

TABLE 1 Comparison of baseline and exit results following one year of hydroxyurea treatment

Variable [mean (SD)]	N	Baseline	N	Exit	N	Change	P-value
Hemoglobin (gm/dL)	19	8.7 (1.2)	18	10.1 (1.5)	18	1.4 (1.4)	0.002*
HbF (%)	18	8.2 (5.2)	16	23.1 (5.7)	16	15.4 (5.3)	<0.001*
Absolute reticulocyte count (x10 ³ /μL)	19	260K (60K)	18	140K (70K)	18	-130K (70K)	<0.001*
GM-CBF (mL/100g/min)	18	64.4 (10.0)	18	62.2 (7.9)	17	-2.6 (7.7)	0.18
WM-CBF (mL/100g/min)	18	37.9 (6.1)	18	37.2 (4.3)	17	-0.7 (6.9)	0.67
BOLD signal increase (%)	13	2.34 (0.78)	13	2.75 (0.93)	8	0.35 (0.94)	0.32
TCD velocity (cm/sec)	17	133 (26)	17	120 (25)	16	-11 (15)	0.007*
SCI number positive (% +)	19	9 (47%)	17	9 (53%)	17	1 (6%)	0.81
Neurocognitive Evaluation							
Full Scale IQ	18	81.9 (12.9)	16	83.4 (13.2)	16	2.8 (4.9)	0.036
Verbal Comprehension	18	80.2 (10.4)	16	81.2 (11)	16	1.7 (7.0)	0.35
Perceptual Reasoning	18	86.2 (14.6)	16	86.4 (14.3)	16	0.6 (11.3)	0.80
Working Memory	18	88.1 (15.2)	16	90.8 (14.3)	16	3.6 (10.1)	0.18
Processing Speed	18	88.8 (13.0)	16	91.1 (15)	16	3.2 (8.1)	0.14
WJ Letter Word ID	18	86.8 (15.5)	16	85.1 (17.6)	16	-0.6 (5.2)	0.64
WJ Reading Fluency	18	87.1 (17.0)	16	85.4 (19.8)	16	0.19 (5.6)	0.90
WJ Calculation	18	81.6 (17.5)	16	83.4 (17.1)	16	3.3 (12.9)	0.32
WJ Math Fluency	18	78.2 (16.9)	16	80.6 (13.9)	16	3.1 (10.6)	0.26
WJ Passage Comprehension	18	79.5 (16.7)	16	82.6 (17.1)	16	4.8 (7.0)	0.016
WJ Applied Problems	18	83.3 (13.7)	16	82.8 (11.6)	16	0.8 (6.4)	0.62

Note: One-sample t-test or Wilcoxon signed rank test was used to compare exit to baseline; $p < 0.05$ indicates significance (two-sided). *P-values remained significant after adjustment for false discovery rate ($p^{\text{FDR}} < 0.05$).

Abbreviations: SD=standard deviation, HbF=hemoglobin F, GM-CBF=gray matter cerebral blood flow, WM-CBF=white matter cerebral blood flow, BOLD=blood oxygen level dependent signal, TCD=transcranial Doppler ultrasound, SCI=silent cerebral infarct, WJ=Woodcock-Johnson