Genetically distinct glioma stem-like cell xenografts established from paired glioblastoma samples harvested before and after molecularly targeted therapy

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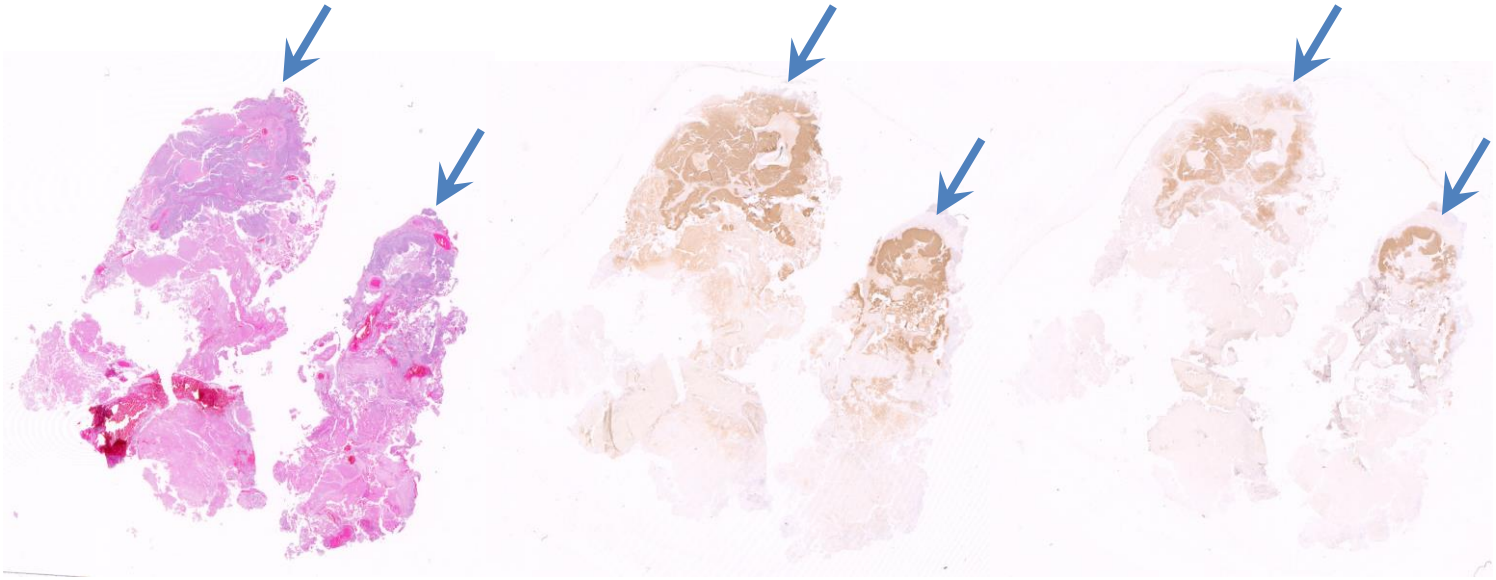
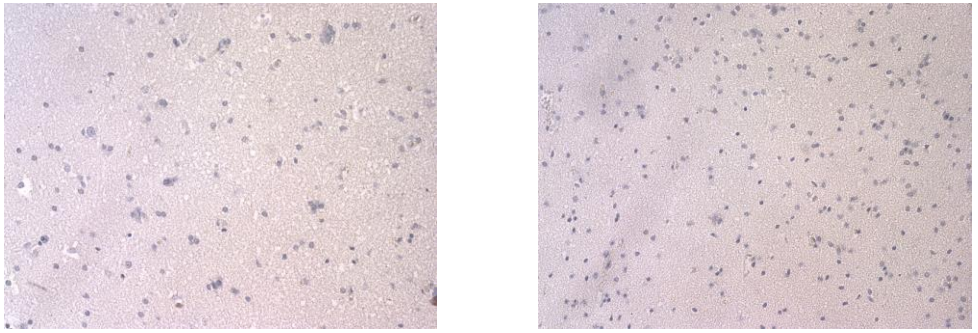
Supplementary Figure S1. Tumour specific immunopositivity of EGFR and phospho-EGFR. H&E staining and Immunohistochemistry (IHC) for EGFR and phospho-EGFR in the newly diagnosed patient tumour MGG70. Arrows show neoplastic cell-dense areas intensely stained for EGFR and phospho-EGFR. Two panels below represent negative EGFR and phospho-EGFR IHC on the normal human brain indicative of the specificity of the antibodies.



H and E EGFR P-EGFR (Y1068)

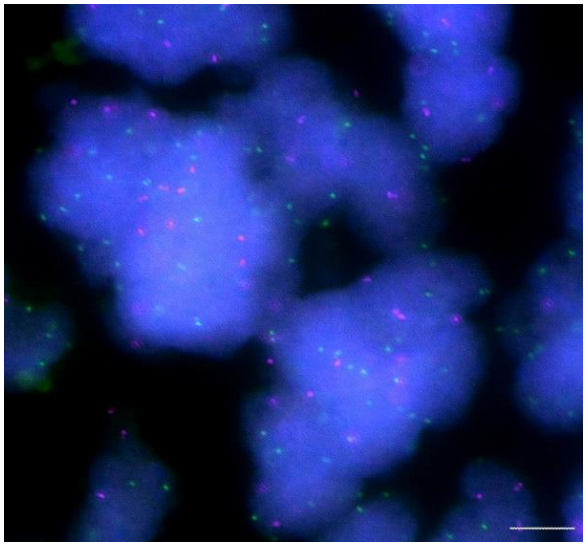
Normal human brain



EGFR P-EGFR (Y1068)

