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MORTALITY PREDICTABILITY OF LONGITUDINAL CHANGES OF SERUM ALBUMIN IN HEMODIALYSIS POPULATION

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Hypoalbuminemia is a marker of malnutrition-inflammation complex syndrome (MICS), & baseline serum albumin (S-ALB) is a strong predictor of death in maintenance hemodialysis (MHD) patients (pts). We hypothesized that changes in S-ALB over time are predictors of survival in MHD pts independent of baseline S-ALB & other covariates. Associations between 3-month averaged S-ALB levels, measured in a single laboratory using the bromocresol green, & mortality were studied longitudinally in a 2-year cohort of 58,058 MHD pts. Multivariate models controlled for case-mix and other elements of MICS. A decreasing S-ALB in the first 6 months was associated with increasing all-cause & cardiovascular (CV) death risks in the subsequent

18 months, whereas a gain in S-ALB level over the same period of time was predictor of lower all-cause mortality. Hence, an increase in S-ALB is positively associated with survival independent of baseline S-ALB or other elements of MICS. Even if this association is not entirely causal, an intervention that could increase S-ALB might reduce the number of MHD deaths in the USA by several thousand annually. Trials of nutritional interventions that increase S-ALB in MHD patients may be indicated.

