This document is intended to be used as a brief overview of some available treatment options for prostate cancer. You will probably want to read more and come to support group meetings.

Treatment Description Pros Cons

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| Intensity Modulated Radiation Therapy (IMRT) and Image Guided Radiation therapy (IGRT) | X-ray treatment from outside the body, usually applied in 35-40 daily treatments. | Non-invasive. Incontinence and impotence a little less likely than surgery. Can continue with current life style. For short term, sex life continues as before. Possible treatment for those who do not qualify for surgical procedures. Many long term studies. | If cancer recurs, follow up surgery difficult, and with increased side effects. Often more than a year wait to know likelihood of cure. 35-45 trips to radiation facility. Mostly temporary bowel and urinary problems may occur. Small risk of secondary cancer (1-1.5%) in another organ approximately 15 years in future. Fatigue may occur during treatment. |
| Brachytherapy – Low dose rate - Permanent radioactive seeds | Rice grain size radioactive seeds are implanted in your prostate. Over the course of weeks or months the emitted radioactivity kills the cancerous cells. | Minimally invasive outpatient surgery lasts 1-2 hours with a possible overnight stay; most return to normal activities in a few days. Many long term studies. | Could make any existing urinary problems that you are currently experiencing, worse. Not suited for large prostates or high Gleason scores. |
| Brachytherapy - High dose rate – temporary radioactive wires | A radioactive source is attached to or embedded in the end of a wire which is inserted into the prostate and then removed in just minutes. | There is the theory that for certain cancers, high levels of radiation given over shorter amounts of time are more likely to effect a cure. Many long term studies. | Usually requires an overnight stay. One to two treatments are usually given. |
| Surgery – open- retropubic | The entire prostate and seminal vesicles are removed through a 5 to 8-inch incision in the abdominal area. | Removed prostate is analyzed in detail for amount and grade of cancer present. Can be followed by external beam radiation if required. One to two nights in hospital on average. Average time away from work is three to five weeks. Many long term studies. | Major surgery. Possible need for blood transfusion. Several weeks recovery. 7-10 day inconvenience of urinary catheter. Short term incontinence and impotence and possibility of long term incontinence and impotence. |
| Surgery - robotic | The entire prostate and seminal vesicles are removed through 4-5 small incisions in the abdominal area. | Removed prostate is analyzed in detail for amount and grade of cancer present. Can be followed by external beam radiation if required. Hospital stay may be slightly shorter than open surgery. The incisions are smaller and the time back to work may be shorter than open surgery and possibly with less pain. | Major surgery. Less need for blood transfusion than open surgery. Several weeks recovery. 7-10 day inconvenience of urinary catheter. Short term incontinence and impotence and possibility of long term incontinence and impotence. Some problems with gas as a result of robotic surgical procedures. Long term studies coming in. |
| |  | | --- | | [Hormone Therapy](http://www.prostate-cancer.com/hormone-therapy/treatment-description/hormone-description.html) | |  | | [Prostate hormone therapy suppresses, blocks, or eliminates testosterone to slow the tumor’s growth.](http://www.prostate-cancer.com/hormone-therapy/treatment-description/hormone-description.html)  Can be administered intermittently to allow the body to recover from low testosterone. | May be used in conjunction with radiation therapy to increase radiation’s effectiveness. May be used in cases of failed radiation or surgery. Works throughout the entire body. May be used as a primary treatment in certain cases. | Probable loss of libido. Possible loss of unassisted erections, probable hot flashes, fatigue, weight gain. Long term use, e.g. greater that approximately one year may result in weakening of bones, memory problems, cardiovascular problems. Onset or aggravation of diabetes or heart problems. |
| Treatment | Description | Pros | Cons |
| Active Surveillance (Predecessor was called Watchful Waiting.) | Careful monitoring instead of aggressive treatment for men with low grade, small amount of tumor contained within the prostate. May also be applicable to men with other serious illnesses or otherwise short life expectancy. | Avoids the side effects of most active treatments. Can switch to active treatment when and if cancer becomes aggressive. If follow recommended life style changes, will benefit entire body. Some possibility that new treatment will be developed during surveillance period. | Risk of having misdiagnosed cancer as less aggressive than it really is. Will require periodic tests, including biopsies or MRI scans. Possible anxiety. |
| Cryotherapy | Freezes the prostate to kill the cancerous cells, killing healthy cells as well. May be used to freeze only the portion of the prostate where the cancer was found. | No cutting, no radiation. Performed on outpatient basis. Can be used after failed radiation. May be appropriate treatment for men who do not qualify or want any other treatment. Can be repeated. | Highest risk of permanent urinary incontinence and other urinary problems as well as highest risk of permanent impotence. Requires 2 to 3 weeks of catherization. May not be covered by insurance. Only partial freezing may miss some cancer. |
| Chemotherapy | Various drugs that attempt to kill the cancerous cells. Generally used after hormone therapy fails, but recently being tried with hormone therapy. | Generally, treats the cancer throughout the body. | Many have very bothersome side effects, reducing quality of life, while extending its length. |
| High Intensity Focused Ultrasound – HIFU | Prostate tumors are heated via ultrasound waves to cause their death. Ultrasound crosses the rectal wall nondestructively; no needles are used.  FDA approved (2015) for prostate-tissue ablation. | Shorter-term studies show cancer control for localized, intermediate-risk disease is as good as with surgery. Documented side effects are significantly less than with RP or RT. | Reliable studies of outcomes are limited to 5-10 years (as compared to 15-20 years for RP and RT).  If HIFU is used focally, such use elevates the risk of missing MRI-undetectable disease elsewhere in the prostate. |
| Clinical Trial | Clinical trials test new drugs, new combinations of drugs or new anticancer treatment strategies. Trials are available for most stages of prostate cancer including active surveillance. | May get an effective treatment which is not yet available to the general public. Advance medical science. | You may not get the experimental treatment in a placebo-controlled trial. You may experience unpleasant side effects. |
| Hypo-fractionated radiation such as Cyberknife | External beam radiation which is delivered in about 5 high intensity doses. High precision is claimed. Has been used up until now for other than prostate. cancers. | Fewer trips to radiation facility | Long term results still coming in.. |