

Supplement Tables

Supplementary Table 1. Laboratory and statistics results at baseline among groups

	TNF α	IL-6	hsCRP
Healthy controls (HC), Median (IQR) (pg/ml)	92.9 (51.5-200.8)	5.3 (3.2-10.8)	707.6 (623.8-823.9)
MDD subtypes, Median (IQR) (pg/ml)			
Melancholic (M)	199.2 (74.7-615.8)	9.3 (3.4-18.1)	725.0 (638.4-848.1)
Atypical (At)	96.1 (55.8-267.5)	5.6 (2.7-14.9)	830.6 (711.6-905.5)
Anxious (An)	84.9 (47.6-560.9)	6.7 (3.2-21.3)	840.0 (696.0 -913.8)
P-value (adjusted P-value)			
Between Groups	0.528 (0.634)	0.937 (0.937)	0.017 (0.059)
MDD vs HC	0.612 (0.735)	0.604 (0.765)	0.053 (0.170)
M vs HC	0.241 (0.534)	0.526 (0.674)	0.674 (0.674)
At vs HC	0.979 (0.979)	0.788 (0.946)	0.011 (0.058)
An vs HC	0.930 (0.930)	0.696 (0.835)	0.042 (0.111)
M vs At	0.216 (0.324)	0.714 (0.790)	0.021 (0.064)
M vs An	0.241 (0.792)	0.792 (0.792)	0.080 (0.190)
At vs An	0.906 (0.908)	0.908 (0.908)	0.523 (0.908)

Note: Median and IQR of inflammatory markers and energy markers were not logarithmically transformed (n TNF α = 153, n hsCRP = 154, n IL-6 = 151), while the *P*-value and adjusted *P*-value of the laboratory results at baseline were obtained from logarithmically transformed. The *P*-value was adjusted by the method of Benjamini - Hochberg. IQR, interquartile range. MDD, major depression disorder. HC, healthy control participants. M, melancholic subtype depression. At, typical subtype depression. An, anxious subtype depression. vs, versus.

Supplementary Table 2. Laboratory and statistics results at 8-week and 12-week follow-up among groups

	TNF α	IL-6	hsCRP
8-week follow-up, Median (IQR) (pg/ml)			
Melancholic (M)	114.5 (58.5-563.1)	6.1 (3.4-17.2)	742.5 (636.9-858.8)
Atypical (At)	104.2 (59.4-284.6)	5.5 (2.6-15.6)	767.4 (688.7-893.5)
Anxious (An)	121.4 (48.7-429.5)	6.9 (3.2-21.0)	831.0 (687.9-931.3)
P-value (adjusted P-value)			
Between Groups	0.735 (0.864)	0.985 (0.985)	0.397 (0.697)
M vs At	0.866 (0.866)	0.680 (0.794)	0.360 (0.608)
M vs An	0.776 (0.877)	0.877 (0.877)	0.253 (0.433)
At vs An	0.674 (0.975)	0.789 (0.975)	0.903 (0.975)
12-week follow-up, Median (IQR) (pg/ml)			
Melancholic (M)	121.3 (53.1-658.1)	7.0 (3.4-18.1)	742.5 (638.2-863.9)
Atypical (At)	110.8 (52.3-421.8)	5.2 (2.6-44.1)	765.1 (689.0-892.6)
Anxious (An)	109.8 (48.3-373.0)	6.8 (3.1-20.0)	837.9 (677.4-938.6)
P-value (adjusted P-value)			
Between Groups	0.594 (0.856)	0.905 (0.905)	0.496 (0.775)
M vs At	0.837 (0.837)	0.632 (0.738)	0.437 (0.714)
M vs An	0.636 (0.742)	0.939 (0.939)	0.313 (0.528)
At vs An	0.540 (0.919)	0.588 (0.919)	0.919 (0.919)

Note: Median and IQR of inflammatory markers and energy markers were not logarithmically transformed (n TNF α = 153, n hsCRP = 154, n IL-6 = 151), while the *P*-value and adjusted *P*-value of the laboratory results at baseline were obtained from logarithmically transformed. The *P*-value was adjusted by the method of Benjamini - Hochberg. IQR, interquartile range. M, melancholic. At, atypical. An, anxious. vs, versus.

Supplementary Table 3. Laboratory results and related clinical symptoms between groups at baseline

