

# Differential Analysis

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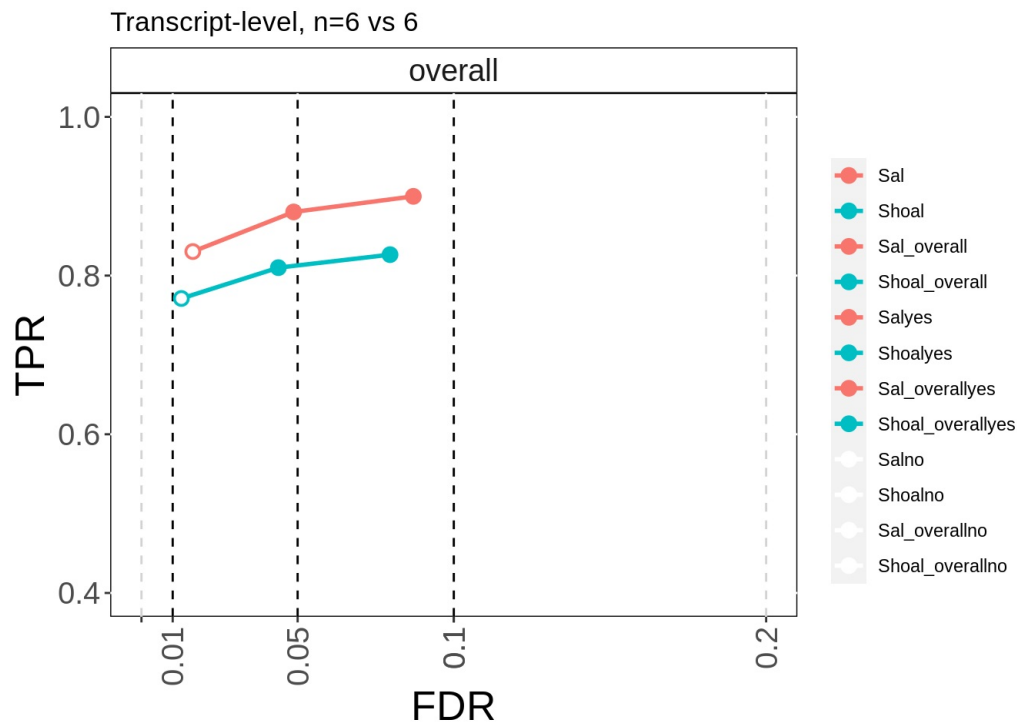
12/31/2021

```
suppressPackageStartupMessages(source("run_limma.R"))  
dirSal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/sal_best/vbprior=1e0"  
load("/fs/cbcb-lab/rob/students/noor/Uncertainty/mikelove-swimdown-216aldd/simulate/data/simulate.rda")
```

## Doing differential analysis on old shoal

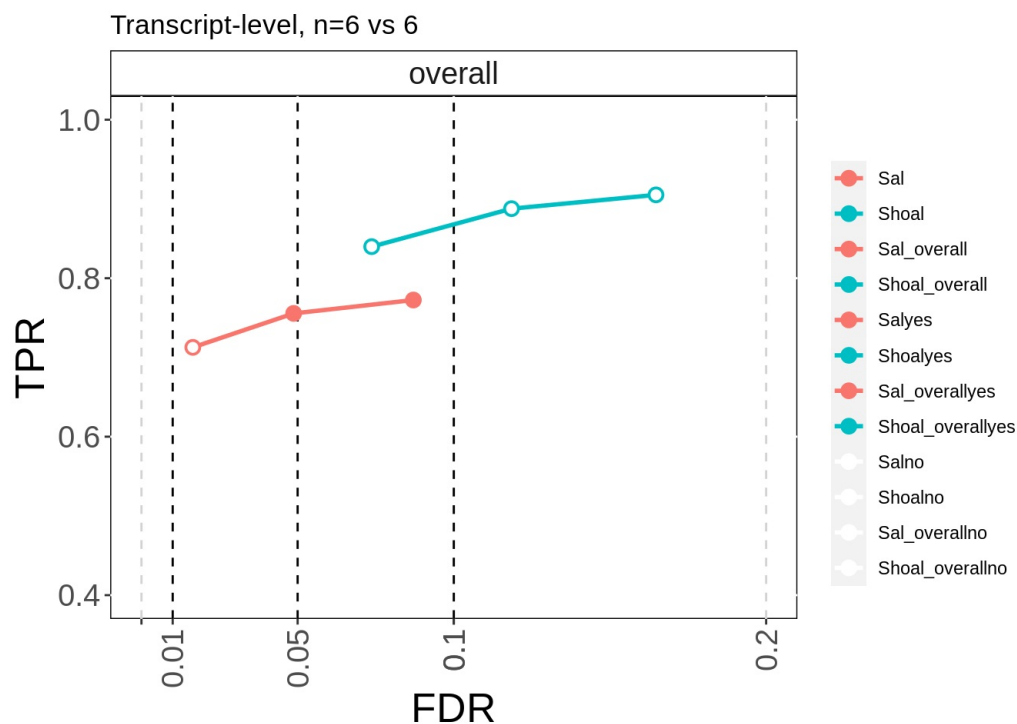
Weight 0.00001

```
dirShoal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/shoal_best/vbprior=1e0/c=1e-05"  
suppressWarnings(runDE(dirSal, dirShoal))
```



