



Supplementary Material

Article Title: The Neuropsychological Mechanism of Treatment of Bipolar Disorders and Borderline Personality Disorders: Activation Likelihood Estimation Meta-Analysis of Brain Imaging Research

Authors: Jingyi Luo, MSc; Meng Liang, MSc; Pengcheng Yi, PhD; and Xiaoming Li, PhD

DOI Number: 10.4088/JCP.22r14463

List of Supplementary Material for the article

1. [Table 1](#) Overall Analysis of Two Disorders After Treatments
2. [Table 2](#) Analysis of Psychotherapy and Drug Therapy in BD
3. [Table 3](#) Analysis of Psychotherapy and Drug Therapy in BPD
4. [Table 4](#) Analysis of Psychotherapy and Drug Therapy in Two Disorders

Disclaimer

This Supplementary Material has been provided by the author(s) as an enhancement to the published article. It has been approved by peer review; however, it has undergone neither editing nor formatting by in-house editorial staff. The material is presented in the manner supplied by the author.

Supplementary Materials

Supplementary Table 1 Overall analysis of two disorders after treatments.

Brain Region	Hemisphere	BA	Cluster Size (mm³)	MNI			ALE	Z
				x	y	z		
Overall increase:								
Anterior Cingulate	R	25	1248	6	18	-14	0.015	4.11
Medial Frontal Gyrus	R	9	1120	6	50	12	0.017	4.46
Amygdala	L	NA	496	-22	-4	-20	0.017	4.44
Anterior Cingulate	L	32	432	0	46	0	0.016	4.31
Anterior Cingulate	R	24	352	8	36	-2	0.014	3.92
Inferior Frontal Gyrus	R	47	328	36	26	-18	0.014	3.98
Cingulate Gyrus	L	24	272	-6	2	46	0.013	3.74
Insula	L	13	256	-40	-8	8	0.013	3.66
Clastrum	R	NA	256	38	-8	8	0.013	3.66
Overall decrease:								
Parahippocampal Gyrus	L	34	688	-20	-2	-18	0.013	4.49
Posterior Cingulate	R	30	416	12	-48	24	0.011	4.11

Supplementary Table 2 Analysis of psychotherapy and drug therapy in BD.

Brain Region	Hemisphere	BA	Cluster Size (mm ³)	MNI			ALE	Z
				x	y	z		
Psychotherapy increase:								
Inferior Frontal Gyrus	L	47	344	-46	18	-4	0.012	4.17
Superior Temporal Gyrus	R	41	296	46	-34	14	0.010	3.84
Drug therapy increase:								
Anterior Cingulate	R	25	1976	6	18	-14	0.014	4.57
Medial Frontal Gyrus	R	9	1016	8	46	16	0.015	4.69
Anterior Cingulate	L	32	800	0	46	0	0.016	4.93
Inferior Frontal Gyrus	R	47	792	36	26	-18	0.014	4.60
Amygdala	L	NA	472	-24	-4	-18	0.013	4.38
Medial Frontal Gyrus	L	9	464	-6	50	18	0.013	4.35
Inferior Frontal Gyrus	L	47	456	-34	24	-18	0.014	4.49
Lingual Gyrus	L	18	456	-20	-84	2	0.014	4.49
Insula	L	47	456	-39	-6	8	0.013	4.18
Angular Gyrus	L	39	448	-30	-54	44	0.013	4.33
Frontal Lobe	L	10	312	-44	44	-8	0.011	3.85
Medial Frontal Gyrus	R	6	288	6	-10	74	0.011	3.91
Drug therapy decrease:								
Posterior Cingulate	R	31	520	16	-46	28	0.010	4.43

Supplementary Table 3 Analysis of psychotherapy and drug therapy in BPD.

Brain Region	Hemisphere	BA	Cluster Size (mm³)	MNI			ALE	Z
				x	y	z		
Psychotherapy increase:								
Supramarginal Gyrus	L	40	304	-60	-54	28	0.009	3.74
Psychotherapy decrease:								
Middle Frontal Gyrus	R	6	280	32	22	46	0.007	3.71
Drug therapy increase:								
Inferior Frontal Gyrus	R	46	384	51	41	-2	0.008	3.88
Middle Temporal Gyrus	R	39	352	42	-52	31	0.008	3.98
Superior Frontal Gyrus	R	8	352	18	56	31	0.008	3.98
Precuneus	L	7	352	-6	-43	52	0.008	3.98
Drug therapy decrease:								
Parahippocampal Gyrus	L	34	1560	-20	-2	-18	0.013	5.11
Insula	L	13	368	-40	16	1	0.010	4.13
Amygdala	R	NA	256	32	-6	-14	0.008	3.68

Supplementary Table 4 Analysis of psychotherapy and drug therapy in two disorders.

Brain Region	Hemisphere	BA	Cluster Size (mm³)	MNI			ALE	Z
				x	y	z		
Psychotherapy increase:								
Superior Temporal Gyrus	R	41	400	50	-32	10	0.011	3.68
Inferior Frontal Gyrus	L	NA	280	-46	18	-4	0.012	3.85
Anterior Cingulate	R	24	264	6	36	-4	0.012	3.88
Psychotherapy decrease:								
Middle Frontal Gyrus	R	6	280	32	22	46	0.007	3.71
Drug therapy increase:								
Anterior Cingulate	R	25	1904	6	18	-14	0.014	4.47
Medial Frontal Gyrus	R	9	944	8	46	16	0.015	4.59
Anterior Cingulate	R	47	768	0	46	0	0.016	4.84
Inferior Frontal Gyrus	L	32	752	36	26	-18	0.014	4.49
Inferior Frontal Gyrus	L	47	456	-34	24	-18	0.014	4.39
Lingual Gyrus	L	18	456	-20	-84	2	0.014	4.39
Insula	L	NA	448	-39	-6	8	0.013	4.15
Clastrum	R	NA	448	38	-8	8	0.013	4.15
Amygdala	L	NA	432	-24	-4	-18	0.013	4.28
Medial Frontal Gyrus	L	9	400	-6	50	18	0.013	4.25
Angular Gyrus	L	39	384	-30	-54	44	0.013	4.23
Drug therapy decrease:								
Parahippocampal Gyrus	L	34	816	-20	-2	-18	0.013	4.64
Posterior Cingulate	R	30	440	12	-48	24	0.011	4.31