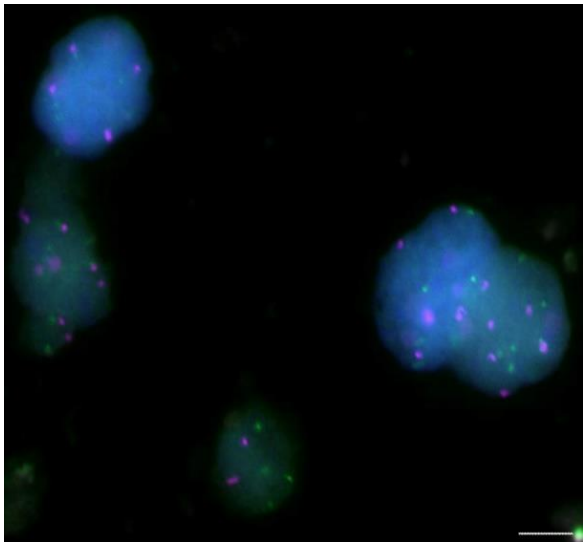
Supplementary Figure S2. No amplification in *PDGFRA* and *MET*.
FISH showing polysomy and no amplification of *PDGFRA* and *MET* in both pre-dacomitinib MGG70R (70R) and post-dacomitinib MGG70RR (70RR) tumors in the patient. Bars, 5 mm.

MET/ *PDGFRA*



70R

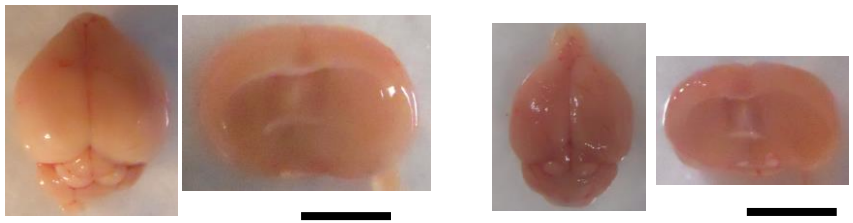
MET/ *PDGFRA*



70RR

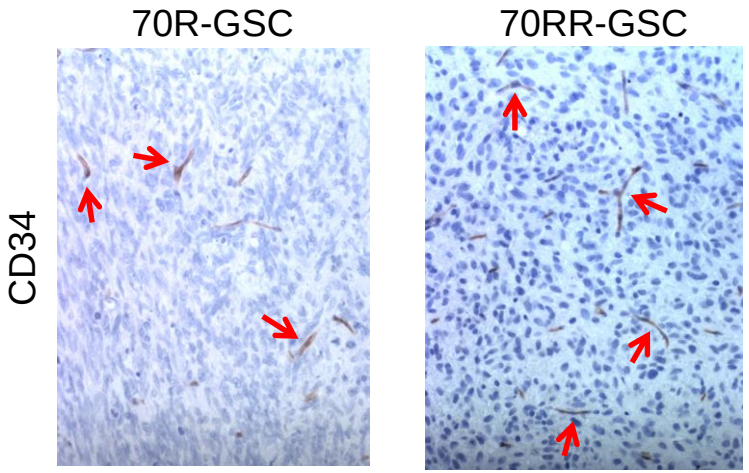
Supplementary Figure S3. Macroscopic appearance of the mouse brains bearing GSC xenografts.

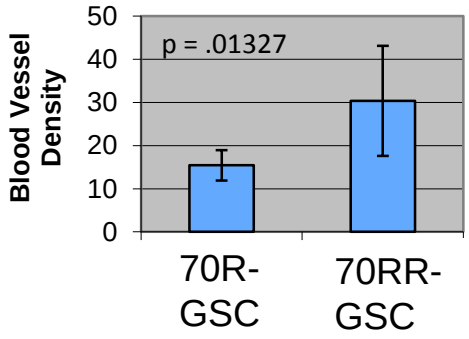
Pictures of representative mouse brains (left, whole brain; right coronal cut through tumour region) bearing MGG70R-GSC tumour (left two panels, 70R-GSC) and MGG70RR-GSC tumour (right two panels, 70RR-GSC). Scale bar, 5mm.



Supplementary Figure S4. Increased microvascular density in re-recurrent GSC orthotopic xenografts.

Immunohistochemistry for endothelial marker CD34 in orthotopic MGG70R-GSC (70R-GSC) and MGG70RR-GSC xenografts (70RR-GSC). Arrows depicting positive staining of micro-vasculature. Shown below is a quantitation of CD34-positive blood vessel densities comparing MGG70R and MGG70RR GSC tumours.





Supplementary Figure S5. Met is immunonegative in MGG70R and 70RR patient tumours and GSC xenografts.

(**A**) Met immunohistochemistry in patient tumours (top row) and the respective orthotopic GSC xenografts (bottom row). A glioblastoma known to have *MET* amplification, and its GSC tumour, served as positive controls. (**B**) Sensitivities of MGG70R-GSC (70R-GSC) and MGG70RR-GSC (70RR-GSC) to the Met inhibitor crizotinib. Cell viability assay was performed as in Fig. 5C.