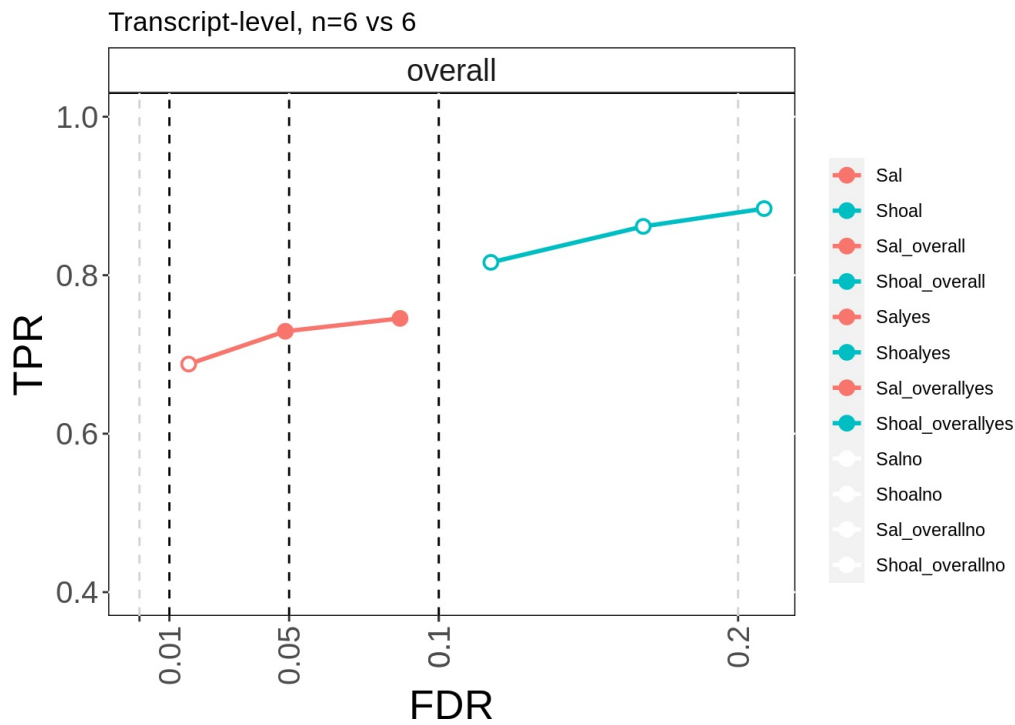
Weight 100 aka optimal

```
dirShoal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/shoal_best/vbprior=1e0/c=100"  
runDE(dirSal, dirShoal)
```



