



**Supplementary Figure 2.** Comparison of continuous versus pulsatile combination treatments. Female NOD/scid mice bearing either PDX8 or PDX12 orthotopic xenografts were randomized into one of the five treatment arms shown (a). T-DM1 and ABT-263 were administered as indicated (a). Body weight measurements were recorded on day 0 and at the experimental endpoint on day 14. Changes in body weights are graphed (b) as percent weight loss relative to individual day 0 measurements for PDX8 and PDX12 mice in each treatment group (Mann-Whitney one-tail test PDX8: vehicle versus T-DM1 + ABT-263;  $p$  value = 0.0079, T-DM1 + ABT-263 versus T-DM1 + <sup>PULSE</sup>ABT-263;  $p$  value = 0.0286 and PDX12: vehicle versus T-DM1 + ABT-263;  $p$  value = 0.0286, T-DM1 + ABT-263 versus T-DM1 + <sup>PULSE</sup>ABT-263;  $p$  value = 0.0143). Note greater tolerability of the pulsatile treatment compared to continuous treatment (b). Platelet counts are graphed (c) for PDX8 and PDX12 (Welch's one-tail  $t$  test PDX8: vehicle versus ABT-263;  $p$  value < 0.0001, ABT-263 versus T-DM1 + <sup>PULSE</sup>ABT-263;  $p$  value = 0.0056, T-DM1 + ABT-263 versus T-DM1 + <sup>PULSE</sup>ABT-263;  $p$  value = 0.0059 and PDX12: vehicle versus ABT-263;  $p$  value = 0.0009, ABT-263 versus T-DM1 + <sup>PULSE</sup>ABT-263;  $p$  value = 0.0002, T-DM1 + ABT-263 versus T-DM1 + <sup>PULSE</sup>ABT-263;  $p$  value = 0.0004). Note blood samples were collected from ABT-263-treated animals 3-6 h post-treatment. Note continuous ABT-263 treatment induces thrombocytopenia (c), whereas pulsatile ABT-263 treatment eliminates platelet side effects (c). Note blood clotting, at the time of sample collection, prevented accurate assessment of platelet counts in one of the four PDX8 mice treated with T-DM1 (c). Female non-tumor bearing NOD/scid mice, treated with T-DM1 and ABT-263 according to the dose and schedule presented here, exhibited no evidence of cardiac fibrosis or cardiomyocyte apoptosis.