simulate multiple prognostic factors

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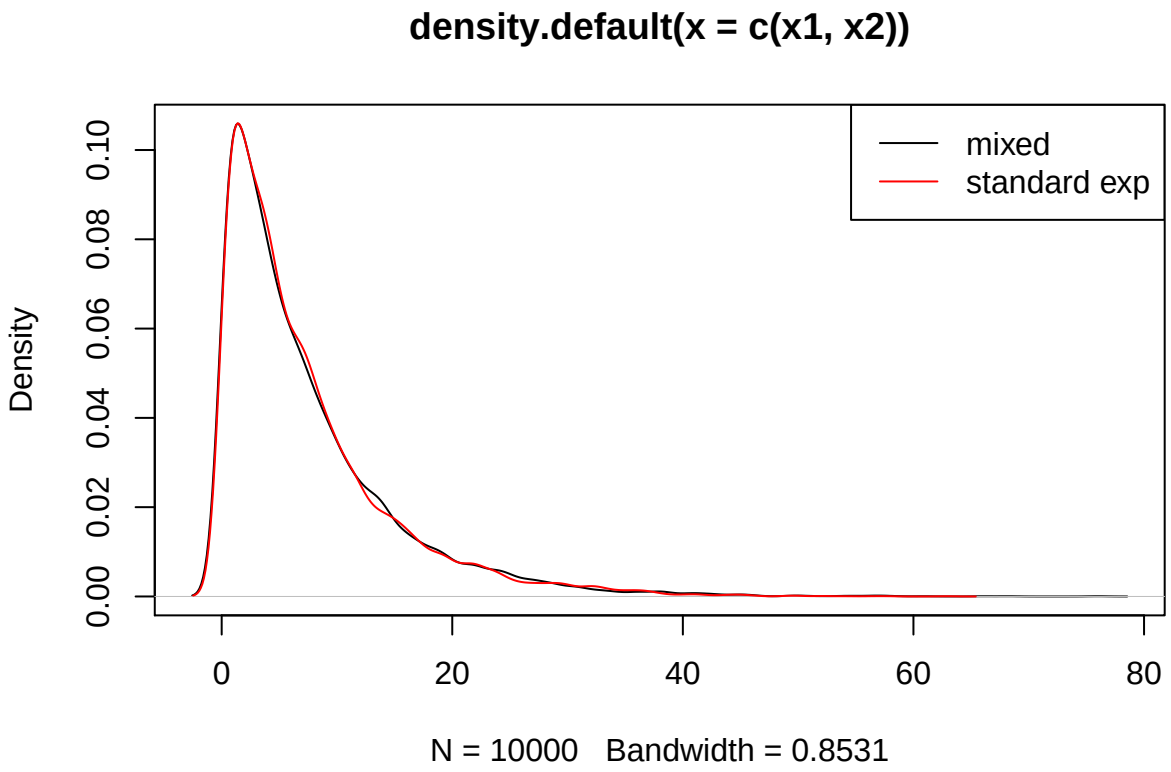
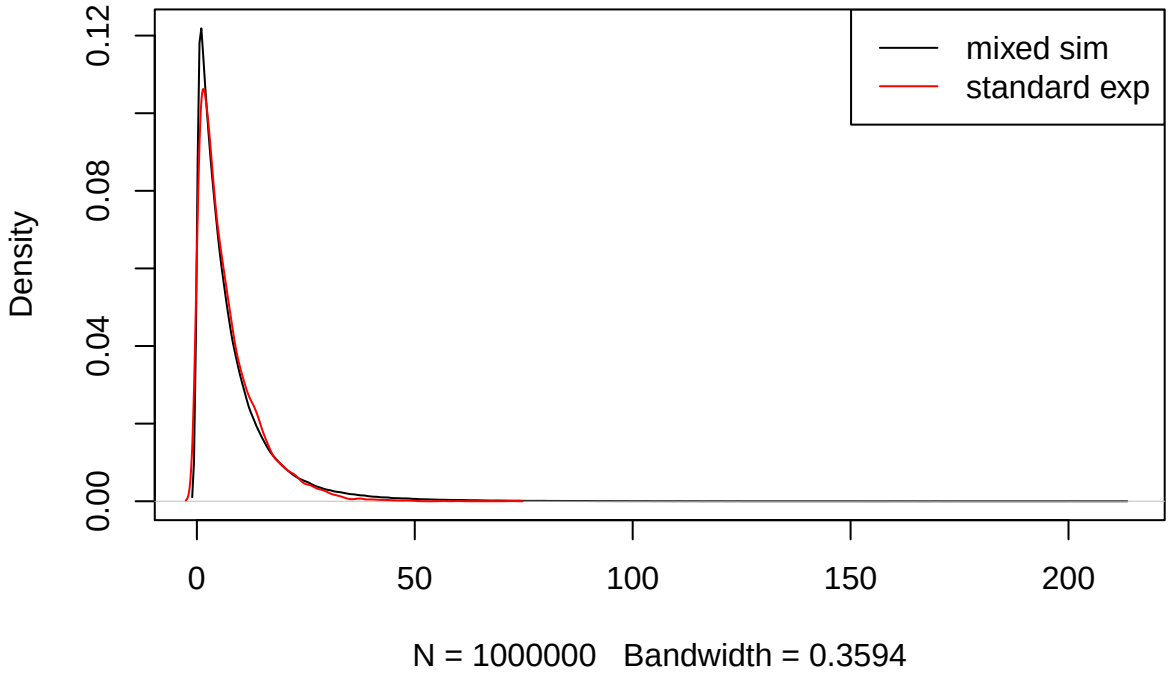
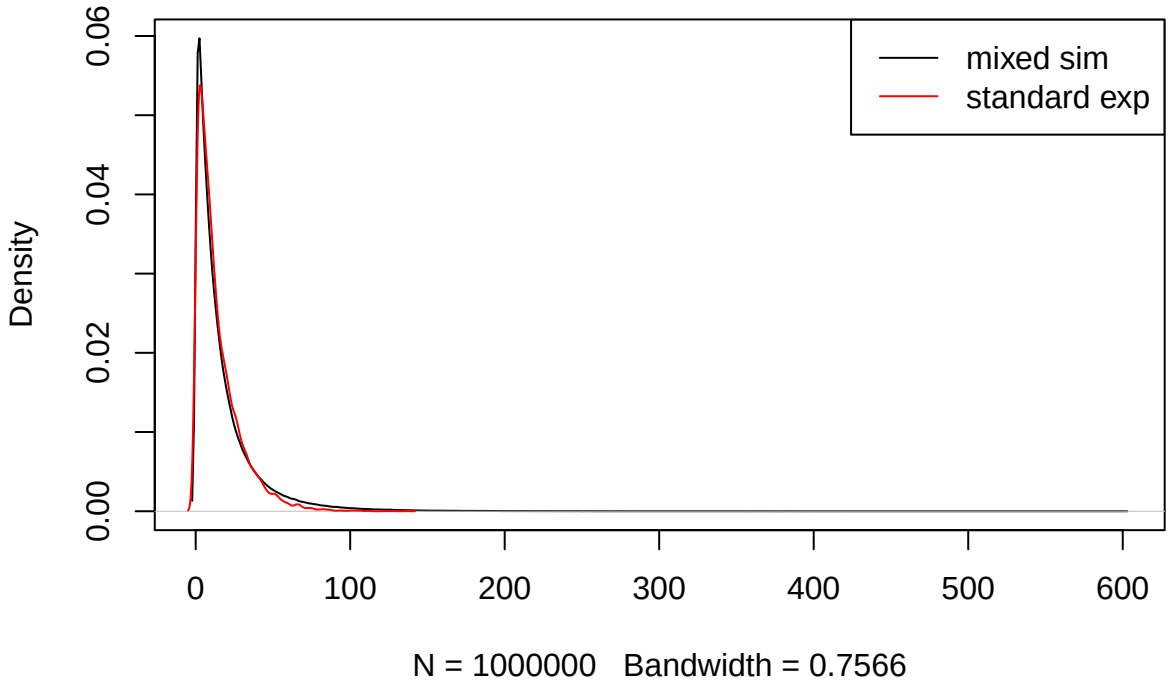
1 factor cases



median of the positive group with 0.2 prevalence is 5.4218509 ; median of the negative group with 0.8 prevalence is 3.8340028. The hr ratio is 0.7071391 and the overall median is 5.060549



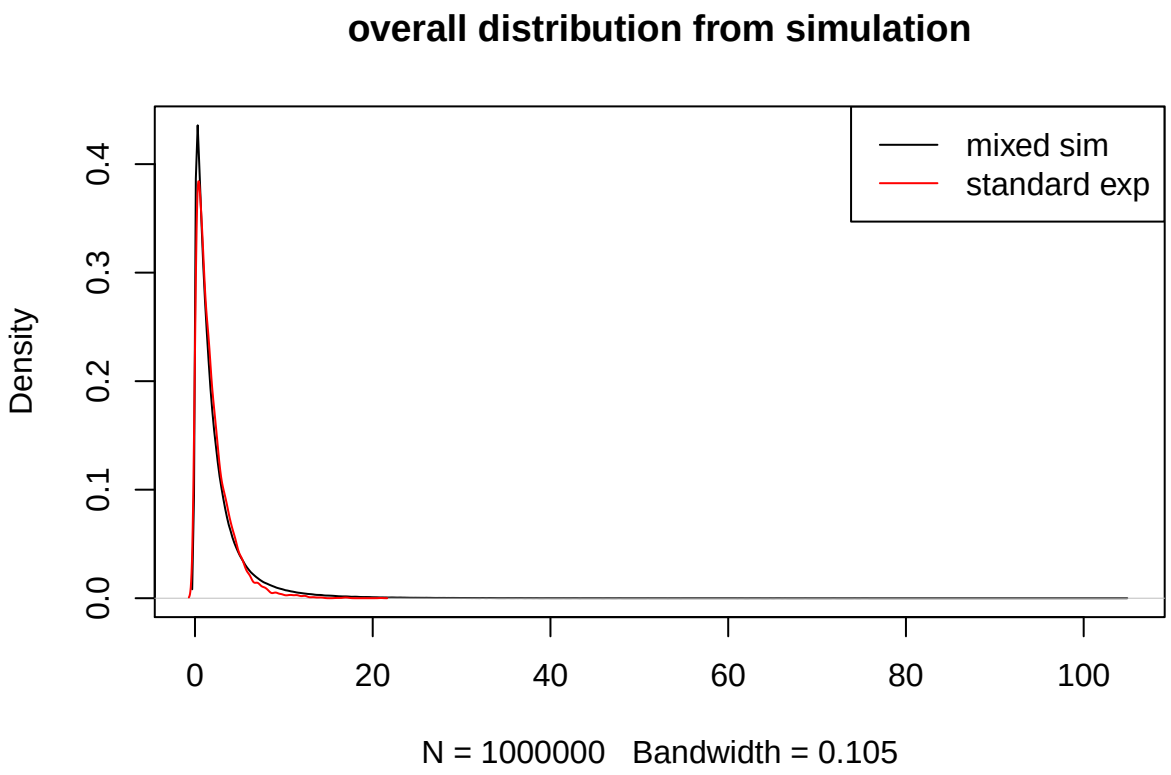

```
## [1] "M1"
## [1] "conditional on M2+"
##      [,1]
## [1,]  0.7
## [1] "conditional on M2-"
##      [,1]
## [1,]  0.7
## [1] "marginal hr 0.697206101315808"
## [1] "M2"
## [1] "conditional on M1+"
##      [,1]
## [1,]  0.4
## [1] "conditional on M1-"
##      [,1]
## [1,]  0.4
## [1] "marginal hr 0.402139585017648"
```




