

Supplementary materials and methods.

Sunitinib resistance inheritance experiment

4T1 tumours displaying acquired (responsive cohort) or innate (non-responsive cohort) resistance to sunitinib treatment *in vivo* were removed at 1300 mm³ in size, minced, and tumour derived cells cultured in high glucose Dulbecco's modified eagle medium (DMEM) (Sigma, Gillingham, UK), supplemented with 10% FCS (PAA, Cambridge, UK) and 2mM L-glutamine (Gibco, Paisley, UK), for 2 weeks. 2.5×10^5 4T1-Luc cells, from these cultures, suspended in Optimem (Gibco) and in a volume of 100 μ L, were injected into the third mammary fat pad of anaesthetised 8-week-old female Balb/C mice. After a 1-week tumour establishment period, mice received either 40 mg sunitinib (Selleck Chemicals, USA) per kg body weight in phosphate buffered saline (PBS) (Sigma) and 3.72% DMSO (Sigma) or the drug vehicle only. The tumour growth was measured by daily caliper measurements.