

## **Drugs used in the Treatment of Prostate Cancer A Partial List**

(Brand Names in Caps; generics in lower case)

This list has not been reviewed by a urologist or oncologist.

Abiraterone - see ZYTIGA

ALPHARADAN – Radium 223 – now known as XOFIGO (see below)

Cabazitaxel – see JEVTANA

COMETRIQ - cabozantinib, an experimental drug being developed by Exelixis, seems to be able to virtually eradicate bone metastases in some patients, at least as measured by bone scans, something no other drug has done.

CASODEX- bicalutamide, is an oral non-steroidal anti-androgen that blocks the androgen receptor sites on prostate cancer cells and elsewhere. It is given orally in conjunction with a GnRH agonist such as Lupron.

Degarelix – See FIRMAGON

FIRMAGON – A GnRH receptor agonist that provides a direct mode of androgen deprivation by blocking pituitary receptors, reducing secretion of FSH and LH resulting in suppression of testosterone production. Firmagon does not produce an initial surge of testosterone like LUPRON (luprolide).

JEVTANA - is used to treat men with advanced prostate cancer that has worsened (progressed) after treatment with other anti-cancer medicines, including docetaxel (Taxotere). Often given with prednisone.

Ketoconazole - was initially used to fight fungal infections, but later it was discovered that the drug also had anti-androgen effects. It can lead to a good response in many patients.

LUPRON - (leuprolide) a GnRH agonist that decreases the secretion of hormones which stimulate testosterone and estrogen production. It is used for treatment of hormone responsive prostate cancer. It is given by injection at various intervals. It is often used as first or second line treatment for recurrent prostate cancer. Notable side effects include loss of libido, erectile dysfunction, and hot flashes.

NOVANTRONE – (mitoxantrone) A cytotoxic drug used in hormone resistant metastatic prostate cancer. Said to reduce mortality in advanced prostate cancer when used with JEVTANA. Also given with prednisone.

PROVENGE – (sipuleucel-T) - a treatment that involves drawing blood from the patient, separating the white blood cells and stimulating the T cells to attack the patient's prostate cancer cells when re-injected into the patient. (At least one reference, Chemotherapy Advisor, has classed this as first line treatment for hormone resistant metastatic prostate cancer. FDA approval ???)

Samarium <sup>153</sup> (QUADRAMET) A radioactive drug used to treat bone pain due to metastatic cancer. Samarium 153 is a beta emitter, that is, it emits beta rays (electrons).

Strontium <sup>89</sup> another beta emitter used in the treatment of metastatic bone cancers, similar to Samarium <sup>153</sup>

TAXOTERE - (docetaxil) interferes with cell division – also known as an antimitotic agent. It is given as an infusion every few weeks for about 10 cycles. Often given for bone pain.

TRELSTAR – (triptorelin pamoate) A LHRH (GnRH) agonist that is similar to LUPRON. It is available in a one-month and a three-month injectable preparation.

XGEVA (denosumab) reduces the risk of fractures and other problems caused by cancer in the bones. The drug can also delay the spread of cancer to the bones, according to the results of a more recent trial.

XOFIGO, (formerly ALPHARADAN) Radium 223 is used for castration resistant prostate cancer with metastases to the bone. Radium has an affinity for bone metastases and this isotope is an alpha particle emitter with a half-life of 11.4 days.

XOLODEX, (gosarelin) is similar to Lupron.

Xtandi, formerly MDV 3100 - (Enzalutamide) an androgen receptor antagonist for treatment of medical or surgical castration resistant prostate cancer.

ZOMETA – a bisphosphonate used to prevent bone loss or treat a Skeletal Related Event.

ZYTIGA - abiraterone acetate, is used in conjunction with prednisone for castration resistant metastatic prostate cancer.

A more complete list and explanation of some of these drugs can be found in *Promoting Wellness: Beyond Hormone Therapy, options for prostate Cancer Patients* by Mark Moyad, MD, MPH