survivors and up to 30 days after suspicion in COVID-19 in patients who died.

**Results:** There were 12,836 HD patients with a suspicion of COVID-19 who received RT-PCR testing (8,895 COVID-19 positive: mean age 61.8 years, 54% male, 37% white race, 68% with diabetes, 24% with ischemic heart disease (IHD)); 3,941 COVID-19 negative: mean age 60.3 years, 55% male, 43% white race, 66% with diabetes, 24% with IHD). The trajectories for several clinical/laboratory parameters (vital signs, hematology, nutrition, iron indices) appeared to have changed about 10 days before suspicion among patients who were confirmed COVID-19 positive; the trends were distinct as compared to patients found to be COVID negative (select variables shown in Figure 1). Many alternations in variables before COVID-19 were subtle. HD patients with COVID-19 who died within 30 days of suspicion were more often older, male, white race, and had a higher comorbidity burden (998 died: mean age 69.1 years, 60% male, 42% white race, 80% with diabetes, 29% with IHD; 7,897 survived: mean age 60.8 years, 53% male, 37% white race, 68% with diabetes, 23% with IHD). There appeared to be unique trajectories before and after suspicion of COVID-19 in patients who died versus those who survived (select variables shown in Figure 1).

**Conclusions:** The trajectories of several clinical/laboratory parameters appeared to change before and after suspicion of RT-PCR confirmed COVID-19. Survivors appeared to have distinct trajectories in clinical/laboratory parameters compared to patients who died within 30 days of COVID-19. These findings appear to reveal some of the pathophysiologic trends defining the onset and course of the disease in the HD population; however, many changes were small. These insights are anticipated to be of high importance for development of predictive models for early identification and prognosis of COVID-19.

**Conflict of Interest:** Analysis and abstract supported by Fresenius Medical Care. RL, SC, YJ, JL, CM, AW, LN, JH, LU, FM, are full time employee of Fresenius Medical Care. JR, PK are full time employees of Renal Research Institute, a wholly owned subsidiary of Fresenius Medical Care. SC, PK, JH, FM have share options/ownership in Fresenius Medical Care. PK receives honorarium from Up-To-Date and is on the Editorial Board of Blood Purification and Kidney and Blood Pressure Research. JH has directorship in the Renal Physicians Association Board of Directors. FM has directorships in Fresenius Medical Care Management Board, Goldfinch Bio, and Vifor Fresenius Medical Care Renal Pharma.

**POS-535**

**RISK OF DEATH AT 3 YEARS AMONG PATIENTS THAT HAVE SURVIVED THE FIRST 6 MONTHS OF DIALYSIS IN AUSTRALIA AND NEW ZEALAND**

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**Introduction:** End stage kidney disease (ESKD) is a major global problem and the incidence is increasing worldwide. Patients receiving dialysis have a lower quality of life, require frequent medical interventions and have high mortality rates. Accurate and reliable prognostic information among patients receiving dialysis is important to facilitate shared decision making regarding burdensome investigations and treatments. The long-term risk of death among patients who survive beyond 6 months of dialysis commencement has not been explored in Australia and New Zealand. We aimed to develop a model to predict the risk of death at 3 years after commencing dialysis among patients that have survived 6 months on dialysis in Australia and New Zealand.

**Methods:** We used the Australian and New Zealand Dialysis and Transplant (ANZDATA) registry to follow 17,596 patients aged >15 years, who commenced haemodialysis or peritoneal dialysis between 1st January 2006 and 31st December 2011, up until 31st December 2014. Overall 1048 patients (6%) died within the first 6 months. Of the 16,548 survivors, 2542 received a kidney transplant, 89 had native renal recovery and 59 were lost to follow up before reaching 3 years of follow up, and were censored. Basic demographic data, comorbidities, clinical measurements and kidney-disease specific variables were routinely collected using a standardized electronic survey form distributed to each dialysis unit across Australia and New Zealand. Patients with missing covariate data were excluded (n=112). Multivariable logistic regression was used to model the risk of death at 3 years. Predictor variables were selected in a stepwise fashion using backwards elimination. Area under the curve was used as a measure of discrimination of the model. Calibration was measured using a goodness of fit test.

