中文題目：在台灣十年的追蹤研究，URR 對於死亡率有著不亞於 Kt/V 的預後價值

英文題目：The prognostic value of URR is as good as Kt/V for mortality in Taiwan after follow-up for 10 years

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Background: Kt/V and URR (Urea removal rate) are the measurements of dialysis adequacy. Single poor Kt/V is theoretically a better method and suggested by guideline. However, the prognostic value of URR compared with Kt/V was little known. We would like to ask the prognostic value of Kt/V versus URR for all-cause mortality and compare the factors modifying this effect.

Method: We studied 2615 incident hemodialysis patients in Kaohsiung Medical University Hospital and associated dialysis clinics from 2001.1.1 to 2009.12.31

Results: The average age at dialysis was 59 ± 14.2 years old, 50.7% were female and 1113 (40.2%) mortalities in 10 years. The dialysis dose was URR $72\% \pm 7\%$ and Kt/V (Daugirdas) 1.6 ± 0.3. URR and Kt/V were both positively associated with nutrition factors (albumin and nPCR) and female and negatively associated with body weight and congestive heart failure. Within multivariate Cox regression models for all-cause mortality, hazard ratios (HRs) of high URR groups (65-70%, 70-75%, and >75%) compared to URR <65% group were 0.748 (0.623-0.898), 0.693 (0.578-0.829) and 0.640 (0.519-0.788), respectively. On the other hand, HRs of high Kt/V groups (Kt/V 1.2-1.4, 1.4-1.7, and >1.7) compared to Kt/V <1.2 group were 0.711 (0.580-0.873), 0.656 (0.540-0.799) and 0.623 (0.498-0.779), respectively. Per one standard deviation (SD) increases in URR and Kt/V were associated with HR 0.896 (0.844-0.952) and 0.885 (0.824-0.952), respectively. In subgroup analysis, Kt/V was not associated with all-cause mortality in female: HR 0.941 (0.51-1.041), compared HR in male 0.817 (0.733-0.911), p interaction < 0.05.

Conclusion: the prognostic value of URR for all-cause mortality is as good as Kt/V. URR >70% or Kt/V >1.4 was associated better survival. Kt/V may be less prognostic in female.