## **SUPPLEMENTARY MATERIALS**

Seasonal Variations in Transition, Mortality, and Kidney Transplantation among Patients with End-Stage Renal Disease in the United States

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## Supplementary Table 1. The definition of cardiovascular and infectious death according to the cause of death in the form CM2746.

Cause of Death in the form CM2746	Category
Cardiac Arrest, Cause Unknown	
Myocardial Infarction, Acute	
Cardiac Arrhythmia	
Cerebro-Vascular Accident Including Intracranial Hemorrhage	
Cardiomyopathy	
Atherosclerotic Heart Disease	
Congestive heart failure	
Ischemic Brain Damage/Anoxic Enecephalopathy	
Pulmonary Edema Due To Exogenous Fluid	
Mesenteric Infarction/Ischemic Bowel	
Valvular Heart Disease	
Other Hemorrhage (Not Codes 38-42,72)	
Pulmonary Embolus	
Hemorrhage From Vascular Access	Cardiovascular
Hemorrhage From Ruptured Vascular Aneurysm	
Pericarditis, Incl. Cardiac Tamponade	
Hemorrhage From Surgery (Not 38,39 Or 40)	
Hemorrhage From Transplant Site	
Hemorrhage From Dialysis Circuit	
Myocardial Infarction, Acute	
Embolism, Air *Discontinued, as of Aug. 1990	
Hemorrhage (Other Than 04, 07, Or 08) *Discontinued, as of Aug. 1990	
Vascular Access *Discontinued, as of Aug. 1990	
Cardiac (Other Than 01 Or 02) *Discontinued, as of Aug. 1990	
Cerebrovascular *Discontinued, as of Aug. 1990	
Pericarditis(incl. Cardiac Tamponade) *Discontinued, as of Aug. 1990	
Embolism, Pulmonary *Discontinued, as of Aug. 1990	
Septicemia, Other	
Septicemia, Due To Peripheral Vascular Disease, Gangrene	Infection
Pulmonary infection (pneumonia, influenza)	

Pulmonary Infection (Bacterial)

Septicemia, Due To Vascular Access \*Discontinued, as of Oct 2004

Septicemia due to vascular access catheter

Abdominal infection (peritonitis-not complication of PD, perforated bowel,

diverticular disease, gallbladder)

Cardiac infection (endocarditis)

Septicemia, Due To Peritonitis

Septicemia due to internal vascular access

Infection, Other

Pulmonary Infection (Other)

Aids

Central nervous system infection (brain abscess, meningitis, encephalitis, etc.)

Genito-urinary infection (urinary tract infection, pyelonephritis, renal abscess)

Peritonitis (complication of peritoneal dialysis)

Peritoneal access infectious complication, bacterial

Viral Infection, Other (Not 64 Or 65)

Pulmonary Infection (Fungal))

Peritoneal access infectious complication, fungal

Viral Infection, Cmv

**Tuberculosis** 

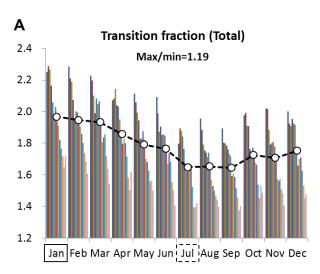
Viral Hepatitis \*Discontinued, as of Aug. 1990

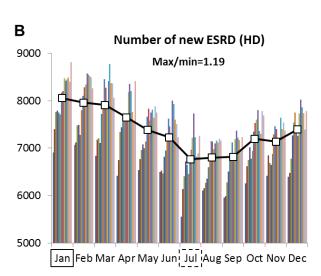
Septicemia \*Discontinued, as of Aug. 1990

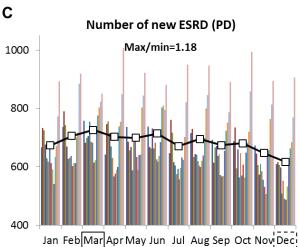
Pulmonary Infection \*Discontinued, as of Aug. 1990

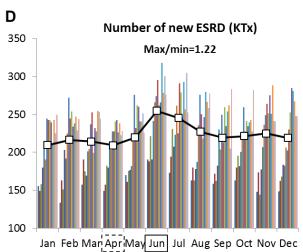
Infection (Other Than 10, 11, Or 12) \*Discontinued, as of Aug. 1990

Supplementary Figure 1. (A) Overall monthly transition fractions to ESRD and (B to D) the number of new ESRD patients by modality (hemodialysis [HD], peritoneal dialysis [PD] and kidney transplantation [KTx], respectively) at each month over 14 years (2000-2013) in the United States. Bars represent monthly values from 2000 (far left) to 2013 (far right), which were normalized based on days of month. Points represent 14-year averages. Solid and dashed box indicate month with highest and lowest 14-year averaged values, respectively.

