```
axTexpr <- function(side, at = axTicks(side, axp=axp, usr=usr, log=log,cex.axis=cex.axis),

                 axp = NULL, usr = NULL, log = NULL,cex.axis=1)

{

   ## Purpose: Do "a 10^k" labeling instead of "a e<k>"
   ##          this auxiliary should return 'at' and 'label' (expression)
   ## ----------------------------------------------------------------------
   ## Arguments: as for axTicks()
   ## ----------------------------------------------------------------------
   ## Author: Martin Maechler, Date:  7 May 2004, 18:01
   eT <- floor(log10(abs(at)))# at == 0 case is dealt with below

   mT <- at / 10^eT
   ss <- lapply(seq(along = at),

              function(i) if(at[i] == 0) quote(0) else
              substitute(10^E, list(A=mT[i], E=eT[i])))

   do.call("expression", ss)
}

plot.AUCs <- function(chem.list,ylim=c(10^-2,10^2),cex=1.5)
{
  AUC.list <- list()
  for (this.chem in sort(unique(chem.list)))
  {
    out <- plot.Chem.PK(this.name=this.chem)
    these.AUCs <- out$AUCs.pred
    for (this.AUC in names(these.AUCs))
    {
      AUC.list[[paste(this.chem,this.AUC)]] <- these.AUCs[[this.AUC]]/out$AUCs[[this.AUC]]
    }
  }

  par(mar=c(10,5.1,2.1,2.1))
  plot(-1,-1,xlim=c(0,1),ylim=ylim,log="y",xlab="",ylab="AUC Predicted / AUC
Observed)",xaxt="n",cex.lab=1.5,yaxt="n")
  axis(1,at=1:length(AUC.list)/(length(AUC.list)+2),labels=FALSE)
    aY <- axTicks(2)
  aY <- aY[log10(aY)==round(log10(aY))]
  axis(2, at=aY, label= axTexpr(1, aY),cex.axis=1.5)
  matplot(c(0,1),c(1,1),lty=2,lwd=2,add=T,type="l")
  text((1+1:length(AUC.list))/(length(AUC.list)+2),10^(par("usr")[3] -
0.1),labels=names(AUC.list),cex=0.5,srt=45,pos=2,xpd=T)

  for (i in 1:length(AUC.list))
  {
    x.pos <- i/(length(AUC.list)+2)
    if (regexpr("iv",names(AUC.list)[i])!=-1)
    {
      pch<-17
      col<-"red"
    } else if (regexpr("po",names(AUC.list)[i])!=-1)
    {
```

```
      pch<-15
      col<-"blue"
    } else {
      pch<-19
      col<-"black"
    }
    matplot(x.pos,AUC.list[i],add=T,pch=pch,col=col,cex=cex)
  }

  matplot(0.5,ylim[1]*2,pch=17,col="red",cex=cex*1.5,add=T)
  text(0.55,ylim[1]*2,"iv")
  matplot(0.5,ylim[1]*4,pch=15,col="blue",cex=cex*1.5,add=T)
  text(0.55,ylim[1]*4,"po")

  return(AUC.list)
}
```