

Table 3 Brain perfusion during smoking versus nonsmoking cues

	<u>All Time 1</u>				<u>Varenicline Time 2</u>				<u>Placebo Time 2</u>			
	X	Y	Z	T Val	X	Y	Z	T Val	X	Y	Z	T Val
VS/mOFC Bilateral	-6	28	18	3.77					-2	18	-14	3.45
Medial OFC					-10	60	-20	- 4.21				
					4	52	-14	- 5.63				
					-8	48	-14	- 3.58				
					-10	26	-20	- 3.75				
Superior Frontal G					-14	70	6	- 6.84				
DLPFC					36	54	18	- 5.04				
Amygdala					44	12	-22	- 3.02				
Superior Temporal					-56	-36	-8	- 3.13	48	28	-22	3.47
Anterior Cingulate					-8	-14	40	4.40				
Cingulate Sulcus	2	-44	52	- 4.02	14	58	2	4.65				
Posterior Cingulate					0	-68	16	4.73	0	-36	42	3.25
					-12	-44	14	4.13				
					-14	-40	36	6.88				
Insula (ventral posterior)					38	-4	-8	4.07	34	16	-6	3.38
Dorsal Posterior Insula	62	-26	14	- 5.10								
Dorsal Posterior Insula	-60	-14	2	- 4.69								
Middle Occipital					-30	-78	-2	5.80				
Inferior Temporal G					-60	-54	-20	4.38				
Medial Temporal G					-62	-28	40	5.07				
					-58	-14	-2	3.24				
					58	-2	-8	6.86				
Inferior Frontal G					60	18	14	15.65				
Lateral (extreme) OFC					44	28	-20	4.75				
DLPFC					-26	44	6	4.20				
					-26	44	-4	4.39				
					-38	38	4	3.63				
Precentral Gyrus					-46	-10	50	15.83				
					-26	-34	66	4.68				
					12	-6	64	4.18				
					34	-32	66	5.12				
Cerebellum					0	-48	-10	9.71				

Listed are the coordinates from the supra-threshold voxel within a cluster and the T value from regions activated during SC exposure relative to nonSC exposure at Time 1 in all subjects and at Time 2 in varenicline and placebo subjects. Note that the VS/medial OFC is still activated in the placebo subjects at Time 2. Varenicline reduced activity in reward-related circuitry, including several areas in the VS/mOFC and amygdala. Additionally, varenicline increased activity in several regions. *A priori* regions are indicated in **bold** font. Abrev: DLPFC, dorsolateral prefrontal cortex; G, gyrus; mOFC, medial orbitofrontal cortex; V, ventral; VS, ventral striatum. Activations are significant at $p < 0.0001$ uncorrected at the cluster level. Left-sided brain responses are indicated by negative 'x' coordinate values.