

Supplemental Figure 1. **(A)** A schematic of tryptophan metabolism **(B)** Metabolomic profiling of tryptophan intermediaries in low grade glioma (LGG) and glioblastoma. **(C)** ROC curve and bar graph showing sensitivity and specificity of kynurenine (KYN) and kynurenine/kynurenic acid (KYN/KYNA) ratio in differentiating glioblastoma from LGG. ***= p<0.0005; *= p<0.05; NS= p>0.05.



Supplemental Figure 2. **(A)** Specified human glioblastoma cell lines were cultured in the presence or absence of 50 ng/ml of human IFN- γ for three days followed by western blot. Loading control (tubulin) used in figure is same as used in Fig 2A. **(B)** Murine (GL261 and TRP) and human glioblastoma cell line U251 were cultured in presence and absence of 100ng/ml mouse IFN- γ (for GL261 and TRP lines) or 50ng/ml of human IFN- γ (for U251) along with 250µM of tryptophan. Cell culture supernatant was collected after three days and analyzed for kynurenine.



Supplemental Figure 3. TRP tumors were grown subcutaneously in C57BL/6 mice. After eight days, mice were randomized into two groups: **(A)** (i) Control, (ii) GDC-0919. GDC-0919 was administered via oral gavage at a concentration of 200 mg/kg twice a day (six days a week) for 2-3 weeks. **(B)** (i) Control (ii) 1-L-MT. 1-L-MT was administered in drinking water (4 mg/ml) for the duration of the experiment. Both experiments were repeated twice. A minimum of 5 mice were used in each treatment arm.



Supplemental Figure 4. Representative MR images and volumes of intracranial TRP tumors (A/B) prior to initiation of therapy and (C) during treatment at specified time points using a fractionated RT (f-RT) schedule (6 Gy x 3).



Supplemental Figure 5. (A/B) Intracranial TRP tumors described in Fig. 5A were analyzed for presence of (A) CD45⁺CD4⁺ T cells and (B) CD45⁺CD8⁺ T cells using flow cytometry. Scatter plot represents data from 5-6 tumors from each group. (C) PD-1 expression was analyzed in orthotopic TRP tumors isolated from C57BL/6 control mice and mice treated with f-RT and used to perform western blot. Tubulin was used as loading control. Loading control used in figure is same as used in Fig 6C.