## Weight 100000 (large)

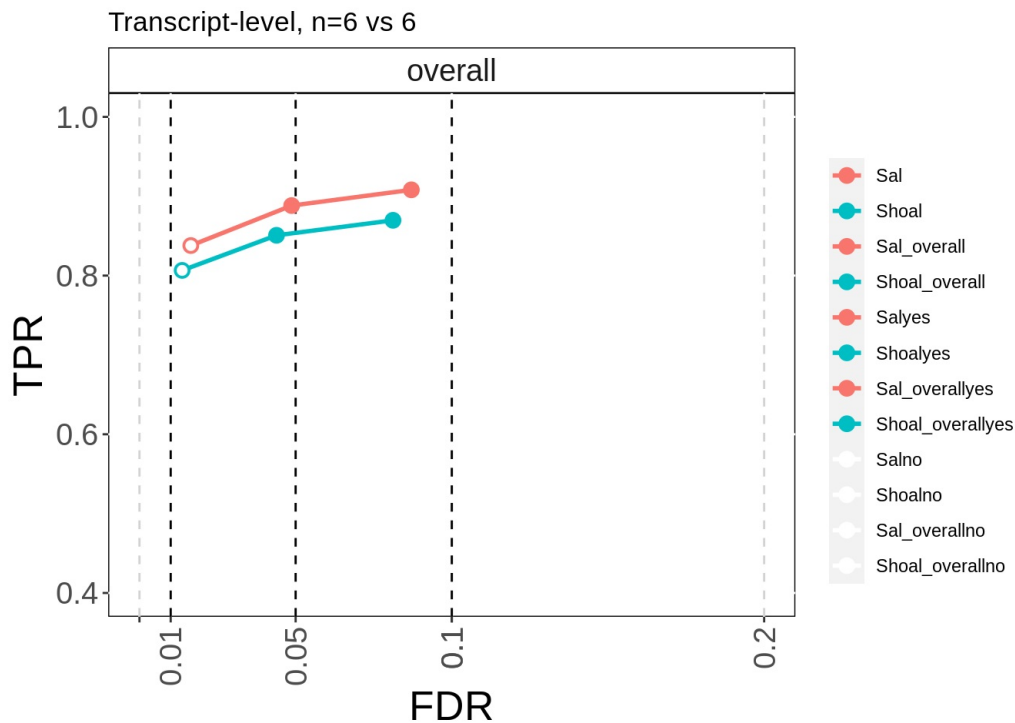
```
dirShoal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/shoal_best/vbprior=1e0/c=100000"  
suppressWarnings(runDE(dirSal, dirShoal))
```



## Doing differential analysis on shoal with fixed prior

### Weight 0.00001

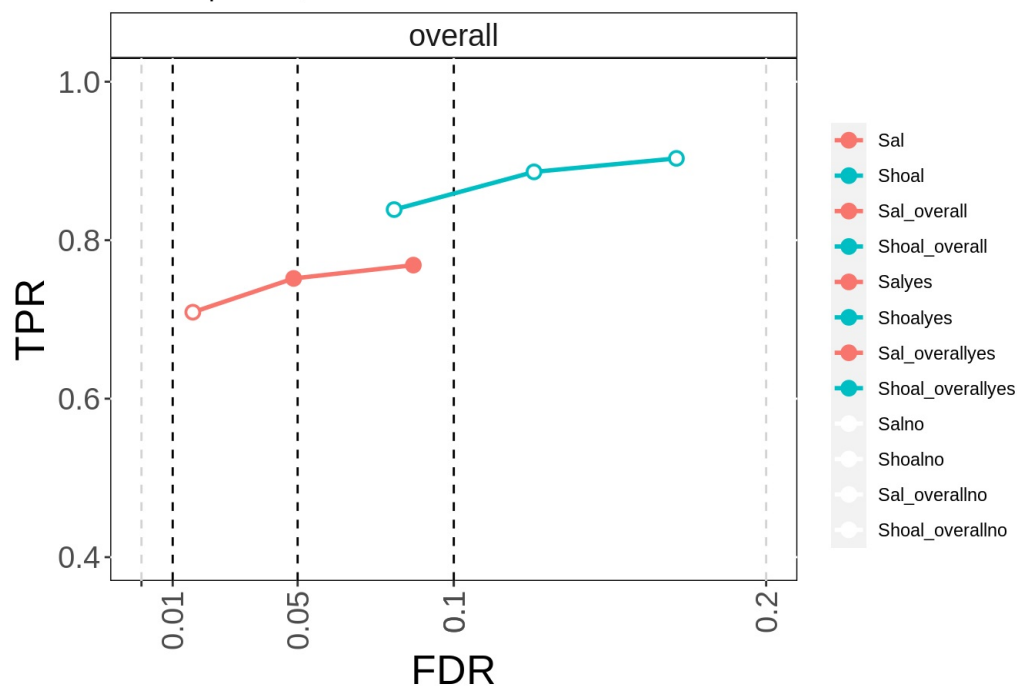
```
dirShoal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/shoal_best_fixed_prior/vbprior=1e0/c=1e-05"  
suppressWarnings(runDE(dirSal, dirShoal))
```



### Weight 100 aka optimal

```
dirShoal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/shoal_best_fixed_prior/vbprior=1e0/c=100"  
suppressWarnings(runDE(dirSal, dirShoal))
```

