Supplemental Figure 1. Clustering of HIM models with their human tumor counterparts and a panel of tumors representing all breast cancer subtypes. The array tree denotes overall gene expression similarities after unsupervised hierarchical clustering using all probes. The letter represents the passage number of WU-BC3, WU-BC4, and WU-BC5 (A, passage 1 ; $B$, passage 2; C, passage 3; D, passage 4; E, passage 5). An ovarian metastasis from a mouse harboring WU-BC5 was included, as well as the human counterparts (Hu) of WU-BC4 and WUBC5.


Supplemental Figure 2. Comparison of tumor cell growth rate for WU-BC3, WU-BC4 and WU-BC5. $1 \times 10^{6}$ cells from either BC3, 4 or 5 were engrafted into humanized mammary fat pads of NODSCID mice. Tumor dimensions were measured every 3-4 days and tumor volumes were calculated. Arrow indicates the time at which treatment commenced.


Supplemental Figure 3. AZD7762 in combination with carboplatin or gemcitabine induces apoptosis in p53 knockdown cells. BC3-p53WT and BC3-p53KD cells were treated with carboplatin or gemcitabine alone or in combination with AZD7762 and analyzed as described for irinotecan in Figure 7C.


