## Supplementary material:

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Suppleme	Supplementary table 1: Regression coefficients for the urinary Na/K-ratio (per 1 SD increase) for the associations with ABP (mmHg) (n=1311).												
	Model	1: Cardio	ovascular										
	r	isk facto	ors	N	lodel 2: +	mGFR		Model 3: + ACR		Mod	el 4: + E	GF-Cr	
	Std beta	Р	95% CI	Std beta	Р	CI	Std beta	Р	CI	Std Beta	Р	CI	
					24 h mea	an ABP as depe	ndent varia	ble					
Systolic BP	0.9	0.003	(0.3-1.6)	1.0	0.003	(0.3-1.6)	0.9	0.003	(0.3-1.6)	1.0	0.003	(0.3-1.6)	
<b>Diastolic BP</b>	0.4	0.053	(-0.1-0.8)	0.4	0.053	(-0.0-0.8)	-0.0-0.8) 0.4 0.058 (-0.0-0.8) 0.4 0.056 (-						
				N	1ean dayt	ime ABP as de	pendent var	iable					
Systolic BP	Mean daytime ABP as dependent variable       Instolic BP     0.9     0.006     (0.3-1.6)     0.9     0.006     (0.3-1.6)     1.0     0.005     (0.3-1.6)												
Diastolic BP	0.4	0.055	(-0.0-0.9)	0.4	0.055	(-0.0-0.9)	0.4	0.061	(-0.0-0.8)	0.4	0.060	(-0.0-0.8)	
				M	ean night	-time ABP as de	ependent va	riable					
Systolic BP	0.9	0.005	(0.3-1.5)	0.9	0.005	(0.3-1.5)	0.9	0.006	(0.3-1.5)	0.9	0.004	(0.3-1.6)	
Diastolic BP	0.3	0.127	(-0.1-0.8)	0.3	0.125	(-0.1-0.8)	0.3	0.135	(-0.1-0.7)	0.3	0.119	(-0.1-0.8)	
Regression r	nodels; Mo	odel 1; C	ardiovascula	r risk facto	<b>rs:</b> The m	odel includes a	ge, sex (mal	e or female), wais	t-hip-ratio, H	bA1c, trigly	cerides a	and HDL-	
						cholesterc	ol.						
Modell 2;	+ mGFR: In	additior	to the prece	eding mode	el, the mo	del includes m	GFR. <b>Model</b>	<b>l 3; + ACR</b> : In addi	tion to the pr	receding mo	del, the	model	
oo o diabata.		ala (::		dia a alla una		includes A	CR tion and ACI				. منام م	un dau tha	
as a dichotor	nous variat	sie (incre	eased ACR: u	rine album	in over th	limit of detec	tion and ACI	R over 1.13mg/m	noi, normai A	ACR: unne a	ibumin (	under the	
	or A(	CR under	r 1 13mg/mn	nol) <b>Mode</b>	1 4· + FGF	<b>Cr</b> . In addition	to the prec	eding model the	model includ	es FGF-Cr			
Blood pressure	e (BP), amb	ulatory ł	blood pressu	re (ABP), st	andardize	- d regression co	pefficient (st	d beta), standard	deviation (SF	)), glomerul	ar filtrat	ion rate as	
2.000 p. 00001						a single-sam	ple			,, <u>6</u> , 6, 6, 1, 6, 1			
plasma cle	arance of i	ohexol (I	mGFR), urine	albumin c	reatinine	ratio (ACR), epi	dermal grov	vth factor to the u	irine creatinir	ne concentr	ation (EC	GF-Cr).	
