

Supplementary Table S1. Predictive value and multivariate logistic regression analysis of seven obesity and lipid-related indices in NCEP-ATPIII criteria

Variable	Optimal cut-offs	Youden Index	Sensitivity (%)	Specificity (%)	OR (95% CI)	P-value
CKD with T2DM						
(Men)						
BMI	24.4	0.3194	75.8	56.14	1.196 (1.075-1.332)	0.001
WC	87	0.3115	60	71.15	1.089 (1.039-1.141)	< 0.001
VFA (cm ²)	101	0.3524	63.01	72.22	1.014 (1.006-1.023)	0.001
SFA (cm ²)	149	0.3171	83.5	48.15	1.011 (1.005-1.018)	0.001
VAI	1.58	0.8439	90.51	93.88	71.795 (14.460-356.467)	< 0.001
CVAI	111.21	0.4237	62.77	79.59	1.033 (1.019-1.046)	< 0.001
LAP	34.84	0.5722	71.22	86	1.105 (1.064-1.146)	< 0.001
CKD with T2DM						
(Women)						
BMI	25	0.5556	55.56	100	1.478 (1.013-2.156)	0.043
WC	77	0.5739	85.96	71.43	1.307 (1.046-1.632)	0.018
VFA (cm ²)	86	0.7377	73.77	100	1.154 (1.012-1.317)	0.033
SFA (cm ²)	200	0.5410	54.1	100	1.023 (1.003-1.044)	0.026
VAI	1.69	0.8396	98.25	85.71	1.749 (1.083-2.824)	0.0223
CVAI	97.801	0.6992	84.21	85.71	1.169 (1.026-1.333)	0.019
LAP	47.12	0.7193	71.93	100	1.033 (1.005-1.061)	0.0208
CKD without T2DM						
(Men)						
BMI	26.9	0.3081	52.46	78.35	1.239 (1.101-1.393)	< 0.001
WC	87	0.3502	72.13	62.89	1.101 (1.049-1.155)	< 0.001
VFA (cm ²)	119	0.4210	60.66	81.44	1.026 (1.014-1.038)	< 0.001
SFA (cm ²)	208	0.3914	72.13	67.01	1.017 (1.009-1.025)	< 0.001
VAI	2.702	0.6978	85.25	84.54	4.055 (2.392-6.874)	< 0.001

CVAI	112.25	0.4205	68.85	73.2	1.031 (1.017-1.044)	< 0.001
LAP	39.82	0.5638	85.25	71.13	1.058 (1.035-1.082)	< 0.001
CKD without T2DM (Women)						
BMI	23	0.4157	81.25	60.32	1.378 (1.169-1.624)	< 0.001
WC	86	0.4673	56.25	90.48	1.123 (1.055-1.195)	< 0.001
VFA (cm ²)	74	0.3070	65.62	65.08	1.023 (1.005-1.042)	0.014
SFA (cm ²)	210	0.3884	53.13	85.71	1.012 (1.005-1.019)	0.001
VAI	3.11	0.6996	81.25	88.71	6.322 (2.665-14.996)	< 0.001
CVAI	90.71	0.5393	78.12	75.81	1.076 (1.041-1.112)	< 0.001
LAP	44.24	0.6850	84.37	84.13	1.160 (1.083-1.243)	< 0.001

