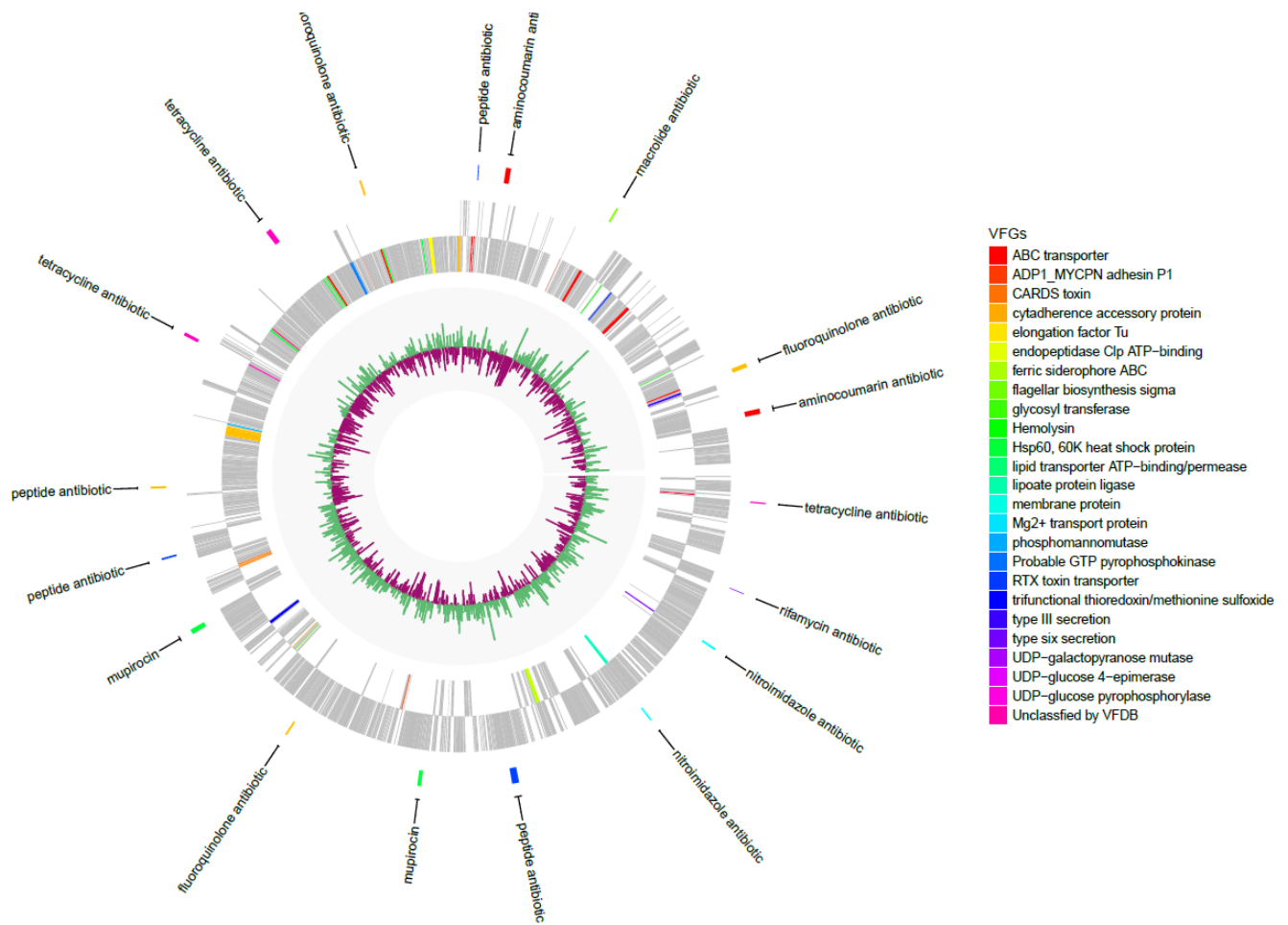
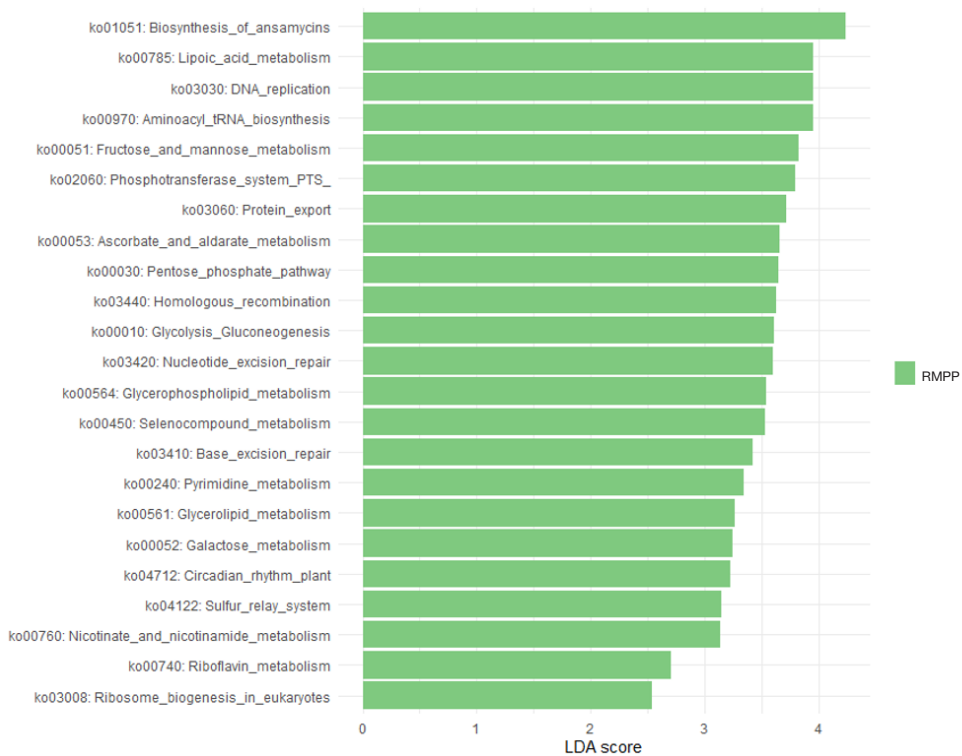


**Figure S1** LEfSe analysis of taxa in RMPP and NRMPP groups. The bar graph shows taxa that the LDA score over 2.0 and the cladograms showing the differences in relative abundance of taxa at six levels, and the red and green circles mean differences in relative abundance and yellow circles mean non-significant differences. LEfSe, Linear discriminant analysis Effect Size.



**Figure S2** ARGs and VFGs shown on the draft genome of *M. pneumoniae*. Tracks from outside to inside represent ARGs, genes on the plus strand, genes on the negative strand, and guanine-cytosine skew, respectively. VFG colors indicate VFG type. ARGs, antibiotic resistance genes; VFGs, virulence factor genes.



**Figure S3** LEfSe analysis of KEGG pathway among RMPP group. The bar graph shows KEGG pathways at level 3 that the LDA score over 2.0. LEfSe, Linear discriminant analysis Effect Size; RMPP, refractory *M. pneumoniae* pneumonia.