SUMMARY & CONCLUSIONS
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*Listeria monocytogenes* is an intracellular pathogen that undergoes oxidative stress in the host cell during infection cycle. The genome analysis of *Listeria monocytogenes* revealed the importance of TDRM network in its life cycle. Reniere et al in 2015, showed that Glutathione is important in activating the key virulence regulator PrfA during infection in the host. They showed that PrfA activation is mediated by binding of glutathione to PrfA. Our cluster analysis shows glutathione and other low molecular weight such as coenzyme A, mycothiol and bacillithiol have similar activating roles in virulence gene expression in other pathogens.

Our research work resulted in the development of the database which has been hosted on to the web server (www.lmtdrm.com). By in silico analysis, we have identified the putative thiol proteins and predicted their structures and domains. Clustering with other bacterial species confirmed the importance of thiol proteins in oxidative stress condition during host–pathogen interaction.