

SUPPLEMENTARY TABLE 1*: Parameter estimates for measure LN activity using the RAIL[‡]

Urine Biomarkers[†]	A-RAIL			P-RAIL
	<i>Creatinine adjusted (1a)</i>	<i>Absolute urine amounts (1b)</i>	<i>Albumin adjusted (1c)</i>	<i>Creatinine adjusted (2)</i>
Intercept	0.21 ± 2.99	-5.05 ± 3.76	3.47 ± 2.74	-4.29 ± 4.28
1. NGAL	0.67 ± 0.40	0.56 ± 0.38	0.43 ± 0.34	-0.34 ± 0.43
2. MCP-1	0.28 ± 0.49	0.12 ± 0.51	0.16 ± 0.46	0.89 ± 0.62
3. Ceruloplasmin	-0.12 ± 0.43	-0.29 ± 0.43	-0.23 ± 0.41	-0.06 ± 0.28
4. Adiponectin	0.88 ± 0.37	0.88 ± 0.36	0.81 ± 0.30	0.18 ± 0.19
5. Hemopexin	-0.25 ± 0.43	0.01 ± 0.41	-0.05 ± 0.39	-0.65 ± 0.42
6. KIM-1	-0.05 ± 0.72	0.02 ± 0.72	-0.62 ± 0.63	0.62 ± 0.85

*The Table above presents the details of slopes and intercepts estimated from multivariate logistical regression models used for developing the different algorithms. It is noticeable that the slope of NGAL was negative in the P-RAIL model (slope = -0.34 ± 0.43 , $p=0.434$), different from the A-RAIL models. It was also different in the univariate model estimated from the same the children's data (slope = 0.14 ± 0.25 , $p=0.578$). The findings suggest that the overall impact of NGAL to the prediction of disease activity is weak for children, and the impact (if any) is mainly through other RAILs as mediators indirectly.

[‡] Values in cells are estimates of the parameters \pm SE using the logistic regression model and outcome the dichotomized LN activity.

[†] Urine biomarkers include: neutrophil gelatinase associated lipocalin (NGAL) [ng/ml], monocyte chemotactic protein 1 (MCP-1) [pg/ml], ceruloplasmin [μ g/ml], adiponectin [ng/ml], hemopexin [mg/ml] and kidney injury molecule 1 (KIM-1) [pg/ml].

(1a), (1b), (1c) and (2): Please refer to Table 3 for details.