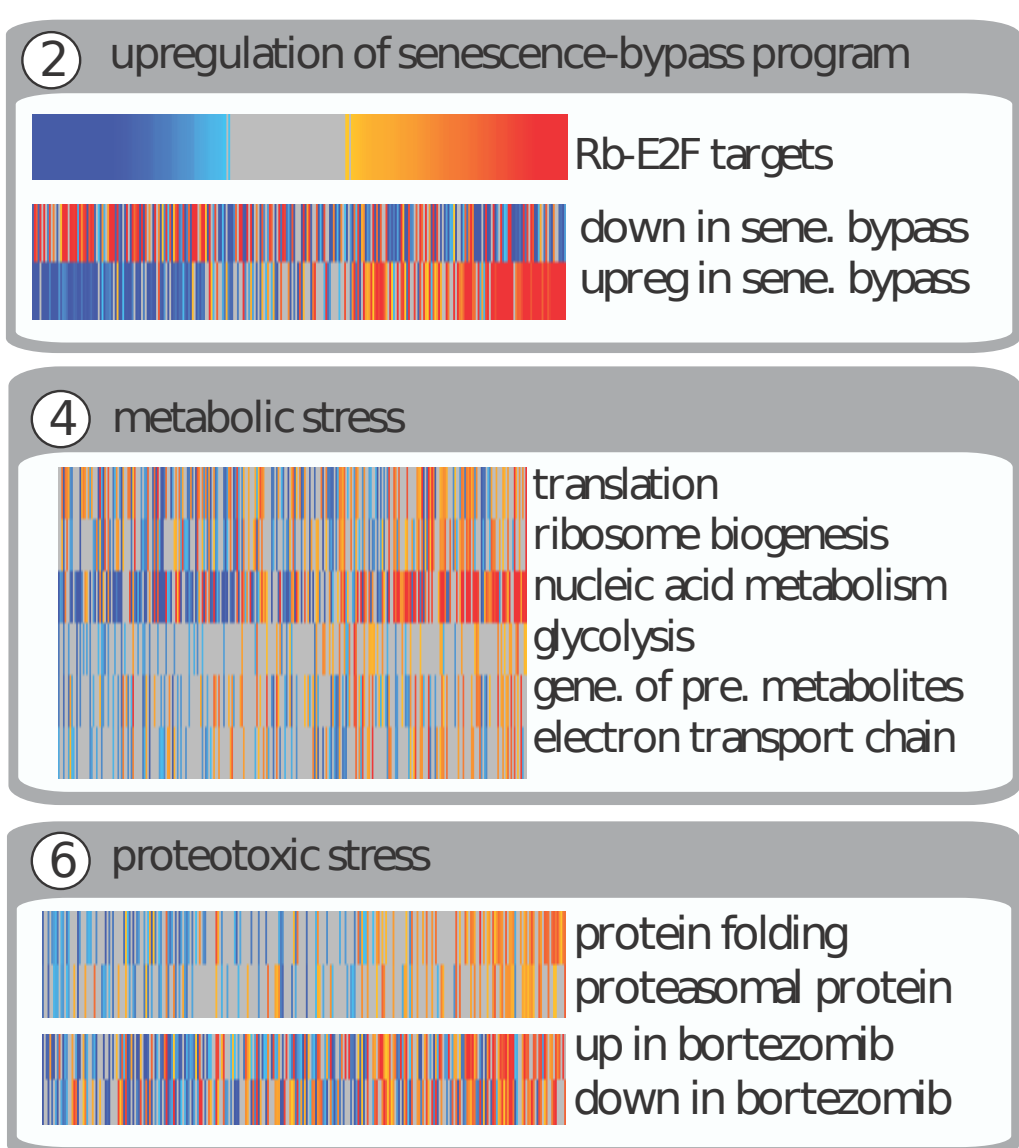
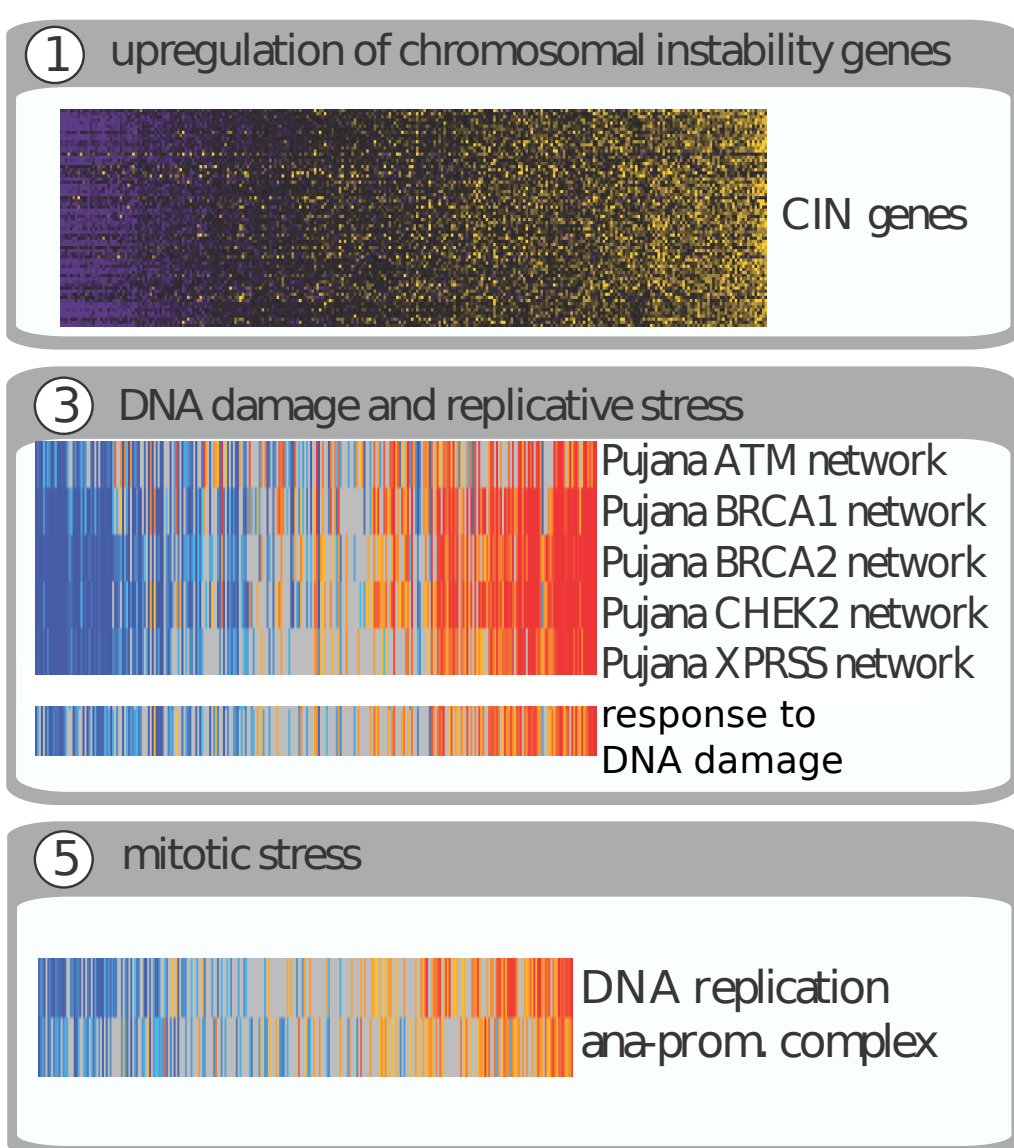
GSE13876: ovary, Crijns 2009



TCGA-OV: ovary, TCGA 2011



GSE9891: ovary, Tothill 2008



TCGA-GBM: brain, TCGA 2008

