



**Fig. S9. Effect of trastuzumab on HER2+ breast tumor growth.** Five-week-old female athymic nude mice were implanted with 0.36 mg, 90-day release, 17 $\beta$ -estradiol pellets. Three days later, in total  $5 \times 10^6$  BT-T or HR6 cells in 150  $\mu$ l growth factor reduced Matrigel and PBS (1:1) were orthotopically injected. Once tumors reached a volume  $\sim 100$  mm $^3$ , the mice were randomly grouped and received treatment with vehicle, trastuzumab (20 mg/kg, i.p., twice/week). Tumor sizes were measured with calipers twice weekly. Tumor volume was calculated with the formula  $V = lw^2/2$ . Differences in tumor volume between groups were analyzed using two-way ANOVA.