

**Web Table 1:** Comparison of Demographic Factors, Birth Weight, and Risk Factors for SGA Between the Original Cohort (N=1,518) and the Cytokine and Cognitive Testing- Follow-up Sample (N=369).

Variables	Cytokine/IQ follow-up N=369		Original cohort N=1518		P value
	mean	SD	mean	SD	
Maternal age, years	24.2	4.3	24.5	4.5	0.247
Birth weight, grams	3031	649	3088 <sup>a</sup>	679	0.145
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	
Maternal race					0.345
Black	265	71.8%	1052	69.3%	
White	104	28.2%	466	30.7%	
Previous low birth weight (<2750 g)	155	42.0%	585	38.5%	0.221
Previous stillbirth or neonatal death	23	6.2%	98	6.5%	0.874
> 2 spontaneous abortions	10	2.7%	77	5.1%	0.052
Hx of phlebitis	5	1.4%	11	0.7%	0.236
Systolic BP > 140	6	1.6%	32	2.1%	0.554
Previous premature birth	66	17.9%	240	15.8%	0.332
Height < 157 cm	69	18.7%	297	19.6%	0.706
Weight < 50 kg	90	24.4%	350	23.1%	0.587
Drank alcohol during pregnancy	118	32.0%	484	31.9%	0.975
Smoked during pregnancy	155	42.0%	718	47.3%	0.067
Late care > 26 weeks gestation	14	3.8%	61	4.0%	0.843

<sup>a</sup>Birth weight based on n=1491

**Web Table 2.** Adjusted<sup>a</sup> Odds Ratios for Low (scores <70) Verbal and Performance Intelligence Quotient (VIQ, PIQ) (vs. reference:  $\geq 70$ ), and Adjusted<sup>a</sup> Linear Regression Coefficients for VIQ and PIQ as Continuous Variables at Age 5 Years in Relation to Cord Serum Cytokine Levels (log, pg/mL), Infant Growth Project, Jefferson County, Alabama, 1985-1988 ( $n = 369$ ).

	VIQ <70		PIQ <70		VIQ		PIQ	
	<i>OR</i>	95% CI	<i>OR</i>	95% CI	$\beta$	95% CI	$\beta$	95% CI
<b>IFN-<math>\gamma</math></b>	1.04	0.74, 1.45	<b>0.68*</b>	<b>0.46, 0.99</b>	0.43	-0.81, 1.67	0.80	-0.68, 2.27
<b>TNF-<math>\alpha</math></b>	1.01	0.53, 1.93	0.88	0.45, 1.71	0.32	-2.08, 2.72	-1.02	-3.88, 1.83
<b>IL-12p70</b>	0.73	0.39, 1.38	<b>0.43*</b>	<b>0.21, 0.88</b>	1.59	-0.71, 3.89	1.97	-0.75, 4.70
<b>IL-10</b>	0.86	0.56, 1.32	0.92	0.60, 1.42	0.81	-0.69, 2.31	0.31	-1.49, 2.10
<b>IL-4</b>	0.95	0.68, 1.32	0.71	0.49, 1.02	0.63	-0.59, 1.85	1.40	-0.03, 2.82

\*  $P$  value <0.05 in logistic regression reference group:  $\geq 70$ .

<sup>a</sup> Adjusted model VIQ and PIQ: Adjusted for gender, race; VIQ is additionally adjusted for smoking in pregnancy (any).

**Web Table 3.** Adjusted<sup>a</sup> Odds Ratios for Low (scores <70) Verbal and Performance Intelligence Quotient (VIQ, PIQ) (vs. reference:  $\geq 70$ ), at Age 5 Years in Relation to Log Cytokine Concentrations by Preterm Birth status, Infant Growth Project, Jefferson County, Alabama, 1985-1988 ( $n = 369$ ).

	Preterm birth N= 72				Term birth N=297				
	VIQ <70	OR	95% CI	PIQ <70	OR	95% CI	VIQ <70	OR	95% CI
<b>IFN-<math>\gamma</math></b>	1.04	0.50, 2.16	0.62	0.20, 1.93	1.03	0.71, 1.51	0.72	0.48, 1.08	
<b>TNF-<math>\alpha</math></b>	<b>0.11*</b>	<b>0.02, 0.96</b>	0.08	0.003, 2.11	1.34	0.67, 2.70	1.15	0.58, 2.29	
<b>IL-12p70</b>	0.48	0.11, 1.98	0.88	0.11, 7.02	0.82	0.40, 1.66	<b>0.41*</b>	<b>0.19, 0.89</b>	
<b>IL-10</b>	0.52	0.17, 1.57	1.44	0.38, 5.43	0.95	0.60, 1.50	0.93	0.59, 1.46	
<b>IL-4</b>	0.90	0.39, 2.07	0.91	0.26, 3.18	0.95	0.66, 1.36	0.70	0.49, 1.03	

\*  $P$  value <0.05 in logistic regression model, reference group:  $\geq 70$ .

<sup>a</sup>Model adjusted for gender, race; VIQ is additionally adjusted for smoking in pregnancy (any).

**Web Table 4.** Adjusted<sup>a</sup> Odds Ratios for Low (scores <70) Verbal and Performance Intelligence Quotient (VIQ, PIQ) (vs. reference:  $\geq 70$ ), at Age 5 Years in Relation to Log Cytokine Concentrations by Small-for-Gestational-Age status, Infant Growth Project, Jefferson County, Alabama, 1985-1988 ( $n = 369$ ).

	SGA birth N= 75				non-SGA birth N=294			
	VIQ <70	95% CI	PIQ <70	95% CI	VIQ <70	95% CI	PIQ <70	95% CI
<b>IFN-<math>\gamma</math></b>	OR 0.90	95% CI 0.47, 1.73	OR 0.67	95% CI 0.34, 1.32	OR 1.11	95% CI 0.75, 1.67	OR 0.72	95% CI 0.45, 1.15
<b>TNF-<math>\alpha</math></b>	<b>3.87<sup>b</sup></b>	<b>0.98, 15.3</b>	2.17	0.69, 6.85	0.52	0.23, 1.17	0.50	0.22, 1.16
<b>IL-12p70</b>	1.09	0.35, 3.36	0.76	0.25, 2.33	0.61	0.28, 1.34	<b>0.32<sup>*</sup></b>	<b>0.13, 0.81</b>
<b>IL-10</b>	1.22	0.67, 2.20	1.20	0.68, 2.12	0.65	0.35, 1.21	0.74	0.39, 1.39
<b>IL-4</b>	1.0	0.48, 2.07	0.92	0.46, 1.84	0.96	0.65, 1.41	0.67	0.43, 1.05

\*  $P$  value <0.05; <sup>b</sup>  $P$  value =0.053 in logistic regression model reference group:  $\geq 70$ .

<sup>a</sup> Model adjusted gender, race; VIQ is additionally adjusted for smoking in pregnancy (any).