

Table 1. Demographic and clinical characteristics of patients and controls

Characteristic	Non-Remitting patients n=147	Remitting patients n=86	Controls n=172	p (t-test/ANOVA/x ²)
Female gender, n (%)	58 (40)	47 (55)	91 (53)	0.02 (x ² =7.5; d.f.=2) ^a
Age years, median (interquartile range)	29 (21-38)	28.5 (24-38)	35 (27-47)	<0.001 ^b (F=11.3; d.f.=2)
Handedness, n (% right) ^c	130 (89)	80 (93)	154 (91)	Ns (x ² =1.1; d.f.=2)
Ethnicity, n (%): White British Black and Minority Ethnic	79 (54) 68 (46)	54 (63) 32 (37)	134 (78) 38 (22)	<0.001 ^d (x ² =21.1; d.f.=2)
Premorbid IQ, mean NART (s.d.) ^e	94.91 (14.12)	101.78 (13.97)	106.74 (11.95)	<0.001 (F=26.8; d.f.=2)
Current full scale IQ, mean WAIS-R (s.d.) ^f	85.95 (14.39)	95.92 (17.32)	105.30 (14.61)	<0.001 (F=55.0; d.f.=2)
Duration of untreated illness, weeks median (interquartile range) ^g	21 (5-71)	3 (1-6)	-	<0.001 (t=9.0; d.f.=204)
Duration of illness, weeks median (interquartile range) ^h	39 (17-94)	14 (9-29)	-	<0.001 (t=5.1; d.f.=195)
Lifetime diagnosis, n (%): Schizophrenia Affective psychosis Other psychosis	82 (56) 34 (23) 31(21)	16 (19) 51 (59) 20 (23)	-	<0.001 ⁱ (x ² =37.3; d.f.=2)
SCAN symptoms, mean (SD) ^j Positive Depressive Hypomania Negative Total	6.41 (4.43) 1.43 (2.08) 0.82 (1.54) 0.55 (0.73) 11.79(6.07)	4.51 (3.47) 1.22 (1.52) 2.45 (2.69) 0.25 (0.53) 10.26 (5.41)	-	0.001 (t=3.3; d.f.=167) Ns (t=0.7; d.f.=195) <0.001(t=-4.6; d.f.=91) 0.001(t=3.31; d.f.=176) Ns (t=1.7; d.f.=195)
Negative symptoms during follow-up, n (%) ^k	49 (18)	5 (6)	-	<0.001 (x ² =21; d.f.=1)
Antipsychotics at baseline assessment, n (%) ^l First generation Second generation Both first and second generation Drug naïve or drug free	61 (50) 38 (31) 2 (2) 21 (17)	35 (47) 19 (26) 0 (0) 20 (27)	-	Ns (x ² =3.9; d.f.=3)
Chlorpromazine equivalents at baseline assessment, mean (SD)	185.3 (167.5)	174 (196.8)	-	Ns (t=0.4; d.f. 168)
Weeks on antipsychotics during follow up, mean (SD)	287.1 (200)	153.8 (210)	-	<0.001 (t=3.8; d.f.=147)
Time adherent to medications over FU (n, %) 0-33% 34-67% 68-100%	20 (19) 24 (22) 64 (59)	5 (8) 13 (21) 43 (71)	-	Ns (x ² =3.6; d.f.=2)
GAF-s, mean (s.d.) ^m	55.29 (18.52)	74.59 (12.7)	-	<0.001 (t=- 8.4, d.f.=178)
GAF-d, mean (s.d)	51.91 (17.46)	71.63 (15.65)	-	<0.001 (t=-7.5, d.f.=176)

- a. *Post-hoc* analysis: Non-Remitting individuals had a significantly lower percentage of females than Remitting individuals and controls ($p=0.04$ and $p=0.02$ respectively).
- b. *Post-hoc* analysis: Controls were significantly older than Non-Remitting ($p<0.001$) and Remitting ($p=0.001$) individuals. There were no age differences between Non-Remitting and Remitting individuals.
- c. Information on handedness was obtained for 146 people in the Non-Remitting group, 86 in the Remitting group and 169 controls.
- d. *Post hoc* analysis: Controls had significantly more individuals of white ethnicity compared to Non-Remitting ($p<0.001$) and Remitting ($p=0.015$) individuals.
- e. Information on NART IQ was obtained for 109 people in the Non-Remitting, 67 people in the Remitting group and 164 controls. *Post-hoc* analysis: controls had a significantly higher NART IQ than Remitting ($p=0.025$) and Non-Remitting individuals ($p <0.001$). Moreover, Non-Remitting individuals had a significantly lower IQ than Remitting individuals ($p<0.002$).
- f. Information on WAIS-R IQ was obtained for 114 Non-Remitting individuals, 70 Remitting individuals and 162 controls. *Post-hoc* analysis: controls had a significantly higher total IQ than Remitting ($p<0.001$) and Non-Remitting individuals ($p<0.001$). Furthermore, Non-Remitting individuals had a significantly lower IQ than Remitting individuals ($p<0.001$).
- g. Information on duration of untreated illness was obtained for 145 Non-Remitting individuals and 83 Remitting individuals. The distribution of duration of untreated illness was highly skewed and therefore, logarithmic transformation was used to compare it across the two groups using a parametric test.
- h. Information on duration of illness was obtained for 123 Non-Remitting individuals and 74 Remitting individuals. The distribution of duration of untreated illness was highly skewed and therefore, logarithmic transformation was used to compare it across the two groups using a parametric test.
- i. *Post hoc* analysis: The Non-Remitting group included more individuals with a diagnosis of schizophrenia ($p<0.001$) and other psychosis ($p=0.005$) than the Remitting group.
- j. Symptom details were missing for 18 Non-Remitting individuals and 18 Remitting individuals.
- k. Data on the presence of negative symptoms during the follow-up period were available for 141 Non-Remitting individuals and for 82 Remitting individuals.
- l. Information on antipsychotic medications at baseline neurological evaluation was available for 196 patients.
- m. GAF-s scores were available for 118 Non-Remitting individuals and 68 Remitting individuals, and GAF-d scores for 114 Non-Remitting individuals and for 64 Remitting individuals.