```
## [1] "M1"
## [1] "conditional on M2+,M3+"
##      [,1]
## [1,]  0.7
## [1] "conditional on M2-,M3+"
##      [,1]
## [1,]  0.7
## [1] "conditional on M2+,M3-"
##      [,1]
## [1,]  0.7
## [1] "conditional on M2-,M3-"
##      [,1]
## [1,]  0.7
## [1] "marginal hr 0.697565934816037"
## [1] "M2"
## [1] "conditional on M1+,M3+"
##      [,1]
## [1,] 0.55
## [1] "conditional on M1-,M3+"
##      [,1]
## [1,] 0.55
## [1] "conditional on M1+,M3-"
##      [,1]
## [1,] 0.55
## [1] "conditional on M1-,M3-"
##      [,1]
## [1,] 0.55
## [1] "marginal hr 0.550167923420505"
## [1] "M3"
```

```
## [1] "conditional on M1+,M2+"
##      [,1]
## [1,]  0.4
## [1] "conditional on M1-,M2+"
##      [,1]
## [1,]  0.4
## [1] "conditional on M1+,M2-"
##      [,1]
## [1,]  0.4
## [1] "conditional on M1-,M2-"
##      [,1]
## [1,]  0.4
## [1] "marginal hr 0.39883831276833"
```

```
c1 <- constructMedians( bigN = 1e6, overallMed = 1.4, freq=c(M1=0.2, M2=0.2), hr = c(0.4, 0.4), check_m
```




```
## [1] "M1"
## [1] "conditional on M2+"
##      [,1]
## [1,]  0.4
## [1] "conditional on M2-"
##      [,1]
## [1,]  0.4
## [1] "marginal hr 0.399565767582076"
## [1] "M2"
## [1] "conditional on M1+"
##      [,1]
## [1,]  0.4
## [1] "conditional on M1-"
##      [,1]
```

```
## [1,]  0.4
## [1] "marginal hr 0.400424013969852"
```

the overall median is 1.4015824