

On-line Table 1: Global and regional CBF by brain injury severity (mild BI versus moderate-severe injury), adjusted for GA at birth^a

Controlling for GA at Birth	PT with Mild BI (n = 29, 61.7%)	PT with Moderate-Severe BI (n = 18, 38.3%)	P Value
Global CBF	18.9 (17.0–20.8)	16.4 (13.9–18.9)	.12
DLPF	15.4 (12.9–17.8)	14.0 (10.8–17.1)	.49
PM	20.2 (17.3–23.0)	18.0 (14.3–21.7)	.35
Primary motor	23.6 (20.6–26.5)	20.1 (16.2–23.9)	.15
PO	15.4 (12.9–17.9)	12.5 (9.3–15.8)	.16
MT	23.2 (20.3–26.5)	20.0 (16.2–24.6)	.23
IO	18.3 (15.2–21.4)	16.4 (12.3–20.6)	.48
Rt. thalamus	29.7 (25.1–34.3)	29.0 (22.8–35.2)	.85
Lt. thalamus	29.6 (24.9–34.3)	23.3 (17.2–29.5)	.11
Midpons	40.8 (34.0–47.7)	30.9 (21.5–40.3)	.09
Ant vermis	30.1 (24.2–36.0)	22.4 (14.7–30.1)	.11
Post vermis	30.6 (24.1–37.1)	21.8 (12.4–31.2)	.12
Rt. cerebellar hemispheres	21.4 (17.1–25.7)	14.2 (8.2–20.3)	.06
Lt. cerebellar hemispheres	22.9 (17.7–28.2)	20.2 (12.8–27.5)	.54
Dentate	31.8 (24.7–38.9)	19.0 (6.0–32.0)	.08

Note:—Rt. indicates right; Lt., left; Ant, anterior; Post, posterior.

^a Data are means (95% confidence intervals).

On-line Table 2: Clinical risk factors and CBF, adjusted for GA at birth^a

Risk factor (No.) (%) / Region	β	Yes (Positive Risk Factor)	No (Negative Risk Factor)	P Value
Sepsis (40) (51.3)				
Posterior vermis	−9.30	24.80	34.10	.03
Right cerebellar hemisphere	−6.73	16.40	23.13	.02
Left cerebellar hemisphere	−6.11	19.24	25.35	.07
Dentate	−8.99	24.76	33.75	.05
Ventilation (63) (80.8)				
Right thalamus	−7.87	30.41	38.28	.03
Left thalamus	−7.09	28.33	35.42	.06
Midpons	−14.48	39.27	53.75	.01
Pressors (16) (20.5)				
DLPF	4.75	19.35	14.60	.008
PM	3.55	23.14	19.59	.09
PO	1.85	17.54	14.35	.09
Intubation (48 hr) (9) (11.5)				
Global CBF	−4.03	15.36	19.39	.05
DLPF	−4.57	11.54	16.10	.06
PM	−5.30	15.63	20.93	.07
Primary motor	−5.85	18.08	23.94	.05
PO	−6.98	8.83	15.81	.006
IO	−6.35	13.33	19.68	.05
Right thalamus	−9.47	23.58	33.05	.05
Midpons	−22.06	22.48	44.55	.002
Ant vermis	−19.97	12.13	32.11	.001
Post vermis	−19.57	12.69	32.26	.003
Right cerebellar hemisphere	−13.89	7.63	21.52	.002
Left cerebellar hemisphere	−14.29	9.80	24.10	.007
Dentate nuclei	−17.62	18.84	31.46	.03
Delivery method (cesarean delivery) (51) (65.4)				
Right thalamus	−7.82	29.20	37.02	.007
Left thalamus	−9.62	26.36	35.98	.001
Midpons	−9.73	38.73	48.46	.03
Ant vermis	−9.51	26.75	36.26	.01
Right cerebellar hemisphere	−5.38	18.04	23.42	.06

Note:—Ant indicates anterior; Post, posterior.

^a Categorical measures with “Yes” indicate mean CBF values in PT infants with a clinical risk factor versus “No” without a risk factor for the specified risk factors and perfusion regions, except for delivery method in which the comparison is having cesarean delivery versus vaginal delivery.

On-line Table 3: CBF measures by sedation within 48 hours status, adjusted for GA at birth^a

Controlling for GA at Birth	No Sedation (n = 68, 87.2%)	Sedation (n = 10, 12.8%)	P Value
Global CBF	18.91 (17.61–20.21)	19.01 (15.59–22.43)	.96
DLPF	15.81 (14.23–17.39)	14.00 (9.84–18.15)	.42
PM	20.56 (18.71–22.41)	18.67 (13.79–23.54)	.47
Primary motor	23.22 (21.27–25.18)	23.50 (18.36–28.64)	.92
PO	15.58 (13.64–16.91)	13.17 (8.87–17.47)	.37
MT	23.29 (21.12–25.46)	26.08 (20.41–31.75)	.37
IO	18.91 (16.84–20.98)	19.13 (13.72–24.55)	.94
Rt. thalamus	29.75 (21.66–37.85)	32.27 (29.17–35.37)	.57
Lt. Thalamus	29.52 (26.33–32.72)	30.85 (22.45–39.26)	.77
Mid pons	42.60 (37.85–47.35)	37.54 (25.21–49.86)	.45
Anterior vermis	30.79 (26.87–34.72)	24.82 (14.62–35.02)	.28
Posterior vermis	30.59 (26.16–35.02)	22.33 (10.32–34.35)	.20
Rt. cerebellar hemispheres	20.22 (17.29–23.16)	16.86 (8.97–24.75)	.43
Lt. cerebellar hemispheres	22.90 (19.42–26.37)	18.34 (8.99–27.70)	.37
Dentate nuclei	30.45 (25.74–35.17)	24.54 (11.41–37.66)	.40

Note:—Rt. indicates right; Lt., left.

^a Data are means (95% confidence intervals).