

4th World Congress on Advancements in Tuberculosis and Lung Diseases

April 25, 2022 | Webinar

Funmilayo Grâce Boni, Clin Respir Dis Care 2022, Volume 08

Cytokine storm in tuberculosis and IL-6 involvement

Funmilayo Grâce Boni

Southwest University, China

Statement of the Problem: Tuberculosis is probably the most seasoned illness of the humanity. Intricacies or subsequent death emerging from these infections are frequently connected with cytokine storm. Interleukin-6 (IL-6) plays a crucial role in the immune response to tuberculosis. Therefore, there is a need to research some new therapeutic approaches to block IL-6 signaling that are right now being applied to the *M. tuberculosis*. In this review, we investigate the implication of IL-6 in the context of tuberculosis research. **Methodology & Theoretical Orientation:** Summary of studies demonstrating the implication of IL-6 in the inflammation. The recapitulation of the repurposing of anti-IL-6 therapeutics for TB. **Findings:** in this study Cytokine storm in tuberculosis can be targeted via the JAK/STAT pathways. Therapeutic avenues dampening IL-6 can quell the storm. **Conclusion & Significance:** An understanding of monocyte- and macrophage-mediated IL-6 release as part of the “cytokine storm” has played a role in a greater understanding of TB. IL-6 was identified as a major driver of disease severity in TB. TB patients should therefore be treated with anti-IL-6 therapeutics, as blunting IL-6 production may be advantageous in attenuating “cytokine storm” from TB. Researches on TB, are making tocilizumab and other anti IL-6 therapeutic approaches available to TB patients, who are believed to face an elevated mortality from complications of *M. tuberculosis*.

Biography

Dr. Funmilayo Grâce Boni is currently a third year PhD student in Biochemistry and Molecular Biology at Southwest University. Her thesis title is: Isolation and characterization of ethambutol resistant from transposon insertion library of *M. tuberculosis*. Her research is focused on ethambutol drug resistance. She is particularly interested in cytokine, drug resistance, and diagnosis and treatment of tuberculosis. She has spoken at a number of conference and has published book reviews.

Received: January 4, 2022; **Accepted:** January 6, 2022; **Published:** April 25, 2022
