

中文題目：急性腎損傷的病人恢復後的長期預後-健保資料研究

英文題目：Long term outcome after recovery from advanced acute kidney injury: A Nationwide Population-Based Study

作者：林孟羣，吳允升

服務單位：台大醫院內科

**Backgrounds** : The incidence of acute kidney injury (AKI) is increasing in hospitalized patients. However, the long term outcome of patient survival to discharge after recovery from in hospital AKI necessitating dialysis is still not clear.

**Design** : Population-based cohort study, using linked TAIWAN national administrative health claims databases and validated by a critical care database.

**Setting and Participants** : Records of all patients aged  $\geq 18$  years hospitalized and served by de novo AKI- dialysis from 1999 to 2008 retrieved from inpatient claims from the Taiwan National Health Insurance database. A control cohort without AKI, matched for age, sex, diabetes and use mechanical ventilation was selected for comparison.

**Interventions** : Main outcome measures all cause of mortality, major adverse cardiovascular event (MACE) and long- term end-stage kidney disease (ESRD) were calculated using a propensity score adjusted cox proportional hazard model.

**Results** : In 2956 AKI-dialysis patients form 5083 sampled patients, 685 (23.2%) patients could be free from acute dialysis at least 90 days. Patients without dialysis or AKI had the lowest risk (hazard ratio, (HR); 0.91, 95%CI, 0.88-0.95,  $p < 0.001$ ), patients without recovery from dialysis had the highest risk (HR, 1.58, 95%CI, 1.39-1.81,  $p < 0.001$ ) to long -term all-cause mortality than patients with recovery from dialysis. After median followed up for 2.96 years, patients without dialysis or AKI had the lowest risk (HR, 0.02, 95%CI, 0.01-0.04,  $p < 0.001$ ) and patients without recovery from dialysis had the highest risk (HR, 4.89, 95%CI, 4.03-5.94,  $p < 0.001$ ) to long -term dialysis than patients with recovery from dialysis. Additionally, patients without dialysis or AKI had lower risk (HR, 0.65, 95%CI, 0.57-0.74,  $p < 0.001$ ) to long -term MACE than patients with recovery from dialysis. However, the ratio of MACE had no significantly different between patients with or without recovery from dialysis.

**Conclusion** : In a large national study, patients with or without recovery from dialysis had higher long-term MACE, ESRD, mortality than patients without AKI. Recovery

from temporary dialysis is associated with lower long –term ESRD and mortality than patients without recovery from dialysis, but not MACE. Improved renal protection and closer postdischarge follow-up of renal function may be warranted even with recovery from temporary dialysis.

**Key words :** Acute on chronic kidney injury, Long-term dialysis, Long–term mortality, hospital survival