Journal Article

## Letter to the Editor: Molecularly defined oligodendroglioma evolving to osseous metastases

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## Extract

To the Editor:

Extra-neural metastases are extremely rare for oligodendroglioma, an adult-type diffuse glioma defined by the presence of an IDH mutation and co-deletion of chromosome arms 1p and 19q.<sup>1,2</sup> Histological features, such as increased mitotic activity, the presence of microvascular proliferation and necrosis,<sup>3</sup> and molecular alterations including homozygous deletion of *CDKN2A/B*<sup>4</sup> and inactivating *CIC* mutation,<sup>5</sup> have been reported to be associated with aggressive tumor behavior and poor prognosis. However, even with the presence of the above features, oligodendrogliomas rarely metastasize intra-axially or extra-axially and the tumor evolution in these rare cases is not understood.<sup>6</sup>

Here, we report a case with molecular profiling of a young male with a 16-year history of oligodendroglioma who presented with disease progression in the form of multi-focal osseous metastases with unusual osteolytic and hemorrhagic imaging features. This report adds to the handful of published cases of metastatic oligodendroglioma with at most limited molecular characterization of both the primary and the metastatic tumors and demonstrates epigenetic evolution of the tumor over time.<sup>7</sup>