TRXE-0025

A new chemotherapy candidate for prostate cancer

***TRXE-0025** represents a potential breakthrough in the treatment of prostate cancer.*

TRXE-0025 is the first drug specifically designed to kill the FULL hierarchy of cells within a prostate cancer.

The vital statistics

About 250,000 men will be newly diagnosed with prostate cancer in 2014 in the US.

About 75% of these men will be cured.

The remainder will experience disease recurrence, ultimately progressing to castration-resistant cancer.

About 1 man in 7 will be diagnosed with prostate cancer in his lifetime and 1 in 36 will die from prostate cancer.

It is the fourth leading cause of death overall and the second leading cause of death (after lung cancer) from cancer in males in developed countries.

Outlook for prostate cancer

A man's survival prospects depend entirely on the level of aggression of the cancer and the extent of its spread at the time of diagnosis.

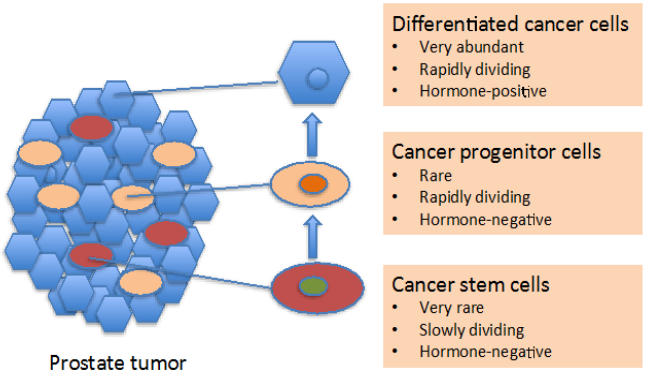
In only about 1 in 10 men diagnosed with prostate cancer is the cancer considered to be potentially lethal.

Treatment of aggressive Prostate cancer consists of radiotherapy, androgen-ablation therapy and chemo-therapy (docetaxel).

Prostate cancer that has spread away from the prostate gland or its immediate region invariably leads to death. The 5-year survival rate for such men is 28% and the median survival time once the disease becomes castrate-resistant is about 2 years.

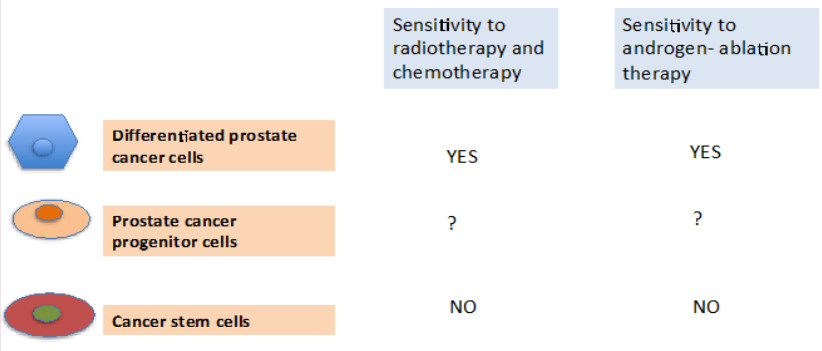
Why there has been so little progress in the treatment of malignant prostate cancer?

The simple answer is that prostate cancer is a hierarchy of 3 types of epithelial cancer cells and current therapy is directed only against 1 of those 3 types.



At the base of the hierarchy is the prostate cancer stem cell (PCSC). This is a normal prostate tissue stem cell that has been transformed. PCSCs account for <1% of cells within a prostate tumor. PCSCs start the tumor and are responsible for its ultimate growth and ability to spread. PCSCs produce the cancer progenitor cells, also very long-lived, but with a much greater capacity for growth, dividing to produce the differentiated cancer cell. These final cells in the chain are short-lived, rapidly-dividing cancer cells that constitute the bulk a tumor.

Radiotherapy, chemotherapy and androgen-ablation therapy all fail to have any effect on the prostate cancer stem cells. In fact, there is evidence that treatment of prostate cancer with chemotherapy results in a 'rebound' effect of enrichment of the cancer stem cells.



"TRXE-0025, a chemotherapy designed to kill all 3 layers of cancer cells"

January 2015