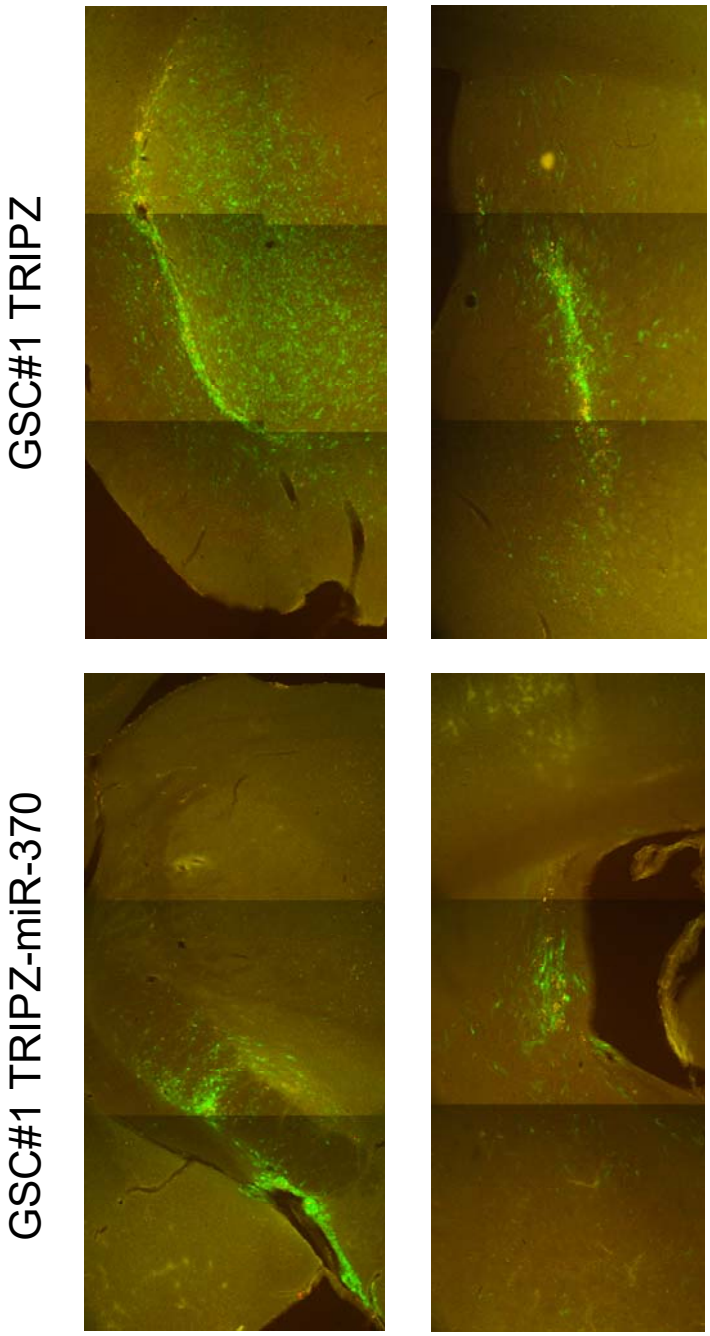
**Supplementary Table 1. Clinical and pathological features of Glioblastoma patients.**

| Clinical features | Data |
|---|---|
| **Median Age (range)** | 57 (42-72) |
| **M/F** | 21/6 |
| **Localization** | |
| Parietal | 7 |
| Frontal | 11 |
| Occipital | 2 |
| Temporal | 7 |
| **Median Karnofsky performance (range)** | 75 (40-90) |
| **Survival median (range)** | 12.2 (2-42) |
| **MGMT status (M/UM)** | 13/14 |

**Supplementary Table 2:** Overlap of modulated genes in GSC#1 cells with restored expression of miR-370. Hallmark gene sets with GSEA are shown**.**