**Results:** The study cohort consisted of 13,755 patients. Mean age at dialysis commencement was 62 years, 60% were male, and 69% were white. The three most common causes of ESKD were diabetes mellitus (40%), glomerulonephritis (20%), and hypertension (15%). Chronic lung disease (19%), coronary artery disease (45%), peripheral vascular disease (28%), cerebrovascular disease (16%) and type 2 diabetes (49%) were common. At 3 years, 3912 patients (28%) had died. Predictors of death included age (OR 1.14 per 5 years, 95% CI 1.12-1.16), white race (OR 1.5, 95% CI 1.31-1.79), low BMI (OR 1.45, 95% CI 1.13-1.87), ESKD caused by paraprotein or amyloid disease (OR 2.12, 95% CI 1.4-3.14), late referral to nephrology (OR 1.16, 95% CI 1.06-1.28), chronic lung disease (OR 1.31, 95% CI 1.19-1.45), coronary artery disease (OR 1.36, 95% CI 1.24-1.48), peripheral vascular disease (OR 1.26, 95% CI 1.15-1.38), cerebrovascular disease (OR 1.36, 95% CI 1.23-1.51) and type 1 diabetes mellitus (OR 1.90, 95% CI 1.45-2.51). Area under the ROC curve of the model was 0.724. Calibration was acceptable (Figure 1; Hosmer-Lemeshow statistic 10.2, p=0.25).

**Conclusions:** Three-year survival in patients who survived the first six months of dialysis was 72%. As expected, those with significant comorbidities had poorer survival. A risk equation will be developed to assist clinicians, patients and caregivers with discussions about prognosis.

**Conflict of interest**

**No conflict of interest**

**POS-536**

**PREDICTING THE RISK OF BLEEDING IN HEMODIALYSIS PATIENTS IN DOPPS (BLEED-HD)**

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**Introduction:** End stage kidney disease (ESKD) is a major global problem and the incidence is increasing worldwide. Patients receiving dialysis have a lower quality of life, require frequent medical interventions and have high mortality rates. Accurate and reliable prognostic information among patients receiving dialysis is important to facilitate shared decision making regarding burdensome investigations and treatments. The long-term risk of death among patients who survive beyond 6 months of dialysis commencement has not been explored in Australia and New Zealand. We aimed to develop a model to predict the risk of death at 3 years after commencing dialysis among patients that have survived 6 months on dialysis in Australia and New Zealand.

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**Results:** The study cohort consisted of 13,755 patients. Mean age at dialysis commencement was 62 years, 60% were male, and 69% were white. The three most common causes of ESKD were diabetes mellitus (40%), glomerulonephritis (20%), and hypertension (15%). Chronic lung disease (19%), coronary artery disease (45%), peripheral vascular disease (28%), cerebrovascular disease (16%) and type 2 diabetes (49%) were common. At 3 years, 3912 patients (28%) had died. Predictors of death included age (OR 1.14 per 5 years, 95% CI 1.12-1.16), white race (OR 1.5, 95% CI 1.31-1.79), low BMI (OR 1.45, 95% CI 1.13-1.87), ESKD caused by paraprotein or amyloid disease (OR 2.12, 95% CI 1.4-3.14), late referral to nephrology (OR 1.16, 95% CI 1.06-1.28), chronic lung disease (OR 1.31, 95% CI 1.19-1.45), coronary artery disease (OR 1.36, 95% CI 1.24-1.48), peripheral vascular disease (OR 1.26, 95% CI 1.15-1.38), cerebrovascular disease (OR 1.36, 95% CI 1.23-1.51) and type 1 diabetes mellitus (OR 1.90, 95% CI 1.45-2.51). Area under the ROC curve of the model was 0.724. Calibration was acceptable (Figure 1; Hosmer-Lemeshow statistic 10.2, p=0.25).

**Conclusions:** Three-year survival in patients who survived the first six months of dialysis was 72%. As expected, those with significant comorbidities had poorer survival. A risk equation will be developed to assist clinicians, patients and caregivers with discussions about prognosis.

**Conflict of interest**

**No conflict of interest**