

**FGFR inhibitor, AZD4547, impedes the stemness of mammary epithelial cells
in the premalignant tissues of MMTV-ErbB2 transgenic mice**

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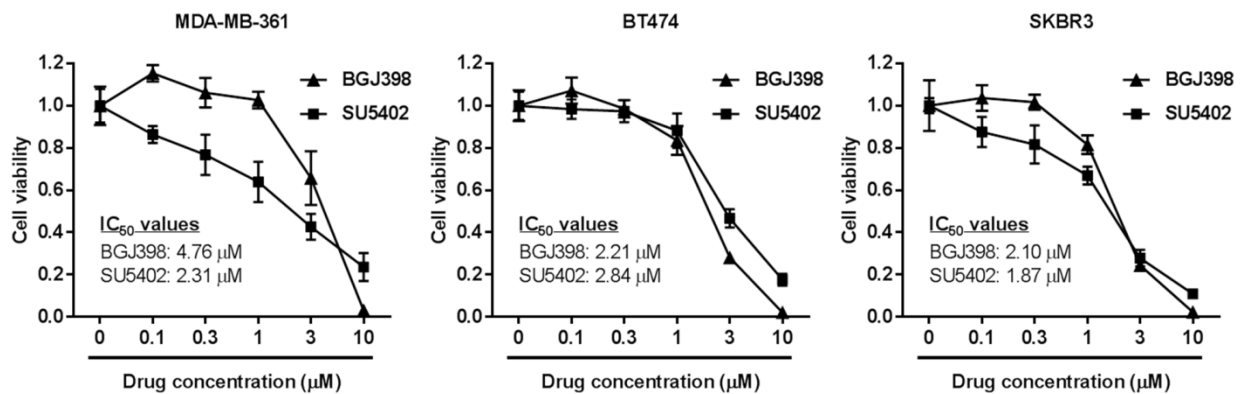
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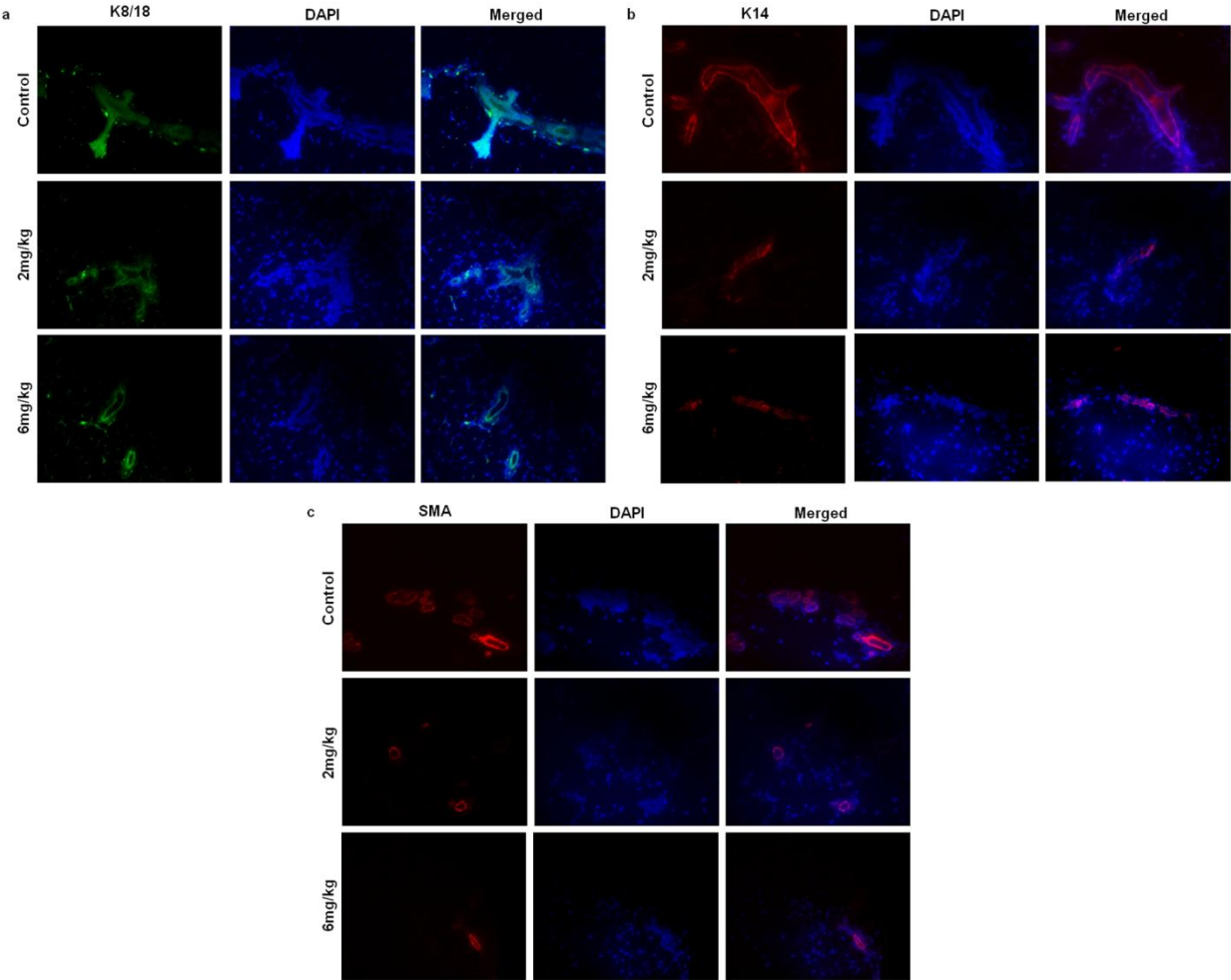
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Supplementary Figure Legends

Supplementary Figure S1: Inhibition of cell proliferation induced by the FGFR inhibitors, BGJ398 and SU5402, in ErbB2-overexpressing breast cancer cells *in vitro*. MDA-MB-361, BT474, and SKBR3 ErbB2-overexpressing breast cancer cells were treated with BGJ398 (0, 0.1, 0.3, 1, 3, or 10 μM) or SU5402 (0, 0.1, 0.3, 1, 3, or 10 μM) for 5 days. Then the viable fraction of each cell line was determined with an MTS assay. The IC_{50} values of BGJ398 and SU5402 are indicated for each cell line.



Supplementary Figure S2: AZD4547 reduces the luminal and basal epithelial cell layer thickness of the mammary ducts. The ductal epithelial thickness was compared in control and AZD4547 (2 or 6 mg/kg/day)-treated MMTV-ErbB2 mice. Using IF, the tissues were stained with K8/K18 (a) luminal epithelial markers and K14 (b) and SMA (c) basal epithelial markers (200× total magnification).



Supplementary Figure S3: AZD4547 suppresses 4EBP1 and p70S6K activation/phosphorylation.

The expression and phosphorylation of indicated proteins were analyzed from mammary tissues of control and AZD4547 (6 mg/kg/day for 10 weeks)-treated MMTV-ErbB2 mice using IHC. Brown staining indicates the presence of the specific protein.