| Entrez Gene Id | Gene Symbol | HALLMARK EPITHELIAL MESENCHYMAL TRANSITION | HALLMARK TNFA SIGNALING VIA NFKB | HALLMARK UV RESPONSE DN | HALLMARK HEDGEHOG SIGNALING | HALLMARK HYPOXIA | HALLMARK IL2 STAT5 SIGNALING | HALLMARK INFLAMMATORY RESPONSE | HALLMARK INTERFERON GAMMA RESPONSE | HALLMARK KRAS SIGNALING UP | HALLMARK COAGULATION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7422 | VEGFA | | | | | | | | | | |
| 7128 | TNFAIP3 | | | | | | | | | | |
| 56937 | PMEPA1 | | | | | | | | | | |
| 2669 | GEM | | | | | | | | | | |
| 3486 | IGFBP3 | | | | | | | | | | |
| 4907 | NT5E | | | | | | | | | | |
| 333 | APLP1 | | | | | | | | | | |
| 4323 | MMP14 | | | | | | | | | | |
| 5396 | PRRX1 | | | | | | | | | | |
| 4313 | MMP2 | | | | | | | | | | |
| 7057 | THBS1 | | | | | | | | | | |
| 5352 | PLOD2 | | | | | | | | | | |
| 7040 | TGFB1 | | | | | | | | | | |
| 51330 | TNFRSF12A | | | | | | | | | | |
| 22795 | NID2 | | | | | | | | | | |
| 5744 | PTHLH | | | | | | | | | | |
| 2152 | F3 | | | | | | | | | | |
| 2353 | FOS | | | | | | | | | | |
| 2643 | GCH1 | | | | | | | | | | |
| 6347 | CCL2 | | | | | | | | | | |
| 7130 | TNFAIP6 | | | | | | | | | | |
| 2150 | F2RL1 | | | | | | | | | | |
| 8878 | SQSTM1 | | | | | | | | | | |
| 5606 | MAP2K3 | | | | | | | | | | |
| 1960 | EGR3 | | | | | | | | | | |
| 4929 | NR4A2 | | | | | | | | | | |
| 5271 | SERPINB8 | | | | | | | | | | |
| 57018 | CCNL1 | | | | | | | | | | |
| 7436 | VLDLR | | | | | | | | | | |
| 8829 | NRP1 | | | | | | | | | | |
| 4233 | MET | | | | | | | | | | |
| 3037 | HAS2 | | | | | | | | | | |
| 7035 | TFPI | | | | | | | | | | |
| 5577 | PRKAR2B | | | | | | | | | | |
| 23266 | ADGRL2 | | | | | | | | | | |
| 23345 | SYNE1 | | | | | | | | | | |
| 23576 | DDAH1 | | | | | | | | | | |
| 6334 | SCN8A | | | | | | | | | | |
| 7048 | TGFBR2 | | | | | | | | | | |
| 1400 | CRMP1 | | | | | | | | | | |
| 154796 | AMOT | | | | | | | | | | |
| 8828 | NRP2 | | | | | | | | | | |
| 10397 | NDRG1 | | | | | | | | | | |
| 5155 | PDGFB | | | | | | | | | | |
| 6781 | STC1 | | | | | | | | | | |
| 54206 | ERRFI1 | | | | | | | | | | |
| 8406 | SRPX | | | | | | | | | | |




**Supplementary Figure S1.** Fluorescence microscopy of mouse brain grafted onto the right striatum with GFP+ GSC#1 cells (*green*). Photomontage of coronal section in a TRIPZ xenograft (*upper panel*) and in a TRIPZ-miR-370 xenograft *(lower panel*) showing the injection area. Scale bars, 200 μm.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 284119 | **CAVIN1** | | | | | | | | | | |
| 25819 | **NOCT** | | | | | | | | | | |
| 55076 | **TMEM45A** | | | | | | | | | | |
| 7133 | **TNFRSF1B** | | | | | | | | | | |
| 4860 | **PNP** | | | | | | | | | | |
| 115361 | **GBP4** | | | | | | | | | | |
| 214 | **ALCAM** | | | | | | | | | | |
| 990 | **CDC6** | | | | | | | | | | |
| 4839 | **NOP2** | | | | | | | | | | |
| 11230 | **PRAF2** | | | | | | | | | | |
| 4135 | **MAP6** | | | | | | | | | | |
| 5269 | **SERPINB6** | | | | | | | | | | |
| 6335 | **SCN9A** | | | | | | | | | | |
| 3091 | **HIF1A** | | | | | | | | | | |
| 684 | **BST2** | | | | | | | | | | |
| 6376 | **CX3CL1** | | | | | | | | | | |
| 10630 | **PDPN** | | | | | | | | | | |
| 8671 | **SLC4A4** | | | | | | | | | | |
| 10437 | **IFI30** | | | | | | | | | | |
| 51015 | **ISOC1** | | | | | | | | | | |
| 196410 | **METTL7B** | | | | | | | | | | |
| 25939 | **SAMHD1** | | | | | | | | | | |
| 8869 | **ST3GAL5** | | | | | | | | | | |
| 8404 | **SPARCL1** | | | | | | | | | | |
| 23531 | **MMD** | | | | | | | | | | |
| 23643 | **LY96** | | | | | | | | | | |
| 26499 | **PLEK2** | | | | | | | | | | |
| 3018 | **HIST1H2BB** | | | | | | | | | | |
| 5801 | **PTPRR** | | | | | | | | | | |
| 2934 | **GSN** | | | | | | | | | | |
| 2 | **A2M** | | | | | | | | | | |
| 11098 | **PRSS23** | | | | | | | | | | |
| 1515 | **CTSV** | | | | | | | | | | |
| 4485 | **MST1** | | | | | | | | | | |