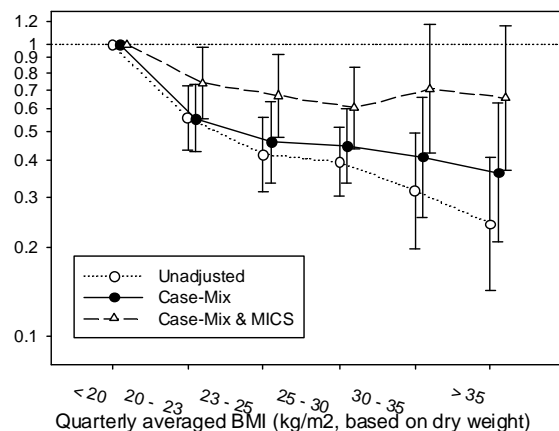


BODY MASS INDEX (BMI) AND SURVIVAL IN POLYCYSTIC KIDNEY DISEASE (PKD) HEMODIALYSIS (HD) PATIENTS

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Higher BMI, even to levels of obesity, may be associated with greater survival in dialysis patients (pts). We hypothesized that this relationship may be different in PKD HD pts and examined the 3-yr (7/2001-6/2004) survival of 1,596 PKD pts in all Legacy DaVita dialysis clinics across the United States using both baseline & time-dependent Cox models, adjusted for case-mix & malnutrition-inflammation-cachexia syndrome (MICS). The 3-yr death hazard ratios (HR) (& 95% confidence levels) of the BMI increments (<20 [ref], 20-<23, 23-<25, 25-<30, 30-<35 & ≥35 kg/m², based on 3-month averaged post-HD dry weight) were calculated. In time-dependent case-mix adjusted models, survival was linearly superior across BMI increments (see Figure). In MICS models, the greatest survival was associated with BMI in 25-30

kg/m²: HR 0.5 (95% CI: 0.3-0.6). Death risk of BMI ≥35 kg/m² (morbid obesity) after adjustment for case-mix was 0.6 (0.4-0.8) but after additional adjustment



for MICS was 0.7 (0.4-1.2). Hence, in PKD HD pts, higher BMI up to 30 kg/m² in each calendar quarter is independently associated with greater survival. The survival advantage of BMI ≥30 is probably related to better nutritional and inflammatory profiles. Obesity (BMI ≥30 kg/m²) per se does not appear to offer greater survival in PKD.