

covid.post.test.R

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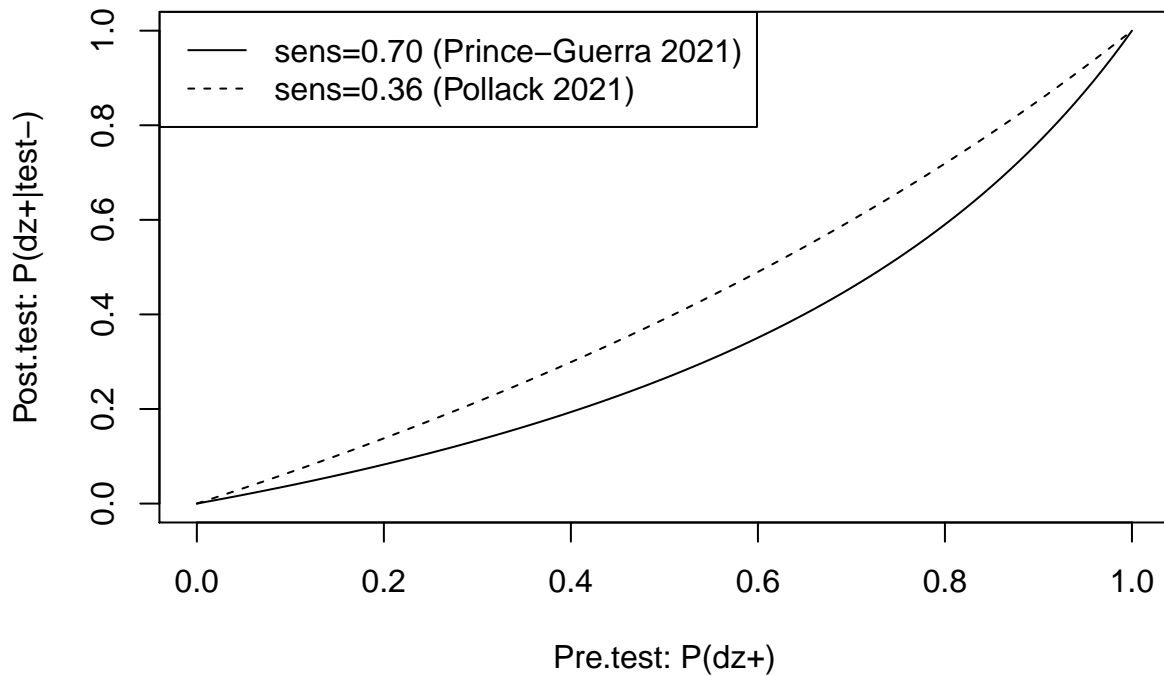
```
# To compute

like.rat=function(sens,spec,pretest){(1-sens)/((1-sens)*pretest+(spec)*(1-pretest))}
pretest=0.2

post.test.prob = function(sens,spec,pretest){
  like.rat(sens=sens,spec=spec,pretest=pretest)*pretest
}

pre.tests = seq(0,1,0.01)
get.post.tests = function(sens,spec,pretests){
  post.tests = c()
  for(i in 1:length(pre.tests)){
    post.tests[i]=post.test.prob(sens=sens,spec=spec,pretest=pre.tests[i])
  }
  post.tests
}

post.tests.6=get.post.tests(sens=0.64,spec=1,pretests)
plot(pre.tests,post.tests.6,type='l',xlab="Pre.test: P(dz+)",ylab="Post.test: P(dz+|test-)",lty=1)
post.tests.36=get.post.tests(sens=0.36,spec=1,pretests)
lines(pre.tests,post.tests.36,lty=2)
abline(v=0.2)
legend("topleft",c("sens=0.70 (Prince-Guerra 2021)","sens=0.36 (Pollack 2021)"),lty=c(1,2))
```



```
#post.test.knox
#abline(h=post.test.knox)
```

```
post.tests.6=get.post.tests(sens=0.64,spec=1,pretests=post.tests.6)
plot(pre.tests,post.tests.6,type='l',xlab="Pre.test: P(dz+|test-)",ylab="Post.test: P(dz+|test-,test-)"
post.tests.36=get.post.tests(sens=0.36,spec=1,pretests=post.tests.36)
lines(pre.tests,post.tests.36,lty=2)
#abline(v=0.2)
legend("topleft",c("sens=0.70 (Prince-Guerra 2021)","sens=0.36 (Pollack 2021)"),lty=c(1,2))
```

