Supplementary table 1. Study population stratified by presence or absence of self reported heart failure at baseline.

		Stratum-specific n (%) or mean (SD) by heart failure		
		Self-reported heart failure at baseline n=382	**No heart failure reported at baseline n=3557**	**p-value**
Age (yrs)	21 to < 45	19 (5.0)	519 (14.6)	<.0001
	45 to < 65	229 (59.9)	2032 (57.1)	<.0001
	65+	134 (35.1)	1006 (28.3)	<.0001
Gender	Male	220 (57.6)	1941 (54.6)	0.26
Race-Ethnicity	Non-Hispanic White	117 (30.6)	1521 (42.8)	<.0001
	Non-Hispanic Black	217 (56.8)	1433 (40.3)	<.0001
	Hispanic	37 (9.7)	460 (12.9)	<.0001
	Other	11 (2.9)	143 (4.0)	<.0001
Current Smoker		54 (14.1)	463 (13.0)	0.54
Systolic Blood Pressure (mmHg)		128.80 (23.7)	128.46 (22.0)	0.78
Diastolic Blood Pressure (mmHg)		67.88 (14)	71.94 (12.6)	<.0001
Hypertension		347 (90.8)	3044 (85.6)	0.005
Diabetes		263 (68.8)	1645 (46.2)	<.0001

Body Mass Index Category	< 25)	41 (10.8)	589 (16.6)	0.002
	25 to < 30	100 (26.3)	1025 (28.9)	0.002
	> 30)	239 (62.9)	1935 (54.5)	0.002
Ankle Brachial Index	<0.90	99 (27.2)	526 (15.0)	<.0001
	0.90-<1.10	150 (41.2)	1663 (47.3)	<.0001
	1.10-<1.40	108 (29.7)	1235 (35.2)	<.0001
	>= 1.40	7 (1.9)	89 (2.5)	<.0001
Angiotensin Converting Enzyme inhibitor or Angiotensin receptor blocker use		296 (77.9)	2393 (67.8)	<.0001
Serum Creatinine (mg/dL)		2.05 (0.65)	1.82 (0.64)	<.0001
Estimated Glomerular Filtration Rate (ml/min/1.73m^2)		37.51 (13.97)	45.69 (16.94)	<.0001
24H Urine Protein (g/24H)	Median (Interquartile range)	0.25 (0.08 - 1.11)	0.17 (0.07 - 0.90)	0.01
Hemoglobin (g/dL)		12.29 (1.83)	12.64 (1.77)	0.0003
Calcium (mg/dL)		9.15 (0.50)	9.18 (0.51)	0.26
Phosphate (mg/dL)		3.88 (0.72)	3.71 (0.66)	<.0001
Fibroblast Growth Factor-23 (FGF-2)3 (RU/ml)		352.38 (482.56)	220.46 (458.75)	<.0001
Total Parathyroid Hormone (pg/ml)		100.22 (101.46)	72.32 (66.81)	<.0001
Brain Natriuretic Peptide (BNP)		271.97 (432.2)	84.42 (222.7)	<.0001

N-terminal pro b-type natriuretic peptide (pg/mL)	1780.0 (3486.9)	438.73 (1547.7)	<.0001

Supplementary table 2. Association between baseline CVD and outcomes in analyses considering death as a competing risk

Model	Any CVD	MI/Prior revascularization	Heart Failure	Stroke	Peripheral Vascular Disease
Model 1 (Unadjusted)	1.26* (1.11, 1.42)	1.07 (0.93, 1.23)	1.33* (1.10, 1.60)	1.13 (0.93, 1.37)	1.69* (1.38, 2.08)
Model2 Model 1+ gender, age, race, and clinical sites	1.27* (1.11, 1.45)	1.14 (0.98, 1.32)	1.20 (0.98, 1.46)	1.02 (0.84, 1.25)	1.60* (1.28, 2.00)
Model 3 Model 2+ Systolic BP, triglycerides, HDL, Body Mass Index, smoking, Diabetes, eGFr, Urine protein, ACE/ARB use Hemoglobin	0.97 (0.84, 1.13)	1.08 (0.92, 1.28)	0.97 (0.77, 1.23)	0.91 (0.73, 1.14)	0.87 (0.67, 1.14)
Model 4 Model 3+FGF 23	0.97 (0.84, 1.13)	1.09 (0.92, 1.28)	0.97 (0.77, 1.22)	0.91 (0.73, 1.14)	0.88 (0.68, 1.14)

Supplementary Table 3. Risk for outcomes adjusted for FGF-23 in addition to Systolic BP, triglycerides, HDL, Body Mass Index, smoking, Diabetes, eGFR, Urine protein, ACE/ARB use Hemoglobin,

Model	Any CVD	MI/Prior revascularization	Heart Failure	Stroke	Peripheral Vascular Disease
ESRD or 50% decline in GFR	1.03 (0.89, 1.18)	1.16 (1.00, 1.36)	1.25* (1.03, 1.53)	0.93 (0.76, 1.14)	0.92 (0.74, 1.14)
Hazard ratio (95% CI)					
Model 3 + FGF-23					
Rate of change of GFR	-0.06 (0.09)	-0.14 (0.1)	-0.10 (0.15)	-0.01 (0.14)	0.08 (0.17)
Parameter estimate (p value)					
Model 3 + FGF-23					