Diagnostics of sepsis - Biomarkers sought for sepsis management

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Sepsis is a serious high mortality disease. As regards pathophysiology, it is a systemic inflammatory response to infection. Its timely diagnosis strongly influences mortality. Identification of biomarkers is used for diagnosing, monitoring, and prognosis in septic patients. The methods for their measurements cover a range of disciplines such as clinical biochemistry, hematology, immunology, and clinical microbiology. The most frequently used sepsis markers in routine clinical diagnostics are C-reactive protein and procalcitonin. Detection of selected cytokines, mediators, and surface markers in immunocompetent cells gives us further chance for diagnostics improvement. Quantifying relative gene expression represents a technology with the potential for discovery of new biomarkers that would improve both diagnostics and therapy in the sense of personalized medicine.

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