

Data supplement

Table DS1 Intake and exit criteria to the PACE clinic

Intake criteria

Group 1: Attenuated psychotic symptoms

- Presence of at least one of the following symptoms: ideas of reference, magical thinking, perceptual disturbance, paranoid ideation, odd thinking and speech (2–3 on Unusual Thought Content scale; 1–2 on Hallucinations scale; 2–3 on Suspiciousness scale or 1–3 on Conceptual Disorganisation scale of BPRS)
- Held with a reasonable degree of conviction, as defined by a score of 2 on the CASH rating scale for delusions
- Frequency of symptoms – several times per week
- Change in mental state present for at least 1 week and not longer than 5 years

Group 2: 'Brief Limited Intermittent Psychotic Symptoms' ('BLIPS')

- Transient psychotic symptoms: ideas of reference, magical thinking, perceptual disturbance, paranoid ideation, odd thinking and speech (4+ on Unusual Thought Content scale; 3+ on Hallucinations scale; 4+ on Suspiciousness scale (or it is held with strong conviction, as defined by a score of 3 or more on the CASH rating scale for delusions) or 4+ on Conceptual Disorganisation scale of BPRS)
- Duration of episode of less than 1 week
- Symptoms resolve spontaneously
- BLIP must have occurred within the past year

Group 3: Trait and state risk factors

- First-degree relative with a psychotic disorder or schizotypal personality disorder or individual has schizotypal personality disorder
- Significant decrease in mental state or functioning maintained for at least a month (reduction in GAF scale of 30 points from pre-morbid level)
- The decrease in functioning occurred within the past year

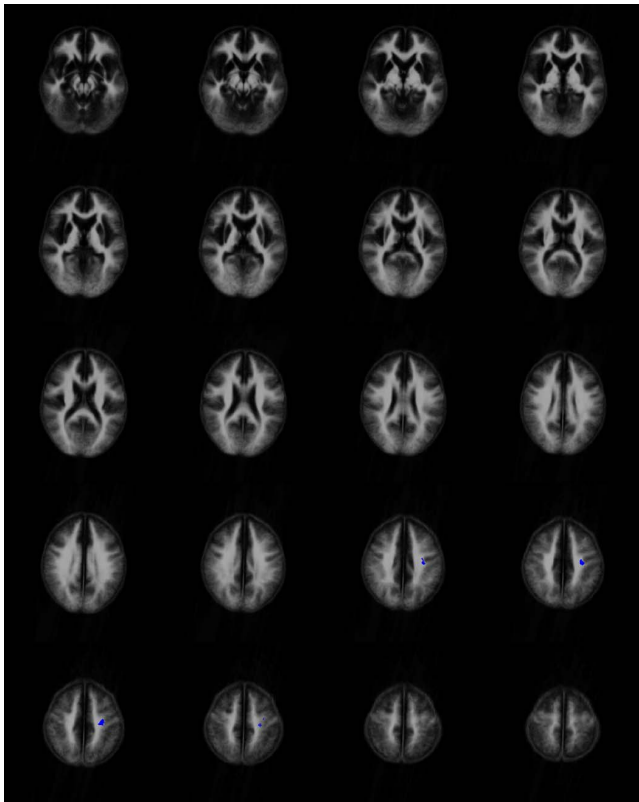
Exit criteria: acute psychosis

- At least one of the following symptoms: Hallucinations (defined by a score of 3 or more on the Hallucinations scale of the BPRS); delusions (defined by a score of 4 or more on the Unusual Thought Content scale or a score of 4 or more on the Suspiciousness scale of the BPRS (or it is held with strong conviction, as defined by a score of 3 or more on the CASH rating scale for delusions) or formal thought disorder (defined by a score of 4 or more on the Conceptual Disorganisation scale BPRS)
- Frequency of symptoms is at least several times a week
- Duration of mental state change is longer than 1 week

BPRS, Brief Psychiatric Rating Scale; CASH, Comprehensive Assessment of Symptoms and History; GAF, Global Assessment of Functioning; PACE, Personal Assessment and crisis Evaluation.

