

Table S1 The final selected rs-fMRI signal values features used to construct the models.

ID	rs-MRI measure	AAL	Brain region	Beta
1	mALFF	41	Amygdala_L	0.072519869
2	mALFF	59	Parietal_Sup_L	-0.429358503
3	mALFF	71	Caudate_L	0.201002892
4	mALFF	116	Vermis_10	0.128016028
5	mfALFF	6	Frontal_Sup_Orb_R	-0.024261141
6	mfALFF	15	Frontal_Inf_Orb_L	-0.014363461
7	mfALFF	24	Frontal_Sup_Medial_R	-0.001614871
8	mfALFF	32	Cingulum_Ant_R	-0.048869777
9	mfALFF	62	Parietal_Inf_R	-0.018110150
10	mfALFF	65	Angular_L	-0.208604230
11	mReHo	15	Frontal_Inf_Orb_L	-0.307361112
12	mReHo	24	Frontal_Sup_Medial_R	-0.246257395
13	mReHo	28	Rectus_R	-0.001127236
14	mReHo	30	Insula_R	-0.235914700
15	mReHo	59	Parietal_Sup_L	-0.137726505
16	mReHo	65	Angular_L	-0.102964896
17	mReHo	72	Caudate_R	0.436094770
18	mReHo	74	Putamen_R	0.126152390
19	mReHo	94	Cerebelum_Crus2_R	0.267000928
20	mReHo	95	Cerebelum_3_L	-0.146061532
21	mReHo	105	Cerebelum_9_L	-0.101243134

AAL, Anatomical Automatic Labeling; rs-fMRI, resting-state functional magnetic resonance imaging; mALFF, mean amplitude of low-frequency fluctuations; mfALFF, mean fractional amplitude of low-frequency fluctuations; mReHo, mean regional homogeneity; Amygdala_L, left amygdala; Parietal_Sup_L, left superior parietal lobule; Caudate_L, left caudate; Frontal_Sup_Orb_R, right superior frontal orbital gyrus; Frontal_Inf_Orb_L, left inferior frontal orbital gyrus; Frontal_Sup_Medial_R, right superior medial frontal gyrus; Cingulum_Ant_R, right superior medial frontal gyrus; Parietal_Inf_R, right inferior parietal lobule; Angular_L, left angular gyrus; Rectus_R, right rectus gyrus; Insula_R, right insula; Caudate_R, right caudate nucleus; Putamen_R, right putamen; Cerebelum_Crus2_R, right cerebellar crus II; Cerebelum_3_L, left cerebellar lobule 3; Cerebelum_9_L, left cerebellar lobule 9.

Table S2 The final selected radiomics features used to construct the models.

ID	rs-fMRI measure	AAL	Brain region	Features	Beta
1	mALFF	39	ParaHippocampal_L	firstorder_Median	0.3055204
2	mALFF	58	Postcentral_R	glcm_Inverse Difference Moment Normalized	0.06939228
3	mALFF	59	Parietal_Sup_L	glcm_Informational Measure of Correlation 2	-0.07092589
4	mALFF	59	Parietal_Sup_L	glszm_Small Area Emphasis	-0.2359383
5	mALFF	71	Caudate_L	firstorder_Mean	0.1245449
6	mALFF	71	Caudate_L	firstorder_Robust Mean Absolute Deviation	0.09869974
7	mALFF	71	Caudate_L	glszm_Size Zone Non Uniformity Normalized	0.1720255
8	mALFF	85	Temporal_Mid_L	glcm_Inverse Difference Moment Normalized	-0.2521231
9	mALFF	91	Cerebelum_Crus1_L	glcm_Cluster Prominence	0.1141408
10	mfALFF	48	Lingual_R	glcm_Inverse Variance	-0.2663680
11	mfALFF	57	Postcentral_L	firstorder_Skewness	0.02346023
12	mfALFF	80	Heschl_R	glszm_Large Area Low Gray Level Emphasis	0.01554470
13	mfALFF	116	Vermis_10	glcm_Correlation	-0.04458550
14	mReHo	11	Frontal_Inf_Oper_L	glcm_Correlation	-0.1501115
15	mReHo	11	Frontal_Inf_Oper_L	glcm_Maximal Correlation Coefcient	-0.08082847
16	mReHo	15	Frontal_Inf_Orb_L	glcm_Joint Average	-0.03759600
17	mReHo	21	Olfactory_L	firstorder_Kurtosis	0.1387072
18	mReHo	62	Parietal_Inf_R	glcm_Difference Variance	-0.0006.918932
19	mReHo	72	Caudate_R	firstorder_Median	0.07855026
20	mReHo	73	Putamen_L	glszm_Small Area Low Gray Level Emphasis	-0.03267030
21	mReHo	74	Putamen_R	glrlm_Short Run Low Gray Level Emphasis	-0.03910409
22	mReHo	78	Thalamus_R	ngtdm_Busyness	-0.1774694
23	mReHo	81	Temporal_Sup_L	glcm_Idn	-0.2020366
24	mReHo	94	Cerebelum_Crus2_R	firstorder_Energy	0.05907072
25	mReHo	94	Cerebelum_Crus2_R	firstorder_Total Energy	0.000009060330
26	mReHo	98	Cerebelum_4_5_R	firstorder_Kurtosis	0.06284972
27	mReHo	106	Cerebelum_9_R	glszm_Small Area Low Gray Level Emphasis	0.1452041
28	mReHo	108	Cerebelum_10_R	glszm_Gray Level Non Uniformity	0.001608609