Modell 2; as a dichotor Blood pressure plasma cle	+ mGFR: In mous varial or A( e (BP), amb earance of i	additior ole (incre CR under ulatory b ohexol (i	to the prece eased ACR: u r 1.13mg/mm plood pressu mGFR), urine	eding mode rine album nol). <b>Mode</b> re (ABP), st albumin c	el, the mo in over th el <b>4; + EGF</b> andardize reatinine	cholestero del includes mo includes A0 e limit of detec limit of detec <b>-Cr:</b> In addition ed regression co a single-sam ratio (ACR), epi	ol. GFR. <b>Model</b> CR tion and ACI tion to the prec oefficient (st ple dermal grov	<b>I 3; + ACR</b> : In addi R over 1.13mg/mi eding model, the d beta), standard yth factor to the u	tion to the pr mol, normal A model includ deviation (SE urine creatinin	Teceding mo ACR: urine a es EGF-Cr. D), glomerul	del, the Ibumin u ar filtrat ation (EC	model under the ion rate as GF-Cr).	

Supplem	Supplementary table 2: Regression coefficients for the urinary Na/K-ratio (per 1 SD increase) with night-time ABP dip (%) as dependent variable											
					(n=1	311).						
Model 1: Ca	rdiovascula	ar risk factors	Mo	odel 2: + m	GFR	м	lodel 3: + A	ACR	Mc	del 4: +EG	iF-Cr	
Std Beta	Р	95% CI	Std Beta	Р	CI	Std beta	Р	CI	Std Beta	Р	CI	
	Night-time systolic ABP dip											
-0.1 0.069 (-0.4-0.3) -0.1 0.673 (-0.4-0.3) -0.1 0.678 (-0.4-0.3) -0.1 0.665 (-0.4-0.3)												
					Night-time dia	astolic ABP dig	p					
0.0 0.914 (-0.4-0.4) 0.0 0.923 (-0.4-0.4) 0.0 0.925 (-0.4-0.4) 0.0 0.973 (-0.4-0.4)												
Nigł	nt-time ABF	odip, as the dif	ference betwo	een daytim	ie mean ABP ar	nd night-time	mean ABP,	, expressed as a	percentage c	of the day v	/alue.	
Regressior	n models: N	Aodel 1: Cardic	ovascular risk	factors: Th	ne model includ	les age, sex (m	nale or fem	iale), waist-hip-	-ratio, HbA1c,	triglycerid	es and HDL-	
					choles	sterol.						
Model 2: + r	mGFR: In ac	ddition to the p	preceding mod	lel, the mo	del includes m	GFR. Model 3:	<b>: + ACR</b> : In	addition to the	preceding mo	odel, the m	odel includes	
ACR as a	a dichotom	ous variable (in	creased ACR:	urine albu	min over the li	mit of detectic	on and ACR	≀over 1.13mg/r	mmol, normal	ACR: urine	e albumin	
under	under the limit of detection or ACR under 1.13mg/mmol). Model 4: + EGF-Cr: In addition to the preceding model, the model includes EGF-Cr.											
Ambulatory blood pressure (ABP), standardized regression coefficient (Std beta), standard deviation (SD), glomerular filtration rate as a single-sample												
plasma (	clearance o	f iohexol (mGF	R), urine albu	min creatir	nine ratio (ACR)	), epidermal gr	rowth facto	or to the urine (	creatinine con	centration	(EGF-Cr).	

Suppleme	Supplementary table 3: Regression coefficients for the urinary Na/K-ratio (per 1 SD increase) with office BP (mmHg) and white coat effect (mmHg)										
as dependent variables (n=1311).											
