

## Diagnostics of sepsis- biomarkers sought for sepsis management

**Miroslav Prucha**

Hospital na Homolce, Czech Republic

Sepsis is a serious high mortality disease. As regards pathophysiology, it is a systemic inflammatory response to infection. Its timely diagnosis strongly influences mortality. The identification of biomarkers is used for diagnosing, monitoring, and prognosis in septic patients. The methods for their measurement 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. The detection of selected cytokines, mediators, and surface markers in immunocompetent cells gives us further chance for improvement of this diagnostics. The methods of calculating gene expression represent a technology with a potential for the discovery of new biomarkers which would improve both diagnostics and therapy in the sense of personalized medicine.

### Biography

Miroslav Prucha is currently an Associate Professor of Clinical Immunology at Hospital na Homolce, Prague, Czech Republic. He got his Medicine Doctor's degree (Ph.D.) at Masaryk's University, Brno, Czech Republic. He has more than 20 years of personal experience in different leadership positions in the clinical immunology, clinical chemistry, and laboratory medicine field. He has been involved in a multitude of clinical trials in the field of sepsis - diagnostics and therapy and asthma bronchiale and autoimmune diseases.

[miroslav.prucha@homolka.cz](mailto:miroslav.prucha@homolka.cz)