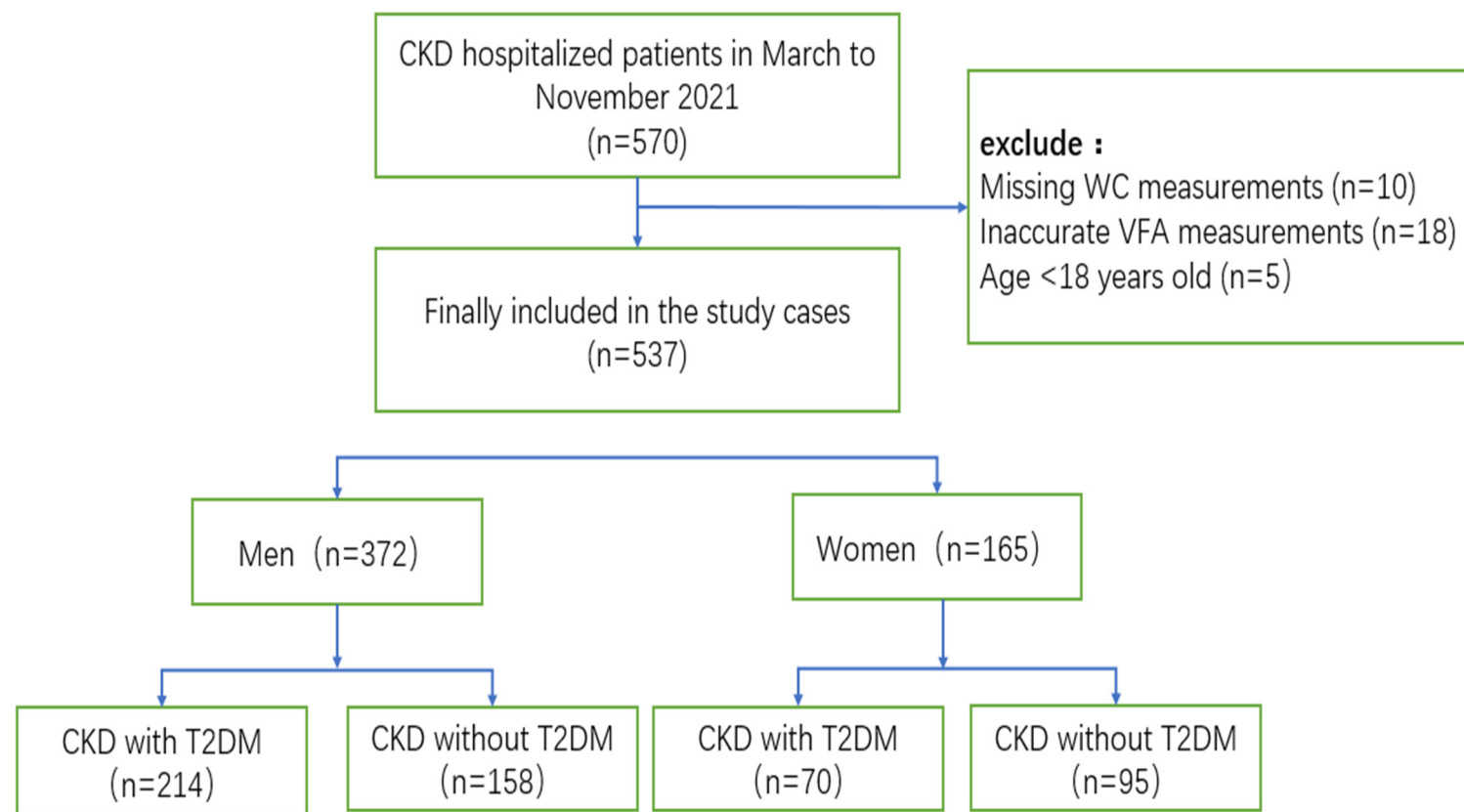
Adjusted for age, systolic blood pressure, total cholesterol, LDL, eGFR ; 95% CI, 95% confidence interval; BMI, body mass index; WC, waist circumference; VFA, visceral fat area; SFA, subcutaneous fat area; VAI, visceral adiposity index; CVAI, Chinese visceral adiposity index; LAP, Lipid accumulation product; OR, odds ratio;

Supplementary Table S2. Predictive value of seven obesity and lipid-related indices in IDF criteria and multivariate logistic regression analysis