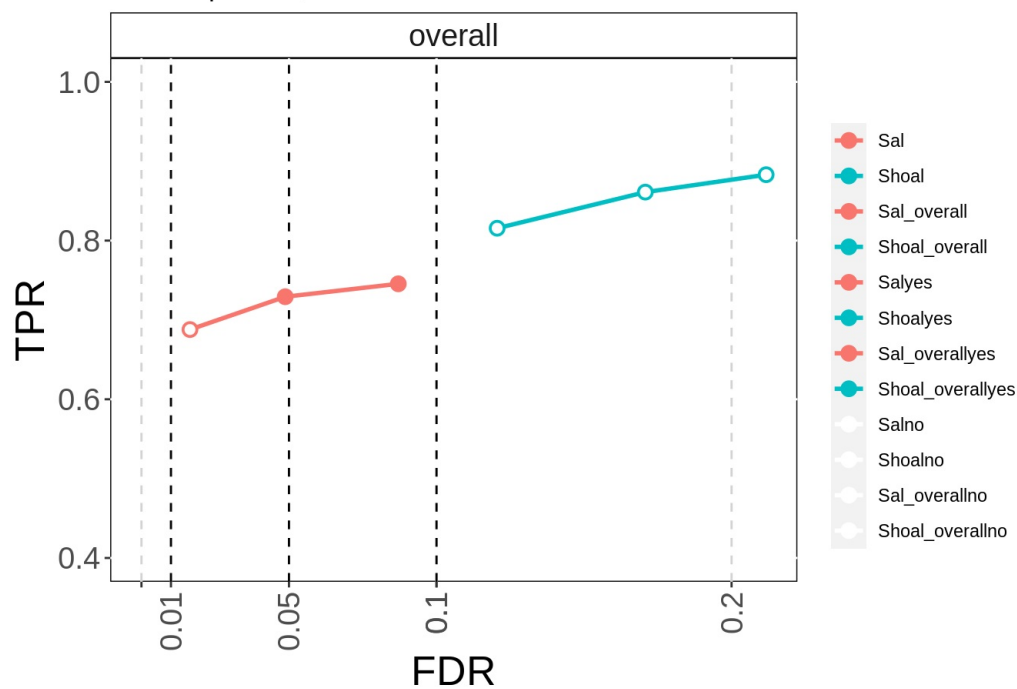
Transcript-level, n=6 vs 6



Weight 100000

```
dirShoal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/shoal_best_fixed_prior/vbprior=1e0/c=100000"
suppressWarnings(runDE(dirSal, dirShoal))
```

