

Supplementary figure 1: Frequency histogram of the percentage of CpG methylation.

Supplementary figure 2: *Kaplan Meyer survival curves based on CIMP status (as defined by the TCGA) and treatment.* OS in CIMP+ tumors is increased in tumors treated with RT-PCV compared to RT only (7.53 vs 4.33 years). This difference was however not significant (P=0.15). No difference in OS can be observed in CIMP- tumors (1.00 vs 1.21 years).

Supplementary figure 3: *Kaplan Meyer survival curves based on CIMP status as defined by the TCGA.* Similar to our findings, when gliomas are assigned to the TCGA-CIMP status, CIMP+ tumors have a significantly better survival than CIMP- gliomas.

Supplementary figure 4: All of the marked (*) genes of figure 1 are located on the X chromosome. In addition, all of these genes show partial methylation (on average 50%) which is consistent with X-chromosome inactivation.