

Supplementary data

Supplemental Table 1.

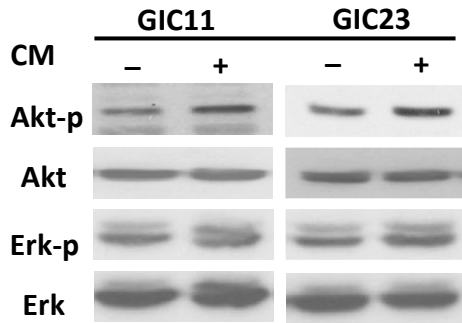
MPO expression

grade	grade IV		grade III			grade II		grade I	
Tumor type	GB	GS	AMOA	AO	AA	OL	MOA	PA	NB
0(<10)	53%	58%	58%	71%	89%	79%	93%	100%	86%
1(10-20)	24%	25%	17%	13%	9%	11%	7%	0%	14%
2(20-50)	14%	8%	8%	4%	3%	11%	0%	0%	0%
3(50-100)	2%	0%	8%	13%	0%	0%	0%	0%	0%
4 (>100)	7%	0%	8%	0%	0%	0%	0%	0%	0%
5(>300)	2%	8%	0%	0%	0%	0%	0%	0%	0%
1-5(>10)	49%	42%	42%	29%	11%	21%	7%	0%	14%
n (232)	96	13	12	24	32	29	11	4	11

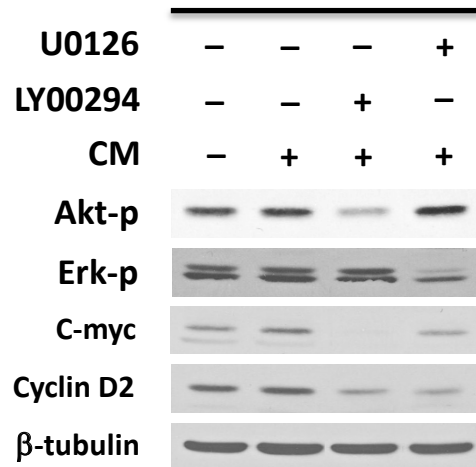
Supplementary data

Supplemental Fig. 1

A



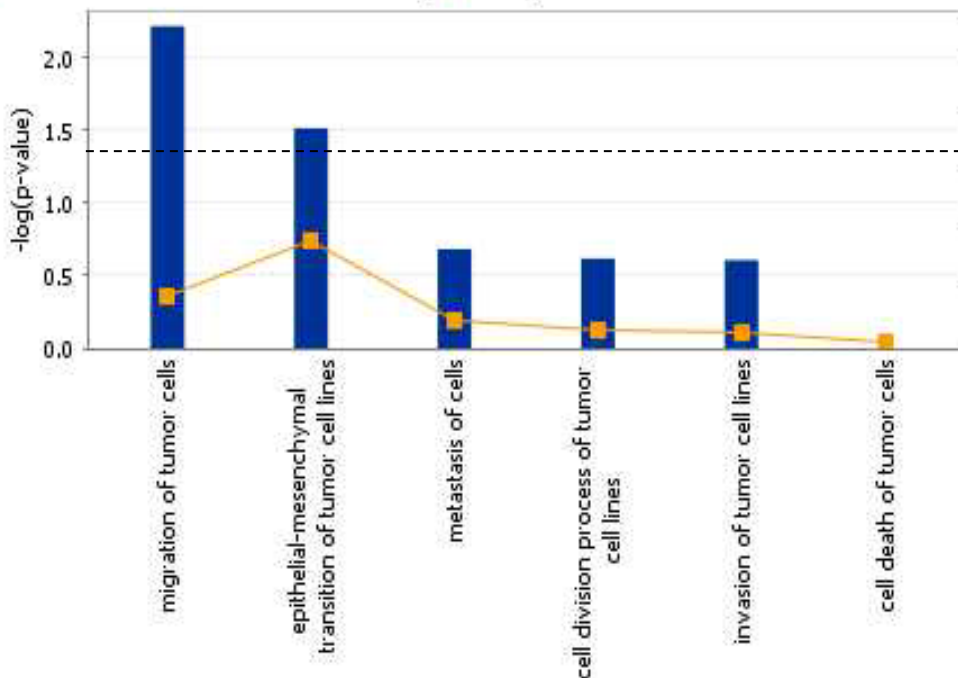
B



Supplemental Figure 1: A, Phosphorylated Erk, Akt (pErk, pAkt) and the total proteins were analysis in GICs incubated with or without CM. B, pErk inhibitor U0126 and pAkt inhibitor LY00294 inhibite the CM-increased expressions of c-myc and cyclin D2 in GICs. CM, Condition media.