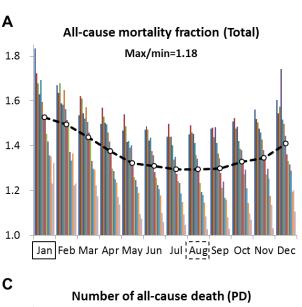


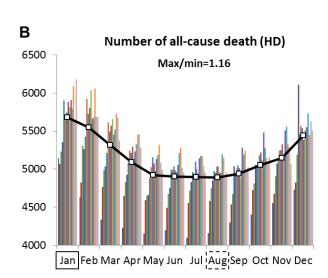


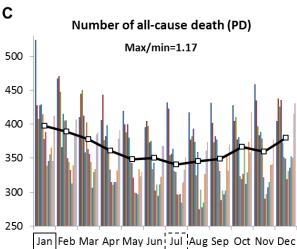


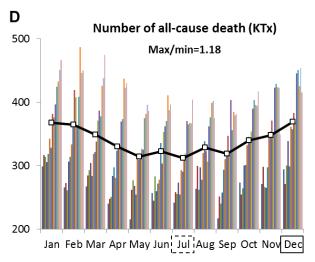


Supplementary Figure 2. (A) Monthly all-cause mortality fraction in patients with renal replacement therapy and (B to D) the number of cases by modality at each month over 14 years (2000-2013) in the United States. Bars represent monthly values from 2000 (far left) to 2013 (far right), which were normalized based on days of month. Points represent 14-year averages. Solid and dashed box indicate month with highest and lowest 14-year averaged values, respectively. Abbreviation: HD, hemodialysis; PD, peritoneal dialysis; KTx, kidney transplantation.

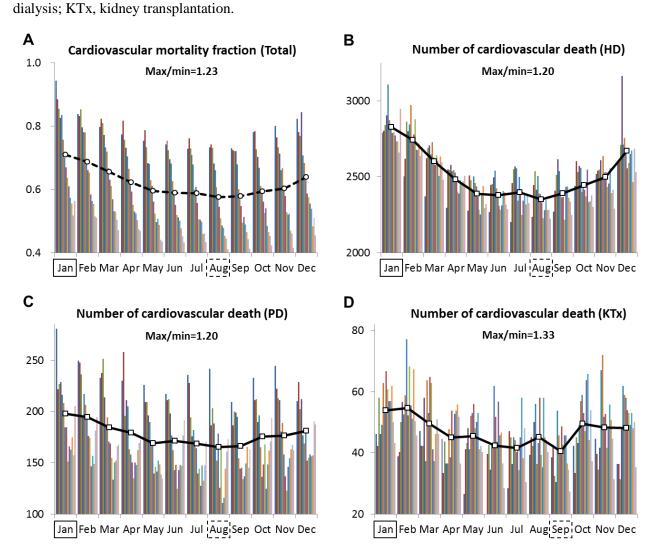




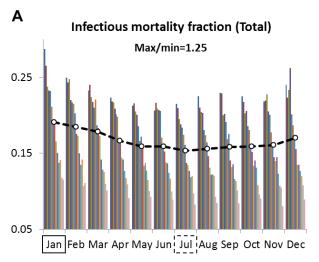


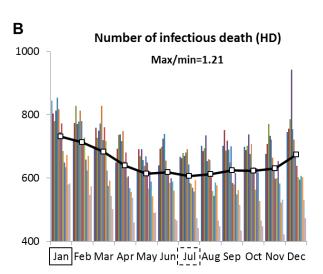


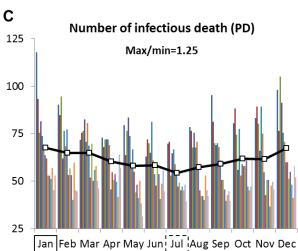
Supplementary Figure 3. (A) Monthly cardiovascular mortality fraction in patients with renal replacement therapy and (B to D) the number of cases by modality at each month over 14 years (2000-2013) in the United States. Bars represent monthly values from 2000 (far left) to 2013 (far right), which were normalized based on days of month. Points represent 14-year averages. Solid and dashed box indicate month with highest and lowest 14-year averaged values, respectively. Abbreviation: HD, hemodialysis; PD, peritoneal

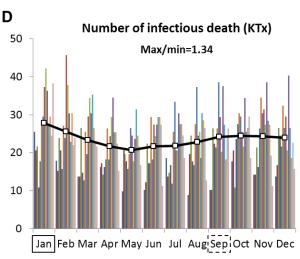


<u>Supplementary Figure 4.</u> (A) Monthly infectious mortality fraction in patients with renal replacement therapy and (B to D) the number of cases by modality at each month over 14 years (2000-2013) in the United States. Bars represent monthly values from 2000 (far left) to 2013 (far right), which were normalized based on days of month. Points represent 14-year averages. Solid and dashed box indicate month with highest and lowest 14-year averaged values, respectively. Abbreviation: HD, hemodialysis; PD, peritoneal dialysis; KTx, kidney transplantation.









Supplementary Figure 5. (A) Kidney transplant fraction, (B) the number of living kidney transplantation, (C) the number of cadaveric kidney transplantation, and (D) kidney transplant failure fraction at each month over 14 years (2000-2013) in the United States. Bars represent monthly values from 2000 (far left) to 2013 (far right), which were normalized based on days of month. Points represent 14-year averages. Solid and dashed box indicate month with highest and lowest 14-year averaged values, respectively. Abbreviation: HD, hemodialysis; PD, peritoneal dialysis; KTx, kidney transplantation.

