

Supplementary Material

Article Title: Association of Suicidal Status, Inflammation Markers, and Resting-State Functional Activity and Connectivity in Patients With Major Depressive Disorder

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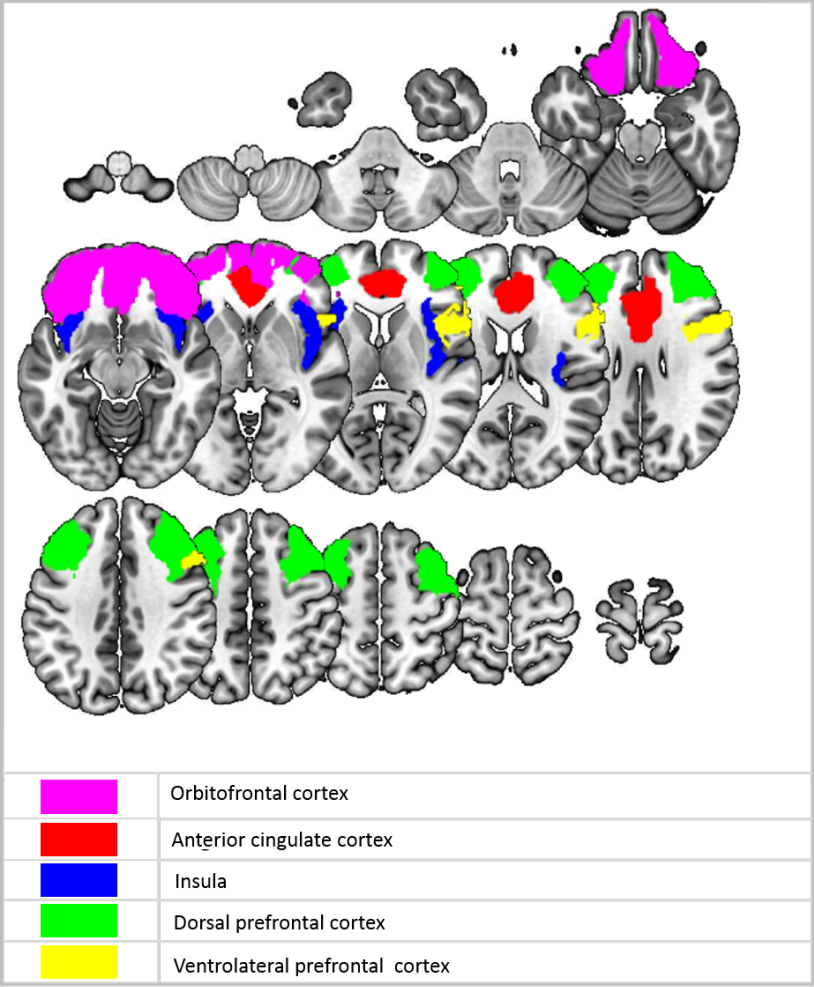
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Supplementary material

Supplementary Figure 1: Regions involved in suicidal vulnerability



Supplementary Table 1: Correlations between the rs-FC of region pairs and psychological pain intensity in patients (ACs and SAs)

	Middle frontal L	Middle frontal R	Middle frontal Orbital L	Middle frontal Orbital R	Pars opercularis of the IFG L	Pars opercularis of the IFG R	Inferior frontal Orbital L	Inferior frontal Orbital R	Medial frontal Orbital L	Medial frontal Orbital R	Insula L	Insula R	Anterior cingulum L	Anterior cingulum R
Middle frontal L		-0.22	-0.03	-0.02	-0.24	-0.32*	-0.23	-0.27	-0.26	-0.34*	-0.45*	-0.41*	-0.28	-0.24
Middle frontal R			-0.26	-0.17	-0.31	-0.34*	-0.29	-0.30	-0.25	-0.28	-0.27	-0.24	-0.11	-0.05
Middle frontal Orbital L				-0.05	0.02	-0.03	-0.15	-0.21	-0.21	-0.16	0.11	-0.05	-0.10	-0.15
Middle frontal Orbital R					-0.05	-0.14	-0.06	-0.22	-0.31	-0.21	0.19	-0.09	0.05	0.09
Pars opercularis of the IFG L						0.02	-0.05	0.09	0.01	-0.03	-0.16	-0.06	-0.07	-0.02
Pars opercularis of the IFG R							-0.10	0.08	-0.08	-0.13	-0.04	0.04	-0.12	-0.13
Inferior frontal Orbital L								-0.05	-0.30	-0.17	0.13	0.03	-0.32	-0.25
Inferior frontal Orbital R									-0.22	-0.12	0.17	0.03	-0.20	-0.10
Medial frontal Orbital L										-0.11	0.02	-0.08	-0.23	-0.23
Medial frontal Orbital R											0.15	0.11	-0.14	-0.19
Insula L												-0.10	-0.20	-0.21
Insula R													-0.14	-0.17
Anterior cingulum L														-0.09
Anterior cingulum R														

