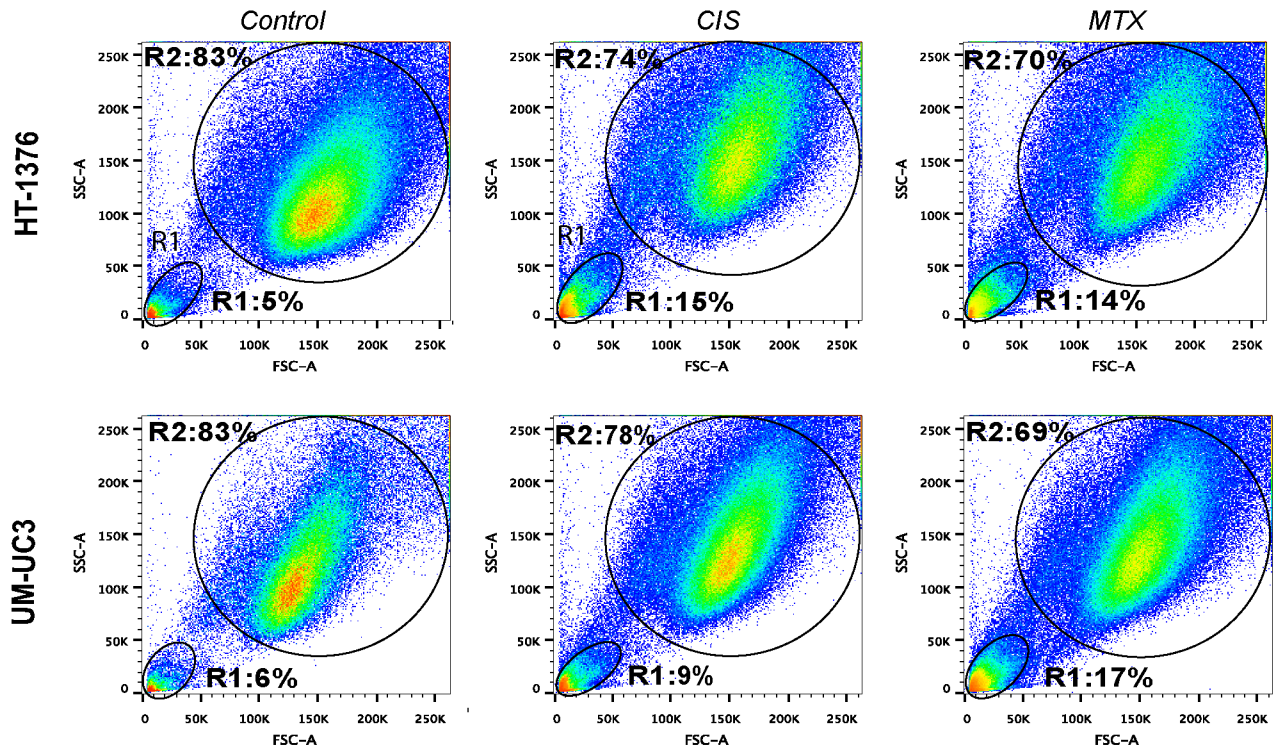
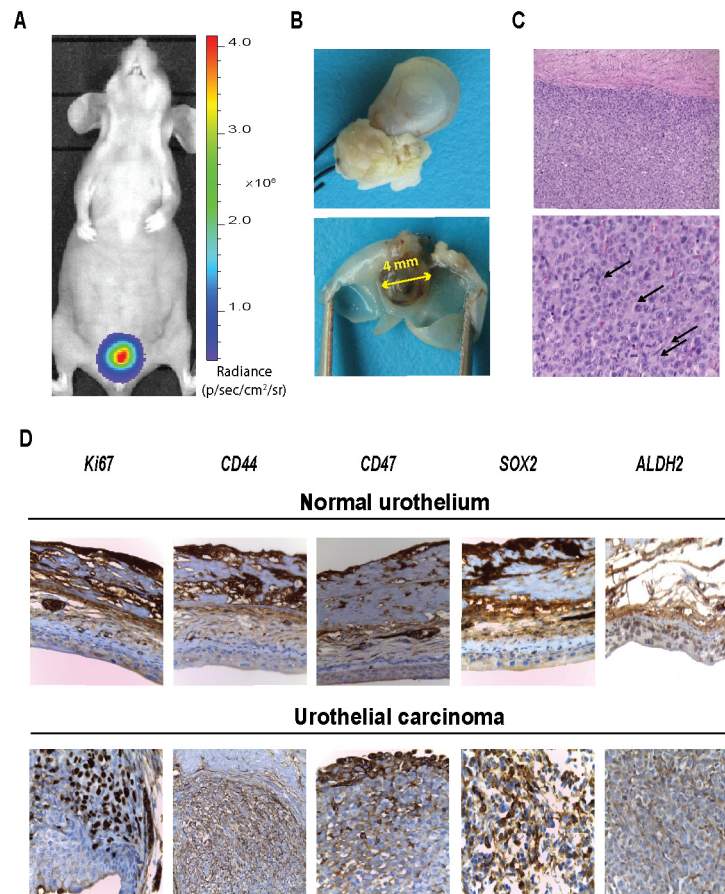


