

Supplementary Information

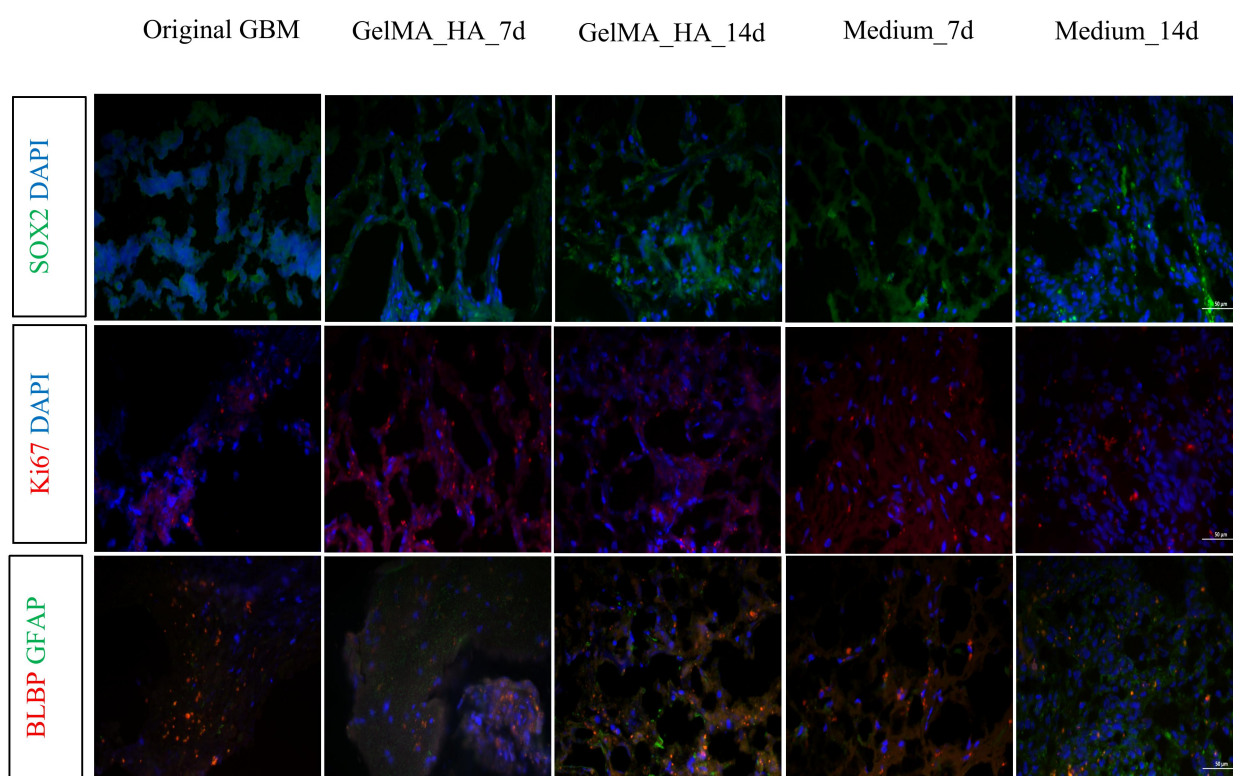


Figure S1. Immunofluorescence staining of SOX2, KI67, BLBP, GFAP in Original GBM and GBOs. Scale bar 50 μ m.

