LETTER TO THE EDITOR

Soluble urokinase plasminogen activator receptor is associated with kidney disease and its progression in sickle cell anemia

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Supplementary Table 1: Patient characteristics				
	N	**St Jude Children's Research Hospital**	**N**	**University of Illinois at Chicago**
Age (years)	245	11 (7 – 17)	212	29 (24 – 39)
Age (years) females	123	11 (11 – 17)	119	31 (25 – 39)
Age (years) males	122	11 (6 – 17)	93	28 (23 – 37)
Females, N (%)	245	123 (50%)	212	119 (56%)
Diabetes, N (%)	–	–	212	4 (2%)
Hydroxyurea, N (%)	245	206 (84%)	212	118 (56%)
Hydroxyurea dose (mg/kg/day)	–	–	118	14 (11 - 20)
RAAS blocker, N (%)	245	4 (2%)	212	35 (17%)
Chronic transfusion, N (%)	245	67 (27%)	212	23 (11%)
Systolic blood pressure (mmHg)	190	111 (103 – 118)	211	119 (110 – 128)
Body mass index (kg/m^2)	243	18 (16 - 22)	208	23 (21 – 26)
WBC (x 10^3/µL)	245	4.8 (3.0 – 6.7)	212	5.3 (3.6 – 7.1)
Hemoglobin (g/dL)	245	9.1 (8.1 – 9.9)	212	8.9 (8.0 – 9.7)
Absolute reticulocyte count (x10^3/µL)	–	–	209	328 (233 – 430)
Hemoglobin F (%)	226	14.8 (7.1 – 23.5)	209	6.1 (2.8 – 9.8)
LDH (u/L)	216	467 (373 – 589)	197	352 (264 – 460)
eGFR (mL/min/1.73m^2)	245	117 (100 – 133)	212	124 (109 – 133)
eGFR by strata, N (%) **≥ 120** **90 – 119** **60 – 89** **< 60**	245	 111 (45%) 101 (41%) 32 (13%) 1 (0.4%)	212	 130 (61%) 48 (23%) 21 (10%) 13 (6%)
uACR (mg/g creatinine)	60	22 (11 – 60)	179	43 (13 – 231)
uACR by strata, N (%) **< 30** **30 – 299** **≥ 300**	60	 36 (60%) 22 (37%) 2 (3%)	179	 77 (43%) 64 (36%) 38 (21%)
***APOL1* high risk, N (%)**	245	21 (9%)	208	28 (13%)

Median (interquartile ranges) provided, unless N (%) specified; RAAS, renin-angiotensin-aldosterone system, WBC, white blood cell count; LDH, lactate dehydrogenase; eGFR, estimated glomerular filtration rate; uACR, urine albumin-to-creatinine ratio

Supplementary Table 2: Association of clinical and laboratory variables with soluble urokinase plasminogen activator receptor concentrations in children and adults with sickle cell anemia.

	St Jude Children's Research Hospital	P value	University of Illinois at Chicago	P value
Age (years)	0.0036 ± 0.0033	0.27	0.005 ± 0.003	0.064
Females	0.11 ± 0.034	0.0019	0.18 ± 0.06	0.0027
Diabetes	–	–	0.77 ± 0.22	0.00054
Hydroxyurea	-0.16 ± 0.047	0.00047	-0.15 ± 0.06	0.81
RAAS blocker	–	–	-0.009 ± 0.083	0.9
Chronic Transfusion	0.17 ± 0.038	9.0×10^{-6}	0.21 ± 0.098	0.028
Systolic blood pressure (mmHg)	0. 41 ± 0.21	0.046	0.23 ± 0.26	0.38
Body mass index (kg/m^2)	0.27 ± 0.074	0.00024	0.16 ± 0.18	0.37
WBC (x 10^3/μL)	0.0055 ± 0.00090	5.9×10^{-10}	0.27 ± 0.06	1.8×10^{-5}
Hemoglobin (g/dL)	-0.12 ± 0.082	0.15	-0.09 ± 0.02	6.5×10^{-5}
Absolute reticulocyte count (x10^3/μL)	–	–	-0.05 ± 0.06	0.45
Hemoglobin F (%)	-0.056 ± 0.012	4.1×10^{-6}	-0.08 ± 0.03	0.013
LDH (u/L)	0.028 ± 0.053	0.60	0.04 ± 0.09	0.63
eGFR (mL/min/1.73m^2)	-0.0017 ± 0.00067	0.012	-0.005 ± 0.001	8.8×10^{-7}
uACR (mg/g creatinine)	0.033 ± 0.070	0.63	0.045 ± 0.018	0.013
***APOL1* high risk (%)**	0.14 ± 0.062	0.026	-0.13 ± 0.09	0.15

β-coefficient ± standard error values provided

RAAS, renin-angiotensin-aldosterone system, WBC, white blood cell count; LDH, lactate dehydrogenase; eGFR, estimated glomerular filtration rate; uACR, urine albumin-to-creatinine ratio

To approximate normality, suPAR, body mass index, uACR, LDH, and systolic blood pressure were log-transformed; WBC, hemoglobin, and hemoglobin F were square-root-transformed in children and suPAR, systolic blood pressure, body mass index, WBC, hemoglobin F, LDH, and uACR were log-transformed in adults with SCA.