



A hypothetical model of hierarchical organization of human prostate cancer (HPCa) cells. The PSA⁻ PCa cell compartment generally represents the minor subset of cells in the tumor that are largely undifferentiated and harbor both CSCs and tumor progenitor cells. This compartment is still heterogeneous and contains several subpopulations of marker-positive PCa cells including: CD44⁺, side population (SP), ABCG2⁺, α2β1⁺, Nanog⁺, and holoclone cells. The CD44⁺ and SP PCa cells are not only highly tumorigenic but also metastatic. In contrast, the PSA⁺ differentiated PCa cell compartment is much less tumorigenic. Surprisingly, though, these cells seem to be highly proliferative.