Combined low vitamin D and K status is highly prevalent in stable kidney transplant recipients (KTR). We studied 461 KTR from a single-center after median 6.1 years (interquartile range 3.0-11.9) after transplantation. At baseline, vitamin D and K status were associated with 2.46 (95% CI 1.30-4.63) greater risk of all-cause mortality. Vitamin D supplement users compared to no vitamin D supplement users: HR per 500 pmol/L was more strongly associated with all-cause mortality and graft failure in vitamin D users. The joint association of low vitamin D and K status is associated with greater risk of premature mortality and graft failure compared to non-users. Future studies are needed to elucidate the biological mechanisms underlying the association between vitamin D and K status and outcomes after kidney transplantation.

CONCLUSIONS: Our analyses showed neutral effects of alcohol consumption on the incidence of abnormal eGFR or proteinuria.

INTRODUCTION AND AIMS: Moderate alcohol consumption is considered to provide cardioprotective effects, but the role of alcohol consumption remains inconclusive in chronic kidney disease. We aimed to evaluate the influences of alcohol consumption on incident chronic kidney disease (CKD) and proteinuria in a cohort of health check-up population.

METHODS: This cohort consisted of 7501 adults who were free of CKD at baseline and repeatedly participated in a health check-up program during 2003-2009. We obtained the participants’ demographic data, laboratory examinations, comorbidities, and lifestyle behaviors (including the amount of alcohol consumption, smoking, or exercise). According to the self-reported questionnaire, we classified participants into nondrinkers, occasional drinkers (less than once per week), and frequent drinkers (at least once per week). We used the Chronic Kidney Disease Epidemiology Collaboration equation to calculate the estimated glomerular filtration rate (eGFR). The primary outcome was the decline of eGFR below 60 ml/min/1.73m², and the secondary outcome was incident proteinuria. Multivariate Cox proportional hazards models were used to estimate the hazard ratios (HRs) and 95% confidence intervals (CIs) for outcomes comparing different levels of alcohol consumption.

RESULTS: There were 38% nondrinkers, 50% occasional drinkers, and 12% frequent drinkers. During a mean follow-up time of 3 years, 324 participants had a decline of eGFR below 60 ml/min/1.73m² and 718 participants had incident proteinuria. Compared with nondrinkers, occasional drinkers (HR 1.13, 95% CI 0.89-1.45) and frequent drinkers (HR 1.02, 95% CI 0.68-1.52) did not show a lower hazard for decline of eGFR below 60 ml/min/1.73m² (Table 1). Compared with nondrinkers, occasional drinkers (HR 1.02, 95% CI 0.87-1.20) and frequent drinkers (HR 1.28, 95% CI 0.99-1.66) did not show a lower hazard of incident proteinuria (Table 2).

CONCLUSIONS: Our analyses showed neutral effects of alcohol consumption on the incidence of abnormal eGFR or proteinuria.