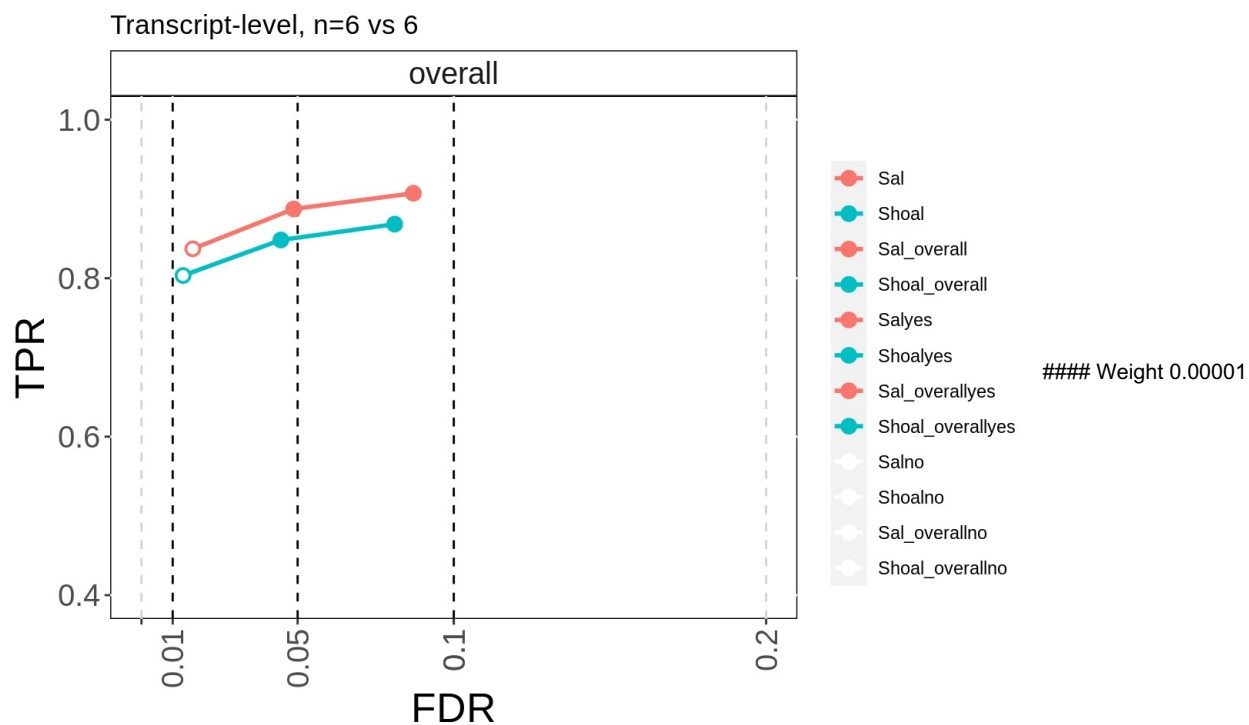
Transcript-level, n=6 vs 6



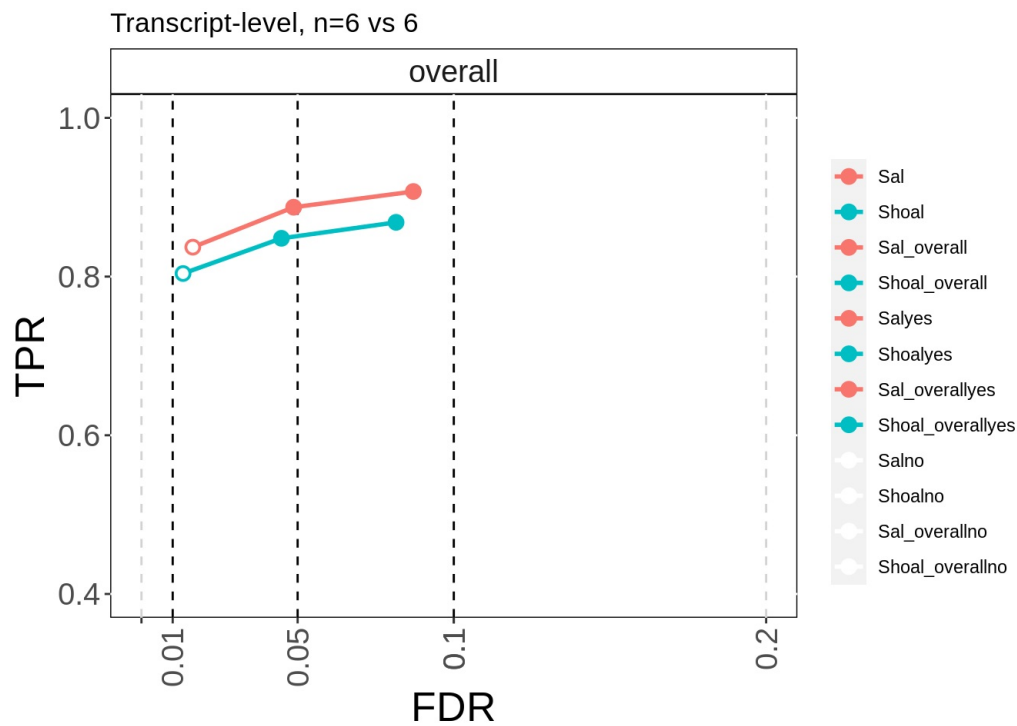
Doing differential analysis on updated shoal (Requant v2)

Weight 0

```
dirShoal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/shoal_best_updated/vbprior=1e0/c=0"
suppressWarnings(runDE(dirSal, dirShoal))
```

