

Supplementary Information

Spatially-graded hydrogels for preclinical testing of glioblastoma anticancer therapeutics

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Supplementary Tables

Table S1.

Primer list for gene expression analysis (5' to 3'; forward and reverse).

| Gene | Primer sequence (5'-XXX-3') | Citation |
|--------------|---|----------|
| CD44 | <i>Forward:</i> AGAAGGTGTGGGCAGAAGAA <i>Reverse:</i> AAATGCACCATTCCCTGAGA | 1 |
| VEGF | <i>Forward:</i> CTACCTCCACCATGCCAAGT <i>Reverse:</i> GCAGTAGCTGCGCTGATAGA | 2 |
| MMP-2 | <i>Forward:</i> TCTCCTGACATTGACCTTGGC <i>Reverse:</i> CAAGGTGCTGGCTGAGTAGATC | 2 |
| HAS3 | <i>Forward:</i> CTC TAC TCC CTC CTC TAT ATG TC <i>Reverse:</i> AAC TGC CAC CCA GAT GGA | 3 |
| GAPDH | <i>Forward:</i> CCTTCCACGATACCAAAGTTG <i>Reverse:</i> CCATGAGAAGTATGACAACAGCC | 4 |

Supplementary Figure

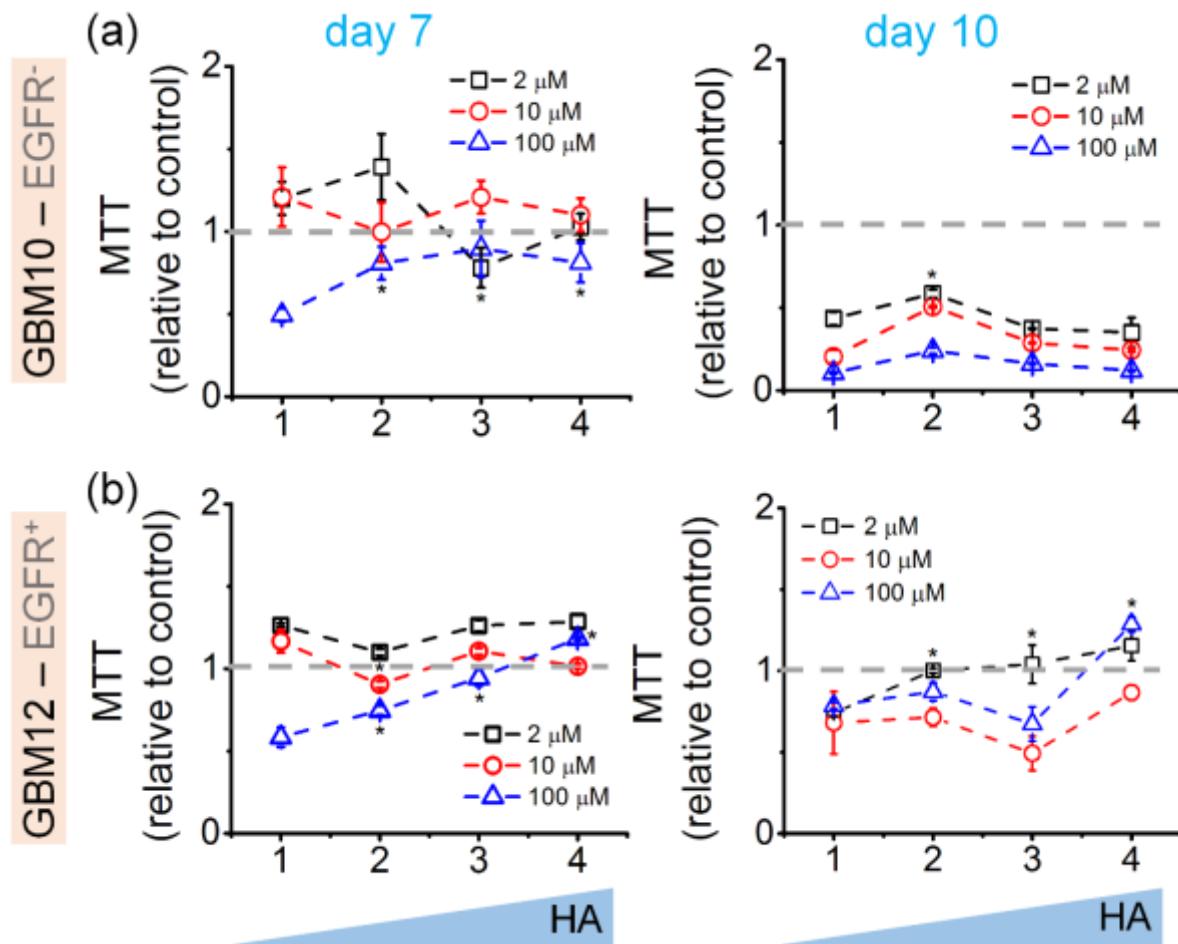


Figure S1. The metabolic activity, normalized to DMSO only control, of (a) GBM10 and (b) GBM12 PDX cells within GelMA hydrogels containing a linear gradient of matrix-immobilized HA. Day 7 results depict changes in metabolic activity seen after four days of exposure to fresh media following culture for three days in erlotinib (2, 10 and 100 μ M). Day 10 results show subsequent changes in metabolic activity after re-exposure to a second dose of erlotinib (10 μ M) for an additional three days. *: $p < 0.05$ compared to hydrogel region 1 (low HA content).

References

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