

7. Conclusions

We came up with following conclusions on the basis of our study:

1. There are significant differences in the transcriptome of virulent and avirulent strains of *L. major*.
2. DNA vaccination was ineffective in reducing the progression and parasitic load in *L. major* infection; decreases Th1 and increases anti-inflammatory Th population.
3. Heterologous prime-boost (HPB) was more efficacious than other strategies in reducing the pathological symptoms, disease burden and decreases Th2, Th17 and Treg memory cells repertoire.
4. This study highlights the importance of vaccination strategy in defining the outcome of vaccination.