	Cross-sectional analysis			Longitudinal analysis		
	Psychosis group (n=23)	Non-psychosis group (n=52)		Psychosis group (n=10)	Non-psychosis group (n=11)	
Gender, male/female	13/10	30/22	$\chi^2=0.01$, $P=0.93$	3/7	4/7	$\chi^2=0.1$, $P=0.76$
Age at baseline, years: mean (range)	19.3 (13.89–29.05)	21.6 (15.10–28.58)	$t=-2.7$, $P=0.01$	18.9 (14.75–29.05)	20.5 (15.10–26.06)	Mann–Whitney $U=40.0$, $P=0.29$
Age at second scan, years: mean (range)	–	–	–	20.0 (16.09 – 30.09)	22.3 (16.65–27.80)	Mann–Whitney $U=34.0$, $P=0.14$
NART-estimated premorbid IQ at baseline: mean (range) ^a	94.3 (69–111)	95.8 (69–126)	$t=-0.4$, $P=0.70$	89.9 (75–106)	94.0 (73–116)	Mann–Whitney $U=34.0$, $P=0.594$
Days between scans: mean (range)	–	–	–	374 (197–825)	637 (358–1362)	Mann–Whitney $U=25.5$, $P=0.04$
Days between onset of psychosis and scan 1: mean (range)	200 (7–833)	–	–	172 (11– 27)	–	–
Days between onset of psychosis and scan 2: mean (range)	–	–	–	202 (95–300)	–	–
Duration of symptoms, days: mean (range) ^b	662.1 (25–2951)	509.4 (7–5491)	Mann–Whitney $U=459.5$, $P=0.22$	610.3 (86–2250)	318.0 (38–989)	Mann–Whitney $U=35.0$, $P=0.27$
BPRS at intake: mean (range)	20.1 (4–40)	19.4 (2–45)	$t=0.3$, $P=0.73$	20.3 (12–28)	19.1 (2–34)	Mann–Whitney $U=49.5$, $P=0.70$
SANS at intake: mean (range)	29.6 (0–67)	24.4 (0–57)	$t=1.3$, $P=0.18$	27.6 (10–56)	22.0 (8–39)	Mann–Whitney $U=42.0$, $P=0.57$
BPRS, Brief Psychiatric Rating Scale; NART, National Adult Reading Test; SANS, Scale for the Assessment of Negative Symptoms. a. Ten participants (6 in the psychosis group and 4 in the non-psychosis group) did not have NART data available at baseline. b. Two participants (one in each group) did not have symptom duration data available.						

(a)



(b)

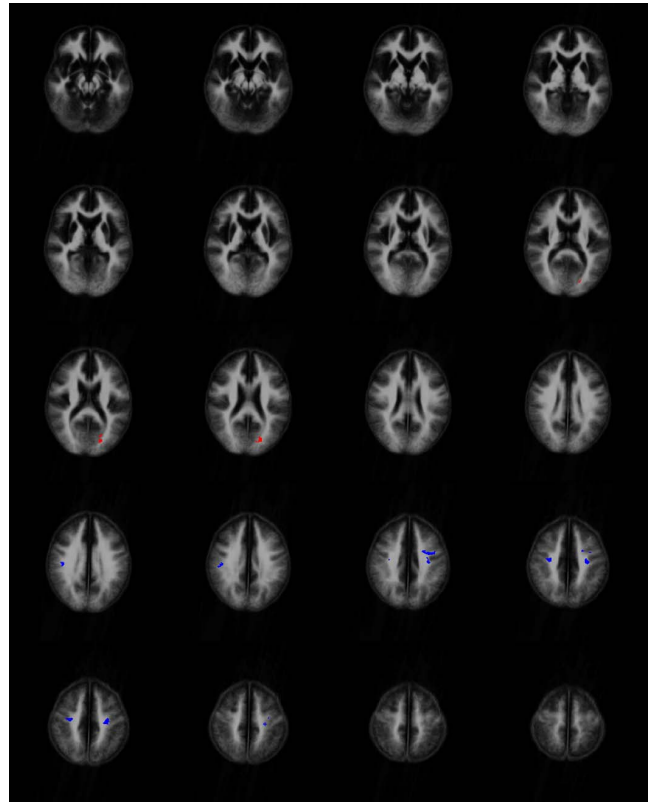


Fig. DS1 White matter probability maps for the baseline comparison of the psychosis and non-psychosis groups.

