

One of the major findings in the publication by Montoya et al on cytokine signatures in chronic fatigue syndrome is the elevation of serum TGFbeta in patients with chronic fatigue syndrome (CFS)¹. Unfortunately, the methods section of the manuscript does not give much information on how the controls were recruited and how the blood samples of patients and controls were obtained and processed, which is essential when measuring inflammatory proteins.

Especially for a cytokine like TGFbeta, this is of critical importance to avoid erroneous results. The major pitfall here is contamination of the samples by platelets. In an otherwise carefully controlled study of CFS patients, we found that the use of two centrifuges with a different g force (at the same centrifugation speed) led to strongly different TGFbeta values (Roerink et al, submitted), reflected by differences in the platelet marker P-selectin between studies, which showed a strong correlation with TGFbeta. In another carefully controlled study, differences in the duration of centrifugation as executed by two technicians turned out to be the explanation for high TGFbeta concentrations in CFS patients (White et al, Clin Exp Immunol, in press). In neither of these studies the TGFbeta concentrations between patients and controls differed.

We would like to challenge Montoya et al to measure the platelet marker p-Selectin in their samples to assess whether platelet contamination could be responsible for their findings.

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¹ Montoya JG, Holmes TH, Anderson JN, et al. Cytokine Signature associated with disease severity in chronic fatigue syndrome patients PNAS

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