Researchers confirm breast cancer regulator also found in prostate cancer

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Researchers at Clarkson University in Potsdam, N.Y., led by Chemistry & Biomolecular Science Professor Costel C. Darie, in collaboration with researchers from Columbia University, have now found the binding partner of TDF, a pituitary hormone that had previously been shown to reduce cancer progression in breast cancer cells, in prostate cancer as well.

The study suggests that TDF may play a general role of inhibiting cancerous cells in both the breast and in the prostate.

"Finding the receptor for the TDF hormone in both the breast and prostate will allow us to design treatments targeting both cancer types," said Darie.

Darie's group has led in the search for a cellular receptor in cancer cells that might bind TDF and inhibit tumor growth. A receptor, labeled TDF-R, was found exclusively in the prostate and breast, but not in other cancer cells, suggesting that this factor is specific to these cancer types.

The results of the research will be reported in an upcoming issue of a journal published by the *Federation of European Biochemical Societies* (FEBS).

Most of the research work was performed by Izabela Sokolowska, a Ph.D. student in Darie's lab.

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According to the American Cancer Society about 241,740 new cases of prostate cancer will be diagnosed in 2012, approximately 28,170 men will die of prostate cancer and approximately one man in six will be diagnosed with prostate cancer in his life.

Provided by Clarkson University