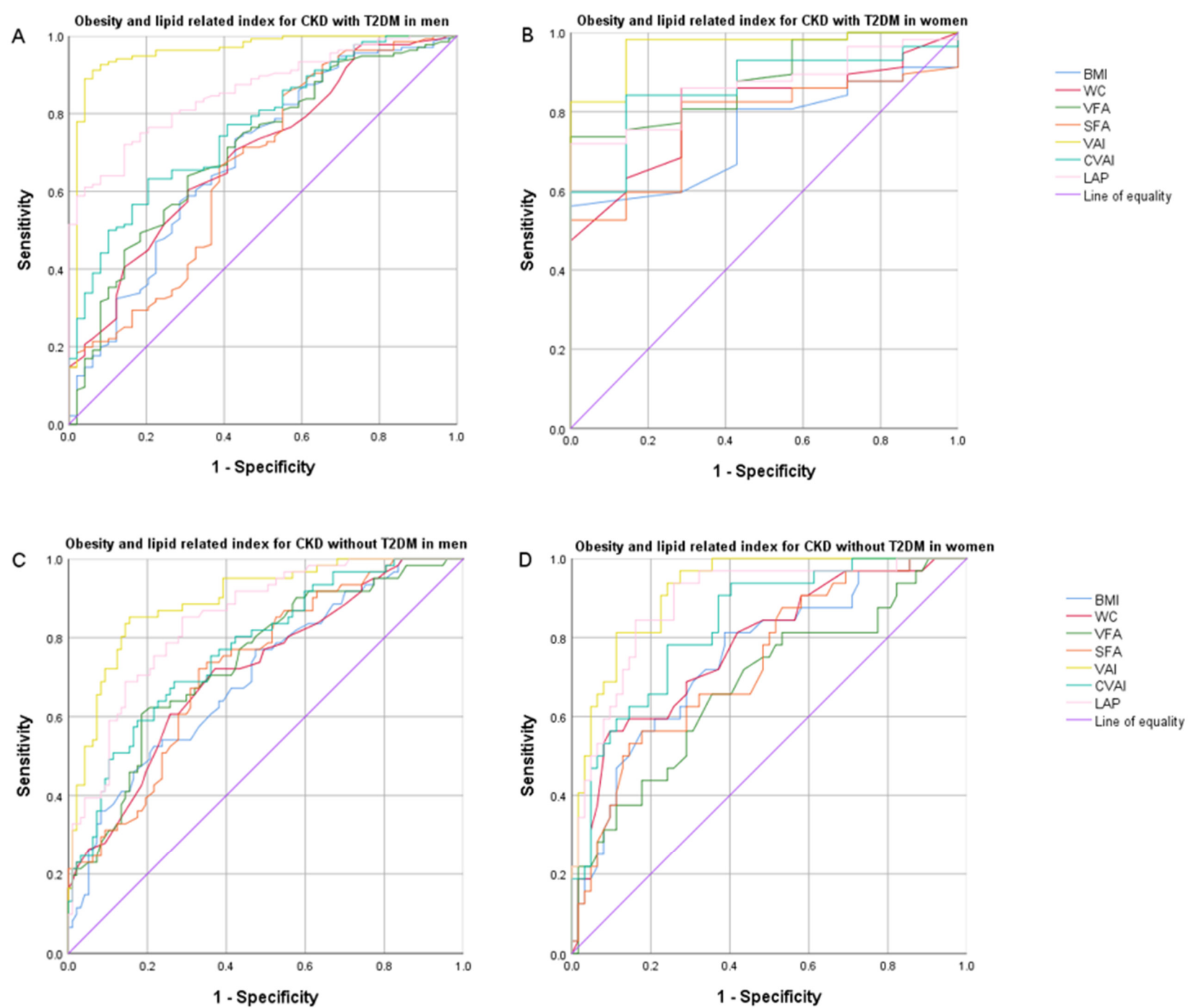
Variable	Optimal cut-offs	Youden Index	Sensitivity (%)	Specificity (%)	OR (95% CI)	P-value
CKD with T2DM (Men)						
BMI	25.9	0.6216	87.36	74.80	2.031 (1.646-2.507)	< 0.001
WC	89	0.991	100	99.1	2.733 (1.797-4.156)	< 0.001
VFA (cm ²)	123	0.6788	78.05	89.93	1.047 (1.032-1.062)	< 0.001
SFA (cm ²)	196	0.7234	92.68	79.66	1.064 (1.043-1.085)	< 0.001
VAI	2.62	0.34	65.43	68.57	1.160 (0.977-1.377)	0.091
CVAI	114.94	0.8801	97.53	90.48	1.197 (1.119-1.280)	< 0.001
LAP	39.79	0.5710	83.95	73.15	1.055 (1.036-1.075)	< 0.001
CKD with T2DM (Women)						
BMI	22.7	0.7481	92.45	82.35	2.999 (1.653-5.441)	< 0.001

WC	79	1	100	100	1.206 (1.085-1.340)	< 0.001
VFA (cm ²)	81	0.8579	92.45	93.33	1.104 (1.048-1.164)	< 0.001
SFA (cm ²)	143	0.8956	96.23	93.33	1.109 (1.034-1.189)	0.004
VAI	3.25	0.5171	66	85.71	1.484 (1.067-2.064)	0.019
CVAI	97.801	0.7057	92	78.57	1.168 (1.059-1.288)	0.002
LAP	47.12	0.7286	80	92.86	1.107 (1.042-1.177)	0.001
CKD without T2DM						
(Men)						
BMI	26	0.7062	88.89	81.73	2.146 (1.672-2.756)	< 0.001
WC	89	0.9038	100	90.38	1.673 (1.384-2.023)	< 0.001
VFA (cm ²)	114	0.7728	90.74	86.54	1.088 (1.057-1.119)	< 0.001
SFA (cm ²)	225	0.6884	85.19	83.65	1.048 (1.031-1.066)	< 0.001
VAI	2.74	0.5004	74.07	75.96	1.472 (1.199-1.807)	< 0.001
CVAI	113.98	0.8853	98.15	90.38	1.211 (1.111-1.320)	< 0.001
LAP	45.6	0.7062	88.89	81.73	1.070 (1.046-1.095)	< 0.001
CKD without T2DM						
(Women)						
BMI	25.4	0.6282	76.67	86.15	1.619 (1.317-1.990)	< 0.001
WC	79	0.8462	100	84.62	1.239 (1.123-1.367)	< 0.001
VFA (cm ²)	71	0.6077	90	70.77	1.057 (1.030-1.085)	< 0.001
SFA (cm ²)	175	0.6538	90	75.38	1.022 (1.012-1.032)	< 0.001
VAI	2.64	0.6188	90	71.87	1.758 (1.279-2.415)	< 0.001
CVAI	90.71	0.6969	90	79.69	1.108 (1.058-1.160)	< 0.001
LAP	43.52	0.7795	93.33	84.62	1.147 (1.081-1.217)	< 0.001