Clinical symptoms		TNF α					
		M	At	An	P-value (adjusted P-value)		
					M vs At	M vs An	At vs An
Remission	Remission at 8-week	7.2 (2.0)	6.2 (0.8)	7.3 (1.8)	0.364 (0.510)	0.919 (0.919)	0.241 (0.734)
	without remission at 8-week	7.7 (2.2)	8.8 (2.4)	7.1 (1.9)	0.982 (0.138)	0.655 (0.860)	0.060 (0.141)
	Remission at 12-week	8.2 (2.1)	6.1 (0.9)	7.4 (1.7)	0.081 (0.283)	0.390 (0.725)	0.253 (0.426)
	without remission at 12-week	7.3 (2.3)	8.2 (2.5)	6.7 (1.9)	0.132 (0.177)	0.862 (0.862)	0.115 (0.252)
Pain	Without pain	6.7 (1.9)	7.2 (2.4)	7.5 (2.3)	0.981 (0.981)	0.722 (0.733)	0.709 (0.931)
	Moderate or mild pain	8.2 (2.4)	7.2 (2.4)	6.8 (2.2)	0.172 (0.543)	0.042 (0.146)	0.584 (0.782)
	Severe pain	7.3 (2.2)	6.6 (0.7)	7.8 (1.9)	0.602 (0.974)	0.686 (0.786)	0.398 (0.821)
Appetite	Without change	7.5 (2.0)	7.3 (2.4)	6.7 (2.2)	0.887 (0.887)	0.412 (0.801)	0.528 (0.669)
	Decreased	8.1 (2.3)	8.1 (2.3)	7.4 (2.2)	0.331 (0.579)	0.282 (0.395)	0.946 (0.977)
	Increased	7.4 (2.7)	6.6 (2.3)	6.5 (1.9)	0.419 (0.932)	0.521 (0.967)	0.952 (0.998)
Gastrointestinal symptoms	Without	7.5 (2.1)	7.6 (2.5)	7.3 (2.5)	0.915 (0.915)	0.886 (0.886)	0.809 (0.924)
	With	8.0 (2.3)	7.0 (2.1)	7.2 (2.2)	0.170 (0.396)	0.238 (0.340)	0.795 (0.899)

Supplementary Table 3 continued.

IL-6						hsCRP					
M	At	An	P-value (adjusted P-value)			M	At	An	P-value (adjusted P-value)		
			M vs At	M vs An	At vs An				M vs At	M vs An	At vs An
2.8 (2.3)	1.8 (0.9)	3.3 (1.5)	0.240 (0.510)	0.627 (0.824)	0.057 (0.400)	9.7 (0.3)	9.5 (0.2)	9.7 (0.3)	0.226 (0.510)	0.706 (0.824)	0.317 (0.734)
3.2 (1.7)	4.7 (2.7)	2.8 (1.7)	0.018 (0.063)	0.772 (0.860)	0.016 (0.109)	9.5 (0.3)	9.7 (0.2)	9.6 (0.4)	0.057 (0.099)	0.250 (0.860)	0.389 (0.544)
3.5 (2.2)	1.5 (1.2)	3.5 (1.3)	0.076 (0.283)	0.848 (0.848)	0.089 (0.312)	9.6 (0.4)	9.5 (0.2)	9.6 (0.3)	0.470 (0.734)	0.827 (0.848)	0.355 (0.426)
2.9 (1.7)	4.1 (2.7)	2.5 (1.7)	0.069 (0.121)	0.837 (0.862)	0.058 (0.203)	9.5 (0.2)	9.7 (0.2)	9.6 (0.4)	0.151 (0.177)	0.297 (0.862)	0.672 (0.672)

2.5 (1.8)	3.4 (2.4)	3.3 (1.8)	0.913 (0.981)	0.733 (0.733)	0.824 (0.931)	9.6 (0.4)	9.6 (0.2)	9.7 (0.3)	0.327 (0.478)	0.067 (0.136)	0.419 (0.938)
3.4 (2.1)	3.0 (2.3)	2.8 (1.9)	0.569 (0.664)	0.289 (0.404)	0.670 (0.782)	9.5 (0.3)	9.7 (0.3)	9.6 (0.3)	0.098 (0.543)	0.277 (0.398)	0.584 (0.782)
3.1 (2.2)	2.6 (0.6)	3.5 (1.8)	0.932 (0.974)	0.437 (0.764)	0.419 (0.821)	9.5 (0.1)	9.6 (0.2)	9.2 (0.5)	0.221 (0.974)	0.197 (0.764)	0.022 (0.155)
2.8 (1.6)	4.2 (2.1)	2.7 (2.2)	0.426 (0.509)	0.943 (0.943)	0.388 (0.669)	9.5 (0.3)	9.7 (0.2)	9.5 (0.5)	0.172 (0.509)	0.771 (0.899)	0.274 (0.669)
3.5 (2.2)	3.5 (2.2)	3.2 (1.8)	0.638 (0.894)	0.776 (0.776)	0.818 (0.977)	9.5 (0.2)	9.5 (0.2)	9.6 (0.3)	0.063 (0.438)	0.085 (0.227)	0.679 (0.977)
3.2 (1.8)	2.4 (2.3)	2.5 (1.0)	0.828 (0.932)	0.852 (0.967)	0.998 (0.998)	9.6 (0.3)	9.6 (0.2)	9.6 (0.3)	0.932 (0.932)	0.875 (0.967)	0.769 (0.998)
2.5 (1.2)	4.7 (1.9)	3.2 (2.4)	0.180 (0.368)	0.468 (0.616)	0.550 (0.924)	9.5 (0.3)	9.6 (0.2)	9.7 (0.4)	0.210 (0.368)	0.177 (0.319)	0.924 (0.924)
3.5 (2.1)	2.8 (2.1)	3.0 (1.7)	0.298 (0.457)	0.530 (0.618)	0.653 (0.899)	9.5 (0.3)	9.6 (0.2)	9.6 (0.3)	0.071 (0.250)	0.236 (0.340)	0.653 (0.899)

Note: Mean (standard deviation, SD) of inflammatory markers and energy markers were logarithmically transformed (n TNF α = 153, n hsCRP = 154, n IL-6 = 151). The *P*-value was adjusted by the method of Benjamini - Hochberg. M, melancholic; At, atypical; An, anxious.

