

# Dissociation between plasma and monocyte-associated cytokines during sepsis

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We report our investigations of circulating interleukin (IL) 1 $\beta$ , IL 6 and tumor necrosis factor (TNF) $\alpha$ , as well as cell-associated IL 1 $\beta$ , IL 1 $\alpha$  and TNF $\alpha$  in plasma and monocytes of 21 patients with sepsis syndrome and 6 patients with non-septic shock. Longitudinal studies reveal that (a) the most frequent detectable plasma cytokines were TNF $\alpha$  and IL 6, (b) the presence and the kinetics of circulating cytokines were independent of one other, (c) detectable levels of cytokines could be found for a long period of time, and (d) significantly higher levels of IL 6 were found for non-surviving patients. Because of the in vivo half-life of cytokines and of the existence of numerous specific high-affinity receptors, it is quite probable that detectable plasma cytokines represent the excess of produced mediators which have not been trapped by the target cells. TNF $\alpha$  ( $410 \pm 65$  pg/10<sup>6</sup> monocytes) and IL 1 $\beta$  ( $153 \pm 60$  pg/10<sup>6</sup> monocytes) were frequently found associated to monocyte lysates (88% and