

Captions for Supplementary Figures from Nauen et al. Chromosomal defects track tumor subpopulations and change in progression in oligodendroglioma. Convergent Science Physical Oncology (2015), Volume 1, Number 1.

Supplementary figure S1. Log R ratio must be interpreted in the context of B-allele frequency. Case 2_44. (a) LRR alone. (b) BAF alone. (c) Combined. LRR alone suggests drops in signal at the telomeric ends of 8q and 9q, and along 19p. BAF does not bear out change in these regions. The unusual LRR signal on 19p is seen relatively commonly.

Supplementary figure S2. Oligodendroglioma from one patient, grade II in each of three resections over 6 years. (a) Other than 1p/19q, case 2_30 shows abnormalities of 1q (whole arm) and 9p (nearly whole arm), both broadly split BAF. These abnormalities and no others are seen in cases 2_31 (b) and 2_39 (c), demonstrating both technical reliability of the assay and potential karyotypic stability of the tumor. This patient had not received chemotherapy or radiation.

Supplementary figure S3. SNP microarray data, two resections from the same patient, separated by an 11 year interval. The first resection was diagnosed as grade II, the second, grade III. The report for the second specimen included a comment attributing the assigned grade to a focal region. For the present study we repeated the microarray analysis of tissue from the second resection, analyzing separately the portion that was assessed as high grade. Here SNP data are shown vertically. (a) From first resection. Apart from 1p/19q, case 2_18 shows thinly split BAF on the whole of 1q and a suggestion of thin splitting on 19p. (b) From second resection, case 3_12, high grade portion. Beyond 1p/19q this focus shows broadly split BAF on the whole of 4pq and a segment of 6p, and thinly split BAF on segments of 11p (nearly whole-arm), 12p (focal), and 15q. The suggested 1q/19p abnormality of the original tumor did not propagate. (c) From second resection, case 3_12, low grade portion. 1p/19q is the only abnormality. (d) SNP array results from the assay on the second resection done at time of signout. Review of the slides used showed that essentially all tissue was sampled. In addition to 1p/19q, thin splitting, or a suggestion thereof, is present on 4pq and on a segment of 6p. Comparison of panels (b)–(d) demonstrates that a broadly split abnormality admixed with other tumor normal in that region results in thin splitting. (e) Hematoxylin and eosin slide from case 3_12, with markings applied at time of signout (top) indicating the high grade area. This focus is shown in the middle panel, with an area of the remaining tumor shown in the bottom panel (original magnification of these two panels 400x). The high grade component shows greater cellularity, nuclear hyperchromasia, abnormal nuclear contours, and mitotic activity.