```
library(netmeta)
library(rmeta)


studies <- c("Jakobsen 2007", "Kirkley 1999", "Robinson 2008", "Wintzell 1999")
treat1 <- c(rep("Labrum repair",3),"Lavage")
treat2 <- c("Lavage", "NOM", "Lavage", "NOM")
x1 <- c(1,1,2,4)
n1 <- c(37,19,42,30)
x2 <- c(13,8,6,13)
n2 <- c(39,19,42,30)


#12 months analysis with RR
data <- pairwise(treat=list(treat1, treat2),
            event=list(x1,x2),
            n=list(n1,n2), sm="RR")

net12 <- netmeta(TE, seTE,treat1,treat2,studlab=studies,data=data,comb.random=T, sm="RR")
print(net12,logscale=T)
net12$pval.random


#24 months analysis with RR

x1 <- c(1,3,3,3)
n1 <- c(37,19,42,15)
x2 <- c(21,9,12,9)
n2 <- c(39,19,42,15)

data24 <- pairwise(treat=list(treat1, treat2),
            event=list(x1,x2),
            n=list(n1,n2), sm="RR")

net24 <- netmeta(TE, seTE,treat1,treat2,studlab=studies,data=data24,comb.random=T, sm="RR")
print(net24,logscale=T)
net24$pval.random




#Forestplot 12 months
mid <- c(NA,0.08,0.23,0.34)
up  <- c(NA,0.27,0.67,0.86)
low <- c(NA,0.02,0.08,0.14)

midlog <- c(NA,-2.53,-1.46,-1.06)
```

```
uplog  <- c(NA,-1.29,-0.39,-0.15)
lowlog <- c(NA,-3.76,-2.53,-1.98)


text <- cbind(c("Treatment 1", "Labrum repair","Labrum repair","Lavage"),
          c(" ", rep("vs",3)),
          c("Treatment 2", "NOM","Lavage", "NOM"),
          c("Relative risk (95-% CI)", paste0(mid[-1]," (",low[-1]," , ",up[-1],")")),
          c("P-value","<0.001","0.007","0.023" ))

pdf(paste0(getwd(), "/Forest12_2017MAY.pdf"), paper="a4", pointsize=9, colormodel="gray")
forestplot(text,  (midlog), (lowlog), (uplog), clip=c(-4,4), zero=0,graphwidth = unit(1.2,"inches"),
       boxsize=0.3, is.summary= c(T,rep(F,3)), xticks=c(0.01,0.1,1,10),xlog=T)
dev.off()

#Forestplot 24 months
mid <- c(NA,0.15,0.21,0.71)
up  <- c(NA,0.80,0.91,3.68)
low <- c(NA,0.03,0.05,0.14)

midlog <- c(NA,-1.88,-1.54,-0.34)
uplog  <- c(NA,-0.23,-0.09,1.30)
lowlog <- c(NA,-3.53,-2.98,-1.98)

text <- cbind(c("Treatment 1", "Labrum repair","Labrum repair","Lavage"),
          c(" ", rep("vs",3)),
          c("Treatment 2", "NOM","Lavage", "NOM"),
          c("Relative risk (95-% CI)", paste0(mid[-1]," (",low[-1]," , ",up[-1],")")),
          c("P-value","0.026","0.037","0.686" ))

pdf(paste0(getwd(), "/Forest24_2017MAY.pdf"), paper="a4", pointsize=9, colormodel="gray")
forestplot(text, (midlog), (lowlog), (uplog), clip=c(-5,5), zero=0,graphwidth = unit(1.8,"inches"),
       boxsize=0.3, is.summary= c(T,rep(F,3)),xticks=c(0.01,0.1,1,10),xlog=T)
dev.off()
?forestplot
log(mid)


#Netheat
pdf(paste0(getwd(), "/netheat12_2017MAY.pdf"), paper="a4", pointsize=10) #,colormodel="gray")
netheat(net12, random=T)
dev.off()


pdf(paste0(getwd(), "/netheat24_2017MAY.pdf"), paper="a4", pointsize=10) #,colormodel="gray")
netheat(net24, random=T)
dev.off()
```

```
LabrumN <- 37 + 19 + 42
lavageN12 <- 39 + 42 + 30
lavageN24 <- 39 + 42 + 15
NOMN12 <- 19 + 15 + 30
NOMN24 <- 19 + 15 + 15

LabrumLavagek <- 2
LabrumNOMk <- 1
LavageNOMk <- 1

#Netgraph
pdf(paste0(getwd(), "/netgraph12_2017MAY.pdf"), paper="a4", pointsize=10 ,colormodel="gray")
netgraph(net12, plastic=F,thickness="number.of.studies",col="black", offset=0.1,points=T,lwd=3,
      cex.points=c(111,49,98)/15, col.points="black")
text(-0.4, 0, "k=2", cex = .8)
text(0.2, -0.3, "k=1", cex = .8)
text(0.2, 0.3, "k=1", cex = .8)
text(-0.6, 0.6, paste0("N=",LabrumN), cex = .8)
text(-0.48, -0.60, paste0("N=",lavageN12), cex = .8)
text(0.64, -0.09, paste0("N=",NOMN12), cex = .8)
dev.off()

#Netgraph
pdf(paste0(getwd(), "/netgraph24_2017MAY.pdf"), paper="a4", pointsize=10 ,colormodel="gray")
netgraph(net24, plastic=F,thickness="number.of.studies",col="black", offset=0.1,points=T,lwd=3,
      cex.points=c(111,49,98)/15, col.points="black")
text(-0.4, 0, "k=2", cex = .8)
text(0.2, -0.3, "k=1", cex = .8)
text(0.2, 0.3, "k=1", cex = .8)
text(-0.6, 0.6, paste0("N=",LabrumN), cex = .8)
text(-0.48, -0.60, paste0("N=",lavageN24), cex = .8)
text(0.64, -0.09, paste0("N=",NOMN24), cex = .8)
dev.off()
```