

### Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: **tdT+ myoepithelial progeny of pubertal Gpr125 progenitors in lactating glands.** Video of 3D confocal imaging of tdT+ cells (red) in glands from Adgra3<sup>cre/+</sup>;tdT mice treated with Tam during puberty. Glands were harvested at lactation day 6 (L6). Nuclei stained with DAPI (pale blue).

File Name: Supplementary Movie 2

Description: **tdT+ cells are at the invasive front of emerging branch from Adgra3- Wnt1 tumor.** Video of 3D confocal imaging of tdT+ cells (red) at the invasive front of tumor from MMTVWnt1; CreER<sup>T2</sup>;tdT mice. Mice were treated with Tam during puberty. Tumors were harvested ~15 weeks of age. Nuclei stained with DAPI (pale blue).