

Sunitinib treatment enhances metastasis of innately drug resistant breast tumors

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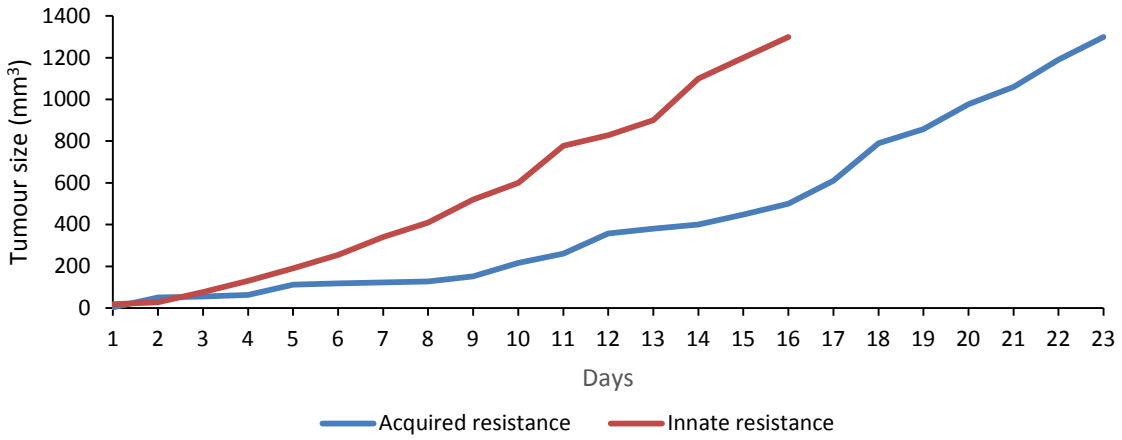
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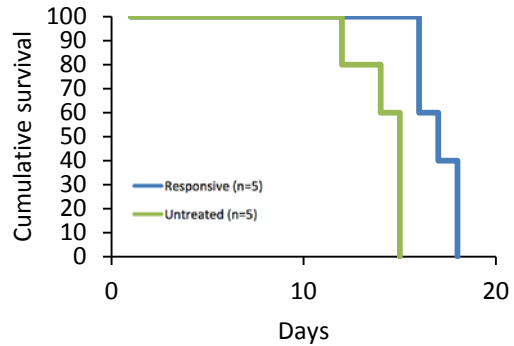
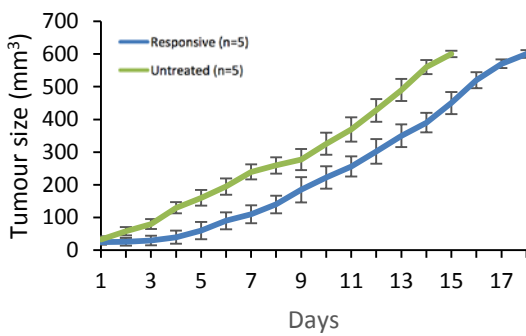
Seeding tumour growth curves

A

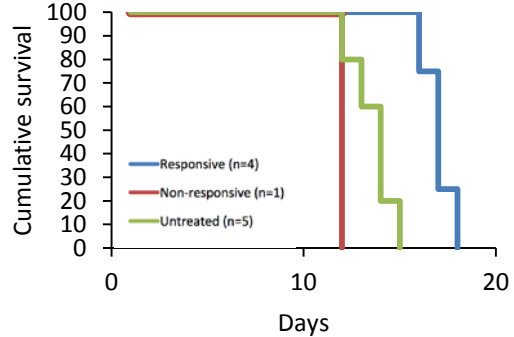
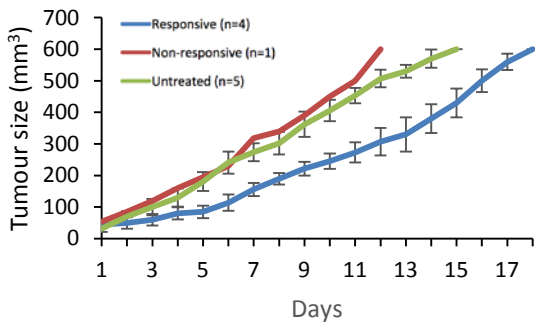


