**Supplementary Fig 8**

**C:\Users\ZZC\Desktop\s Fig 8 working model.tif**

**Supplementary Fig 8. Schematic model of hTERThigh PCSCs cell division modes modulated by WNT/β-catenin**

(A) hTERT-/low PCa cells, with cell membrane localized β-catenin expression and dampened WNT signaling, mostly undergo SCD to produce two identical hTERT-/low daughter cells. (B) hTERThigh PCSCs exhibit greater WNT/β-catenin pathway activation and undergo three distinct types of cell division: self-renewing SCD I, differentiating SCD II, and ACD. In SCD I, hTERT and nuclear β-catenin equally distribute into the daughter cells. In SCD II, both daughter cells exhibit undetectable hTERT expression and cell membrane localized β-catenin. In ACD, an hTERThigh PCSC gives rise to one daughter cell with high level of hTERT and nuclear β-catenin, the other with undetectable hTERT and cell membrane localized β-catenin. Canonical WNT ligands, like WNT3a and WNT16b, significantly increases self-renewing SCD I, meanwhile inhibits differentiating SCD II, and ACD.