

SUPPLEMENTARY DATA

Supplementary Table 1. Correlation between A1c and serum glucose by different glucose cutoffs in different subgroups

<i>Characteristics</i>	Glucose (mg/dL)				
	<i>All</i>	<i>0-400</i>	<i>100-400</i>	<i>100-200</i>	<i>100-300</i>
<i>All Patients</i>	0.562	0.530	0.515	0.302	0.448
<i>Men</i>	0.563	0.528	0.515	0.307	0.453
<i>Women</i>	0.561	0.532	0.515	0.300	0.445
<i>Blacks</i>	0.577	0.551	0.529	0.317	0.459
<i>Hispanics</i>	0.565	0.523	0.512	0.301	0.447
<i>Whites</i>	0.550	0.520	0.510	0.300	0.449

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Supplementary Table 2. Demographic, clinical, and laboratory values in 54,757 MHD patients and according to the categories of A1c

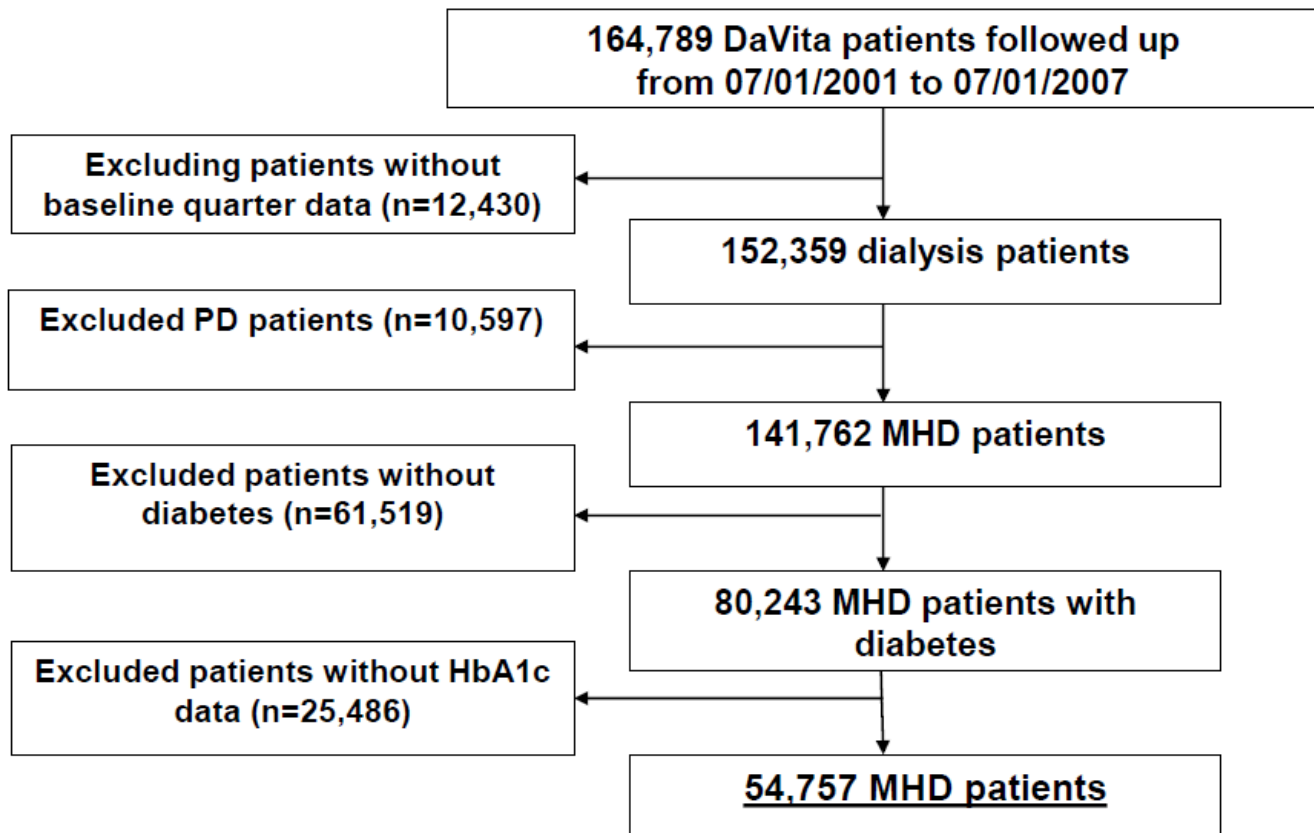
mean±SD	All Patients	A1c< 6	A1c 6 - < 7	A1c ≥7	p-value
	n=54,757	n= 21,733	n= 14,988	n= 18,036	
Age (years)	63±13	65±12	64±12	60±13	<0.001
Gender (% female)	49	49	48	49	0.04
Race (%):					<0.001
White	40	41	41	37	<0.001
Black	30	32	29	30	<0.001
Hispanic	19	16	19	22	<0.001
Asian	3	3	3	3	0.03
Dialysis Vintage (%):					
0-6 months	14	14	15	13	<0.001
6-24 months	30	29	31	32	<0.001
2-5 years	37	36	36	37	0.20
>5 years	19	20	18	18	<0.001
Primary insurance (%):					
Medicare	64	66	64	60	<0.001
Marital Status (%):					
Married	40	39	42	41	<0.001
Divorced	7	7	7	8	0.001
Single	20	19	19	22	<0.001
Widowed	14	16	14	11	<0.001
Comorbidities upon dialysis initiation (%):					
Hypertension	82	82	81	82	0.078
Inability to ambulate	4.0	4.8	4.1	3	<0.001
Cerebro-vascular disease	8.9	9.3	9.2	8.1	<0.001
Other cardiac disease	5.9	6.6	6.3	4.9	<0.001
Peripheral vascular disease	15	14	15	15	0.02
Malignant neoplasm, Cancer	3.2	4.1	3.3	2.1	<0.001
Congestive heart failure	34	34	35	33	<0.001
Atherosclerotic heart disease	25	25	27	24	<0.001
Inability to transfer	1.2	1.6	1.2	0.78	<0.001
Smoker	4.0	4.1	3.7	4.3	0.016
Pulmonary Disease	5.8	6.5	6.1	4.9	<0.001
Laboratory values:					
Delivered single-pool Kt/V	1.5±0.34	1.5±0.35	1.5±0.36	1.5±0.36	0.39
Serum albumin (g/dL)	3.6±0.44	3.6±0.48	3.6±0.43	3.6±0.41	<0.001