(a) Left and (b) right. Red regions denote areas of less white matter volume in the psychosis group. The images are presented in standard radiological fashion, where right is left and vice versa. Cluster-wise probability of type I error: $P < 0.005$, meaning less than one false-positive test is expected over the whole map.

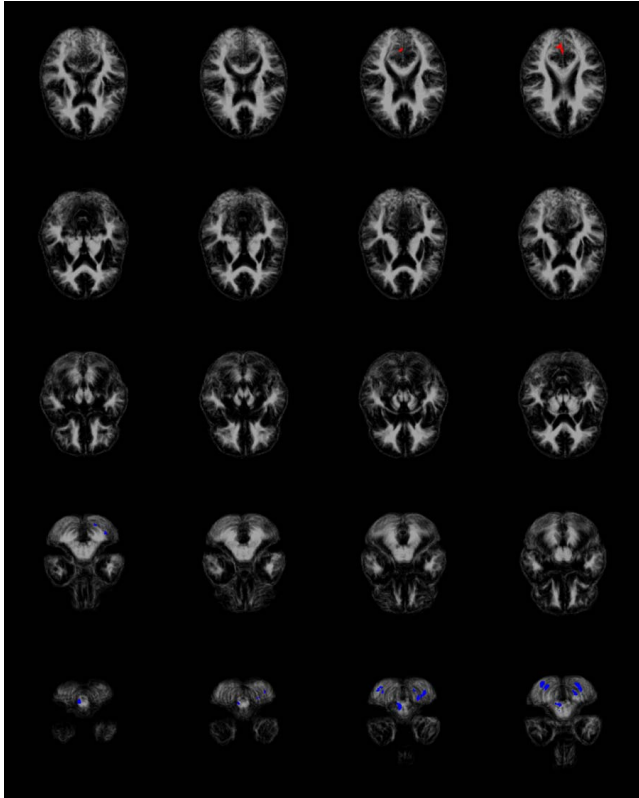


Fig. DS2 White matter probability map for the psychosis group.

Red regions denote areas of white matter reduction over the follow-up interval, while blue regions denote areas of increase. The images are presented in standard radiological fashion, where right is left and vice versa. Cluster-wise probability of type I error: $P < 0.005$, meaning less than one false-positive test is expected over the whole map.

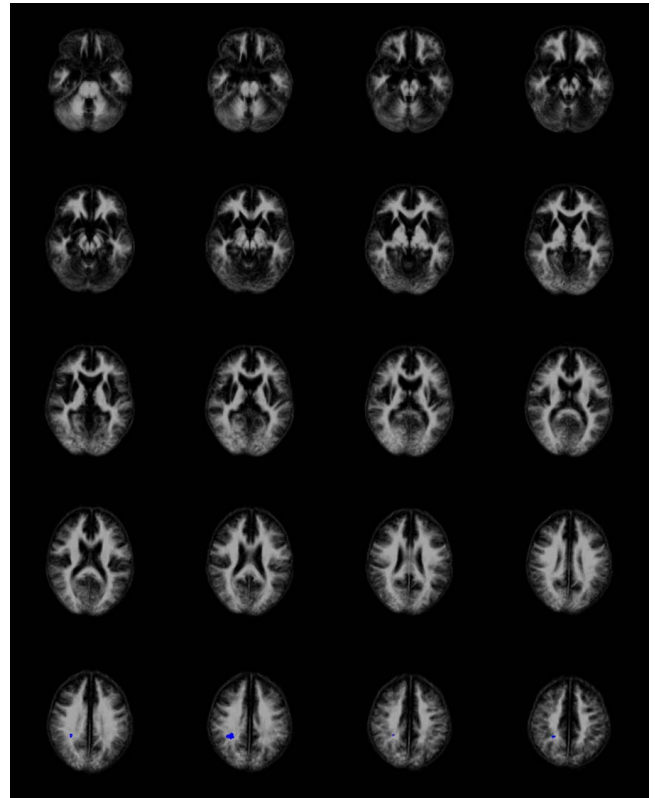


Fig. DS3 White matter probability map for the non-psychosis group.

Red regions denote areas of white matter reduction over the follow-up interval, while blue regions denote areas of increase. The images are presented in standard radiological fashion, where right is left and vice versa. Cluster-wise probability of type I error: $P < 0.005$, meaning less than one false-positive test is expected over the whole map.