

## Supplementary material

Table S.1

Results from univariable and multivariable logistic regression models for response status using PANSS total >20% reduction criteria and baseline BACS performance

BACS task	Unadjusted					Adjusted for age, gender and DUP				
	$\beta$	SE	95%CI	OR	P-value	$\beta$	SE	95%CI	OR	P-value
Verbal Memory	-0.01	0.03	-0.07 ; 0.06	0.99	.819	<-0.01	0.04	-0.08 ; 0.07	1.00	.920
Digit Sequencing	-0.10	0.10	-0.29 ; 0.09	0.90	.297	-0.06	0.11	-0.27 ; 0.16	0.95	.604
Verbal Fluency	0.04	0.05	-0.06 ; 0.14	1.04	.403	0.07	0.06	-0.05 ; 0.18	1.07	.259
Token Motor	0.03	0.04	-0.04 ; 0.10	1.03	.432	0.06	0.05	-0.03 ; 0.15	1.06	.218
Symbol Coding	-0.04	0.03	-0.11 ; 0.02	0.96	.206	-0.05	0.04	-0.12 ; 0.03	0.96	.237
Tower of London	0.07	0.09	-0.11 ; 0.24	1.07	.445	0.07	0.09	-0.12 ; 0.25	1.07	.465
t score composite	<0.01	0.03	-0.06 ; 0.07	1.00	.924	0.01	0.03	-0.06 ; 0.07	1.00	.892
z score composite	0.02	0.33	-0.63 ; 0.66	1.02	.960	0.03	0.34	-0.63 ; 0.69	1.03	.931

Note. BACS = Brief Assessment of Cognition in Schizophrenia; DUP = duration of untreated psychosis; CIs = confidence intervals.

Table S.2

Results from unadjusted and adjusted growth curve models comparing trajectory groups on BACS performance across all visits

BACS task	Unadjusted				Adjusted for age, gender and DUP			
	$\beta$	SE	95%CI	P-value	$\beta$	SE	95%CI	P-value
Verbal Memory	-2.15	45.79	-13.49 ; 9.19	.710	-2.67	5.88	-14.20 ; 8.86	.650
Digit Sequencing	-2.25	1.63	-5.45 ; 1.095	.167	-2.03	1.62	-5.19 ; 1.14	.210
Verbal Fluency	-0.90	3.29	-7.36 ; 5.55	.784	-1.31	2.99	-7.17 ; 4.54	.660
Token Motor	-2.00	6.39	-14.52 ; 10.53	.755	-0.45	5.89	11.99 ; 11.10	.939
Symbol Coding	-3.81	5.56	-14.71 ; 7.08	.493	-4.25	5.42	-14.87 ; 6.37	.433
Tower of London	0.18	1.56	-2.87 ; 3.24	.906	0.17	1.57	-2.90 ; 3.25	.912
t score composite	-2.49	5.70	-13.66 ; 8.68	.662	-2.43	5.78	-13.76 ; 8.89	.674
z score composite	-0.25	0.57	-1.37 ; 0.87	.658	-0.25	0.58	-1.38 ; 0.88	.665

Note. BACS = Brief Assessment of Cognition in Schizophrenia; DUP = duration of untreated psychosis; CIs = confidence intervals

Table S.3

Results from unadjusted and adjusted growth curve models comparing PANSS >20% reduction groups on BACS performance across all visits

BACS task	Unadjusted				Adjusted for age, gender and DUP			
	$\beta$	SE	95%CI	P-value	$\beta$	SE	95%CI	P-value
Verbal Memory	-4.18	4.21	-12.44 ; 4.08	.321	3.27	4.34	-11.78 ; 5.23	.451
Digit Sequencing	-2.36	1.35	-5.01 ; 0.29	.081	-1.78	1.34	-4.41 ; 0.86	.186
Verbal Fluency	-0.97	2.55	-5.97 ; 4.02	.703	-0.54	2.49	-5.42 ; 4.35	.830
Token Motor	1.81	5.52	-9.01 ; 12.62	.744	5.60	5.07	-4.33 ; 15.53	.269
Symbol Coding	-4.23	3.92	-11.92 ; 3.46	.281	-4.13	4.03	-12.03 ; 3.78	.306
Tower of London	-0.77	1.25	-3.22 ; 1.68	.538	-0.56	1.30	-3.10 ; 1.98	.667
t score composite	-2.39	4.75	-11.71 ; 6.93	.615	-1.56	4.84	-11.03 ; 7.92	.747
z score composite	-0.25	0.48	-1.18 ; 0.68	.600	-0.17	0.48	-1.12 ; 0.78	.728

Note. BACS = Brief Assessment of Cognition in Schizophrenia; DUP = duration of untreated psychosis; CIs = confidence intervals

Table S.4

*Descriptive statistics of clinical and demographic variables for each trajectory group at baseline assessments*

