

**Appendix 1. Patients' demographics and characteristics\***

	<b>Baseline (n=117)</b>	<b>12 months (n=117)</b>	<b>24 months (n=105)</b>
<b>Age (years) Mean±SD (min-max)</b>	11.4±4.9 (0.1-18.0)		
<b>Gender n</b>			
<b>Female/Male</b>	37/80	37/80	32/73
<b>BMI Mean±SD (min-max)</b>	18.9±4.5 (12.3-34.2)	19.6±4.5 (12.0-34.2)	19.8±4.9 (10.9-38.3)
<b>Hypertension</b>			
<b>Yes/No</b>	35/82	46/71	43/62
<b>CKD stage n (%)</b>			
<b>Stage 2</b>	17 (14.5)	18 (15.4)	12 (11.4)
<b>Stage 3a</b>	35 (29.9)	18 (15.4)	18 (17.1)
<b>Stage 3b</b>	33 (28.2)	35 (29.9)	24 (22.9)
<b>Stage 4</b>	27 (23.1)	35 (29.9)	38 (36.2)
<b>Stage 5</b>	5 (4.3)	11 (9.4)	13 (12.4)
<b>CKD etiology n (%)</b>			
<b>CAKUT</b>	64 (54.7)	-	-
<b>Inborn error of metabolism</b>	13 (11.1)	-	-
<b>Neurogenic bladder</b>	12 (10.3)	-	-
<b>Cystic kidney disease</b>	12 (10.3)	-	-
<b>Glomerular disease</b>	4 (3.4)	-	-
<b>Others</b>	12 (10.3)	-	-
<b>eGFR (mL/min/1.73m<sup>2</sup>) Mean±SD (min-max)</b>	42±18 (10-86)	37±17 (10-79)	35±19 (9-89)
<b>Hemoglobin (g/dL) Mean±SD (min-max)</b>	11.9±1.8 (7.2-16.5)	11.8±1.8 (7.5-17.0)	12.0±1.9 (7.4-17.7)
<b>Ferritin (ng/mL) Mean±SD (min-max)</b>	108±115 (5-581)	128±153 (4-866)	130±164 (4-759)
<b>Serum calcium (mg/dL) Mean±SD (min-max)</b>	9.6±0.6 (8.3-11.8)	9.6±0.6 (7.9-11.3)	9.6±0.7 (7.2-11.5)
<b>Serum phosphorus (mg/dL) Mean±SD (min-max)</b>	4.5±1.0 (2.4-9.1)	4.5±0.9 (2.1-7.7)	4.5±0.9 (2.4-7.6)
<b>Serum alkaline phosphatase (U/L) Mean±SD (min-max)</b>	247±228 (26-2010)	207±102 (65-472)	224±111 (56-549)
<b>Parathyroid hormone (pg/mL) Mean±SD (min-max)</b>	149±158 (18-949)	199±300 (17-1872)	218±324 (10-2073)
<b>Urinary protein/creatinine (mg/mg) Mean±SD (min-max)</b>	1.69±2.11 (0.07-12.14)	1.61±2.44 (0.08-15.82)	1.87±3.57 (0.09-31.55)
<b>Medication*</b>			
<b>Antihypertensive drugs</b>			
<b>1 drug n (%)</b>	23 (19.7%)	29 (24.8%)	22 (21.0%)
<b>2 drugs n (%)</b>	8 (6.8%)	15 (12.8%)	16 (15.2%)
<b>3 drugs n (%)</b>	4 (3.4%)	2 (1.7%)	5 (4.8%)
<b>Sodium bicarbonate n (%)</b>	43 (36.8%)	67 (57.3%)	64 (61.0%)
<b>Calcium carbonate n (%)</b>	29 (24.8%)	39 (33.3%)	41 (39.1%)
<b>Sevelamer n (%)</b>	0 (0%)	1 (0.9%)	2 (1.9%)
<b>Calcitriol n (%)</b>	26 (22.2%)	42 (35.9%)	59 (56.2%)
<b>Vitamin D n (%)</b>	33 (28.2%)	44 (37.6%)	44 (41.9%)
<b>ESAs n (%)</b>	9 (7.7%)	10 (8.6%)	18 (17.1%)
<b>Oral iron n (%)</b>	44 (37.6%)	60 (51.3%)	61 (58.1%)
<b>Antiepileptic drugs n (%)</b>	5 (4.3%)	5 (4.3%)	5 (4.8%)
<b>Oxybutynin n (%)</b>	19 (16.2%)	21 (18.0%)	17 (16.2%)
<b>Immunosuppressive drugs n (%)</b>	5 (4.3%)	5 (4.3%)	5 (4.8%)
<b>Tiopronin n (%)</b>	1 (0.9%)	1 (0.9%)	1 (1.0%)
<b>Cysteamine n (%)</b>	3 (2.6%)	3 (2.6%)	3 (2.9%)
<b>Pyridoxine n (%)</b>	3 (2.6%)	3 (2.6%)	3 (2.9%)

BMI: Body mass index CAKUT: Congenital anomalies of the kidney and the urinary tract, CKD: Chronic kidney disease, eGFR: estimated glomerular filtration rate, ESAs: Erythropoiesis-stimulating agents,\* Medication data were recorded at the time of sampling

\*\*This table was cited from the PROGRESS study [12].

