Additional file 1. Code used in R to build the BSI risk index.

```
#read the mapping file and the otu table generated with QIIME
our.x <- t(read.table('wf_taxa_summary/otu_table_L6.txt',sep='\t',head=T,row=1,check=F))
our.map <- read.table('mapping-file.txt',sep='\t',head=T,row=1,check=F,comment='')
#perform the MWU test
our.x <- our.x[rownames(our.map),]
pvals <- apply(our.x,2,function(xx) wilcox.test(xx ~ our.map$Treatment,exact=F)$p.value)
pvals <- p.adjust(pvals,'fdr')
# determine good and bad bugs
hit.ix <- pvals < alpha
bsi.means <- colMeans(our.x[our.map$Treatment == 'bacteremia',])
hc.means <- colMeans(our.x[our.map$Treatment == 'nobacteremia',])
good.bugs <- hit.ix & ((hc.means - bsi.means) > 0)
bad.bugs <- hit.ix & ((hc.means - bsi.means) < 0)
#obtain the risk index
risk.index <- rowSums(our.x[,bad.bugs]) - rowSums(our.x[,good.bugs])
```