## SUPPLEMENTARY FIGURES AND TABLE



**Supplementary Figure S1: Short-term chemotherapy has minimal effects on tumor cells viability.** Representative flow cytometry dot plots of BC cells upon short-term single exposure to chemotherapy. Cells were treated with 10  $\mu$ M CIS or 10  $\mu$ M MTX for 24 hours and then subjected to flow cytometry analysis. R1 represents the percentage of dead cells and R2 the percentage of viable cells of the whole-cell population.



**Supplementary Figure S2: Bladder cancer induced by orthotopic inoculation of adherent HT-1376 cells.** **A.** Representative BLI image of a mouse that was inoculated intravesically with  $4 \times 10^6$  adherent HT-1376 cells at 5 weeks. **B.** Macroscopic examination of a papillary tumor protruding into the bladder lumen on day 40. **C.** Representative H&E-stained ( $\times 200$ ) and high mitotic count ( $\times 400$ ). **D.** Immunohistochemical staining for Ki67, CD44, CD47, SOX2 and ALDH2 in serial sections of normal urothelium (upper row) and in the orthotopic tumor (lower row). Original magnification:  $\times 400$ .

**Supplementary Table S1: Primer sequences used in real-time RT-qPCR analysis**

| Gene    | Primer  | Primer Sequence/ENSEMBL Gene ID |
|---------|---------|---------------------------------|
| ALDH1A1 | Forward | 5'-TGGCTTATCAGCAGGAGTGT-3'      |
| ALDH1A1 | Reverse | 5'-GCAATTCACCCACACTGTTTC-3'     |
| ALDH2   | Forward | 5'-CGAGGTCTTCTGCAACCAG-3'       |
| ALDH2   | Reverse | 5'-GCCTTGTCCACATCTTCCTT-3'      |
| ALDH7A1 | Forward | 5'-CAACGAGCCAATAGCAAGAG-3'      |
| ALDH7A1 | Reverse | 5'-GCATCGCCAATCTGTCTTAC-3'      |
| SOX2    | Forward | 5'-CATGCACCGCTACGACG-3'         |
| SOX2    | Reverse | 5'-CGGACTTGACCACCGAAC-3'        |
| NANOG   | Forward | 5'-GATGCCTCACACGGAGACTG-3'      |
| NANOG   | Reverse | 5'-GCAGAAGTGGGTGTTTGCC-3'       |
| POU5F1  | Forward | 5'-TCTGCATCCCTTGGATGTGC-3'      |
| POU5F1  | Reverse | 5'-GTGTGGCCCCAAGGAATAGT-3'      |
| ABCB1   | Forward | 5'-GAGGAAGACATCACCAGGTATGC-3'   |
| ABCB1   | Reverse | 5'-GCCAGGCACCAAATGAAACC-3'      |
| ABCG2   | Forward | 5'-TCAGCGGATACTACAGAGTGCATC-3'  |
| ABCG2   | Reverse | 5'-ATCTGCCTTTGGCTTCAATCCTAA-3'  |
| HPRT-1  | Forward | 5'-TGACACTGGCAAAACAATG-3'       |
| HPRT-1  | Reverse | 5'-GGCTTATATCCAACACTTCG-3'      |
| 18S     | Forward | 5'-GAAGATATGCTCATGTGGTGTG-3'    |
| 18S     | Reverse | 5'-CTTGTACTGGCGTGGATTCTG-3'     |
| GAPDH   | Forward | 5'-ACAGTCAGCCGCATCTTC-3'        |
| GAPDH   | Reverse | 5'-GCCCAATACGACCAAATCC-3'       |
| CD44    |         | ENST00000278385                 |
| CD47    |         | ENST00000398257                 |
| KRT14   |         | ENST00000167586                 |

All Cycle threshold (Ct) values of the analyzed genes were normalized to the housekeeping genes, *i.e.*, HPRT-1, 18S and GAPDH.