**Orbitofrontal Volumes in Early Adolescence Predict Initiation of Cannabis Use: A Four-Year Longitudinal and Prospective Study**

*Supplemental Information*

**Amygdala and Hippocampus**

In accordance with Velakoulis and colleagues (1), the anterior boundary of the amygdala was identified as the section posterior to the most posterior of either the point where the optic chiasm joins, or the point where the lateral sulcus closes to form the entorhinal sulcus. Other boundaries of the amygdala were defined as follows: posterior, first appearance of gray matter above the temporal horn; lateral, temporal stem; and medial, the semilunar gyrus superiorly and subamygdaloid white matter inferiorly. Hippocampal tracings included the hippocampus proper, the dentate gyrus, the subiculum, and part of the fimbria and alveus. Boundaries were defined as follows: posterior, section with the greatest length of continuous fornix; lateral: temporal horn; medial: open end of the hippocampal fissure posteriorly and the uncal fissure anteriorly; and superior: fimbria and alveus posteriorly and amygdala anteriorly.

**Anterior Cingulate Cortex (ACC)**

The limbic ACC included cingulate gyrus gray matter. The paralimbic ACC included gray matter within the paracingulate gyrus when the paracingulate sulcus was present, and included only gray matter on the upper bank of the cingulate sulcus when the paracingulate sulcus was absent.

**Orbitofrontal Cortex (OFC)**

Using the method outlined by Riffkin and colleagues (2), a line through the AC-PC was used to define the superior boundary of the OFC. The posterior boundary of the OFC
was marked by a coronal plane passing through the most posterior aspect of the olfactory sulcus in each hemisphere. The inferior boundary was defined by the most inferior aspect of the cortex, the lateral boundary by the most lateral edge of the cortex, and the medial boundary of each hemisphere by the longitudinal fissure. All images were manually edited to eliminate subcortical tissue and artifacts related to the eye sockets and nasal bones.

**Supplemental References**
