library(openxlsx)

library(venn) ### 7组及以下绘venn图

library(VennDiagram)###获得各个交集内的代谢物

library(UpSetR)###7组（不含）以上venn图变种

library(stringr)

library(readxl)

setwd("D:/马驰宇/181/戴博/新项目/11111/6 biomarkers/RA-Control")

data<-read.xlsx("venn.xlsx",sheet = 1,startRow = 1,colNames = TRUE,rowNames = TRUE)

venn<-vector(mode = "list")

for(i in 1:length(colnames(data))){

venn[[colnames(data)[i]]]=data[,i][-which(is.na(data[,i]))]

}

sets<- get.venn.partitions(venn)

sets<-sets[sets['..count..']>0,]

sets$elements<-lapply(1:nrow(sets), function(i){

paste(unlist(sets[i,'..values..']),collapse = ';;')

}

)

sets$'intersection'<-lapply(1:nrow(sets), function(i){

ins<-strsplit(sets[i,'..set..'],')')[[1]][1]

ins<-str\_remove\_all(ins,'\\(')#substring(ins,2,nchar(ins))

gsub(pattern = '∩',replacement = '&',x=ins)

}

)

insdata<-sets[,c('intersection','..count..',"elements")]

colnames(insdata)<-c('intersection','count',"elements")

insdata<-as.data.frame(lapply(insdata,as.character))

png(file = "venn.png",width = 3100\*1.5,height = 3100,res = 600)

venn(venn,zcolor="style")

dev.off()

write.csv(insdata,"venn result.csv")