

HETEROGENEITY IN THE RELATIVE MORTALITY OF INCIDENT HEMODIALYSIS AND PERITONEAL DIALYSIS PATIENTS, ACROSS AGE, COMORBID DISEASE BURDEN, AND FOLLOW-UP YEAR

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The relative mortality of incident hemodialysis (HD) and peritoneal dialysis (PD) patients is difficult to estimate, in part because of confounding in modality assignment. With Medicare claims, we conducted a retrospective cohort study of dialysis patients who became ESRD-incident in 2003 ($N = 99,702$, with 7.1% assigned to PD). Follow-up continued until the end of 2006, with censoring for kidney transplant. We considered both intent-to-treat and as-treated follow-up rules, and we performed traditional analysis of covariance and propensity score-matched analysis. Confounders were taken from CMS Form 2728, and included demographics, comorbid conditions, and biomarkers (Alb, BMI, BUN, eGFR, and Hgb). We also assessed effect modification by age, diabetes, and cardiovascular (CV) disease. In an as-treated, matched analysis, with follow-up from incidence, the relative hazards of mortality for PD vs HD were 0.61*, 0.89, 0.98, and 0.96 during years 1, 2, 3, and 4 (* $p < 0.05$). With follow-up from day 90 of ESRD, relative hazards for PD vs HD were 0.83*, 0.99, 1.19*, and 1.02 during years 1, 2, 3, and 4. Relative hazards favored PD in year 1, and in younger (age < 65 yr), non-diabetic, and non-CV-diseased patients. Relative hazards favored HD in years 3 and 4, and in older, diabetic, and CV-diseased patients. Heterogeneity dominated all estimates of relative mortality for PD vs HD.