in identifying patients with an increased risk of fibrinolysis and erythrocyte, plasma and platelet transfusions out of 1,974 major trauma patients [24]. Schochl et al. [25] retrospectively analyzed the effects of thromboelastometry-guided hemostatic therapy in 131 trauma patients who received ≥ 5 erythrocyte concentrate units within 24 hours after admission. POC-guided hemostatic therapy with fibrinogen concentrate as first-line hemostatic therapy (if maximum clot firmness [MCF] measured by FibTEM [fibrin-based test] was < 10 mm) and additional use of prothrombin complex concentrate (if clotting time measured by extrinsic activation test [EXTEM] > 1.5 times normal) allowed rapid and reliable diagnosis of the underlying coagulopathy, and resulted in a favorable survival rate compared with predicted mortality [25]. Although a recent meta-analysis concluded that use of a thromboelastography- or thromboelastometry-guided transfusion strategy significantly reduced bleeding in massively transfused patients, these POC techniques were not, however, able to improve morbidity or mortality in patients with massive transfusion [26]. Therefore, prospective randomized studies focusing on POC-guided therapy are needed in these patients.

Severe sepsis

Because hemostatic alterations are a common early event in patients with severe sepsis, and commonly used sepsis biomarkers, such as procalcitonin and interleukin (IL)-6, may also increase in patients with trauma or surgery even without infection, thromboelastometry variables may have potential as early biomarkers of sepsis in critically ill patients. Adamzik and colleagues [27] recently demonstrated, in an observational cohort study of 56 patients with severe sepsis and 52 patients after major surgery,