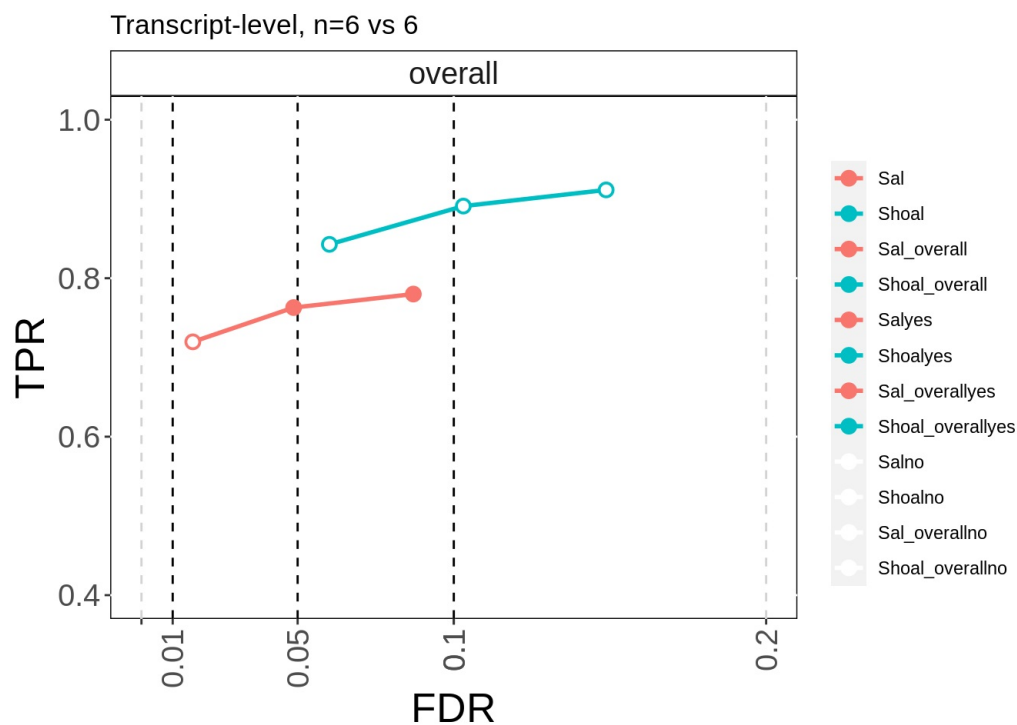


```
dirShoal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/shoal_best_updated/vbprior=1e0/c=1e-05"
suppressWarnings(runDE(dirSal, dirShoal))
```



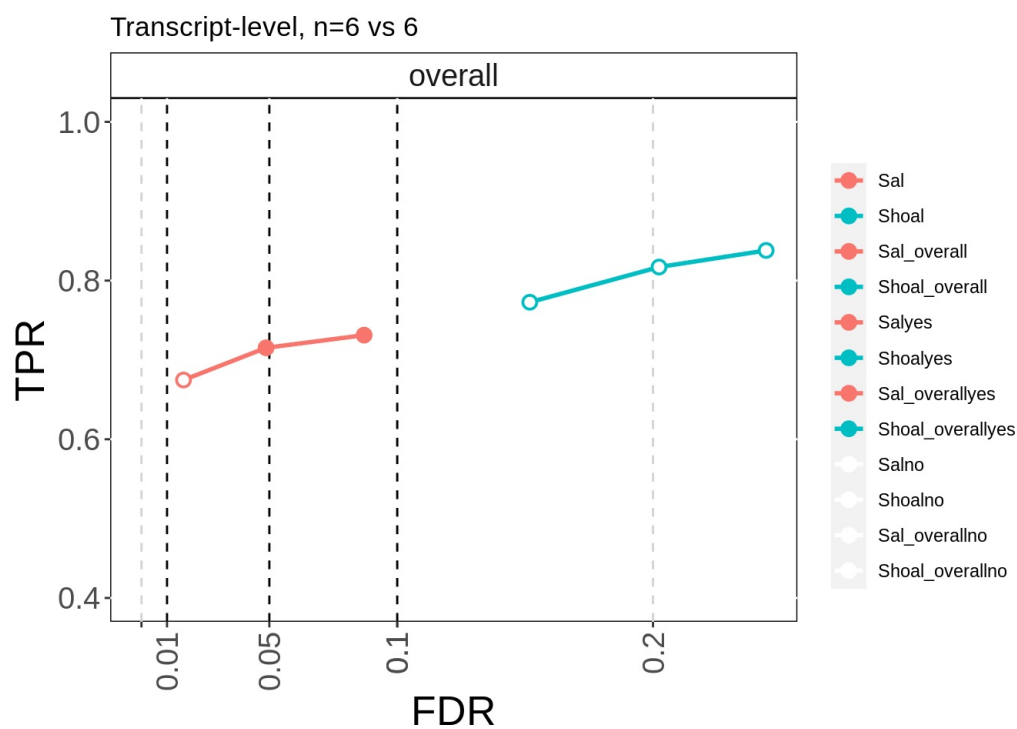
Weight 0.1 (Optimal)

```
dirShoal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/shoal_best_updated/vbprior=1e0/c=0.1"
suppressWarnings(runDE(dirSal, dirShoal))
```



