

**Supplementary data.** Descriptive statistics for the analyzed variables in the identified clusters of individuals. Clustering results of the variables used for analysis: DUP - duration of untreated psychosis; number of hospitalizations; New P\_1 - subscale P of the PANSS scale - at week 1 of follow-up; pos\_1 - positive symptoms at week 1 of follow-up: (delusions (P1), hallucinations (P3), haughtiness (P5), suspicion/preoccupation (P6), stereotyped thinking (N7), somatic distress (G1), unusual thought content (G9), lack of judgment and insight (G12)); neg\_1 - negative symptoms in the first week of follow-up: (blunted affect (N1), emotional withdrawal (N2), poor contact (N3), passive/apathetic social withdrawal (N4), lack of spontaneity (N6), motor delay (G7), active social avoidance (G16)); dis\_1 - disorganized thoughts in the first week of observation: (difficulties in abstract thinking (N5), mannerisms/positions (G5), disorientation (G10), poor attention (G11), disruption of will (G13), preoccupation (G15), conceptual disorganization (P2)); exc\_1 - uncontrolled hostility/excitement in the first week of observation: (excitement (P4), hostility (P7), uncooperativeness (G8)), PANSS\_emo ("anxiety/depression": anxiety (G2), guilt (G3), tension (G4), depression (G6)); emo\_1 - anxiety/depression in the first week of follow-up (anxiety (G2), guilt (G3), tension (G4), depression (G6)). STAIfeature\_1 - State and Trait Anxiety Inventory/trait - at 1 week of follow-up; BDI\_1 - Beck Depression Scale - at 1 week of follow-up; Calgary\_1 - scale for assessing depression in schizophrenia - at 1 week of follow-up; MoCA\_1 - Montreal Cognitive Function Assessment Scale - at 1 week of follow-up; CTQ\_EN - Childhood Trauma Questionnaire - accounting for emotional abandonment; CTQ\_EA - Childhood Trauma Questionnaire - accounting for emotional abuse; CTQ\_PN - Childhood Trauma Questionnaire - responsible for physical abandonment; CTQ\_PA - Childhood Trauma Questionnaire - responsible for physical abuse; CTQ\_SA - Childhood Trauma Questionnaire - responsible for sexual abuse; CTQ\_M - Childhood Trauma Questionnaire - responsible for minimizing trauma; PAS\_C - Pre-Disorder Attachment Scale - related to childhood; PAS\_EA - Pre-disease Adjustment Scale - related to early adolescence; PAS\_LA - Pre-disease Adjustment Scale - related to late adolescence; PAS\_A - Pre-disease Adjustment Scale - related to adulthood; PASG\_B - Pre-disease Adjustment Scale - related to total scale; PAST\_B - Pre-disease Adjustment Scale - total scale; 5HT - blood serotonin concentration in [ng/mL]; TRP - blood tryptophan concentration in [ $\mu$ g/mL]; GLUT - blood glutamic acid concentration in [ $\mu$ g/mL]; GLUT1 - blood glutamine concentration in [ $\mu$ g/mL]; LAC - blood lactate concentration [mM]; ALA - blood alanine concentration [mM]; 1 - subjects with higher T-scores (cluster 1); 2 - subjects with lower T-scores (cluster 2).

Variable	Focus no.	M	SD	Min	Max	Q1	Me	Q3	Statistical test result
<b>Age</b>	1	23.45	7.79	15	37	16.25	21	31.25	U = 193; p = 0.85
	2	21.9	7.08	15	38	17	18	28	
<b>DUP</b>	1	27.15	24.64	3	84	7	20.5	49.5	U = 165.5; p = 0.35
	2	21.45	30.62	3	140	7	14	21	
<b>hospi</b>	1	60.95	32.35	20	158	36.5	53.5	70.25	U = 169.5; p = 0.41
	2	67.5	34.48	14	171	47	63	84.5	
<b>Age of Episode I</b>	1	18.85	3.44	15	29	16	17.5	20.75	U = 198.5; p = 0.97
	2	18.7	4.13	12	28	16.25	17.5	21.75	
<b>Number of episodes</b>	1	3.85	4.39	1	15	1	1	7.5	U = 195.5; p = 0.89
	2	3.05	3.14	1	11	1	1	5	
<b>Duration</b>	1	4.38	6.5	0.1	21	0.15	0.32	10.5	U = 191.5; p = 0.82
	2	3.3	4.77	0.05	15	0.17	0.34	5.75	
<b>New P_1</b>	1	28.7	7.27	15	36	21.25	32.5	34.75	U = 165; p = 0.34
	2	27.05	6.1	17	38	22	26.5	31.75	