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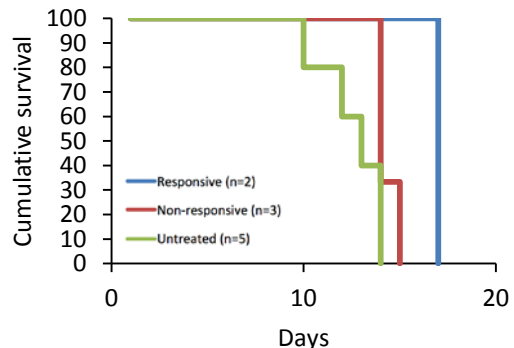
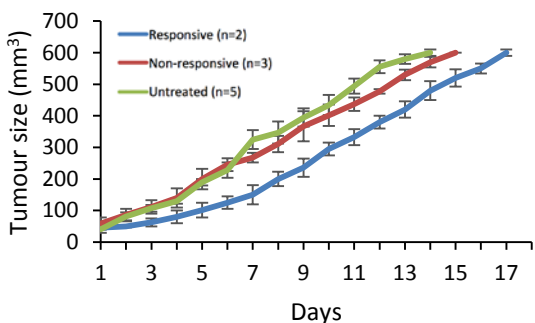
Naïve tumours



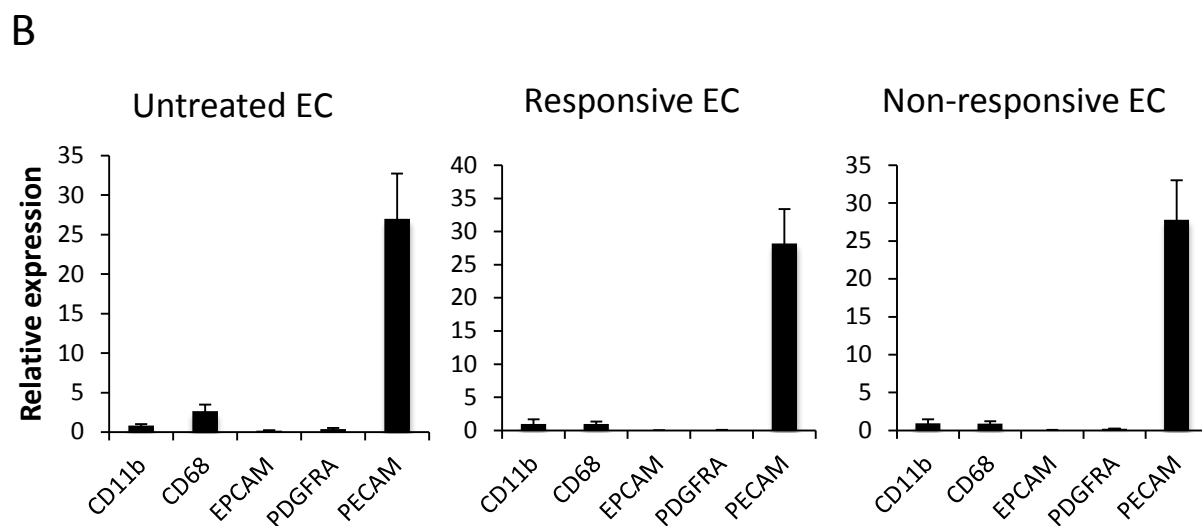
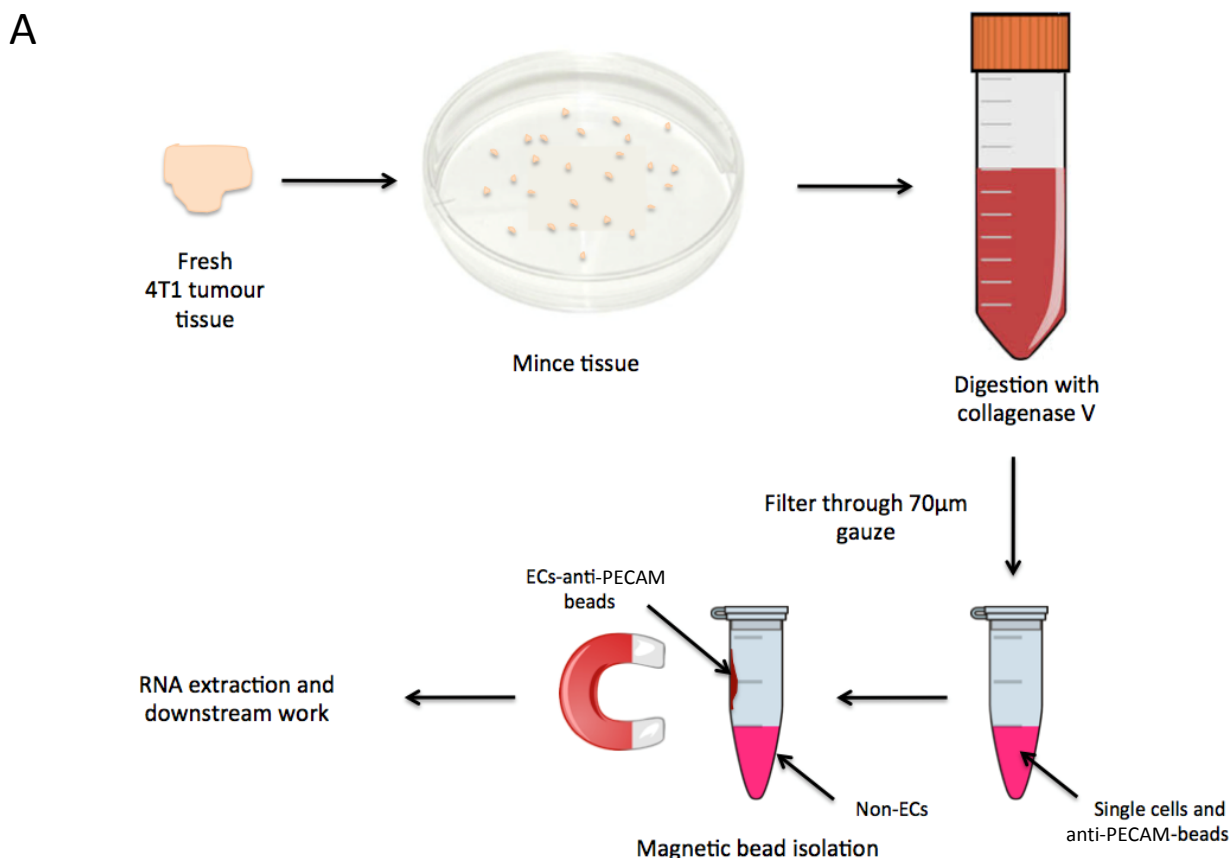
Acquired resistance tumours