Model 1: Ca	rdiovascula	r risk factors	Mo	del 2: + m0	GFR	Μ	lodel 3: + AC	CR	Model 4: + EGF-Cr		
Std Beta	Р	95% CI	Std Beta	Р	CI	Std beta	Р	CI	Std Beta	Р	CI
					Office sy	stolic BP					
3.6	<0.001	(2.8-4.5)	3.6	<0.001	(2.8-4.5)	3.6	<0.001	(2.7-4.5)	3.6	<0.001	(2.8-4.5)
Office diastolic BP											
1.4	<0.001	(0.9-1.9)	1.4	<0.001	(0.9-1.8)	1.4	<0.001	(0.9-1.8)	1.4	<0.001	(0.9-1.9)
				١	White coat eff	ect systolic Bl	Р				
2.7	<0.001	(2.1-3.3)	2.7	<0.001	(2.1-3.3)	2.7	<0.001	(2.1-3.3)	2.7	<0.001	(2.0-3.3)
				V	White coat effe	ect diastolic B	Ρ				
1.0	<0.001	(0.6-1.3)	1.0	<0.001	(0.6-1.3)	1.0	<0.001	(0.6-1.3)	1.0	<0.001	(0.6-1.3)
Th	e white coat	t effect as the	discrepancies	between th	ne office BP an	id daytime me	an ABP (mn	nHg) (office Bl	P minus daytir	ne mean AB	BP).
Regressio	n models: M	lodel 1: Cardio	ovascular risk	factors: Th	e model includ	les age, sex (n	nale or fema	ile), waist-hip-	-ratio, HbA1c,	triglyceride	s and HDL-
Madal 2		d:t:			choles	sterol.		م ما : • : • • • • • • • • • • •		مماما المامم	alal in alu daa
iviodel 2: + i	<b>MGFK</b> : In ad	altion to the p	receaing mod	iei, the mot		טרא. <b>ועוסמפו 3</b> : באב	: + ACK: In a	daition to the	preceding mo	odel, the mo	del includes
dichotomou	s variable (ir	ncreased ACR:	urine albumir	n over the li	mit of detection	on and ACR ov	/er 1.13mg/i	mmol. normal	ACR: urine al	bumin unde	er the limit of
					dete	ction					
	or ACR under 1.13mg/mmol). Model 4: + EGF-Cr: In addition to the preceding model, the model includes EGF-Cr.										
Ambulato	Ambulatory blood pressure (ABP), standardized regression coefficient (Std beta), standard deviation (SD), glomerular filtration rate as a single-sample										
plasma	clearance of	iohexol (mGF	R), urine albui	min creatin	ine ratio (ACR)	, epidermal gi	rowth factor	to the urine o	creatinine con	centration (	(EGF-Cr).

Supplementa	Supplementary table 4: Mediation analysis for the urinary Na/K-ratio (per 1 SD increase) for the associations with ABP (mmHg) with ACR substituted for values under limit of detection (n=1311).													
	Total		Direct	Confidence interval					Confie inte	dence rval	-			
	effect		effect					Indirec						
	(Na/K-ratio	Р	(Na/K-ratio-	Lower	Upper	Р		t	Lower	Upper				
	-ABP)	value	ABP)	bound	bound	value	Relationship	effect	bound	bound	t-statistic	Conclusion		
				24 h	mean ABP	as depei	ndent variable							
												No mediation		
Systolic BP	0.93	0.003	0.95	0.33	1.58	0.003	M1	-0.00	-0.04	0.02	-0.23	effect		
												No mediation		
							M2	0.01	-0.01	0.03	0.76	effect		
												No mediation		
							M3	-0.02	-0.12	0.06	-0.54	effect		
												No mediation		
Diastolic BP	0.38	0.064	0.39	-0.02	0.79	0.061	M1	-0.00	-0.02	0.01	-0.17	effect		
												No mediation		
							M2	-0.00	-0.02	0.03	-0.05	effect		
												No mediation		
							M3	-0.00	-0.05	0.05	-0.19	effect		
				Mean	daytime Al	BP as dep	endent variab	le						
												No mediation		
