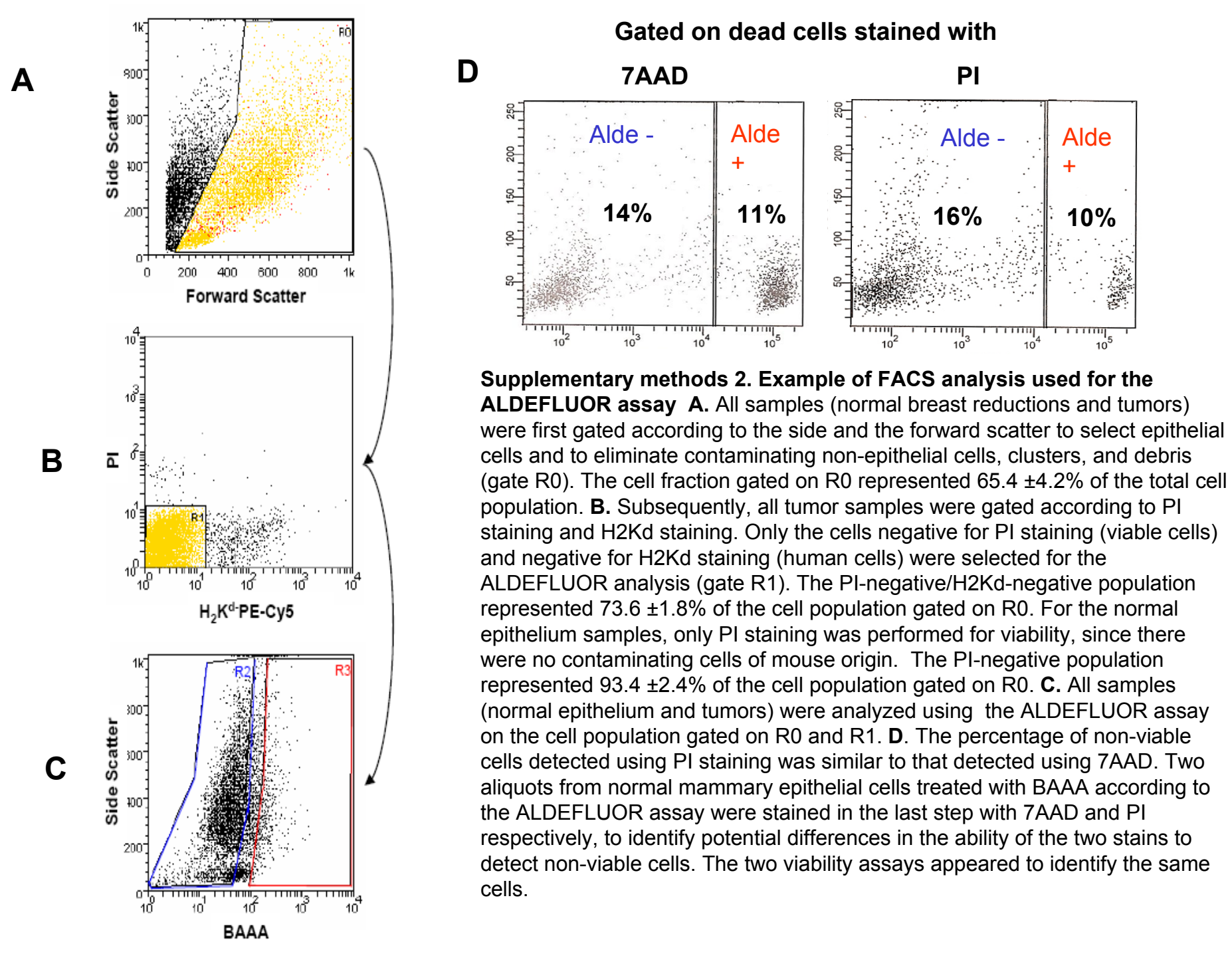

Supplementary methods 2. Example of FACS analysis used for the ALDEFLUOR assay **A.** All samples (normal breast reductions and tumors) were first gated according to the side and the forward scatter to select epithelial cells and to eliminate contaminating non-epithelial cells, clusters, and debris (gate R0). The cell fraction gated on R0 represented 65.4 ±4.2% of the total cell population. **B.** Subsequently, all tumor samples were gated according to PI staining and H2Kd staining. Only the cells negative for PI staining (viable cells) and negative for H2Kd staining (human cells) were selected for the ALDEFLUOR analysis (gate R1). The PI-negative/H2Kd-negative population represented 73.6 ±1.8% of the cell population gated on R0. For the normal epithelium samples, only PI staining was performed for viability, since there were no contaminating cells of mouse origin. The PI-negative population represented 93.4 ±2.4% of the cell population gated on R0. **C.** All samples (normal epithelium and tumors) were analyzed using the ALDEFLUOR assay on the cell population gated on R0 and R1. **D**. The percentage of non-viable cells detected using PI staining was similar to that detected using 7AAD. Two aliquots from normal mammary epithelial cells treated with BAAA according to the ALDEFLUOR assay were stained in the last step with 7AAD and PI respectively, to identify potential differences in the ability of the two stains to detect non-viable cells. The two viability assays appeared to identify the same cells.