**Supplemental Figure Legends**

Supplemental Figure 4. Biological network graphs for genes with SNPs that modified bladder cancer recurrence or survival. We searched for biologic relationships between the genes containing SNPs of interest and other molecules reported in the literature using Pathway Studio 8.0 software with the ResNet 8.0 mammal database (Ariadne Genomics). Genes searched were: a) ALDH2, b) IGF1, c) XRCC4, d) RB1CC1, e) APC, TNKS. Genes and molecules are depicted as shapes. Arrows represent relationships between molecules based on experimental data in the literature (lavender – expression regulation, dark green – promoter binding, gold – protein modification, purple – binding, grey dotted – regulation, grey solid – molecular transport, orange - miRNA effect.