* non-corrected p-value < 0.05; colored cells: FDR p-value < 0.05

Supplementary Table 2. Correlations between the rs-FC of regions pairs and depression severity in patients (ACs and SAs)

	Middle frontal L	Middle frontal R	Middle frontal Orbital L	Middle frontal Orbital R	Pars opercularis of the IFG L	Pars opercularis of the IFG R	Inferior frontal Orbital L	Inferior frontal Orbital R	Medial frontal Orbital L	Medial frontal Orbital R	Insula L	Insula R	Anterior cingulum L	Anterior cingulum R
Middle frontal L		0.14	0.17	0.19	0.04	0.09	0.19	0.15	0.17	0.18	0.20	0.30		0.08
Middle frontal R			0.26	0.19	0.18	0.07	0.41*	0.14	0.13	0.13	0.14	0.24	-0.08	-0.23
Middle frontal Orbital L				-0.23	-0.02	0.04	-0.27	-0.26	-0.06	0.06	-0.07	0.03	0.13	0.15
Middle frontal Orbital R					0.10	0.04	-0.41*	-0.18	-0.26	-0.11	-0.28	-0.12	0.05	0.01
Pars opercularis of the IFG L						0.08	-0.03	0.04	0.06	0.09	0.18	0.19	0.15	0.20
Pars opercularis of the IFG R							0.22	0.11	-0.12	-0.09	0.17	0.28	0.09	-0.01
Inferior frontal Orbital L								-0.23	-0.08	0.03	0.13	0.26	0.04	0.13
Inferior frontal Orbital R									-0.14	-0.04	-0.09	0.11	0.08	0.10
Medial frontal Orbital L										0.19	-0.16	-0.09	-0.16	-0.09
Medial frontal Orbital R												0.03	-0.21	-0.14
Insula L												0.17	0.10	0.09
Insula R													0.17	0.15
Anterior cingulum L														0.32*
Anterior cingulum R														

* non-corrected p-value < 0.05; colored cells: FDR p-value < 0.05

Supplementary Table 3. Correlations between the rs-FC and suicidal ideation intensity in patients (ACs and SAs)

	Middle frontal L	Middle frontal R	Middle frontal Orbital L	Middle frontal Orbital R	Pars opercularis of the IFG L	Pars opercularis of the IFG R	Inferior frontal Orbital L	Inferior frontal Orbital R	Medial frontal Orbital L	Medial frontal Orbital R	Insula L	Insula R	Anterior cingulum L	Anterior cingulum R
Middle frontal L		0.01	0.05	-0.10	0.06	0.02	0.16	0.03	0.28	0.19	0.11	0.04	-0.02	0.01
Middle frontal R			-0.02	-0.08	0.17	0.02	0.22	0.12	0.33*	0.31*	0.04	0.05	0.02	-0.08
Middle frontal Orbital L				-0.13	-0.16	0.01	-0.04	-0.11	0.04	0.13	0.25	0.16	-0.09	-0.22
Middle frontal Orbital R					-0.22	-0.05	0.03	0.05	0.01	0.10	0.15	0.10	0.04	-0.04
Pars opercularis of the IFG L						0.06	-0.25	-0.30	-0.21	-0.33*	0.16	0.10	-0.02	-0.08
Pars opercularis of the IFG R							-0.18	-0.17	-0.03	-0.09	0.02	0.01	-0.01	-0.18
Inferior frontal Orbital L								-0.11	0.03	0.03	0.31	0.21	0.01	-0.02
Inferior frontal Orbital R									-0.11	-0.04	0.23	0.14	0.03	0.01
Medial frontal Orbital L										0.11	0.13	0.03	0.24	0.30
Medial frontal Orbital R											0.07	0.09	0.25	0.29
Insula L												-0.04	-0.04	-0.10
Insula R													-0.02	-0.13
Anterior cingulum L														0.31
Anterior cingulum R														

* non-corrected p-value < 0.05; colored cells: FDR p-value < 0.05

Supplementary Table 4. Correlations between the rs-FC of region pairs and suicidal intent of the last suicide attempt in SAs

