

## R-code for ROC - AUC determinations

```
library(pROC)
a=read.csv("~/Desktop/a.txt",sep=";",header=FALSE)
p=read.csv("~/Desktop/p.txt",sep=";",header=FALSE)
a1 <- unlist(a)
p1 <- unlist(p)
roc(a1, p1)
roc1 <- roc(a1,p1, percent=TRUE,
            # arguments for ci
            ci=TRUE, boot.n=100, ci.alpha=0.9, stratified=FALSE,
            # arguments for plot
            plot=TRUE, auc.polygon=TRUE, max.auc.polygon=TRUE, grid=TRUE,
            print.auc=TRUE, show.thres=TRUE)

# CI of the curve
sens.ci <- ci.se(roc1, specificities=seq(0, 100, 5))
plot(sens.ci, type="shape", col="lightblue")
plot(sens.ci, type="bars")
```