Supplementary data

Supplemental Fig. 2

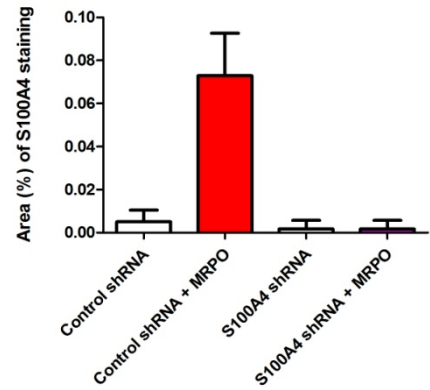
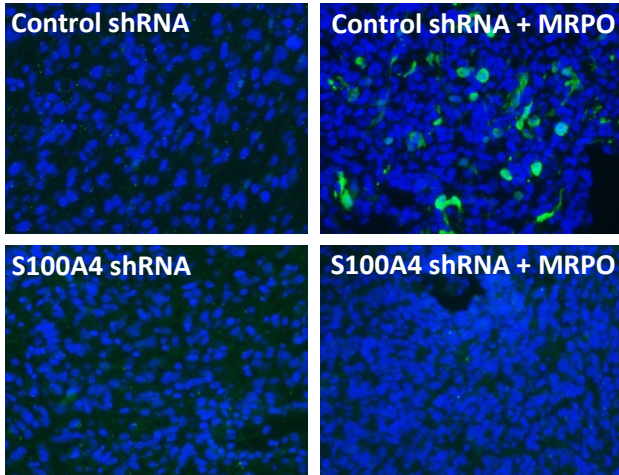


Supplemental Figure 2: Microarray analysis by IPA for the characteristics changes of GIC11 cells when co-culture of MPRO cells. For network analysis, IPA computed a score ($p\text{-score} = -\log(p\text{-value})$) according to the fit of the set of supplied genes and a list of biological functions stored in the IPKB. The score takes into account the number of genes in the network and the size of the network to approximate how relevant this network is to the original list of genes. A score >1.3 ($p < 0.05$, upper of **the plotted line**) indicates a significant change on the indicated gene network.

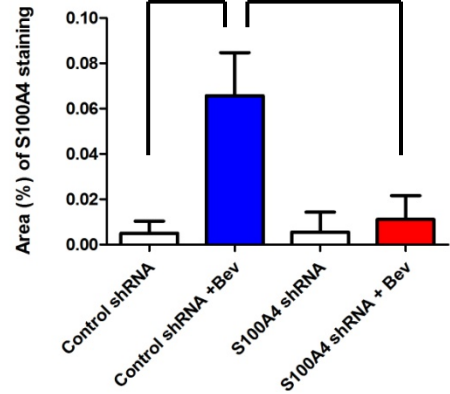
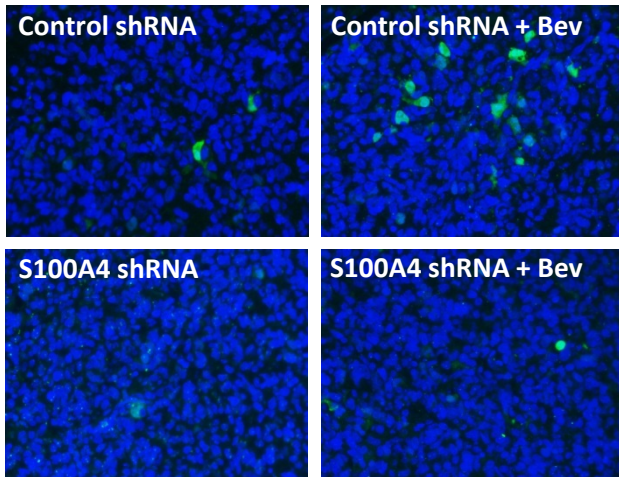
Supplementary data

Supplemental Fig. 3

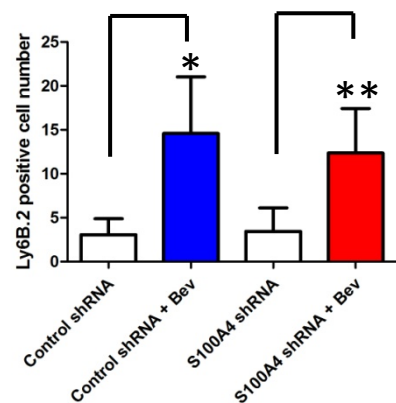
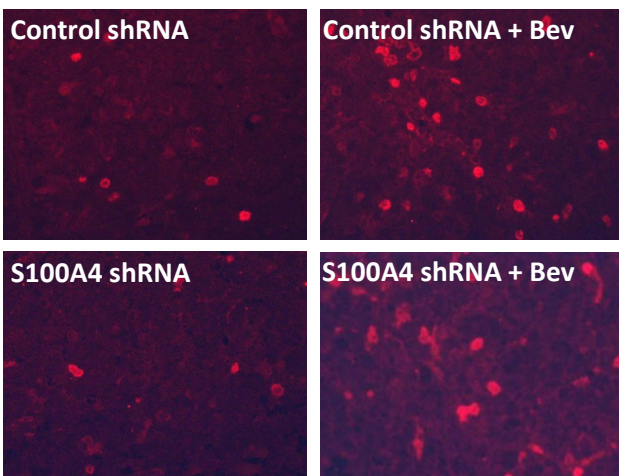
A



