

Sepsis is a life-threatening condition resulting from the body's dysregulated response to infection, leading to organ dysfunction. It is a leading cause of death worldwide, particularly in low- and middle-income countries, affecting millions of individuals annually and contributing to substantial morbidity and mortality. The high mortality rate, often exceeding 25%, underscores the need for timely intervention.

Early diagnosis is critical in improving outcomes, and biomarkers play a crucial role in this process. Biomarkers such as procalcitonin (PCT) and C-reactive protein (CRP) have shown promise in identifying sepsis at its onset, enabling prompt treatment and reducing the risk of progression to septic shock and thus death. Advancements in biomarker research continue to enhance the accuracy and speed of sepsis diagnosis, offering hope for better patient outcomes.