

Table S1 Intra-reader and inter-reader reproducibility

Variables	Intra-reader (95% CI)	Inter-reader (95% CI)
VI	0.862 (0.791–0.911)	0.756 (0.702–0.809)
Impression	0.976 (0.963–0.985)	0.865 (0.779–0.951)
Shape	0.958 (0.935–0.973)	0.87 (0.779–0.960)

VI, vascular index.

Table S2 The correlation between all tested parameters and MN

Variables	Age	BMI	VI	Impression	Shape	Renal length	Renal width	Renal thickness	Cortical thickness	Medulla thickness	PSV	EDV	RI	eGFR	Scr	BUN	Pro (+)	MN
Age	1																	
BMI	0.168	1																
VI	-0.403	-0.344	1															
Impression	0.349	0.385	-0.835	1														
Shape	0.316	0.303	-0.716	0.774	1													
Renal length	0.126	0.358	-0.335	0.286	0.131	1												
Renal width	0.215	0.367	-0.429	0.434	0.228	0.655	1											
Renal thickness	0.22	0.363	-0.354	0.38	0.171	0.608	0.913	1										
Cortical thickness	-0.181	0.235	-0.022	-0.043	-0.082	0.229	0.234	0.263	1									
Medulla thickness	-0.147	0.1	0.05	-0.004	-0.017	0.234	0.32	0.39	0.429	1								
PSV	0.104	0.065	0.055	-0.066	-0.059	0.058	-0.04	0.044	0.216	0.097	1							
EDV	-0.092	0.02	0.223	-0.212	-0.213	0.036	-0.141	-0.049	0.137	0.089	0.792	1						
RI	0.406	0.179	-0.366	0.38	0.23	0.037	0.289	0.289	0.023	-0.076	0.089	-0.359	1					
eGFR	-0.581	-0.175	0.462	-0.429	-0.445	0.025	-0.162	-0.098	0.144	0.143	0.1	0.234	-0.396	1				
Scr	0.456	0.324	-0.534	0.526	0.446	0.369	0.435	0.361	-0.027	-0.03	-0.147	-0.196	0.308	-0.783	1			
BUN	0.504	0.328	-0.391	0.346	0.24	0.247	0.381	0.307	-0.036	-0.039	-0.037	-0.068	0.294	-0.6	0.691	1		
Pro (+)	0.239	0.288	-0.729	0.75	0.517	0.294	0.532	0.433	0.037	0.032	-0.068	-0.174	0.312	-0.545	0.644	0.484	1	
MN	0.256	0.25	-0.762	0.743	0.578	0.333	0.521	0.43	0.052	0.034	-0.094	-0.249	0.362	-0.561	0.642	0.472	0.941	1

Spearman correlation test was used to examine the correlation between all tested parameters and MN. MN, membranous nephropathy; BMI, body mass index; VI, vascular index; PSV, peak systolic velocity; EDV, end-diastolic velocity; RI, resistive index; eGFR, estimated glomerular filtration rate; Scr, serum creatinine; BUN, blood urea nitrogen; Pro (+), urine protein.

Table S3 Independent factors for predicting vascular classification.

Variables	Prediction of mild vascular disease	Prediction of moderate vascular disease	Prediction of severe vascular disease
	AUROC (95% CI)	AUROC (95% CI)	AUROC (95% CI)
VI	0.79 (0.64–0.94)	0.54 (0.35–0.73)	0.75 (0.59–0.90)
eGFR	0.63 (0.43–0.84)	0.60 (0.41–0.78)	0.75 (0.59–0.91)
Impression	0.67 (0.47–0.87)	0.55 (0.37–0.74)	0.72 (0.55–0.90)
Shape	0.75 (0.59–0.91)	0.51 (0.32–0.70)	0.74 (0.56–0.92)

AUROC, area under the receiver operating characteristic curve; VI, vascular index; eGFR, estimated glomerular filtration rate.