Systolic BP	0.93	0.007	0.95	0.28	1.62	0.006	M1	-0.00	-0.04	0.25	-0.22	effect		
												No mediation		
							M2	0.01	-0.01	0.04	0.55	effect		
												No mediation		
							M3	-0.02	-0.11	0.06	-0.54	ettect		
		0.000		0.00	0.05	0.000			0.04		0.00	No mediation		
Diastolic BP	0.41	0.062	0.41	-0.02	0.85	0.061	M1	0.00	-0.01	0.02	0.03	effect		
								0.00	0.00	0.00	0.45	No mediation		
							IVI2	-0.00	-0.02	0.03	-0.15	effect		

												No mediation
							M3	-0.00	-0.05	0.05	-0.06	effect
				Mean n	ight-time	ABP as de	pendent var	iable				
												No mediation
Systolic BP	0.90	0.006	0.92	0.28	1.56	0.005	M1	-0.00	-0.03	0.02	-0.09	effect
												No mediation
							M2	0.01	-0.01	0.05	0.90	effect
												No mediation
							M3	-0.03	-0.12	0.05	-0.79	effect
												No mediation
Diastolic BP	0.31	0.15	0.32	-0.10	0.75	0.14	M1	-0.00	-0.02	0.01	-0.19	effect
												No mediation
							M2	0.00	-0.01	0.03	0.37	effect
												No mediation
							M3	-0.02	-0.07	0.03	-0.64	effect
Relationsh	i <b>ps</b> : <b>M1</b> : Na/	'K-ratio (SE	))-> mGFR-> A	BP (mmHg)	. <b>M2</b> : Na/ł	<-ratio (SD	)->ACR-> AB	P (mmHg). <b>I</b>	<b>M3</b> : Na/K-r	ratio (SD)->	EGF-Cr -> /	ABP (mmHg)
		Covariat	tes: age, sex	(male or fen	nale), wais	t-hip-ratio	, HbA1c, trig	lycerides ar	nd HDL- ch	olesterol.		
			95%	6 confidence	e intervals	based on !	5,000 bootst	rap samples	S.			
Ambulatory b	lood pressur	e (ABP), gl	omerular filtr	ation rate a	s a single-	sample pla	isma clearan	ce of iohexo	ol (mGFR),	urine albur	nin creatin	ine ratio (ACR),
, , ,	,	. // 0	eniderma	al growth fai	tor to the	urine crea	atinine conce	entration (Fi	GF-Cr)			$\chi = \mu$

Supplementary table 5: Mediation analysis for the urinary Na/K-ratio (per 1 SD increase) with night-time ABP dip (%) as dependent variable (n=1311).												
				Confi	dence				Confi	dence		
	Total effect		Direct effect	inte	rval				inte	rval		
	(Na/K-ratio –		(Na/K-ratio	Lower	Upper			Indirect	Lower	Upper		
	ABP)	P value	- ABP)	bound	bound	P value	Relationship	effect	bound	bound	t-statistic	Conclusion
					Night-ti	me ABP o	dip					
												No
												mediation
Systolic BP	-0.07	0.71	-0.07	-0.41	0.28	0.71	M1	-0.00	-0.02	0.01	-0.19	effect
												No
												mediation
							M2	-0.01	-0.02	0.01	-0.85	effect
												NO
							N42	0.01	0.02	0.04	0.20	mediation
							IVI3	0.01	-0.03	0.04	0.36	enect
												mediation
Diastolic BP	0.06	0 78	0.05	-0 35	0.45	0.81	M1	0.00	-0.01	0.02	0.27	effect
Diastone Di	0.00	0.70	0.05	0.55	0.45	0.01		0.00	0.01	0.02	0.27	No
												mediation
							M2	-0.01	-0.02	0.01	-0.87	effect
												No
												mediation
							M3	0.01	-0.03	0.06	0.67	effect
Relationshi	<b>ps</b> : <b>M1</b> : Na/K-ra	tio (SD) ->	> mGFR-> ABP	dip (%). <b>N</b>	<b>12</b> : Na/K-r	atio (SD)-	>ACR-> ABP dip	(%). <b>M3</b> :	Na/K-ratio	5 (SD)-> E	GF-Cr -> ABP	dip (%).
<b>Covariates:</b> age, sex (male or female), waist-hip-ratio, HbA1c, triglycerides and HDL- cholesterol.												