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Creatinine (mg/dL)	7.2±2.8	7.3±2.9	7.2±2.8	7.2±2.7	<0.001
Total Iron-binding capacity (mg/dL)	209±46	205±49	212±46	214±43	<0.001
Bicarbonate (mg/dL)	23±3.0	23±3.1	23±3.0	22±3.0	<0.001
Phosphorus (mg/dL)	5.5±1.4	5.4±1.5	5.5±1.4	5.6±1.4	<0.001
Calcium (mg/dL)	9.1±0.67	9.1±0.70	9.1±0.65	9.1±0.65	<0.001
Ferritin (ng/mL)	496±462	513±471	496±477	477±439	<0.001
Protein Catabolic Rate (g/kg/day)	0.96±0.26	0.93±0.26	0.97±0.26	0.98±0.26	<0.001
Blood hemoglobin (g/dL)	12±1.3	12±1.4	12±1.3	12±1.3	<0.001
Lymphocyte (% of total WBC)	20±7.6	20±7.7	20±7.5	20±7.4	<0.001
Body mass index (kg/m ²)	28±7.2	28±7.1	28±7.2	28±7.3	<0.001
Weight (kg)	78±22	77±21	79±22	79.5±22	<0.001

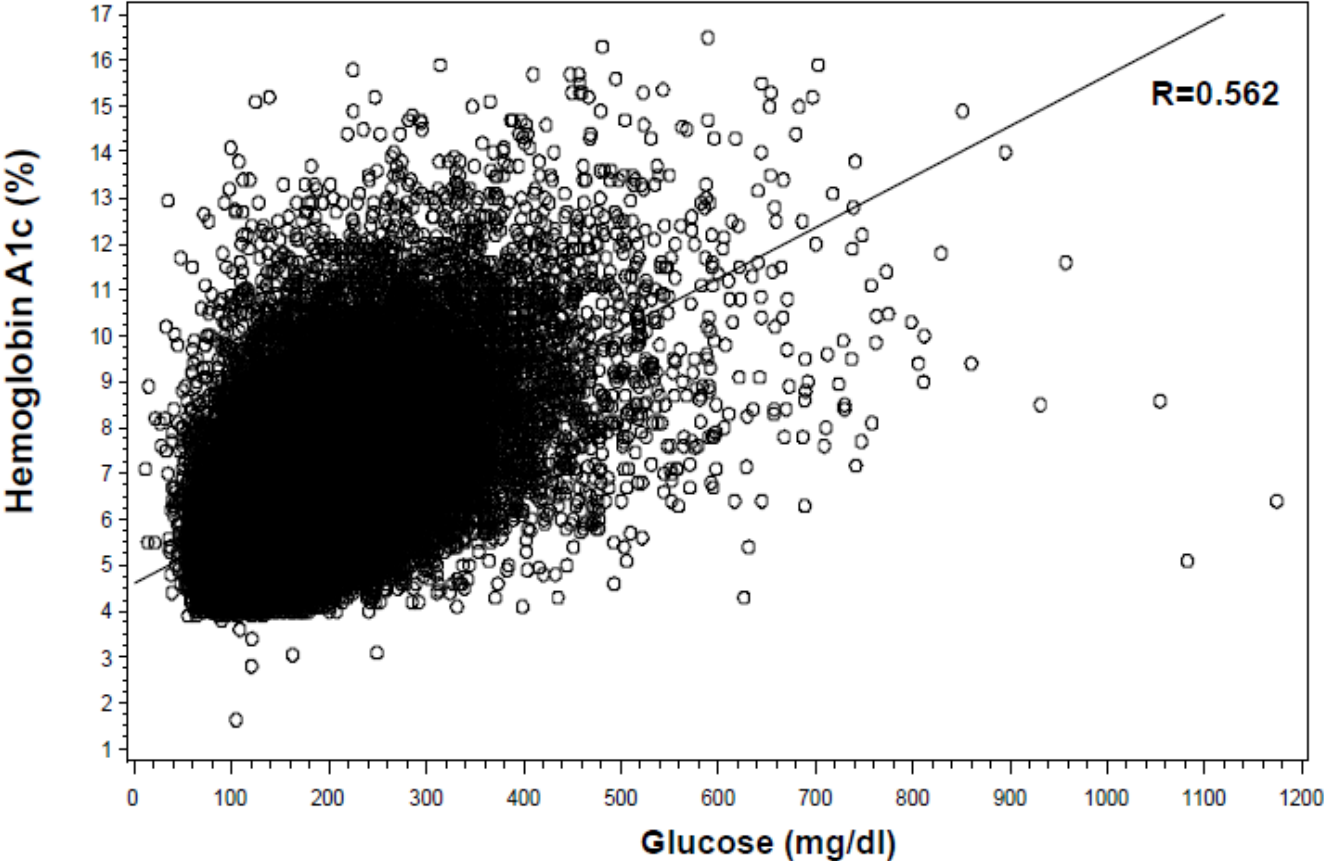
Data are presented in mean±standard deviation (SD)

Supplementary Figure 1. Flow chart of patient selection



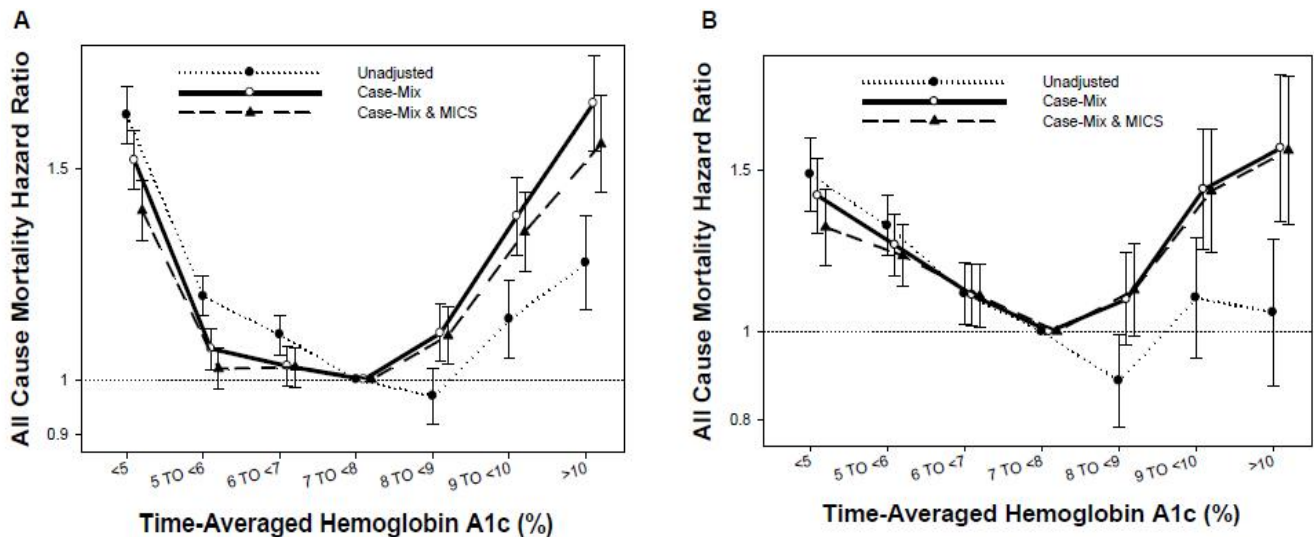
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Supplementary Figure 2. Correlation between serum glucose and A1c level in the 54,757 MHD patients