Variable	Non-responder			Responder		
	N	M	SD	N	M	SD
Age (at consent)	6	29.57	6.70	39	26.90	8.41
Gender ( <i>male</i> )	6	-	-	27	-	-
Gender ( <i>female</i> )	1	-	-	12	-	-
Age of illness onset (years)	7	27.54	8.09	39	26.34	8.60
Duration from 1 <sup>st</sup> Psychotic symptom (days) to baseline antipsychotic (DUP)	7	177.09	207.93	39	261.08	251.38
Duration from 1 <sup>st</sup> contact with mental health services (days) to baseline antipsychotic	7	461.89	801.88	39	325.88	567.82
Chlorpromazine equivalents (mg/day)	7	271.43	249.76	39	159.92	75.02
Number of hospitalisations	7	1.00	1.00	39	0.87	0.57
Years of education	6	17.00	2.53	36	13.06	2.47
PANSS positive	7	11.14	6.67	38	12.08	4.44
PANSS negative	7	12.57	5.77	38	9.95	7.04
PANSS general	7	19.57	8.70	38	19.37	8.66
PANSS total	7	43.29	13.52	38	41.39	16.68

*Note.* PANSS = Positive and Negative Symptom Scale.

Table S.5

*Baseline cognitive performance for both groups using >20% PANSS reduction criteria*

BACS measure	N	Non-responder		Responder		
		Mean	SD	N	Mean	SD
Verbal Memory	13	37.54	8.27	20	36.65	12.73
Digit Sequencing	12	19.25	4.20	19	17.68	3.97
Verbal Fluency	14	27.36	6.44	20	29.45	7.75
Token Motor	13	63.23	10.94	18	66.39	11.24
Symbol Coding	12	44.83	9.47	20	39.35	12.75
Tower of London	12	14.17	5.11	17	15.41	3.79
t-score composite	10	26.30	13.35	17	26.77	12.28
z-score composite	10	-2.36	1.31	17	-2.34	1.22

*Note.* BACS = Brief Assessment of Cognition in Schizophrenia; PANSS = Positive and Negative Symptom Scale.