95% confidence intervals based on 5.000 bootstrap samples.												
Ambulatory blood pressure (ABP), glomerular filtration rate as a single-sample plasma clearance of johexol (mGFR), urine albumin creatinine ratio (ACR).												
,		,, 0	epidermal grov	wth factor	to the ur	ine creati	nine concentrat	ion (EGF-0	Cr).		-	

Supplementary table 6: Mediation analysis for the urinary Na/K-ratio (per 1 SD increase) with night-time ABP dip (%) as dependent variable with ACR															
			subs	stituted f	or values	s under lir	nit of detectior	n (n=1311)	•						
				Confi	dence				Confi	dence					
	Total effect		Direct effect	inte	rval				inte	erval					
	(Na/K-ratio		(Na/K-ratio –	Lower	Upper			Indirect	Lower	Upper					
	-ABP)	P value	ABP)	bound	bound	P value	Relationship	effect	bound	bound	t-statistic	Conclusion			
					Nig	ght-time	ABP dip								
	Systelic BP     -0.08     0.66     -0.08     -0.08     -0.02     0.01     -0.17     effect														
Systolic BP	-0.08	0.66	-0.08	-0.42	0.27	0.66	M1	-0.00	-0.02	0.01	-0.17	effect			
	Systolic BP     -0.08     0.66     -0.08     -0.42     0.27     0.66     M1     -0.00     -0.02     0.01     -0.17     effect       No mediation  <														
		l					M2	-0.01	-0.02	0.01	-0.84	effect			
												No mediation			
							M3	0.01	-0.03	0.00	0.35	effect			
												No mediation			
Diastolic BP	0.03	0.87	0.02	-0.37	0.42	0.90	M1	0.00	-0.01	0.02	0.27	effect			
												No mediation			
							M2	-0.01	-0.02	0.01	-0.87	effect			
												No mediation			
			<u> </u>				M3	0.01	-0.03	0.06	0.66	effect			
Relatior	nships: M1: Na	/K-ratio (S	5D)-> mGFR-> A	BP dip (%	5). <b>M2</b> : N	a/K-ratio	(SD)->ACR-> AB	P dip (%). <b>I</b>	<b>M3</b> : Na/K-r	atio (SD)->	EGF-Cr -> AB	P dip (%).			
		Covaria	tes: age, sex (m	ale or fe	male), wa	aist-hip-ra	itio, HbA1c, trig	lycerides a	nd HDL- ch	olesterol.					
	95% confidence intervals based on 5,000 bootstrap samples.														
Ambulatory	blood pressur	e (ABP), g	lomerular filtrat	ion rate a	as a singl	e-sample	plasma clearan	ce of iohex	ol (mGFR),	, urine albu	min creatinir	ne ratio (ACR),			
,	•		epidermal (	growth fa	actor to t <sup>i</sup>	he urine c	reatinine conce	entration (E	EGF-Cr).						

Supplementa	Supplementary table 7: Mediation analysis for the urinary Na/K-ratio (per 1 SD increase) for the associations with office BP (mmHg) and white coat effect (mmHg) as dependent variables with ACR substituted for values under limit of detection (n=1311).												
