

**Supplementary Figure S9- Characterization of PDX model CTG-3346.** (A) Treatment history of the patient that provided tumor tissue for PDX. (B) Representative H&E, ER, PR, and HER2 IHC staining of patient's tumor before and after (P3) growth in mice. (C) Tumors were harvested from ovx NSG mice. Tumor lysates were analyzed by immunoblot. WHIM16 was included as a positive control for Rb expression. (D) Ovx mice bearing CTG-3346 tumors ~200 mm<sup>3</sup> were randomized to treatment ± E2 (s.c. pellet) for 24 h. RNA was isolated from tumors, and gene expression was measured by RT-qPCR. *TFF1* levels were normalized to *ACTB* levels. Horizontal bars indicate median values. \**p*<0.05.

