

Supplementary Table 1. Comparison of demographic and laboratory data between normal and abnormal MRI groups in children with a history of full-term birth

Variable	Normal MRI group	Abnormal MRI group	P-value
No. of subjects	64	12	
Sex, male:female	40:24	8:4	1.000
GA, AGA:SGA	53:21	10:2	1.000
Age at the time of GHST (yr)	8.13±3.33	7.27±3.38	0.415
Bone age at the time of GHST (yr)	6.69±3.2	5.94±3.17	0.459
Height SDS	-2.61±0.53	-3.04±1.12	0.219
Weight SDS	-1.83±0.91	-1.32±1.07	0.082
IGF-I (ng/mL)	150.16±75.48	72.98±64.01	0.001
IGF-I SDS	-0.75±0.62	-1.66±0.72	<0.001
IGFBP3 (ng/mL)	2,187.17±557.09	1,789.5±830.44	0.135
IGFBP3 SDS	-0.86±1.02	-1.57±1.15	0.034
GH Peak level (ng/mL)	6.99±2.14	4.45±3.22	0.021
Complete GHD			
With cutoff value of 3 ng/mL	1 (1.6)	4 (33.3)	0.002
With cutoff value of 5 ng/mL	5 (7.8)	6 (50.0)	0.001
With cutoff value of 7 ng/mL	13 (20.3)	6 (50.0)	0.062

Values are presented as mean±standard deviation or number (%).

MRI, magnetic resonance imaging; GA, gestational age; AGA, average for GA; SGA, small for GA; GHST, growth hormone stimulation test; SDS, standard deviation score; IGF-I, insulin-like growth factor-I; IGFBP3, insulin-like growth factor binding protein 3; GH, growth hormone; GHD, GH deficiency.

Supplementary Table 2. Comparison of demographic and laboratory data between normal and abnormal MRI groups in children with a history of preterm birth

Variable	Normal MRI group	Abnormal MRI group	P-value
No. of subjects	14	2	
Sex, male:female	5:9	2:0	0.175
GA, AGA:SGA	8:6	1:1	1.000
Age at the time of GHST (yr)	7.07±2.94	7.26±3.76	0.934
Bone age at the time of GHST (yr)	5.98±3.29	6.18±4.7	0.939
Height SDS	-2.47±0.34	-3.01±0.97	0.579
Weight SDS	-1.85±1.05	-1.86±0.96	0.989
IGF-I (ng/mL)	162.83±83.7	83.35±62.58	0.223
IGF-I SDS	-0.60±0.64	-1.24±0.37	0.200
IGFBP3 (ng/mL)	2,266.14±723.05	2,138.5±229.81	0.813
IGFBP3 SDS	-0.64±0.85	-0.53±1.34	0.871
GH Peak level (ng/mL)	5.96±2.04	3.80±0.41	0.169
Complete GHD			
With cutoff value of 3 ng/mL	0 (0)	0 (0)	NA
With cutoff value of 5 ng/mL	5 (35.7)	1 (50.0)	0.242
With cutoff value of 7 ng/mL	10 (71.4)	2 (100)	0.467

Values are presented as mean±standard deviation or number (%).

MRI, magnetic resonance imaging; GA, gestational age; AGA, average for GA; SGA, small for GA; GHST, growth hormone stimulation test; SDS, standard deviation score; IGF-I, insulin-like growth factor-I; IGFBP3, insulin-like growth factor binding protein 3; GH, growth hormone; GHD, GH deficiency; NA, not available.

Supplementary Table 3. Comparison of demographic and laboratory data between normal and abnormal MRI groups in children with a history of AGA

Variable	Normal MRI group	Abnormal MRI group	P-value
No. of subjects	62	11	
Sex, male:female	36:26	8:3	0.509
Birth, term:preterm	53:8	10:1	1.000
Age at the time of GHST (yr)	8.09±3.27	7.51±3.37	0.596
Bone age at the time of GHST (yr)	6.6±3.24	6.12±3.05	0.649
Height SDS	-2.55±0.54	-3.08±1.16	0.168
Weight SDS	-1.77±0.93	-1.43±1.02	0.281
IGF-I (ng/mL)	155.18±75.4	77.83±65.66	0.002
IGF-I SDS	-0.75±0.6	-1.64±0.76	<0.001
IGFBP3 (ng/mL)	2,235.33±573.11	1,713.36±759.62	0.010
IGFBP3 SDS	-0.8±1.07	-1.72±1.09	0.011
GH Peak level (ng/mL)	7.07±2.15	4.39±2.98	0.015
Complete GHD			
With cutoff value of 3 ng/mL	1 (1.6%)	3 (27.3%)	0.010
With cutoff value of 5 ng/mL	3 (4.8%)	5 (45.5%)	0.001
With cutoff value of 7 ng/mL	11 (17.7%)	6 (54.5%)	0.015

Values are presented as mean±standard deviation or number (%).

MRI, magnetic resonance imaging; AGA, average for gestational age; GHST, growth hormone stimulation test; SDS, standard deviation score; IGF-I, insulin-like growth factor-I; IGFBP3, insulin-like growth factor binding protein 3; GH, growth hormone; GHD, GH deficiency.

Supplementary Table 4. Comparison of demographic and laboratory data between normal and abnormal MRI groups in children with a history of SGA

Variable	Normal MRI group	Abnormal MRI group	P-value
No. of subjects	18	3	
Sex, male:female	10:8	2:1	1.000
Birth, term:preterm	11:6	2:1	1.000
Age at the time of GHST (yr)	7.77±3.46	6.37±3.4	0.523
Bone age at the time of GHST (yr)	6.8±3.43	5.45±4.37	0.549
Height SDS	-2.67±0.32	-2.85±0.74	0.708
Weight SDS	-1.93±0.98	-1.26±1.3	0.304
IGF-I (ng/mL)	147.62±79.6	62.11±52.32	0.092
IGF-I SDS	-0.72±0.74	-1.45±0.33	0.117
IGFBP3 (ng/mL)	2,081.11±607.38	2,301.33±794.5	0.581
IGFBP3 SDS	-1.03±0.72	-0.31±0.92	0.139
GH Peak level (ng/mL)	5.62±2.05	4.22±3.57	0.333
Complete GHD			
With cutoff value of 3 ng/mL	1 (5.6)	1 (33.3)	0.271
With cutoff value of 5 ng/mL	4 (22.2)	2 (66.7)	0.184
With cutoff value of 7 ng/mL	9 (50.0)	2 (66.7)	1.000

Values are presented as mean±standard deviation or number (%).

MRI, magnetic resonance imaging; SGA, small for gestational age; GHST, growth hormone stimulation test; SDS, standard deviation score; IGF-I, insulin-like growth factor-I; IGFBP3, insulin-like growth factor binding protein 3; GH, growth hormone; GHD, GH deficiency.