



BioMed Research International

Special Issue on

**Sepsis: Diagnostic and Therapeutic Challenges**

# CALL FOR PAPERS

Sepsis has been the focus of interest for physicians involved in critical care for decades, and it has also become a serious health economic issue. More people are dying because of sepsis related complications than from breast and colorectal cancer taken together. The complexity of sepsis makes exact definition extremely difficult, which can be one of the reasons why most large prospective randomized clinical trials end up with nonsignificant results; hence we are generally lacking evidence based diagnostic and therapeutic management applicable for all patients. Therefore, in addition to sepsis definitions, certain treatment algorithms, the so-called therapeutic bundles, recommended by earlier guidelines, become under scrutiny and will change in the future. These uncertainties can be explained by the complex pathomechanism of sepsis and the heterogeneity of the disease.

Recently we gained new insight in pathophysiology, which helps us to understand the underlying molecular patterns as a response for an infectious insult and also to understand the similar host response for infectious and noninfectious “insults,” leaving us with great uncertainty in differential diagnosis.

Treating these patients includes the combination of early nonspecific resuscitation of failing vital organs, diagnosis of infection, and early adequate antimicrobial therapy. In each of these topics we still have more questions than answers. Furthermore, recently occurring multiresistant bacterial strains and invasive fungal infections open new challenges for the critical care physicians and make this picture even more complicated. This is a really hot topic, which not only includes almost every element of intensive therapy as the sickest patients need to be treated in the critical care environment but also has very important inter- and multidisciplinary aspects.

Therefore, we solicit papers to be submitted to this special issue, reporting original data as well as reviews, which focus on topics related to sepsis from basic resuscitation through diagnostics to antimicrobial and adjuvant therapy.

Potential topics include, but are not limited to:

- ▶ Goals for early resuscitation: bundles versus individualized approach
- ▶ Performance of previous guidelines
- ▶ Role of sepsis markers in sepsis diagnostics
- ▶ Role of biomarkers in guiding therapy
- ▶ Individualized antimicrobial therapy
- ▶ Organ dysfunction related to sepsis
- ▶ Results of animal experiments
- ▶ Extracorporeal blood purification methods in sepsis
- ▶ Fungal and viral sepsis
- ▶ Demographics of sepsis
- ▶ The role of education in prevention
- ▶ Economic issues

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/bmri/critical.care/dtc/>.

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