	Total effect (Na/K-ratio		Direct effect	Confie inte	dence rval			Indirect	Confidence interval		-		
	ABP)	P value	(Na/K-ratio – ABP)	Lower bound	Lower Upper bound bound P value		Relationship	effect	Lower bound	Upper bound	t-statistic	Conclusion	
				Office BP									
Systolic BP	3.65	<0.001	3.66	2.79	4.52	<0.001	M1	0.01	-0.03	0.06	0.31	No mediation effect	
							M2	0.01	-0.02	0.03	0.42	No mediation effect	
							M3	-0.02	-0.14	0.10	0.30	No mediation effect	
Diastolic BP	1.38	<0.001	1.38	0.90	1.85	<0.001	M1 M2	0.01 -0.00	-0.03 -0.01	0.05 0.03	0.39 -0.04	No mediation effect No mediation effect No mediation	
							M3	-0.01	-0.06	0.05	-0.24	effect	
				Am	bulatory	white coat	effect						

												No	
												mediation	
Systolic BP	2.71	< 0.001	2.70	2.08	3.31	< 0.001	M1	0.01	-0.04	0.06	0.40	effect	
												No	
												mediation	
							M2	-0.00	-0.03	0.01	-0.24	effect	
												No	
												mediation	
							M3	0.01	-0.06	0.08	-0.14	effect	
												No	
												mediation	
Diastolic BP	0.97	<0.001	0.97	0.62	1.32	<0.001	M1	0.01	-0.03	0.05	0.40	effect	
												No	
												mediation	
							M2	0.00	-0.02	0.01	0.22	effect	
												No	
												mediation	
							M3	-0.01	-0.05	0.03	-0.32	effect	
	R	elationship	s: M1: Na/K-rat	io-> mGFR-	> BP. <b>M2</b> :	Na/K-ratio	->ACR-> BP. <b>N</b>	<b>//3</b> : Na/K-ra	tio-> EGF-	Cr -> BP			
		Covariate	s: age, sex (ma	le or female	e), waist-ł	nip-ratio, Hk	A1c, triglyce	rides and HI	DL- cholest	terol.			
	95% confidence intervals based on 5 000 bootstrap samples												
Ambulatory						/ /							
	lood pressur	mbulatory blood pressure (ABP), glomerular filtration rate as a single-sample plasma clearance of iohexol (mGFR), urine albumin creatinine ratio (ACR),											

Supplementary table 8: Mediation analysis for the urinary Na/K-ratio (per 1 SD increase) for the associations with hypertension phenotypes (n=1311) with ACR substituted for values under limit of detection (n=1311).													
Odds ratio for	Confiden	ce interval				Confidenc	e interval						
direct effect	Lower	Upper			Odds ratio for the	Lower	Upper						
(Na/K-ratio - ABP)	bound	bound	P value	Relationship	indirect effect	bound	bound	Conclusion					
			Normotensio	n vs white coat h	ypertension (n=824)								
1.31	1.06	1.60	0.010	M1	1.0	0.99	1.01	No mediation effect					
				M2	1.0	0.99	1.01	No mediation effect					
M2 1.0 0.39 1.01 No mediation effect   M3 1.04 1.01 1.10 Partial mediation effect													
			Normot	ension vs masked	hypertension								
0.90	0.74	1.11	0.30	M1	0.96	0.98	1.01	No mediation effect					
				M2	1.0	0.99	1.04	No mediation effect					
				M3	1.01	0.99	1.04	No mediation effect					
			Normote	nsion vs sustaine	d hypertension								
1.27	1.11	1.48	0.010	M1	1.0	0.99	1.01	No mediation effect					
				M2	1.0	0.99	1.00	No mediation effect					
				M3	1.0	0.99	1.0	No mediation effect					
Relations	hips: M1: Na	/K-ratio (SD)-	> mGFR-> Hype	rtension phenoty	pe. <b>M2</b> : Na/K-ratio (S	D) ->ACR-> H	Hypertensio	n phenotype.					
		N	<b>13</b> : Na/K-ratio (	SD)-> EGF-Cr -> Hy	pertension phenotyp	be.							
	Covaria	ates: age, sex	(male or female	e), waist-hip-ratio	, HbA1c, triglycerides	and HDL- cl	holesterol.						
Results are expressed in odd ratios, 95% confidence intervals based on 5,000 bootstrap samples.													
Ambulatory blood pres	Ambulatory blood pressure (ABP), glomerular filtration rate as a single-sample plasma clearance of iohexol (mGFR), urine albumin creatinine ratio (ACR),												
		epiderm	al growth facto	r to the urine crea	atinine concentration	(EGF-Cr).							