

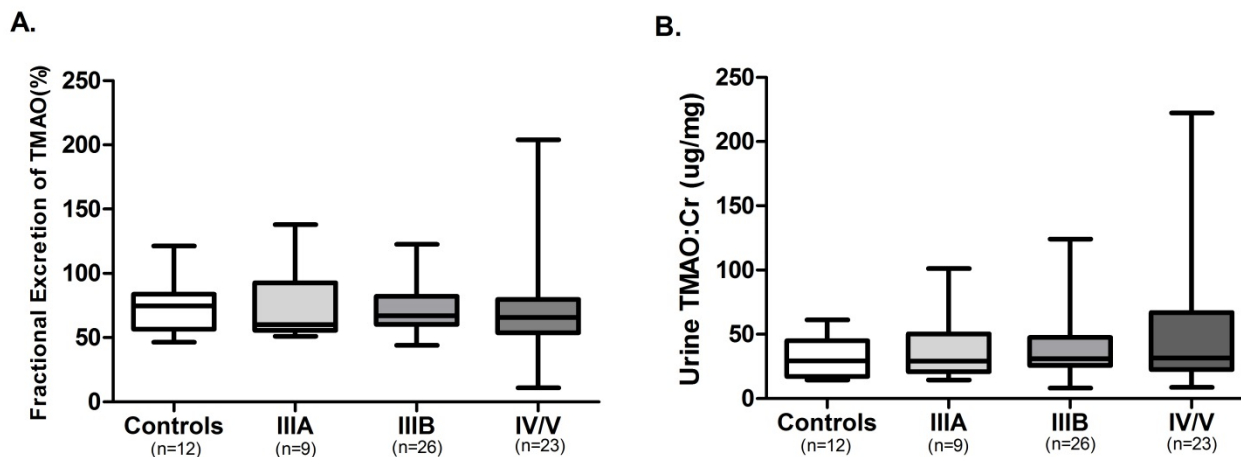
SUPPLEMENTAL DATA

Supplemental Table 1. Demographics of cohort utilized for cross-sectional comparison of TMAO concentrations among CKD stages

	Total Cohort (n=104)	Controls (n=17)	CKD-IIIA (n=9)	CKD-IIIB (n=28)	CKD-IV/V (n=25)	ESRD (n=25)	P-value
Demographics							
Age (years)	57.6 ± 14.2	44.1 ± 14.6	53.4 ± 7.4	57.5 ± 13.8	62.3 ± 13.3	63.9 ± 10.2	< 0.001
Sex							0.015
Female	52 (50.0%)	12 (70.6%)	3 (33.3%)	16 (57.1%)	15 (60.0%)	6 (24.0%)	
Male	52 (50.0%)	5 (29.4%)	6 (66.7%)	12 (42.9%)	10 (40.0%)	19 (76.0%)	
Race							0.751
African-American	24 (23.1%)	3 (17.6%)	3 (33.3%)	7 (25.0%)	6 (24.0%)	5 (20.0%)	
Caucasian	71 (68.3%)	13 (76.5%)	6 (66.7%)	19 (67.9%)	18 (72.0%)	15 (60.0%)	
Other	9 (8.7%)	1 (5.9%)	0 (0.0%)	2 (7.1%)	1 (4.0%)	5 (20.0%)	
Hypertension							< 0.001
No	26 (25.0%)	12 (70.6%)	4 (44.4%)	6 (21.4%)	3 (12.0%)	1 (4.0%)	
Yes	78 (75.0%)	5 (29.4%)	5 (55.6%)	22 (78.6%)	22 (88.0%)	24 (96.0%)	
Smoking History	54 (52.4%)	4 (23.5%)	6 (66.7%)	16 (57.1%)	14 (56.0%)	14 (58.3%)	0.131
BMI	31.3 ± 7.0	29.1 ± 6.6	36.5 ± 6.5	33.2 ± 7.2	30.9 ± 7.7	29.1 ± 4.9	0.023
Diabetes	39 (37.9%)	2 (11.8%)	6 (66.7%)	11 (39.3%)	10 (40.0%)	10 (41.7%)	0.071
History of CAD	31 (30.1%)	2 (11.8%)	1 (11.1%)	10 (35.7%)	7 (28.0%)	11 (45.8%)	0.119
History of CHF	14 (13.6%)	0 (0.0%)	3 (33.3%)	4 (14.3%)	4 (16.0%)	3 (12.5%)	0.181
History of PCI or CABG	19 (18.4%)	2 (11.8%)	2 (22.2%)	6 (21.4%)	4 (16.0%)	5 (20.8%)	0.924
Etiology of CKD		N/A					< 0.001
DM	40 (46.5%)	-	6 (66.7%)	14 (50.0%)	11 (44.0%)	9 (37.5%)	
Glomerular	6 (7.0%)	-	0 (0.0%)	1 (3.6%)	1 (4.0%)	4 (16.7%)	
Hypertension/CV	15 (17.4%)	-	1 (11.1%)	6 (21.4%)	4 (16.0%)	4 (16.7%)	
PKD	11 (12.8%)	-	2 (22.2%)	3 (10.7%)	5 (20.0%)	1 (4.2%)	
Urologic	9 (10.5%)	-	0 (0.0%)	1 (3.6%)	2 (8.0%)	6 (25.0%)	
Other	5 (5.8%)	-	0 (0.0%)	3 (10.7%)	2 (8.0%)	0 (0.0%)	
Laboratory Parameters							
eGFR (ml/min/1.73m ²)	42.5 ± 27.1	96.8 ± 27.3	53.7 ± 8.4	39.3 ± 6.3	20.5 ± 5.0	N/A	< 0.001

Continuous variables presented as mean ± standard deviation

Abbreviations: CAD, coronary artery disease; PCI, percutaneous coronary intervention; CABG, coronary artery bypass grafting; TMAO, trimethylamine-N-oxide; eGFR, estimated glomerular filtration rate; ESRD, end-stage renal disease; CKD, chronic kidney disease; CV, cardiovascular; DM, diabetes mellitus; PKD, polycystic kidney disease; CHF, congestive heart failure



Supplemental Figure 1. FE_{TMAO} and TMAO:Cr Values Stratified by CKD Stage

(A) Comparison of the spot fractional excretion of TMAO (FE_{TMAO}) in controls and CKD patients with residual kidney function after stratification by CKD stage. **(B)** Comparison of the spot urine TMAO to creatinine ratio (TMAO:Cr) in controls and CKD patients with residual kidney function after stratification by CKD stage. (box plots depict median + interquartile range and whiskers illustrate minimum-maximum values; $P=NS$ for all statistical comparisons).