Myxoid glioneuronal tumors are a newly defined CNS tumor that has stereotypic location in the septal region, periventricular white matter, or corpus collosum. It is characterized by a dinucleotide mutation of the PDGFRA oncogene replacing lysine with leucine or isoleucine. Histological features are reminiscent of dysembryoplastic glioneuronal tumors (DNT) or rosette-forming glioneuronal tumors (RGNT) and are characterized by oligodendrocyte-like tumor cells embedded in a myxoid/mucin-rich stroma.