

# Review of: "Perspectives on the Immune System in Sepsis"

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Authors reviewed current knowledge of inflammation specifically focusing the role of RNA in cascades of inflammation and cytokine storm describing basic pathological events of inflammation. Various parameters for measuring inflammatory responses were described like SEPSIS-3, qSOFA, SIRS, APACHE-II, NEWS, REMS. Biomarkers used for evaluation of sepsis were prescribed briefly. Pathological events of sepsis were briefly explained focusing on role of transcription and mRNA expression in activation of various inflammatory pathways. Role of miRNAs and lncRNAs were shortly reviewed in development of inflammation and its pathobiological events involving various receptor-signaling mechanisms for inflammation. 29mRNA test for evaluation of sepsis were reviewed and compared to existing state of knowledge with available alternate evaluation parameters. Post sepsis modification in leukocytes and CD+cells and lymphocytes were reviewed. Modification in apoptotic pathways were also described and reversal of these inflammatory modifications were showed to be corrected with pleiotropic molecules like arginine and ascorbic acid. Patient heterogeneity was observed for altered responses of medications in inflammation and prognosis based on genetic factors. Pleiotropic molecules like ethyl pyruvate, dipeptide alanil-glutamide, glutathione, L-arginine, ascorbic acid were shortly reviewed for reducing post treatment inflammatory responses and helps in adaptation of tissue cells to reduce recurrence and making better prognosis.

Manuscript focused on various inflammatory molecules having various pathological events responsible for sepsis. This manuscript provides an overview being a short review of various inflammatory substances, signaling pathways involved in sepsis and patient management. First hand information about pleiotropic molecules are also described.

This is a short review on inflammatory molecules and the management drugs, prognosis and challenges were briefly described. This is encompassing many treating molecules or drugs with little detail. Comprehensive exploration of each signaling pathway to inflammatory cascades with role of RNAs and various types of RNAs involves through different signaling pathway is essential to understand possible mechanisms of inflammation. Similarly therapeutic potential of pleiotropic molecules are over looked and briefly described. Detailed review on all molecules separately will provide a handsome piece of information on sepsis management.