	Middle frontal L	Middle frontal R	Middle frontal Orbital L	Middle frontal Orbital R	Pars opercularis of the IFG L	Pars opercularis of the IFG R	Inferior frontal Orbital L	Inferior frontal Orbital R	Medial frontal Orbital L	Medial frontal Orbital R	Insula L	Insula R	Anterior cingulum L	Anterior cingulum R
Middle frontal L		-0.10	0.18	-0.01	-0.11	-0.20	-0.19	-0.24	-0.23	-0.36	-0.03	-0.16	-0.47*	-0.45*
Middle frontal R			0.14	0.02	-0.06	-0.19	0.03	0.04	0.11	-0.12	0.10	-0.10	-0.15	-0.27
Middle frontal Orbital L				-0.32	0.02	0.23	-0.07	-0.08	-0.45*	-0.24	-0.05	-0.26	-0.38	-0.35
Middle frontal Orbital R					-0.16	-0.01	0.05	0.10	-0.37	-0.10	0.07	-0.06	-0.05	-0.12
Pars opercularis of the IFG L						0.01	-0.02	-0.12	0.01	-0.07	0.11	0.02	-0.17	-0.07
Pars opercularis of the IFG R							0.23	0.25	0.04	-0.24	0.33	0.22	-0.21	-0.26
Inferior frontal Orbital L								-0.18	-0.09	-0.02	-0.17	-0.12	-0.09	0.01
Inferior frontal Orbital R									0.06	0.06	-0.06	-0.11	-0.08	-0.06
Medial frontal Orbital L										-0.15	-0.06	0.01	0.19	0.14
Medial frontal Orbital R											0.01	0.04	0.21	0.14
Insula L												-0.20	-0.16	-0.02
Insula R													-0.14	-0.07
Anterior cingulum L														0.25
Anterior cingulum R														

* non-corrected p-value < 0.05; colored cells: FDR p-value < 0.05

Supplementary Table 5, Correlations between the rs-FC of region pairs and CRP concentration in patients (ACs and SAs)

	Middle frontal L	Middle frontal R	Middle frontal Orbital L	Middle frontal Orbital R	Pars opercularis of the IFG L	Pars opercularis of the IFG R	Inferior frontal Orbital L	Inferior frontal Orbital R	Medial frontal Orbital L	Medial frontal Orbital R	Insula L	Insula R	Anterior cingulum L	Anterior cingulum R
Middle frontal L		0.19	0.07	-0.10	-0.08	-0.22	0.05	-0.02	0.16	0.03	-0.06	-0.07	0.12	0.11
Middle frontal R			0.02	-0.12	0.07	0.01	0.11	0.14	0.12	0.20	-0.01	0.01	0.07	-0.01
Middle frontal Orbital L				-0.23	0.14	-0.01	0.16	-0.07	0.28	0.24	0.13	0.09	-0.03	0.03
Middle frontal Orbital R					-0.06	-0.20	0.15	-0.09	0.41*	0.32	-0.21	-0.15	0.03	0.10
Pars opercularis of the IFG L						-0.23	0.01	0.01	0.05	0.09	0.03	0.01	0.17	0.12
Pars opercularis of the IFG R							-0.08	0.09	0.06	0.28	-0.09	-0.03	-0.02	-0.06
Inferior frontal Orbital L								-0.08	0.23	0.24	0.11	0.03	0.16	0.24
Inferior frontal Orbital R									0.10	0.17	0.19	0.16	0.11	0.11
Medial frontal Orbital L										-0.04	0.16	0.16	0.17	0.29
Medial frontal Orbital R											0.19	0.30	0.02	0.09
Insula L												-0.27	-0.01	-0.05
Insula R													-0.04	-0.05
Anterior cingulum L														0.03
Anterior cingulum R														

* non-corrected p-value < 0.05; colored cells: FDR p-value < 0.05

Supplementary Table 7. Correlations between the rs-FC of region pairs and IL-6 concentration in patients (ACs and SAs)

	Middle frontal L	Middle frontal R	Middle frontal Orbital L	Middle frontal Orbital R	Pars opercularis of the IFG L	Pars opercularis of the IFG R	Inferior frontal Orbital L	Inferior frontal Orbital R	Medial frontal Orbital L	Medial frontal Orbital R	Insula L	Insula R	Anterior cingulum L	Anterior cingulum R
Middle frontal L		0.22	0.09	0.25	0.27	0.09	0.06	0.16	-0.07	0.06	-0.02	0.15	0.07	0.27
Middle frontal R			0.06	0.31	0.17	0.05	0.12	0.19	-0.14	0.01	-0.03	0.16	0.01	0.10
Middle frontal Orbital L				0.05	0.18	-0.09	0.08	0.04	0.02	0.06	0.01	0.07	-0.06	0.06
Middle frontal Orbital R					0.23	0.15	-0.03	0.05	0.01	0.06	0.09	0.28	0.07	0.22
Pars opercularis of the IFG L						-0.04	0.17	0.08	-0.02	0.01	0.06	0.07	0.20	0.27
Pars opercularis of the IFG R							0.08	0.18	0.03	0.07	-0.31	-0.08	0.18	0.22
Inferior frontal Orbital L								-0.06	-0.04	0.01	-0.03	-0.09	-0.16	-0.09
Inferior frontal Orbital R									-0.09	-0.03	-0.19	0.10	-0.04	0.07
Medial frontal Orbital L										0.15	-0.03	-0.11	-0.11	-0.09
Medial frontal Orbital R											0.03	0.04	-0.01	-0.03
Insula L												-0.35	0.05	0.01
Insula R													0.15	0.21
Anterior cingulum L														-0.09*
Anterior cingulum R														

* non-corrected p-value < 0.05; colored cells: FDR p-value < 0.05