

## **LncRNA DANCR Restrains Sensitivity to 5-fluorouracil in Prostate Cancer through Sponging MiR-577**

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**ABSTRACT** This present study explored the functions of lncRNA DANCR on regulating sensitivity to 5-fluorouracil (5-FU) in prostate cancer in vitro. The RT-qPCR examined RNA expressions of LNCRNA DANCR in RWPE-1, VCaP, PC3 and LNCaP cells, which also measured RNA levels of miR-577 in PC3 cells. DANCR was highly expressed in prostate cancer cell lines. 5-FU (0, 1, 5 and 10 $\mu$ M) treatment induced the decrease of PC3 cell viability and low RNA expressions of DANCR but increased miR-577 in PC3 cells. The luciferase reporter test detected the binding between DNACR and miR-577. Interactions between DANCR and miR-577 were examined. Knockdown of DANCR downregulated DANCR and Bcl-2 RNA expressions but accelerated cell viability and upregulated Bax, which were enhanced by the overexpression of miR-577. Hence, DANCR might restrain sensitivity of prostate cancer cells to 5-FU by downregulating miR-577.