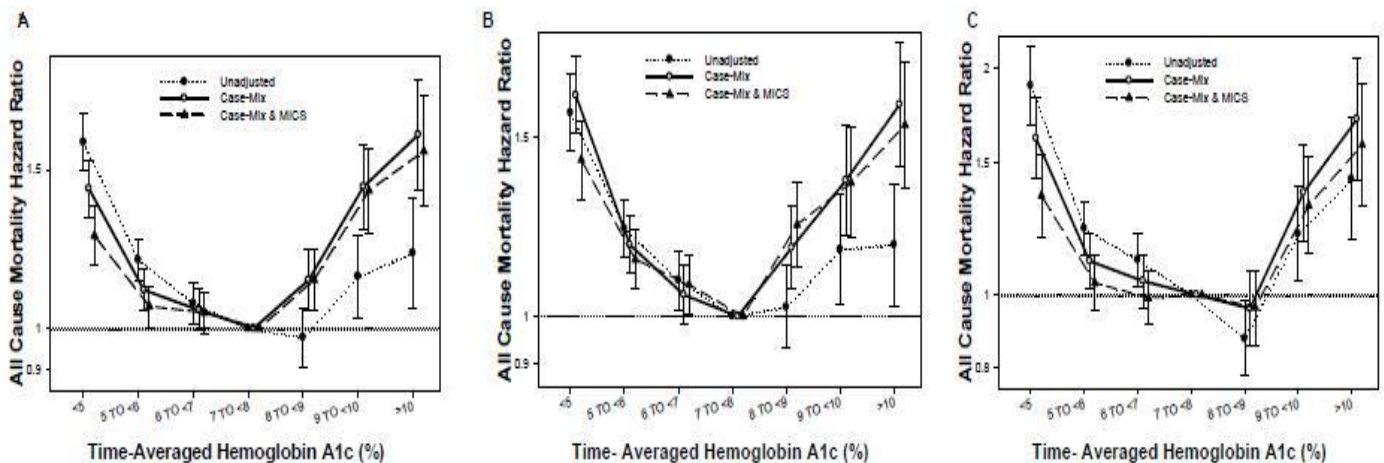


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Supplementary Figure 3. HRs of all-cause mortality of the entire range of A1C in 43,806 diabetic MHD patients with blood hemoglobin ≥ 11.0 g/dl (A) and 10,951 diabetic MHD patients with hemoglobin <11 g/dl (B). Case-mix model is adjusted for age, gender, race/ethnicity, categories of dialysis vintage, primary insurance, marital status, dialysis dose as indicated by Kt/V (single pool), residual renal function during the entry quarter. Malnutrition-inflammation complex syndrome (MICS)-adjusted model includes all of the case-mix covariates as well as body mass index, nPCR, serum levels of albumin, total iron-binding capacity, ferritin, creatinine, phosphorus, calcium, bicarbonate, blood white blood cell count, lymphocyte percentage, and hemoglobin.