AAL, Anatomical Automatic Labeling; rs-fMRI, resting-state functional magnetic resonance imaging; mALFF, mean amplitude of low-frequency fluctuations; mfALFF, mean fractional amplitude of low-frequency fluctuations; mReHo, mean regional homogeneity; GLCM, gray level cooccurrence matrix; GLRLM, gray level run length matrix; GLSZM, gray level size zone matrix; NGTDM, neighboring gray tone difference matrix; ParaHippocampal_L, left parahippocampal gyrus; Postcentral_R, right postcentral gyrus; Parietal_Sup_L, left superior parietal lobule; Caudate_L, left caudate nucleus; cTemporal_Mid_L, left middle temporal gyrus; Cerebelum_Crus1_L, left cerebellar crus I; Lingual_R, right lingual gyrus; Postcentral_L, left postcentral gyrus; Heschl_R, right heschl's gyrus; Frontal_Inf_Oper_L, left inferior frontal operculum; Frontal_Inf_Orb_L, left inferior frontal orbital gyrus; Olfactory_L, left olfactory bulb; Parietal_Inf_R, right inferior parietal lobule; Caudate_R, right caudate nucleus; Putamen_L, left putamen; Putamen_R, right putamen; Thalamus_R, right thalamus; Temporal_Sup_L, left superior temporal gyrus; Cerebelum_Crus2_R, right cerebellar crus II; Cerebelum_4_5_R, right cerebellar lobules 4 and 5; Cerebellum_9_R, right cerebellar lobule 9; Cerebellum_10_R, right cerebellar lobule 10.

Table S3 Comparisons of performance across different classifiers.

model		Training set				Validation set			
		AUC	Sensitivity	Specificity	Accuracy	AUC	Sensitivity	Specificity	Accuracy
Rs-fMRI models	RF	1.000	1.000	1.000	100%	0.771	0.958	0.682	82.6%
	LR	0.927	0.920	0.875	89.6%	0.848	0.792	0.818	80.4%
	KNN	0.948	0.880	0.911	89.6%	0.856	0.750	0.818	78.3%
	XGB	1.000	1.000	1.000	100%	0.742	0.875	0.636	76.1%
	SVM	0.962	0.980	0.911	94.3%	0.786	0.875	0.682	78.3%
Radiomics models	RF	1.000	1.000	1.000	100%	0.888	0.792	0.864	82.6%
	LR	0.998	0.980	0.982	98.1%	0.877	0.833	0.771	80.4%
	KNN	0.990	0.940	0.964	95.3%	0.875	0.667	0.955	80.4%
	XGB	1.000	1.000	1.000	100%	0.900	0.917	0.727	82.6%
	SVM	1.000	1.000	1.000	100%	0.862	0.792	0.818	80.4%
Combined models	RF	1.000	1.000	1.000	100%	0.902	0.917	0.773	84.8%
	LR	0.999	1.000	0.964	98.1%	0.890	0.708	0.909	80.4%
	KNN	0.976	0.940	0.946	94.3%	0.888	0.833	0.773	80.4%
	XGB	1.000	1.000	1.000	100%	0.866	0.917	0.682	80.4%
	SVM	1.000	1.000	1.000	100%	0.881	0.750	0.909	82.6%

Abbreviations: rs-fMRI, resting-state functional magnetic resonance imaging; AUC, area under the receiver operating characteristic curve.