library(ggplot2)

logFC <-v$logFC

VIP <- v$VIP

padj <- v$P

data <- data.frame(logFC=logFC,VIP=VIP)

data$sig[(data$VIP < 1|data$VIP=="NA")|(data$logFC < 0.585)& data$logFC > -0.585] <- "no"

data$sig[data$VIP >= 1 & data$logFC >= 0.585] <- "up"

data$sig[data$VIP >= 1 & data$logFC <= -0.585] <- "down"

x\_lim <- max(logFC,-logFC)

library(ggplot2)

library(RColorBrewer)

pdf(file = "NEG\_lung\_volcano\_VIP.pdf",width=8,height=8)

theme\_set(theme\_bw())

p <- ggplot(data,aes(logFC,VIP,color = sig))+geom\_point() + xlim(-5,5) + labs(x="log2 (Fold Change)",y="VIP value")

p<-p+scale\_color\_manual(values=c("#006400","grey","#ee2c2c"))+geom\_hline(yintercept=1,  
linetype=6)+geom\_vline(xintercept=c(-0.585,0.585),linetype=6)

p<-p+theme(panel.grid=element\_blank())+

theme(axis.line=element\_line(size=0))+ylim(0,10.5)

p <- p+ guides(colour = FALSE)

p <- p +theme(axis.text=element\_text(size=20),axis.title=element\_text(size=20))

p

dev.off()

print(p)

x\_lim <- max(logFC,-logFC)

library(ggplot2)

library(RColorBrewer)

data <- data.frame(logFC=logFC,padj=padj)

data$sig[(data$padj > 0.05|data$padj=="NA")|(data$logFC < 0.585)& data$logFC > - 0.585] <- "no"

data$sig[data$padj <= 0.05 & data$logFC >= 0.585] <- "up"

data$sig[data$padj <= 0.05 & data$logFC <= - 0.585] <- "down"

pdf(file = "NEG\_lung\_volcano\_adj.pdf",width=8,height=8)

theme\_set(theme\_bw())

p <- ggplot(data,aes(logFC,-1\*log10(padj),color = sig))+geom\_point()+xlim(-5,5) + labs(x="log2 (FoldChange)",y="-log10 (p-value)")

p<-p+ scale\_color\_manual(values =c("#006400","grey","#ee2c2c"))+geom\_hline(yintercept=-log10(0.05),linetype=6)+geom\_vline(xintercept=c(-0.585,0.585),linetype=6)

p <- p +theme(panel.grid =element\_blank())+

theme(axis.line = element\_line(size=0))+ylim(0,10.5)

p <- p+ guides(colour = FALSE)

p <- p +theme(axis.text=element\_text(size=20),axis.title=element\_text(size=20))

p

dev.off()

print(p)