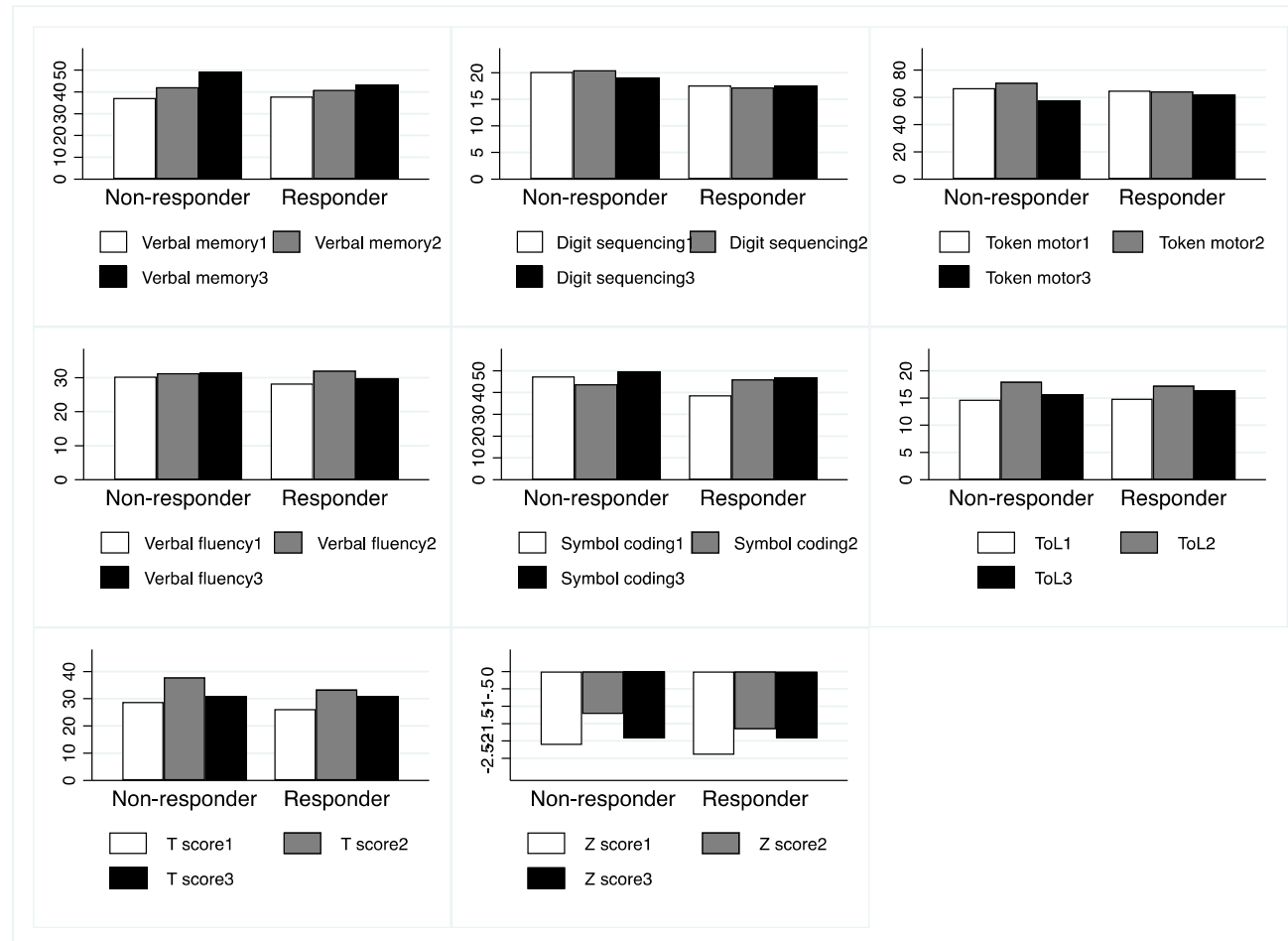


Figure S.1

Bar graphs comparing mean performance on BACS measures between trajectory groups (non-responder vs. responder) at each visit (*white* = baseline, *grey* = 2-week, *black* = 6-week)

Note. *BACS* = Brief Assessment of Cognition in Schizophrenia; *ToL* = Tower of London.

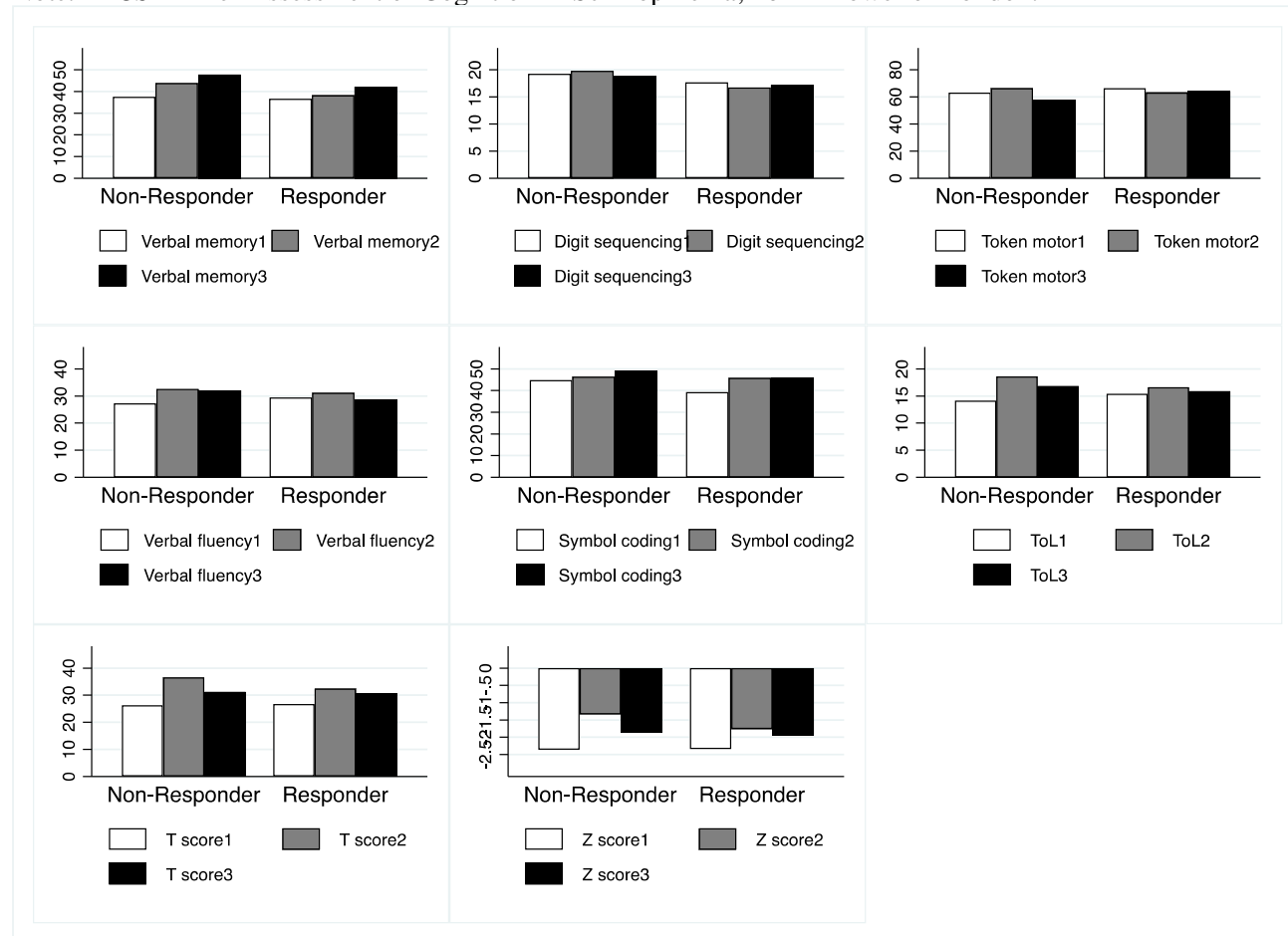


Figure S.2

Bar graphs comparing mean performance on BACS measures using >20% PANSS reduction criteria (non-responder vs. responder) at each visit (*white* = baseline, *grey* = 2-week, *black* = 6-week)

Note. *BACS* = Brief Assessment of Cognition in Schizophrenia; *ToL* = Tower of London.