Table S4 The correlation between all tested parameters and Vascular damage level in all MN patients

Variables	Age	BMI	VI	Impression	Shape	Renal length	Renal width	Renal thickness	Cortical thickness	Medulla thickness	PSV	EDV	RI	RBP	eGFR	Scr	CysC	BUN	Pro (+)	ALB	Vascular damage level
Age	1																				
BMI	-0.003	1																			
VI	-0.452	-0.316	1																		
Impression	0.199	0.255	-0.727	1																	
Shape	0.302	0.224	-0.75	0.771	1																
Renal length	-0.112	0.132	0.022	-0.076	-0.121	1															
Renal width	-0.041	0.198	0.134	-0.14	-0.103	0.65	1														
Renal thickness	-0.03	0.093	0.112	-0.13	-0.152	0.551	0.897	1													
Cortical thickness	-0.347	0.235	0.244	-0.216	-0.209	0.213	0.17	0.187	1												
Medulla thickness	-0.184	0.177	-0.002	0.032	-0.026	0.328	0.399	0.434	0.378	1											
PSV	0.07	0.04	-0.159	0.03	-0.037	0.186	0.106	0.129	0.456	0.317	1										
EDV	-0.221	0.065	0.023	-0.066	-0.174	0.19	0.079	0.108	0.358	0.286	0.733	1									
RI	0.517	-0.09	-0.218	0.097	0.04	-0.297	-0.108	-0.067	-0.027	-0.229	0.234	-0.266	1								
RBP	0.478	-0.086	-0.147	0.141	0.222	-0.296	-0.089	0.091	-0.33	0.139	-0.357	-0.265	0.11	1							
eGFR	-0.542	-0.239	0.31	-0.21	-0.373	0.41	0.221	0.224	0.289	0.289	0.274	0.246	-0.241	-0.662	1						
Scr	0.346	0.193	-0.146	0.157	0.264	-0.178	-0.05	-0.051	-0.274	-0.157	-0.391	-0.24	0	0.634	-0.888	1					
CysC	0.198	0.151	-0.22	-0.017	0.204	-0.272	0.078	0.126	0.028	0.087	-0.187	0.027	-0.044	0.566	-0.506	0.513	1				
BUN	0.408	0.33	-0.075	-0.063	0.002	-0.058	0.077	0.04	-0.085	-0.03	-0.103	0.053	0.043	0.347	-0.61	0.663	0.6	1			
Pro (+)	-0.07	0.227	-0.005	0.198	-0.086	-0.077	0.201	0.141	-0.04	0.026	0.085	0.227	-0.106	-0.022	-0.086	0.164	0.087	0.159	1		
ALB	-0.148	-0.085	-0.073	0.085	0.047	0.08	-0.26	-0.209	0.002	-0.086	0.259	0.298	-0.104	-0.289	0.18	-0.283	-0.174	-0.177	-0.159	1	
Vascular damage level	0.389	0.059	-0.504	0.43	0.518	-0.165	-0.117	-0.213	-0.118	-0.072	0.173	-0.027	0.265	0.245	-0.381	0.228	0.176	0.1	0.304	0.051	1

Spearman correlation test was used to examine the correlation between all tested parameters and Vascular damage level. MN, membranous nephropathy; BMI, body mass index; VI, vascular index; PSV, peak systolic velocity; EDV, end-diastolic velocity; RI, resistive index; RBP, retinol-binding protein; eGFR, estimated glomerular filtration rate; Scr, serum creatinine; CysC, cystatin C; BUN, blood urea nitrogen; Pro (+), urine protein; ALB, albumin.

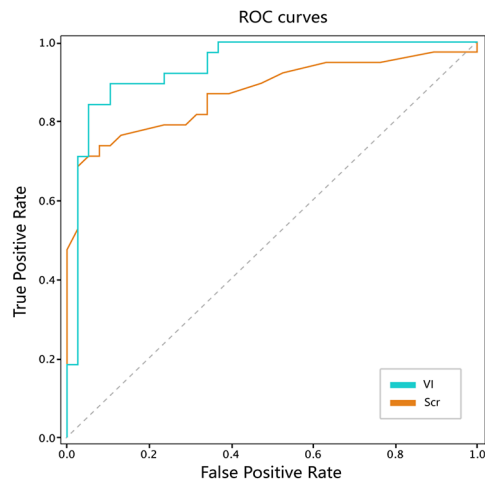


Figure S1 Receiver operating characteristic curves for Scr levels and VI. ROC, receiver operating characteristic; VI, vascular index; Scr, serum creatinine.