

Table 1 Demographic and Clinic Characteristics of Participants with PBD and HC

	HC (n=10)	PBD (n=13)	Analyses
Variables	Mean (SD)	Mean (SD)	T(P)
Age (years) at Baseline	13.61 (2.97)	13.25 (2.27)	0.33 (0.75)
IQ*	105.10 (14.39)	99.92 (17.17)	0.77 (0.45)
YMRS at Baseline	2.40 (2.59)	25.62 (6.48)	10.65 (0.000)
YMRS at 16 weeks	0.78 (1.56)	9.36 (12.74)	2.00 (0.06)
YMRS at three years	2.60 (1.58)	8.54 (4.33)	4.11 (0.000)
CDRS-R at Baseline	19.20 (1.48)	42.54 (18.19)	4.03 (0.001)
CDRS-R at 16 weeks	18.56 (1.01)	25.00 (7.20)	2.65 (0.02)
CDRS-R at three years	18.80 (1.14)	34.08 (12.09)	3.96 (0.001)
	N (%)	N (%)	$\chi^2(P)$
Sex			
Male	7 (70)	9 (69)	0.002 (0.97)
Female	3 (30)	4 (31)	
Race			
White	6 (60)	9 (69)	0.21 (0.65)
Other	4 (40)	4 (31)	
Handedness			
Right	9 (90)	11 (85)	0.14 (0.70)
Left	1 (10)	2 (15)	
ADHD Comorbid	0 (0)	6 (46)	

*IQ was measured using WASI (Wechsler Abbreviated Scale of Intelligence); PBD = Pediatric Bipolar Disorder; HC = Healthy Controls; YMRS = Young Mania Rating Scale; CDRS-R = Child Depression Rating Scale-Revised.

Table S1 Medication Used to Treat Participants with Pediatric Bipolar Disorder

Type of Medication	Baseline to 16 weeks n (%)	16 weeks to three years n (%)
Mood stabilizers (Lithium, divalproex sodium, oxcarbazepine, lamotrigine)	9 (82)	11 (85)
Second-generation antipsychotics (resperidone, quetiapine, aripiprazole)	5 (45)	12 (92)
Psychostimulants (methylphenidate, long-acting form, mixed amphetamine salts long-acting form)	4 (36)	6 (46)
Non-stimulants (Atomoxetine)	-	2 (15)
Serotonin reuptake inhibitors	2 (18)	-
Benztropine	1 (9)	1 (8)

Table S2 Response Time and Accuracy Measures for Participants with Pediatric Bipolar Disorder (PBD) and Healthy Controls (HC) at Baseline, 16 weeks, and three years

Response time (ms)	HC Mean (SD)			PBD Mean (SD)		
	Baseline (n=10)	16 weeks (n=9)	Three years (n=10)	Baseline (n=13)	16 weeks (n=11)	Three years (n=13)
Negative words	553 (131)	538 (101)	499 (95)	682 (199)	685 (206)	560 (116)
Positive words	536 (109)	563 (124)	498 (107)	749 (162)	751 (206)	527 (126)
Neutral words	540 (124)	558 (113)	495 (110)	741 (144)	796 (222)	531 (149)
Accuracy (%)						
Negative words	92 (16)	93 (11)	92 (9)	81 (19)	71 (37)	87 (13)
Positive words	91 (15)	97 (7)	97 (5)	85 (16)	73 (33)	88 (14)
Neutral words	90 (15)	95 (8)	93 (6)	84 (18)	71 (35)	88 (15)

PBD = Pediatric Bipolar Disorder; HC = Healthy Controls.

Table 2 ANOVA Group by Time Interaction Effect

ANOVA group by time effect	Talairach coordinates for peak values	BA	Volume (mm3)	Peak <i>F</i> values
Baseline - three years				
R DLPFC	52, 32, 34	46	2856	19.89
R VLPFC	58, 26, 4	45	1952	17.82
R VLPFC	18, 32, -16	47	2520	13.90
R Pregenual ACC	6, 44, 18	32	3160	16.76
L Pregenual ACC	-2, 40, 8	32	2352	12.55
R Dorsal ACC	2, 36, 18	32	2560	15.30
L Dorsal ACC	-2, 36, 18	32	3256	13.94
R Amygdala	14, 6, -24		272	12.92
L Striatum	-2, 6, -6		984	12.92
R Striatum	6, 8, -16		3216	18.07
Baseline - 16 weeks				
R DLPFC	50, 30, 32	46	5544	19.38
R Occipital cortex	54, -74, 14	39	22996	27.39
16 weeks - three years				
None				

Abbreviations: BA, Broadmann areas; ACC, anterior cingulate cortex; DLPFC, dorsal lateral prefrontal cortex; VLPFC, ventral lateral prefrontal cortex.