<b>New N_1</b>	1	25.2	5.89	12	33	21.25	26.5	29.75	U = 197.5; p = 0.95
	2	26.2	5.26	18	39	23.25	25.5	28.75	
<b>New G_1</b>	1	53.6	11.83	25	70	44.75	54	64.25	U = 196.5; p = 0.92
	2	54.65	9.42	40	69	46	55	62.75	
<b>New T_1</b>	1	107.5	22.04	69	134	89.25	115	128.25	U = 196; p = 0.91
	2	107.9	18.83	81	141	89.5	110.5	122.5	
<b>pos_1</b>	1	21.35	5.37	10	27	17	23.5	25	U = 175.5; p = 0.51
	2	20.85	4.38	13	29	17.25	21	24	
<b>neg_1</b>	1	25.35	5.8	14	35	21	26.5	30	U = 190; p = 0.79
	2	27.05	6.79	16	46	24	26.5	29.75	
<b>dis_1</b>	1	21.3	5.65	10	32	18	21.5	24	U = 165.5; p = 0.35
	2	19.5	5.06	12	28	15.25	18	23.75	
<b>exc_1</b>	1	13.7	5.05	5	21	9	15	17.75	U = 173; p = 0.46
	2	12.45	4.16	5	20	9	12	16	
<b>emo_1</b>	1	11.9	3.06	5	18	10	12	14	U = 132.5; p = 0.07
	2	13.85	2.96	8	18	12	13.5	16.75	
<b>STAI</b>	1	58.6	6.44	47	70	55.25	59.5	63.5	U = 184.5; p = 0.67
<b>feature_1</b>	2	59.25	7.67	49	70	50.25	60	67.25	
<b>STAI state_1</b>	1	56.85	7.03	45	75	53.5	57.5	59.75	U = 199.5; p = 0.99
	2	56.25	6.76	47	65	49	55.5	62.75	
<b>BDI_1</b>	1	10.5	4.58	3	22	7.25	11.5	13	U = 187; p = 0.72
	2	10.85	4.78	2	20	9	10.5	14.75	
<b>Calgary_1</b>	1	3.8	1.91	1	10	3	3.5	4.75	U = 185.5; p = 0.69
	2	4.15	2.62	1	10	2	4	5.75	
<b>MoCA_1</b>	1	15.2	3.16	9	21	13	15	17.75	U = 184; p = 0.66
	2	15.8	3.87	10	22	12	16	18.75	
<b>CTQ_EN</b>	1	16.75	4.58	8	24	14	17	20	U = 198; p = 0.96
	2	16.95	4.63	8	24	13.25	17	20.5	
<b>CTQ_EA</b>	1	14.45	4.16	7	23	12	14	18	U = 169.5; p = 0.41
	2	13.35	4.59	6	21	10	13	17.5	
<b>CTQ_PN</b>	1	12.4	4.77	5	21	9.25	10.5	16	U = 170.5; p = 0.42
	2	11.1	4.2	6	21	8	10.5	13.75	