**Appendix 2.** Correlations between baseline levels of sFas, sFasL, and sE-selectin and simultaneously biochemical parameters

		Serum sFas	Serum sFasL	Serum sE-selectin	Urinary sFas/Cr	Urinary sFasL/Cr	Urinary sE-selectin/Cr
Hemoglobin (g/dL)	r	0.098	-0.152	0.145	-0.238	-0.245	-0.199
	p	0.296	0.103	0.121	<b>0.010</b>	<b>0.008</b>	<b>0.033</b>
Serum Ferritin (ng/mL)	r	0.169	0.007	0.075	-0.105	-0.206	-0.200
	p	0.102	0.943	0.473	0.317	<b>0.047</b>	0.055
Serum calcium (mg/dL)	r	-0.085	0.078	0.161	-0.182	-0.171	-0.155
	p	0.366	0.404	0.085	0.051	0.067	0.098
Serum phosphorus (mg/dL)	r	-0.109	0.138	0.026	0.015	0.112	0.125
	p	0.250	0.142	0.781	0.874	0.236	0.188
Parathyroid hormone (pg/mL)	r	0.218	-0.037	0.131	0.156	0.100	0.029
	p	<b>0.027</b>	0.713	0.187	0.117	0.315	0.776
Urinary protein/creatinine (mg/mg)	r	0.071	0.017	0.142	0.703	0.663	0.716
	p	0.452	0.856	0.133	<b>&lt;0.0001</b>	<b>&lt;0.0001</b>	<b>&lt;0.0001</b>

Cr: creatinine, eGFR: estimated glomerular filtration rate, sFas: soluble Fas, sFasL: soluble Fas Ligand, sE-selectin: soluble E-selectin; r-Spearman's correlation coefficient.

**Appendix 3.** Correlations among baseline levels of sFas, sFasL, and sE-selectin

		Serum sFas	Serum sFasL	Serum sE-selectin	Urinary sFas/Cr	Urinary sFasL/Cr	Urinary sE-selectin/Cr
Serum sFas	r	-	-0.239	0.443	0.046	-0.038	-0.032
	p	-	<b>0.009</b>	<b>&lt;0.0001</b>	0.623	0.683	0.730
Serum sFasL	r	-0.239	-	-0.056	0.158	0.250	0.173
	p	<b>0.009</b>	-	0.550	0.091	<b>0.007</b>	0.064
Serum sE-selectin	r	0.443	-	-	0.163	0.216	0.319
	p	<b>&lt;0.0001</b>	0.056	0.550	-	0.081	<b>0.020</b>
Urinary sFas/Cr	r	0.046	0.158	0.163	-	0.805	0.726
	p	0.623	0.091	0.081	-	<b>&lt;0.0001</b>	<b>&lt;0.0001</b>
Urinary sFasL/Cr	r	-0.038	0.250	0.216	0.805	-	0.845
	p	0.683	<b>0.007</b>	<b>0.020</b>	<b>&lt;0.0001</b>	-	<b>&lt;0.0001</b>
Urinary sE-selectin/Cr	r	-0.032	0.173	0.319	0.726	0.845	-
	p	0.730	0.064	<b>&lt;0.0001</b>	<b>&lt;0.0001</b>	<b>&lt;0.0001</b>	-

Cr: creatinine, sFas: soluble Fas, sFasL: soluble Fas Ligand, sE-selectin: soluble E-selectin r-Spearman's correlation coefficient.

**Appendix 4.** Correlations between baseline serum levels of sFas, sFasL, and sE-selectin and serum levels of HSPs

		Serum sFas	Serum sFasL	Serum sE-selectin
Serum HSP27	r	0.011	-0.108	-0.142
	p	0.909	0.245	0.127
Serum HSP40	r	0.102	0.050	-0.092
	p	0.272	0.595	0.324
Serum HSP47	r	0.019	0.068	-0.048
	p	0.840	0.463	0.605
Serum HSP60	r	0.057	-0.086	-0.023
	p	0.539	0.356	0.804
Serum HSP70	r	0.037	0.029	-0.058
	p	0.689	0.756	0.535
Serum HSP72	r	0.154	-0.173	0.077
	p	0.096	0.063	0.410
Serum HSP90	r	-0.110	0.004	-0.097
	p	0.237	0.965	0.297
Serum anti-HSP60	r	-0.032	-0.217	-0.151
	p	0.729	<b>0.019</b>	0.103
Serum anti-HSP70	r	-0.128	0.247	-0.045
	p	0.168	<b>0.007</b>	0.629

HSP: heat shock protein, sFas: soluble Fas, sFasL: soluble Fas Ligand, sE-selectin: soluble E-selectin; r-Spearman's correlation coefficient