Data Supplement for Howes et al., Dopamine Synthesis Capacity Prior to the Onset of Psychosis: A Prospective [<sup>18</sup>F]-DOPA PET Imaging Study, American Journal of Psychiatry (doi: 10.1176/appi.ajp.2010.11010160)

## SUPPLEMENTARY INFORMATION

## Striatal dopamine synthesis capacity in the schizotypal personality disorder group

The  $k_i^{cer}$  values for the schizotypal personality disorder group are shown in Table S1. One patient in this group was receiving treatment with an antipsychotic (quetiapine, 100 mg/ day) at the time of the scan and continued to receive this throughout follow-up.

**TABLE S1**. Mean (SD) dopamine synthesis capacity ( $k_i^{cer}$ / min) in the whole striatum and its functional subdivisions for the schizotypal personality disorder group (N=6) and the statistical comparisons with the psychotic transition, control and nontransition groups.

			Statistical Comparison		
	Mean	SD	SPD vs psychotic transition	SPD vs control	SPD vs nontransition
Whole striatum	0.0154	0.0018	t=0.2, df=13, p=0.85	t=2.9, df=33, p=0.006	t=2.1, df=19, p=0.053
Associative subdivision	0.0151	0.0015	t=0.3, df=13, p=0.75	t=3.3, df=33, p=0.003	t=2.5, df=19, p=0.023
Limbic subdivision	0.0145	0.0017	t=0.9, df=13, p=0.36	t=0.6, df=33, p=0.562	t=-0.5, df=19, p=0.635
Sensorimotor subdivision	0.0167	0.0026	t=0.3, df=13, p=0.77	t=2.1, df=33, p=0.047	t=1.8, df=19, p=0.095

## Functional subdivisions of the striatum

The striatal subdivisions reflect the functional organisation of the striatum (Figure S1). The predominant projections to the limbic striatum originate from limbic areas such as the hippocampus and amygdala, whilst those to the associative striatum originate from the dorsolateral prefrontal cortex and other associative areas, and those to the sensorimotor striatum originate in motor and related areas such as primary motor cortex, premotor cortex and supplementary motor cortex.

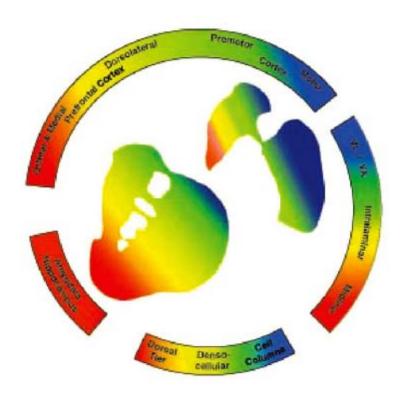


FIGURE S1. Organization of the Projections to and From the Striatum<sup>a</sup>

<sup>&</sup>lt;sup>a</sup> The part of the striatum coloured red is linked to the limbic cortical areas, including the amygdala and hippocampus, whilst the yellow-green regions are linked to the associative cortical areas (prefrontal cortical regions), and the green-blue regions are linked to motor areas. Reproduced with permission from Haber SN: The primate basal ganglia: parallel and integrative networks. J Chem Neuroanat 2003; 26:317–330.