Table 2. Neurological signs and side-effect scales mean scores at baseline

Scale	Non-Remitting patients n=147	Remitting patients n=86	Controls n=172	Statistical significance
Neurological signs, mean (SD); (quartiles)				
Primary	3.9 (4.0); (1 3 6)	2.8 (2.9); (0 2 4)	2.0 (2.2); (0 1 3)	<0.001 (F=15.3; d.f.=2)
Sensory Integration	1.5 (1.9); (0 1 2)	1.1 (1.4); (0 0 2)	1.3 (1.5); (0 1 2)	Ns (F=1.9; d.f.=2)
Motor Coordination	2.6 (2.8); (0 2 4)	1.6 (1.8); (0 1 3)	0.4 (0.9); (0 0 0)	<0.001 (F=48.1; d.f.=2)
Motor Sequencing	2.2 (2.4); (0 2 4)	1.7 (2.1); (0 1 3)	1.5 (1.7); (0 1 2)	0.005 (F=5.4; d.f.=2)
Total	10.2 (8.2); (5 9 15)	7.3 (5.7); (3 6 10)	5.1 (3.9); (2 4 8)	<0.001 (F=27.1; d.f.=2)
Tardive dyskinesia, mean AIMS (SD)	0.7 (2.2)	0.6 (1.6)	-	Ns (t=0.4; d.f.=220)
Akathisia, mean Barnes (SD)	1.3 (2.3)	1.5 (2.7)	-	Ns (t=-0.6; d.f.=221)
Extrapyramidal symptoms, Simpson-Angus mean (SD)	2.2 (3.3)	1.3 (1.6)	-	0.008 (t=2.7; d.f.=218)

Table 3. Neurological signs and side effect scales mean scores at baseline and at follow up in patients with Non-Remitting and Remitting course of illness (ANOVA)

Scale, mean (SD)	Non-Remitting patients n=36		Remitting patients n=20		Time effect	Time*Group effect
	Baseline	Follow-up	Baseline	Follow-up	P (F; d.f.)	P (F; d.f.)
Primary	4.4 (3.7)	7.6 (6.5)	3.9 (3.6)	6.0 (4.6)	0.005 (8.5; 1)	Ns (0.3; 1)
Sensory Integration	1.6 (1.8)	2.8 (2.2)	0.7 (1.0)	1.1 (1.6)	0.02 (5.9; 1)	Ns (1.3; 1)
Motor Coordination	1.9 (2.0)	1.7 (2.3)	0.8 (1.1)	0.9 (1.0)	Ns (0.07; 1)	Ns (0.17; 1)
Motor Sequencing*	2.1 (2.3)	3.9 (3.5)	1.2 (1.9)	1.1 (1.3)	Ns (3.5; 1)	0.031 (4.9; 1)
Total	10.2 (7.3)	15.3 (11.0)	6.5 (6.0)	9.0 (5.5)	0.007 (7.9; 1)	Ns (0.96; 1)
Tardive dyskinesia, AIMS*	0.21 (0.5)	0.37 (1.6)	0.47 (0.91)	0.07 (0.26)	Ns (0.3;1)	Ns (1.6;1)
Akathisia, Barnes*	1.2 (2.3)	2.1 (2.7)	1.1 (2.0)	0.7 (1.8)	Ns (0.23;1)	Ns (1.9;1)
Extrapyramidal symptoms, Simpson-Angus*	2.3 (2.8)	3.9 (7.1)	1.1 (1.1)	0.6 (1.4)	Ns (0.3; 1)	Ns (1.0; 1)

*Motor Sequencing score for missing for one patient; AIMS scores were available for 40 patients, Barnes scores for 45 patients and Simpson-Angus scores for 38 patients

Table 4: Correlations between neurological signs scores and antipsychotics

Correlation between baseline neurological signs scores and chlorpromazine equivalents (mg)	Pearson r	Significance p
Primary signs	.073	.34
Sensory Integration signs	.05	.48
Motor Coordination signs	.07	.38
Motor Sequencing signs	-.05	.50
Total signs	.06	.47
Correlation between follow up neurological signs scores and time on antipsychotics during the follow up (weeks)	Pearson r	Significance p
Primary signs	.065	.65
Sensory Integration signs	.23	.1
Motor Coordination signs	-.05	.74
Motor Sequencing signs	.005	.97
Total signs	.004	.79