B



C



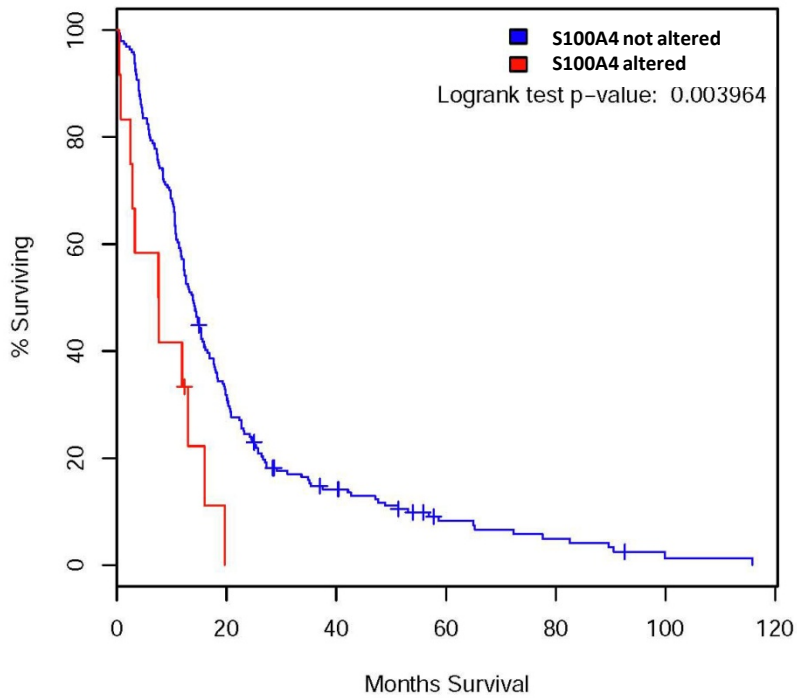
Supplemental Figure 3: A and B, Representative light microscopy images (left panel) showing immunostaining of S100A4 (green) in GICs gliomas. Images were taken at 200X. Bar graph (right panel) demonstrating the mean staining of mesenchymal marker S100A4. **: $P < 0.01$, Student's *t* test. C, Representative light microscopy images (left panel) showing immunostaining of Ly6B.2 (red) in GSCs gliomas. Bar graph (right panel) demonstrating the mean staining of neutrophil marker Ly6B.2. *: $P < 0.05$, **: $P < 0.01$, Student's *t* test.

Supplementary data

Supplemental Fig. 4

A

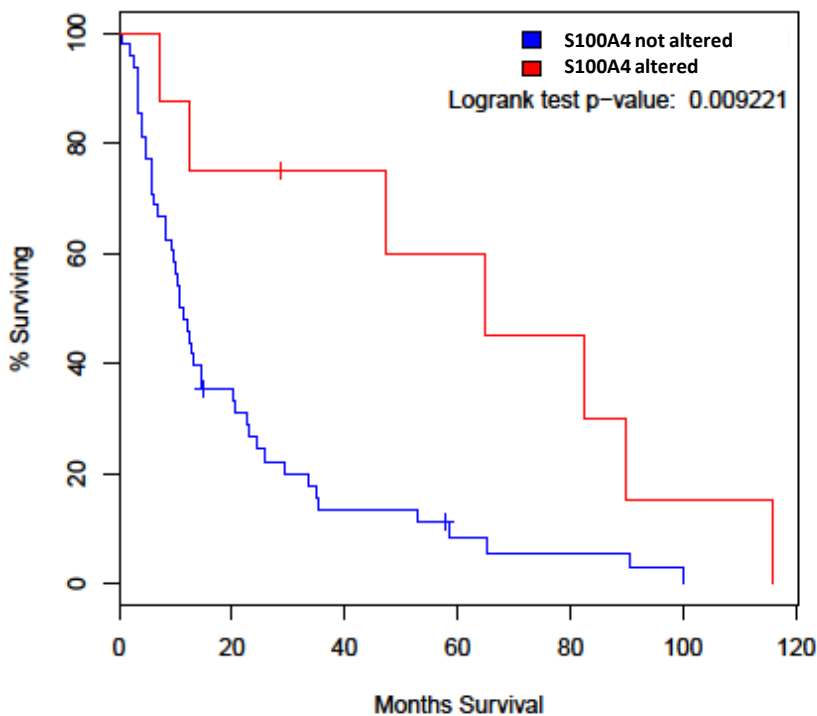
5.8% of all cases up-regulated in Glioblastoma



B

14

1 cluster



Supplemental Figure 4: A, Survival curve from a query of the Cancer Genome Atlas (TCGA) showed the glioblastoma samples with increased expression (**Z-score > 2**) of S100A4 (red line, 9.9%) have a shorter overall survival (P=0.000562). B, 14.3% proneural glioblastoma samples have down-regulation of S100A4 (red line) and longer survival (P=0.009221).