<b>CTQ_PA</b>	1	9.5	3.09	6	16	6.5	8.5	12	U = 147; p = 0.14
	2	8.75	4.45	5	19	6	8	9.5	
<b>CTQ_SA</b>	1	6.4	3.5	5	20	5	5	6	U = 170; p = 0.27
	2	5.9	3.16	5	19	5	5	5	
<b>CTQ_M</b>	1	4.5	1.43	3	8	3	4	5	U = 167; p = 0.35
	2	4.45	2.37	3	13	3	4	4.75	
<b>PAS_C</b>	1	0.62	0.17	0.17	0.83	0.54	0.66	0.75	U = 90.5; p = 0.16
	2	0.56	0.15	0.25	0.83	0.45	0.58	0.65	
<b>PAS_EA</b>	1	0.49	0.18	0.25	0.83	0.4	0.47	0.67	U = 95.5; p = 0.22
	2	0.55	0.18	0.1	0.9	0.44	0.53	0.67	
<b>PAS_LA</b>	1	0.49	0.2	0	0.87	0.4	0.47	0.6	U = 82; p = 0.08
	2	0.59	0.19	0.2	0.9	0.53	0.6	0.67	
<b>PAS_A</b>	1	0.26	0.31	0	0.67	0	0	0.66	U = 119; p = 0.73
	2	0.27	0.35	0	0.83	0	0	0.67	
<b>PASG_B</b>	1	0.51	0.17	0.22	0.76	0.41	0.55	0.63	U = 80.5; p = 0.08
	2	0.6	0.2	0.15	0.78	0.48	0.69	0.74	
<b>PAST_B</b>	1	2.29	0.58	1.16	3.39	2.09	2.33	2.6	U = 86; p = 0.12
	2	2.62	0.74	0.92	3.99	2.14	2.72	3.04	
<b>Dosage</b>	1	12.25	44.32	0	200	0	2	3.75	U = 175; p = 0.49
	2	3.03	2.62	0	10	2	2	3.75	
<b>Chlorpromazi ne</b>	1	88.33	95.99	0	300	0	75	150	U = 168; p = 0.37
	2	100	56.2	0	200	100	100	137.5	
<b>5HT</b>	1	180.26	203.5	89.7	1003.34	94.84	133.4	178.08	U = 179; p = 0.76
	2	130.09	32.02	78.99	200.96	104.5	125.48	150.72	
<b>TRP</b>	1	3.54	6.14	0.16	28.46	1.01	2.21	3.08	U = 189; p = 0.98
	2	2.27	1.3	0.22	5.49	1.12	2.11	3.31	
<b>GLUT</b>	1	17.01	6.54	8.93	28.96	11.45	15.17	22.35	U = 162; p = 0.43
	2	15.15	5.71	7.46	25.36	9.81	14.64	20.68	
<b>GLUT1</b>	1	2.85	3.84	1.08	18.51	1.57	2.04	2.3	U = 189; p = 0.98
	2	2	0.38	1.33	2.89	1.74	1.9	2.22	
<b>LAC</b>	1	1.71	0.49	1.02	2.87	1.35	1.67	2.17	U = 141; p = 0.17
	2	1.53	0.34	1.11	2.13	1.19	1.48	1.85	

<b>ALA</b>	1	0.51	0.14	0.34	0.74	0.39	0.47	0.65	<b>U = 186; p = 0.91</b>
	2	0.49	0.12	0.31	0.68	0.39	0.46	0.59	
<b>Hamilton</b>	1	10.58	4.25	3	18	7	11	14	<b>U = 154.5; p = 0.32</b>
	2	9.15	4.25	3	15	5.25	8	13.75	
<b>ACC_LAC</b>	1	3572742	1987859	1537700	6936500	1829300	2907700	6177600	<b>U = 111; p = 0.03; eta<sup>2</sup> =</b>
	2	5279910	2061542	1318100	7523500	2925175	6176900	6740850	<b>0.13</b>
<b>ACC_ALA</b>	1	2110026	884824.9	683790	3622900	1307000	2056800	3245100	<b>U = 117; p = 0.04; eta<sup>2</sup> =</b>
	2	2781855	733439.6	1116900	4029500	2154325	2957600	3318575	<b>0.11</b>