Weight 100000 (large)

```
dirShoal <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/shoal_best_updated/vbprior=1e0/c=100000"
suppressWarnings(runDE(dirSal, dirShoal))
```

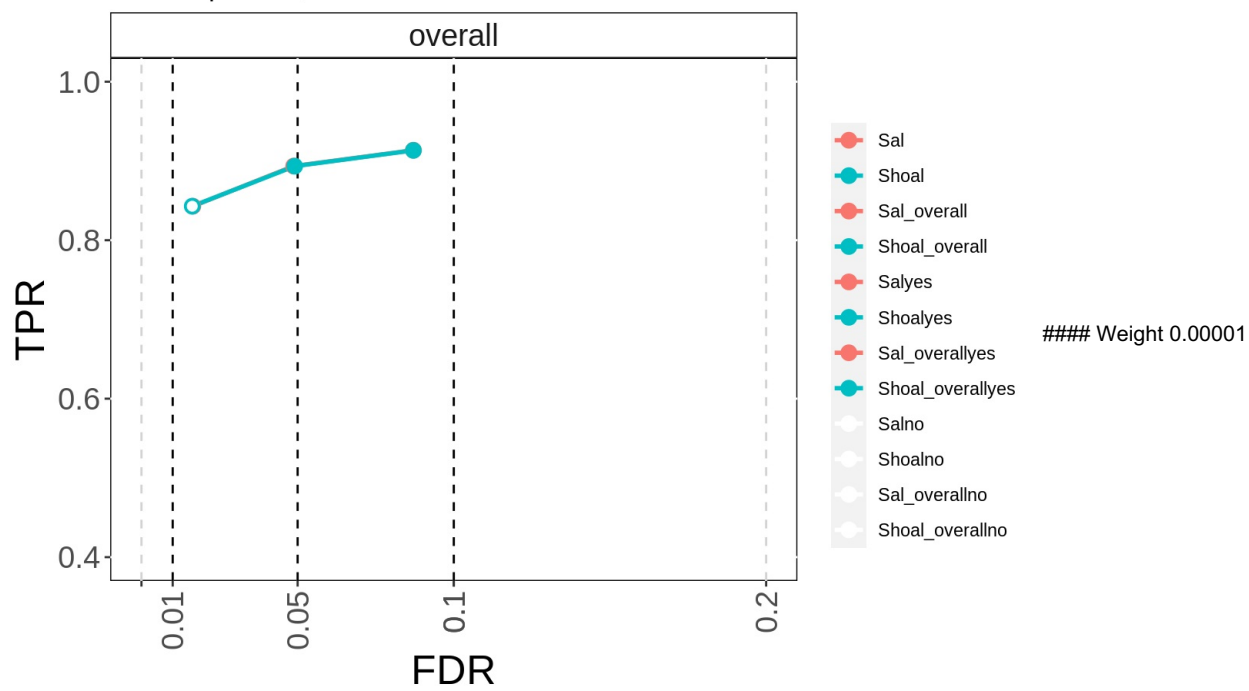


Doing differential analysis on shoal where factor has been set to 1 (Requant v2)

