Supplementary Materials:

Supplementary Table 1a: Demographic and Clinical Features of Study Participants with Bipolar Disorder (Li-)

Sex	Age (years)	Current Medication	Past Medications	Time Off All Medication before MRI	Mood State	Bipolar I or II?
Female	36	None	Tranylcypromine	>1 month	Depressed	BPI
Male	29	None	None		Depressed	BPI
Female*	26	None	Lorazepam, Valproic acid, Lithium, Tranylcypromine, Thioridazine	30 weeks	Euthymic	BPI
Male	31	None	Fluoxetine	52 weeks	Euthymic	BPI
Male**	41	None	Lithium Fluoxetine	>1 year	Depressed	BPII
Male	45	None	None		Hypomanic	BPII
Female	56	None	Imipramine, Amitriptyline	19 years	Depressed	BPII
Female	45	Citalopram	Citalopram		Euthymic	BPII

^{*}Subject previously used antipsychotic medication for 2 weeks, 2 years prior to scan date, and previously used lithium (maximum dose 1125 mg) for 107 weeks (discontinued 6 months prior to scan date)

^{**}Subject previously used lithium (maximum dose 1500 mg) for 44 weeks (discontinued 13 months prior to scan date)

Supplementary Table 1b: Demographic and Clinical Features of Study Participants with Bipolar Disorder (Li+)

** 1611	Dipolal D	isorder (L1+)			
Sex	Age (years)	Current Medication	Weeks on lithium	Mood state	Bipolar I or II?
Female	30	Lithium	3	Depressed	BPI
Male	41	Lithium	36	Euthymic	BPI
Male	36	Lithium	10	Euthymic	BPI
Female	44	Lithium, Tranylcypromine	4	Depressed	BPI
Female	40	Lithium	240	Euthymic	BPI
Male	42	Lithium	96	Euthymic	BPI
Male	40	Lithium	384	Euthymic	BPI
Female	28	Lithium	16	Depressed	BPI
Male	22	Lithium	52	Euthymic	BPI
Female	52	Lithium	150	Euthymic	BPI
Male	37	Lithium	27	Depressed	BPI
Male	21	Lithium	21	Depressed	BPI
Male	26	Lithium	29	Euthymic	BPI
Male	30	Lithium	33	Euthymic	BPI
Male	24	Lithium	20	Euthymic	BPI
Female	29	Lithium, Levothyroxine	264	Euthymic	BPI

Female	26	Lithium, Tranylcypromine	6	Depressed	BPI
Female	47	Lithium	1000	Euthymic	BPI
Male	25	Lithium	20	Euthymic	BPII
Female	61	Lithium, Levothyroxine, Citalopram	150	Euthymic	BPII

Cortical GMD Differences as a Function of Lithium Treatment Bipolar Li+ versus Bipolar Li-

