



Supplementary Figure S2. Ki67 expression in patient tumor specimens **A.** Ki67 expression in ANZ treatment arm at baseline, 2 weeks after treatment with ANZ alone, and EOT after 14 weeks of combination therapy. All patients received abemaciclib+ANZ after 2 weeks of initial treatment. Data shown are from 19 tumors with available Ki67 IHC at all 3 timepoints. Ki67 IHC expression in tumor specimens was measured at baseline, 2 weeks after initial treatment with ANZ alone, and EOT after 14 weeks of combination therapy. Tumors were classified by ANZ sensitivity (n=5) and resistance (n=14) as: ANZ-sensitive tumors (n=5) were defined by an expression of Ki67 $\leq 2.7\%$ at 2 weeks; ANZ-resistant/abemaciclib+ANZ-sensitive tumors (n=9) were defined by Ki67 $\geq 7.4\%$ at 2 weeks, and Ki67 $\leq 2.7\%$ at EOT; and ANZ-resistant/abemaciclib+ANZ-resistant tumors (n=5) were defined by Ki67 $\geq 7.4\%$ at 2 weeks and at EOT. **B.** Ki67 staining by IHC on representative patient tumor specimens (indicated by patient 1-6 in **Supplementary Figure S2A**). Expression level of Ki67 is indicated for each tumor specimen. Images at 200x magnification.