Weight 0

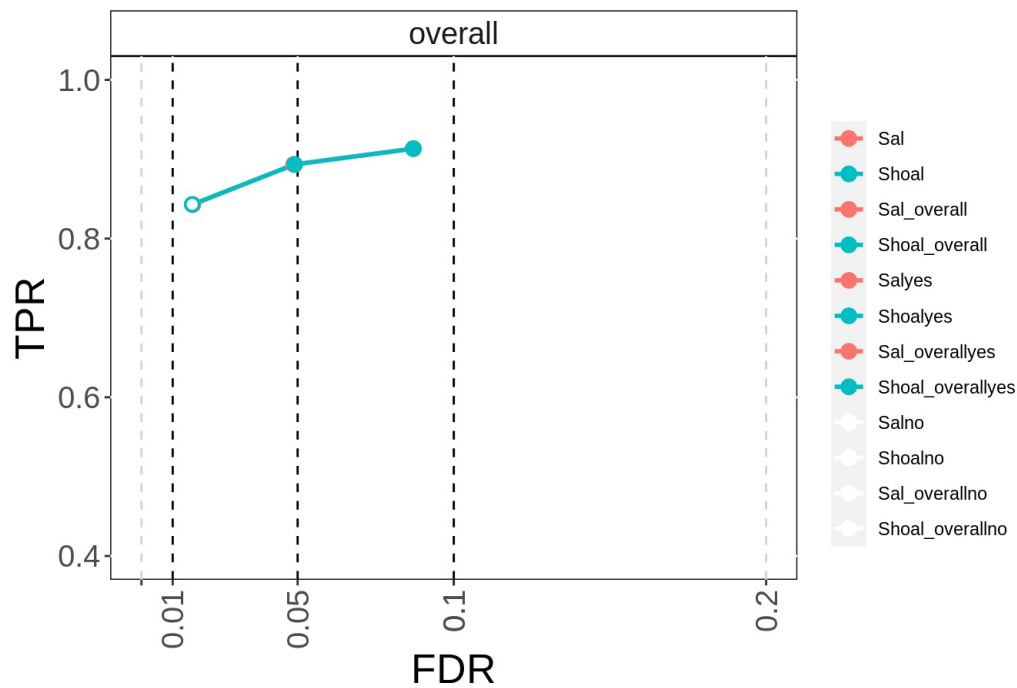
```
dir <- "/fs/cbcb-lab/rob/students/noor/shoal_proj/swim/shoal_best_uni_fac/vbprior=1e0/"
dirShoal <- file.path(dir, "c=0")
suppressWarnings(runDE(dirSal, dirShoal))
```

Transcript-level, n=6 vs 6



```
dirShoal <- file.path(dir, "c=1e-05")
suppressWarnings(runDE(dirSal, dirShoal))
```

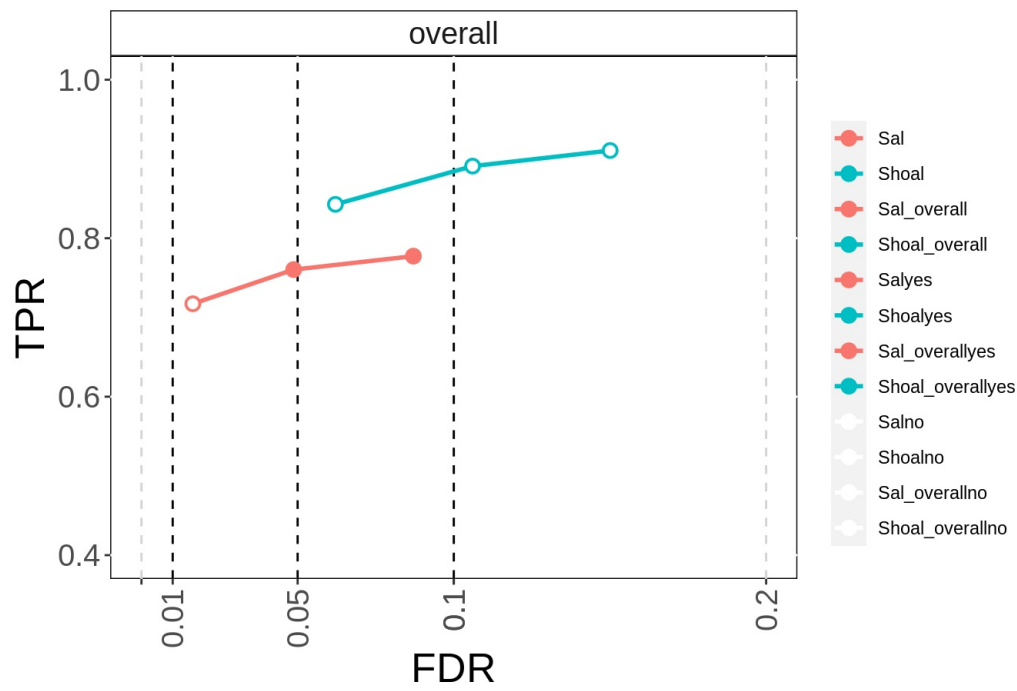
Transcript-level, n=6 vs 6



Weight 0.1 (Optimal)

```
dirShoal <- file.path(dir, "c=0.1")
suppressWarnings(runDE(dirSal, dirShoal))
```

Transcript-level, n=6 vs 6



Weight 100000 (large)

```
dirShoal <- file.path(dir, "c=100000")
suppressWarnings(runDE(dirSal, dirShoal))
```

Transcript-level, n=6 vs 6