Innate resistance tumours

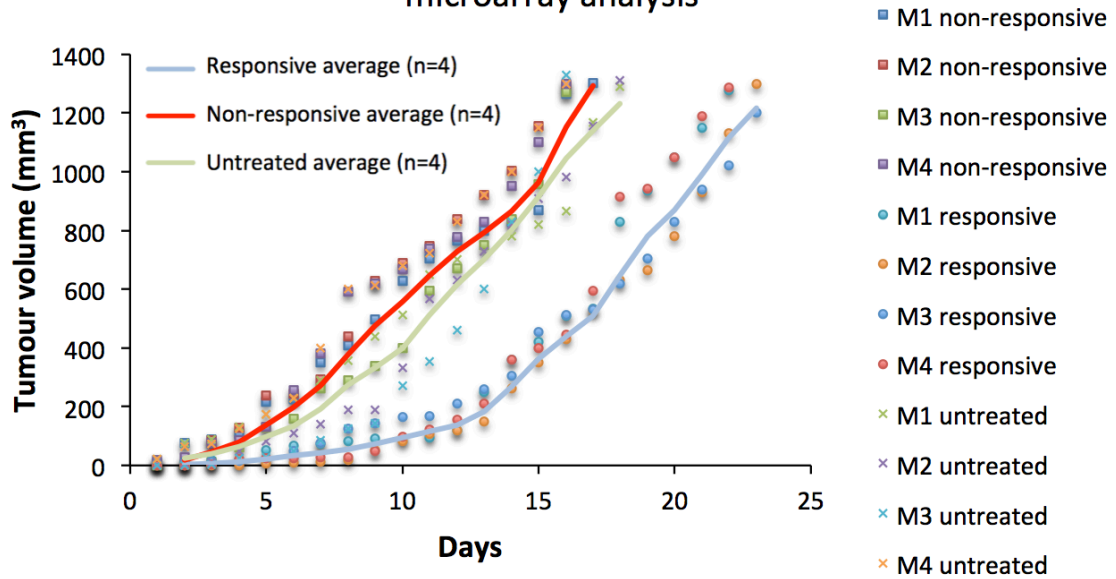


Supplementary figure 1. Sunitinib resistance inheritance. Tumour cells were isolated from 4T1 tumours displaying acquired (responsive cohort) or innate (non-responsive cohort) resistance to sunitinib treatment *in vivo* and cultured for 2 weeks. A, tumour growth curves of the selected tumours from each cohort. 2.5×10^5 tumour cells from each culture along with treatment naïve 4T1 tumour cells were inoculated into Balb/c mice and the tumours allowed to grow to 600 mm³ with or without 40 mg/Kg sunitinib treatment. B, tumour growth curves (mean \pm SEM) and Kaplan-meier plots for each inoculation, split into Untreated (green), Responsive (blue) and Non-responsive (red) cohorts. N-numbers as shown.

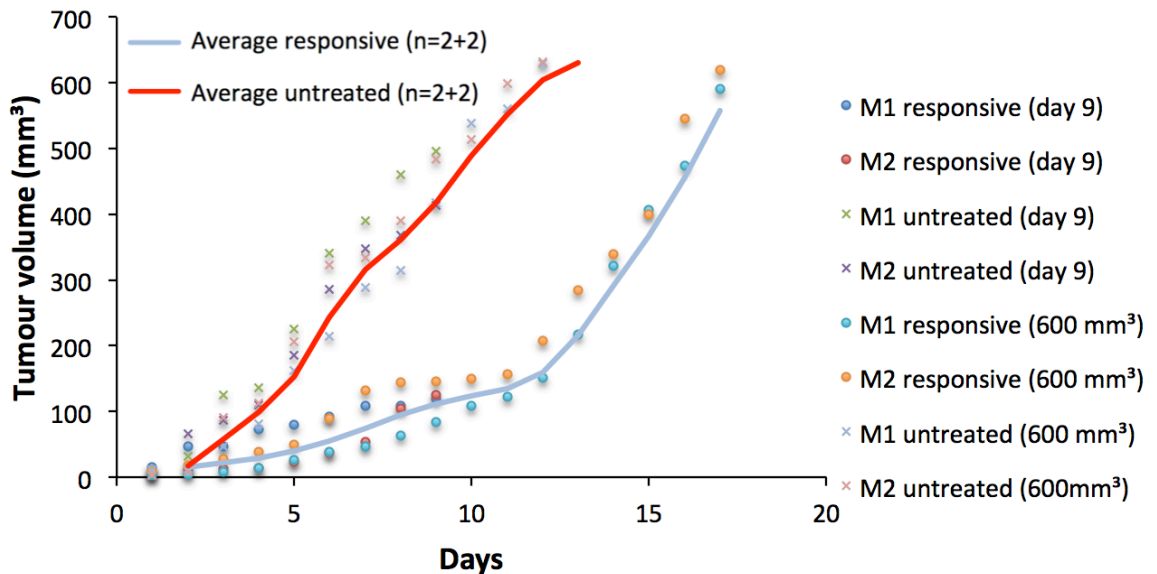


Supplementary figure 2: Endothelial isolation from murine breast tumours. A, workflow of the main steps involved in the murine endothelial cell isolation procedure. B, RTqPCR for markers of leukocytes (CD11b), macrophages (CD68), epithelium (EPCAM), smooth muscle (PDGFRA) and endothelium (PECAM) in the endothelial isolates (EC) from responsive, untreated and non-responsive tumours (n=4,4,4) standardised to β -actin (a house keeping gene) and normalised for marker expression to matched bulk tissue. Mean fold change of marker expression between the endothelial and bulk fraction is shown \pm SEM.

Tumour growth curves for samples used in 1300 mm³ microarray analysis



Tumour growth curves for 9 days and 600 mm³ microarrays



Supplementary figure 3: Representative tumours from the non-responsive (square), responsive (circle) and untreated (cross) group at each time period, were subjected to microarray transcriptomic analysis. Graphs showing individual tumour growth data points and mean tumour size of the selected tumours over the period of the experiment. N-numbers for each experiment are shown.