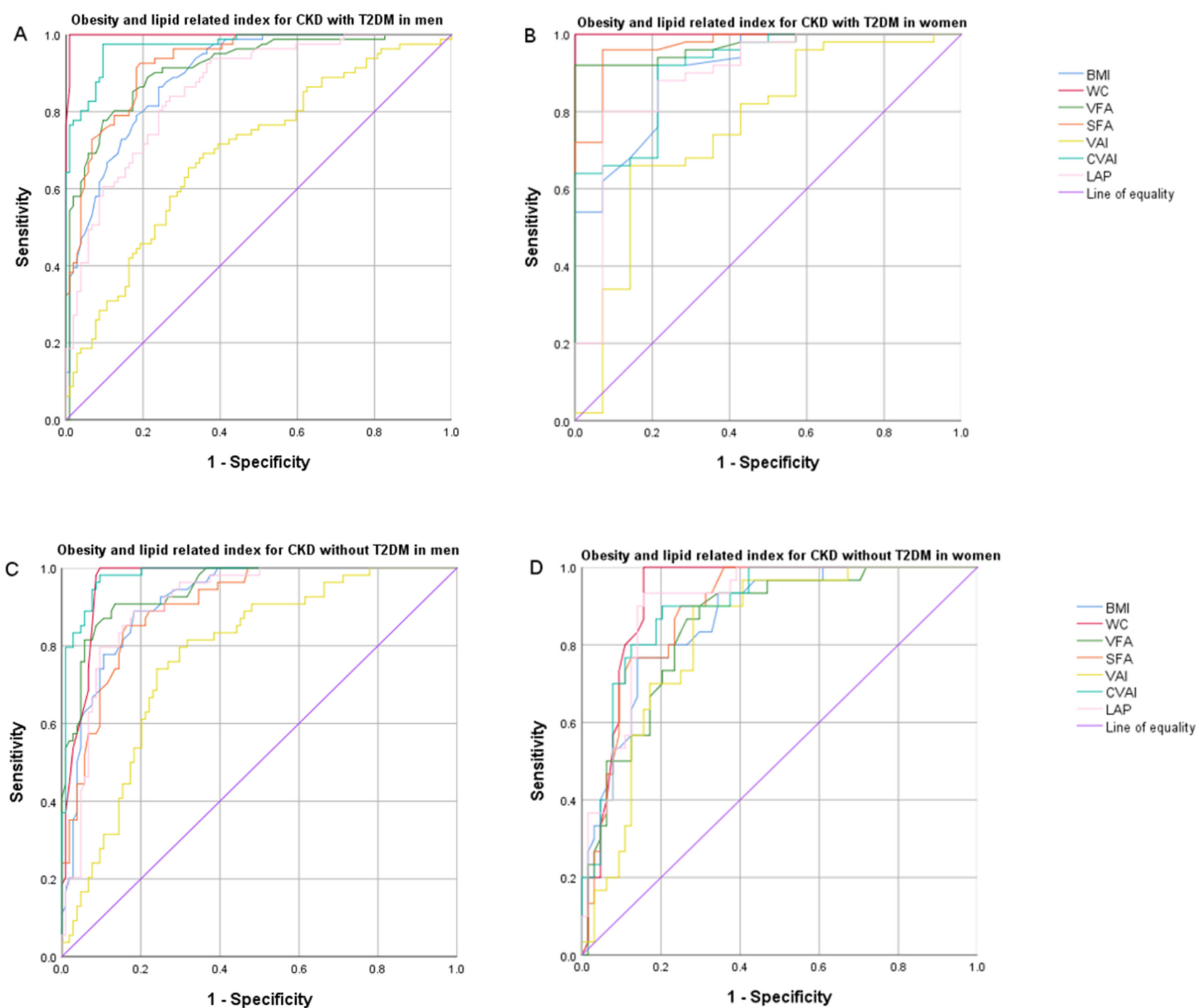
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Supplementary Figure S1. Flowchart of selection process for the data included in this analysis. WC, waist circumferences; VFA, visceral fat area



Supplementary Figure S2. Comparison of diagnostic value of BMI, WC, VFA, SFA, VAI, CVAI and LAP in predicting metabolic syndrome using NECP-ATP III criteria in CKD males and females with T2DM and without T2DM.



Supplementary Figure S3. Comparison of diagnostic value of BMI, WC, VFA, SFA, VAI, CVAI, and LAP in predicting metabolic syndrome using IDF criteria in CKD men and women with T2DM and without T2DM.