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An Overview of Enhanced Intracellular Survival Protein in *Mycobacterium tuberculosis* †

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Abstract: Enhanced intracellular survival protein, which is secreted by Mtb enhances its survival in macrophages. It contributes to drug resistance by acetylating numerous amines of aminoglycosides. EIS protein plays a major role in its pathogenesis of Mtb. It inhibits phagosomal maturation, including fusion with lysosomes, autophagy, and death. The identifying and classifying mycobacterial proteins that play a major role in encouraging intracellular survival remain a priority for the development of new medications for antituberculosis. Recombinant EIS protein can be encoded by recombinant DNA, which is cloned in a gene expression support system and mRNA translation. The stages of the mechanism involved in phagosome maturation were mentioned in the role of mycobacterium eis. The pathogenesis of tuberculosis is complex, and its manifestations vary, indicating a lifetime of complex interactions between mycobacterial virulence factors and the human immune system. The pathogenic mycobacteria have evolved strategies to resolve major killing mechanisms used among the macrophages and advantage of the enclosed environment within the host cell to escape humoral and cell-mediated immune responses.

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Conflicts of Interest

The authors declare no conflict of interest.