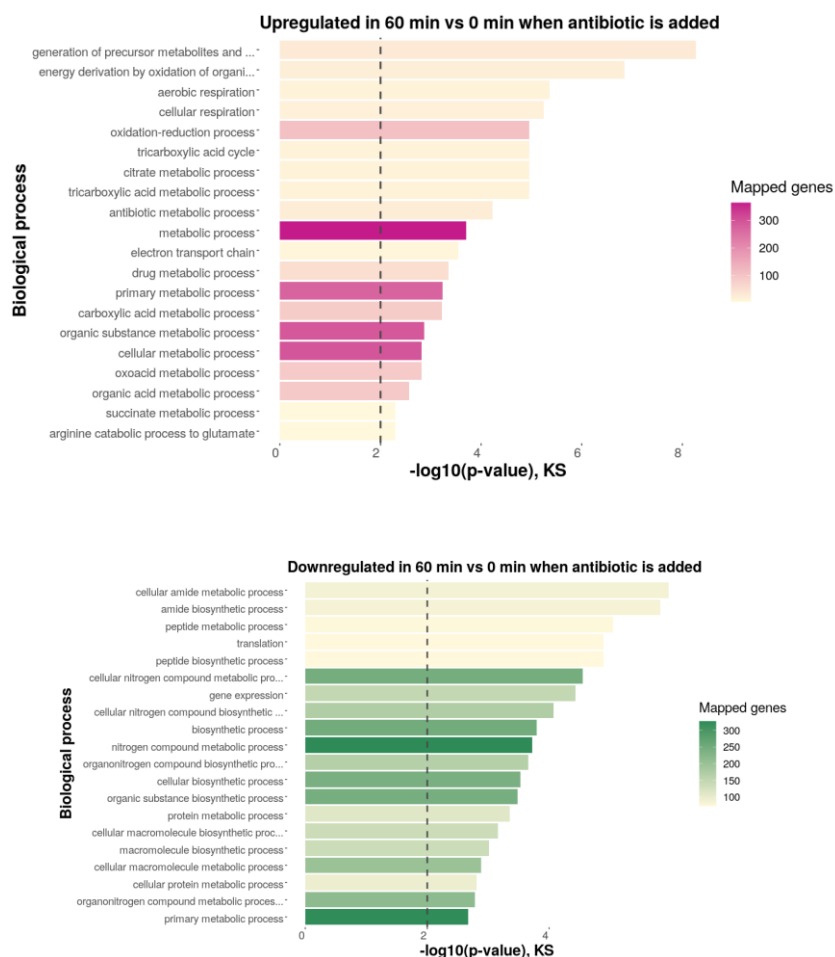


Example of plots which can be obtained by using scripts in this repository

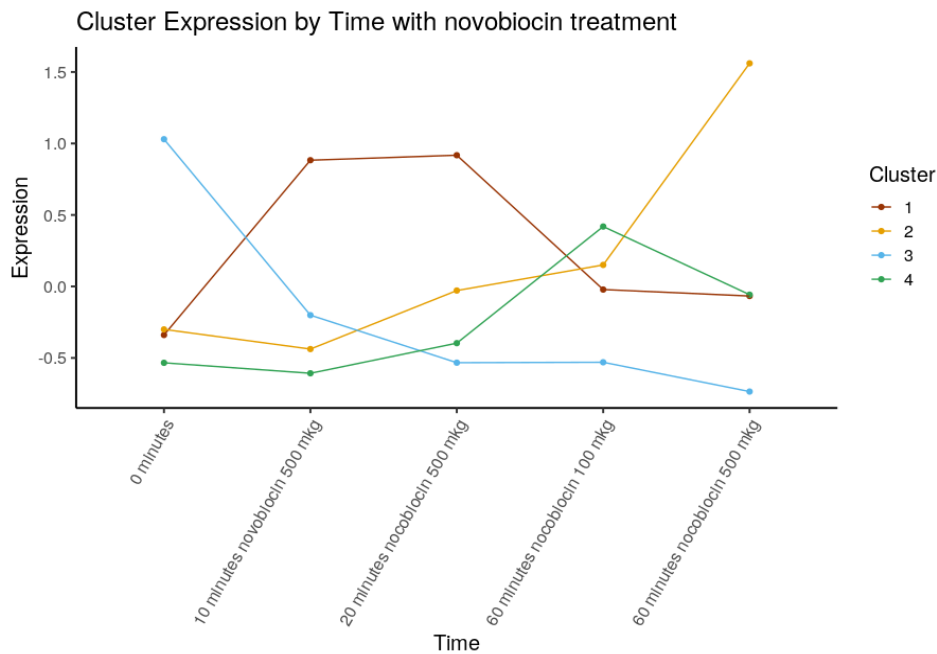
### *Enrichment\_analysis\_TopGO.r*

Ggplot R package and standard bar plot were used for visualisation of GO-enrichment data. Horizontal bars indicate  $-\log_{10}(\text{pvalue})$  for Kolmogorov- Smirnov test results (This value also can be interpreted as Enrichment score).

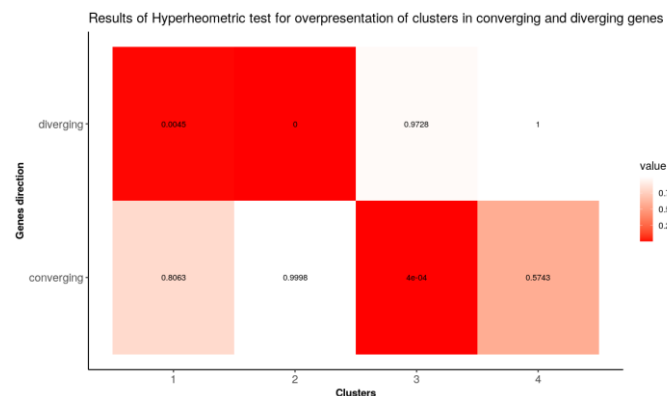


### *Clusterization.R*

Ggplot package also was used for visualization of mean expression dynamics of genes within clusters which was extracted based on their expression dynamics at different time points. Usual `geom_point` plot and `geom_line` for connection of dots were used for this visualization.