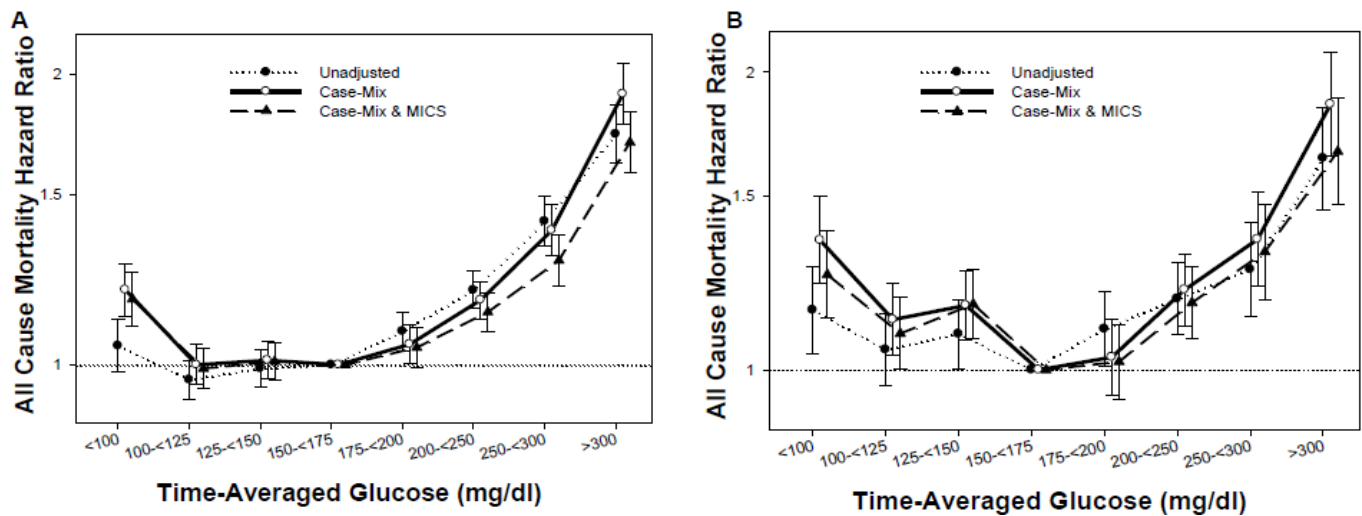


Supplementary Figure 4. HRs of all-cause mortality of the entire range of A1C in 21,770 diabetic White MHD patients (A), 16,580 Black diabetic MHD patients (B) and 10,285 Hispanic diabetic MHD patients (C). Case-mix model is adjusted for age, gender, categories of dialysis vintage, primary insurance, marital status, dialysis dose as indicated by Kt/V (single pool), residual renal function during the entry quarter. Malnutrition-inflammation complex syndrome (MICS)-adjusted model includes all of the case-mix covariates as well as body mass index, nPCR, serum levels of albumin, total iron-binding capacity, ferritin, creatinine, phosphorus, calcium, bicarbonate, blood white blood cell count, lymphocyte percentage, and hemoglobin.



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Supplementary Figure 5. HRs of all-cause mortality of the entire range of glucose in 39,686 diabetic MHD patients with blood hemoglobin ≥ 11.0 g/dl (A) and 10,697 diabetic MHD patients with hemoglobin <11 g/dl (B). Case-mix model is adjusted for age, gender, race/ethnicity, categories of dialysis vintage, primary insurance, marital status, dialysis dose as indicated by Kt/V (single pool), residual renal function during the entry quarter. Malnutrition-inflammation complex syndrome (MICS)-adjusted model includes all of the case-mix covariates as well as body mass index, nPCR, serum levels of albumin, total iron-binding capacity, ferritin, creatinine, phosphorus, calcium, bicarbonate, blood white blood cell count, lymphocyte percentage, and hemoglobin.



Supplementary Figure 6. HRs of all-cause mortality of the entire range of glucose in 19,621 diabetic White MHD patients (A), 16,023 Black diabetic MHD patients (B) and 9,355 Hispanic diabetic MHD patients (C). Case-mix model is adjusted for age, gender, categories of dialysis vintage, primary insurance, marital status, dialysis dose as indicated by Kt/V (single pool), residual renal function during the entry quarter. Malnutrition-inflammation complex syndrome (MICS)-adjusted model includes all of the case-mix covariates as well as body mass index, nPCR, serum levels of albumin, total iron-binding capacity, ferritin, creatinine, phosphorus, calcium, bicarbonate, blood white blood cell count, lymphocyte percentage, and hemoglobin.

