Supplemental Material

Table S1: Comparison of study participants within the development cohort who progressed towards end-stage renal disease with study participants with event-free survival

	Total cohort	Progression to ESRD	No progression to ESRD	P
Age (years)	64.6 ± 12.6	64.1 ± 13.5	64.7 ± 12.5	0.72
Gender (female)	168 (41.7 %)	15 (28.8 %)	153 (43.6 %)	0.05
Diabetes mellitus	150 (37.2 %)	26 (50.0 %)	124 (35.3 %)	0.05
Current Smoker	38 (9.4 %)	4 (7.7 %)	34 (9.7 %)	0.80
Albuminuria (mg/g creatinine)	32 (7; 194)	437 (126; 1923)	23 (6; 106)	<0.001
eGFR (ml/min/1.73 m²)	45.8 ± 16.0	28.1 ± 12.3	48.9 ± 14.5	<0.001
BMI (kg/m²)	30.2 ± 5.5	29.4 ± 5.5	30.3 ± 5.5	0.24
BP sys (mmHg)	154 ± 23	160 ± 23	153 ± 23	0.03
BP diast (mmHg)	87 ± 12	87 ± 14	87 ± 12	0.72
BP mean (mmHg)	110 ± 14	111 ± 14	109 ± 14	0.33
HF (beats/min)	66 ± 11	67 ± 12	66 ± 11	0.49
RRI	74 ± 9	79 ± 8	73 ± 8	<0.001
SRI	65 ± 8	68 ± 9	65 ± 8	0.01
DI-RISK	8 ± 5	10 ± 5	8 ± 5	<0.001

eGFR: estimated glomerular filtration rate; BMI: body mass index; BP sys: systolic blood pressure; BP diast: diastolic blood pressure; BP mean: mean blood pressure; HF: heart rate; RRI: renal resistive index; SRI: splenic resistive index; DI-RISK: difference of resistive indices in spleen and kidney

Table S2: Comparison of study participants within the validation cohort who progressed towards end-stage renal disease with study participants with event-free survival

	Total cohort	Progression to ESRD	No progression to ESRD	P
Age (years)	49.8 ± 16.4	58.2 ± 18.0	48.4 ± 15.7	0.01
Gender (female)	67 (41.4 %)	8 (34.8 %)	59 (42.4 %)	0.65
Diabetes mellitus	21 (13.0 %)	5 (21.7 %)	16 (10.1 %)	0.19
Albuminuria (mg/g creatinine)	57 (32; 318)	732 (436; 1463)	53 (28; 102)	<0.001
eGFR (ml/min/1.73 m²)	80.2 ± 47.6	18.0 ± 10.0	90.5 ± 43.3	<0.001
BMI (kg/m²)	26.0 ± 4.5	27.1 ± 5.6	25.8 ± 4.3	0.20
BP sys (mmHg)	164 ± 26	175 ± 19	162 ± 27	0.03
BP diast (mmHg)	97 ± 15	98 ± 16	97 ± 14	0.71
BP mean (mmHg)	119 ± 17	124 ± 15	119 ± 17	0.18
RRI	68 ± 10	79 ± 9	66 ± 8	<0.001

eGFR: estimated glomerular filtration rate; BMI: body mass index; BP sys: systolic blood pressure; BP diast: diastolic blood pressure; BP mean: mean blood pressure; RRI: renal resistive index.

Equation: Three year risk prediction of KFRE index + RRI

$P = 1 - S_0(t = 3years)^{\exp(f(x))}$

where $f(x) = \beta_1(x_1 - \bar{x}_1) + \beta_2(x_2 - \bar{x}_2)$

and β_1 represents the beta coefficient of the KFRE Index, β_2 the beta coefficient of RRI/5, $\bar{x}_1$ the mean KFRE Index, $\bar{x}_2$ the mean RRI/5, x_1 the individual patient KFRE Index (see equation 1 of the manuscript), and x_2 the RRI/5 of the individual patient.

In our cohort $S_0(t = 3\ years) = 0.989$ so the final three year risk prediction of an individual was:

$P = 1 - 0.989^{\exp[0.861*(KFRE\ Index-(-4.752))+0.332*(RRI/5-14.74)]}$