Table S1 Differentially expressed genes between samples

Original_GBM-vs-GelMA_HA_7d			Original_GBM-vs-Medium_7d		Medium_7d-vs-GelMA_HA_7d	
Symbol	Log2 FoldChange	FDR	Log2 FoldChange	FDR	Log2 FoldChange	FDR
GFAP	-2.597172255	0	-3.662965013	0	1.065792758	5.53E-222
NES	-1.312864012	4.68E-66	-1.669851398	1.28E-80	0.356987386	0.000967645
MKI67	-0.201207091	0.143575012	-0.87731748	3.43E-11	0.676110389	5.88E-08
S100B	-1.427823654	0	-3.045761574	0	1.61793792	3.95E-185
FABP7	0.757738149	7.19E-85	-2.136482236	1.04E-254	2.894220385	0
HOPX	-1.286195919	1.16E-281	-3.902679639	0	2.616483719	0
SOX2	-0.698439703	5.28E-16	-2.840600178	1.25E-104	2.142160476	3.77E-52
OLIG2	-1.200387113	5.95E-09	-1.899633041	4.28E-14	0.699245928	0.023522179
PROM1	-11.3553511	7.65E-55	-0.21964181	1.76E-05	-11.13570929	2.42E-30
CRBN	-1.214077605	6.96E-141	-1.043848462	5.39E-96	-0.170229143	0.073143841
EGFR	-1.284649871	1.88E-188	-2.663694937	0	1.379045066	6.05E-45
CDK12	-0.14172811	0.072245125	-0.636492801	0.009132575	0.494764692	0.391545584
PTEN	-0.797487893	1.13E-95	0.123104145	1.19E-05	-0.920592037	1.11E-144
TNKS	-0.533823652	1.36E-22	-0.759449608	5.37E-35	0.225625957	0.000969898
NF1	0.178267196	0.000871638	-0.018185472	1.27E-05	0.196452668	0.244832593
MTOR	0.284825388	0.327010508	-0.255982783	0.000451192	0.540808171	0.01106217

The genes/transcripts with the parameter of false discovery rate (FDR) below 0.05 and absolute fold change \geq 1 were considered differentially expressed genes. Sample on the left of “vs” is control group

Table S2 Differentially expressed genes between samples

Original_GBM-vs-GelMA_HA_14d			Original_GBM-vs-Medium_14d		Medium_14d-vs-GelMA_HA_14d	
Symbol	Log2 FoldChange	FDR	Log2 FoldChange	FDR	Log2 FoldChange	FDR
GFAP	-1.1000408	0	-1.643073456	0	0.543032657	1.02E-89
NES	0.022852671	0.77959435	0.136400967	0.039413974	-0.113548296	0.06027403
MKI67	1.343954401	7.98E-55	1.066726114	1.23E-31	0.277228287	4.94E-05
S100B	-1.044582833	2.82E-195	-1.331445465	4.57E-299	0.286862632	6.63E-13
FABP7	3.147428164	0	1.459768736	0	1.687659428	0
HOPX	0.012156062	0.587664236	-1	1.57E-175	1.012156062	1.51E-202
SOX2	0.798661052	5.28E-32	-0.011846243	0.935374399	0.810507295	4.29E-39
OLIG2	1.21405312	4.23E-17	0.092589608	0.648814612	1.121463512	1.15E-17
PROM1	-11.3553511	4.41E-55	-1.693572999	2.06E-17	-9.661778098	1.12E-20
CRBN	-0.250673677	1.78E-08	-0.084559959	0.006470378	-0.166113718	0.003872649
EGFR	0.243195659	0.670842273	-2.10203981	1.71E-293	2.345235468	0
CDK12	-1.208399149	3.36E-11	-0.636492801	0.001203492	-0.571906348	0.000905418
PTEN	-1.421247294	5.68E-272	-0.65132639	8.92E-63	-0.769920904	1.40E-75
TNKS	0.309380244	5.66E-18	0.373927997	9.54E-12	-0.064547754	0.084124776
NF1	-1.281830026	2.68E-22	-1.973144508	4.26E-46	0.691314482	1.15E-06
MTOR	-1.089472446	5.04E-32	-0.426867342	1.23E-05	-0.662605104	1.67E-14

The genes/transcripts with the parameter of false discovery rate (FDR) below 0.05 and absolute fold change \geq 1 were considered differentially expressed genes. Sample on the left of “vs” is control group