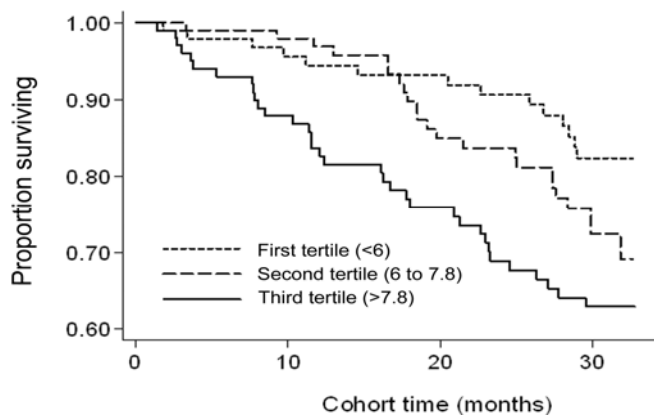


# ASSOCIATION OF SOLUBLE ENDOTOXIN RECEPTOR CD14 AND MORTALITY IN HEMODIALYSIS (HD) PATIENTS (PTS)

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CD14 is involved in innate immunity mediating cell activation & signaling in response to endotoxin. We hypothesized that elevated sCD14 in HD pts is associated inflammatory cytokine activation & increased mortality. We measured sCD14 level in a cohort of 310 HD pts. The mean sCD14 was  $7.24 \pm 2.45$   $\mu\text{g/ml}$ . Tumor necrosis factor- $\alpha$  (TNF- $\alpha$ ) was the strongest correlate of sCD14 ( $r=0.24$ ,  $p<0.001$ ) followed by interleukin (IL)-6 ( $r=0.18$ ,  $p=0.002$ ), ferritin ( $r=0.21$ ,  $p<0.001$ ), transferrin ( $r=-0.19$ ,  $p<0.001$ ). Over the 33 months follow-up, 71 pts died. Multivariable Cox analysis adjusted for case-mix & other nutritional/inflammatory confounders including serum TNF- $\alpha$ , C-Reactive protein, & IL-6 showed that compared to lowest sCD14 tertile, sCD14 levels in the third tertile ( $>7.8$   $\mu\text{g/ml}$ ) were associated with higher death risk (hazard ratio 1.94; 95% CI 1.01-3.75,  $p=0.04$ ).



Thus, elevated sCD14 is positively related to markers of inflammation, negatively to nutritional status & an independent predictor of mortality. Further studies are needed to examine the usefulness of sCD14 in risk stratification & clinical decision-making process in HD pts.