**Supplementary Material**

**R-codes**

#read dataset, need to set wd first

library(readxl)

hairless\_mice <- read\_excel("Hairless\_Mice\_Chemistry.xlsx")

View(hairless\_mice)

# PERMANOVA test

library(dplyr)

hlm\_treatment <- dplyr::select(hairless\_mice,Treatment)

hlm\_chemistry <- dplyr::select(hairless\_mice, "3-Hexanol":unkown\_4)

library(vegan)

adonis(hlm\_chemistry ~ Treatment, data=hlm\_treatment ,method = "bray")

#wilcoxon tests for all compounds

library(survival)

lapply(hairless\_mice[,2:21], function(x) wilcox.test(x ~ hairless\_mice$Treatment))