

## Doctors Guide Dispatch

### **ERA-EDTA: Methods for Assessing Nutrition Status in Dialysis Patients not Equally Predictive**

COPENHAGEN, DENMARK -- July 19, 2002 -- Several nutritional assessment tools, measuring different clinical parameters, may be effective in predicting survival in dialysis patients.

Dr. Jeannette G. van Manen, of the clinical epidemiology and biostatistics faculty, Academic Medical Center, University of Amsterdam, Netherlands, presented the findings here July 16<sup>th</sup> at the 39<sup>th</sup> annual Congress of the European Renal Association - European Dialysis and Transplant Association (ERA-EDTA).

She noted that malnutrition is a predictor for survival in dialysis patients, but assessment of malnutrition takes place by different measures, of varying effectiveness. These include mid-arm circumference (MAC); mid-arm muscle circumference (MAMC); skin fold thickness, as assessed by percentage of fat measurement; body mass index (BMI); nPNA, serum albumin (SA); or the Subjective Global Assessment Scale (SGA).

To evaluate whether these measures provide similar association of nutritional status and survival, Dr. van Manen and colleagues conducted a prospective, multicentre cohort study.

The study followed 1,455 new dialysis patients for a maximum of five years. Three months after dialysis began, patients' clinical, demographic and nutritional measures were assessed. To determine the predictive value of the various nutritional markers for survival, c-statistics were calculated. A value of 0.50 indicated no predictive value, while 1.0 indicated a perfect prediction.

Seventy percent of patients could be classified as well nourished, according to the SGA, with 2 percent of patients classified as severely malnourished and 29 percent classified as mildly malnourished.

The study found the strongest predictors for survival in univariate analyses were, in order: SA (c=0.60), SGA (c=0.58), MAMC (c=0.58), nPNA (c=0.58) and MAC (c=0.57). BMI and skin fold thickness were not significantly related to survival in univariate analyses.

All measures except MAMC and skin fold thickness were significantly related to survival in multivariate analyses. Percentage of body fat as measured by skin fold thickness added no value to the nutritional assessment of these patients.

Dr. van Manen concluded that since SGA, BMI, MAC, SA, and nPNA are all independently related to survival they can be used to measure different aspects of dialysis patients' clinical conditions.