We also performed hyperheometric test to test hypothesis if converging ( $><$ ) or diverging ( $<>$ ) genes are enriched by genes within different clusters. For visualization of test results heatmap plot where p-value was used as value for cell colors was implemented.

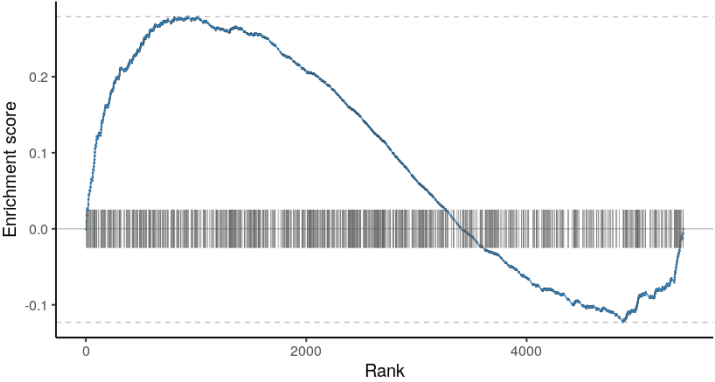


## FGSEA.r

For representation of GSEA analysis results the standard code of function *plotEnrichment* from fgsea R package was slightly changed and new function *plotEnr* was created.

Default line color was changed from green. At the example picture you can see it as blue, but you can change it in script and also you can change text size or vertical bar color if you want (Relevant comments can be found in this part of FGSEA.r script)

Diverging genes forward (>)



Expression dynamics of leucine operon genes

