

GLOSSARY

3DXRT - 3-dimensional external radiation therapy

5-alpha reductase- An enzyme in prostate cells that convert testosterone into dihydrotestosterone (DHT). The prostate cells can only utilize DHT. Certain drugs such as Proscar can prevent this conversion.

AAT- Anti-androgen therapy. The following acronyms all mean the same thing:
ADT- Androgen Deprivation Therapy, AHB-anti-hormone blockade, CAA- complete androgen ablation, CAB- combined androgen blockage or blockade, CAD- complete or combined androgen deprivation, CHD- complete or combined hormone deprivation, CHT- complete or combined hormone therapy, MAA- maximum androgen ablation, MAB- maximum androgen blockade, NAA- neoadjuvant ablation, (hormone therapy before surgery or radiation), NAB- neoadjuvant blockade, TAA- total androgen ablation, TAD- total androgen deprivation, TAS- total androgen suppression, IHT- intermittent hormone treatment. There are no doubt other acronyms for this therapy that mean the same thing.

AAWR - Anti-Androgen Withdrawal Response. Sometimes the cancer will stop responding to the deprivation of androgens. The PSA may start to rise. In some cases, if the hormone suppression is removed, the PSA will drop. The PSA may stay at a low level for as long as six months in some cases.

Abarelix- An antagonist drug that suppresses testosterone. It is equivalent to orchiectomy or castration. Compare agonists Lupron and Zoladex

Ablation- Removal or destruction of a part by surgery, laser beams, or drugs. (L. ab=from, latus= carried)

Acini- (plural of acinus- from Latin for Grape-) The smallest division of a gland or secretory cells surrounding a cavity. There are several acini in the prostate gland that secretes portions of the ejaculate.

Adenocarcinoma- Adeno- is Greek meaning gland, carcinoma is from Greek, karkinos=crab, oma=tumor- The cancer that arises from the prostate gland is an adenocarcinoma, and so is any other cancer that arises from a gland such as breast cancer.

Adjuvant-from Latin, adjuvans=aiding. A treatment or something that assists the primary treatment such as hormone therapy in addition to radiation.

Acid Phosphatase- usually prostatic acid phosphatase (PAP). An enzyme that is produced by prostate cells. It is somewhat similar to PSA but is not nearly as specific. Some doctors still use it as an additional tool.

ADT - androgen deprivation therapy

Adrenal androgens- Male hormones made by the adrenal glands. These hormones may be used by prostate cancer cells just as if they were testosterone. (L. ad = to, ren = kidney, G. andros = man, gennan = produce).

AE- Adverse Event- a disagreeable or unpleasant side effect

AFUD - American Federation for Urologic Disease

AG - aminoglutethemide- A drug that interferes with the production of the adrenocortical hormone. Used sometimes in treating hormone refractory (HRPC) patients

Agonists-from Greek agon, a contest. In drugs, an agonist usually helps or promotes an activity. Lupron and Zoladex are LHRH agonists which stimulates the hypothalamus and pituitary to cause the testes to produce more testosterone. Eventually, the hypothalamus and pituitary ignore the Lupron or Zoladex and shuts down the production of testosterone. An antagonist such as Abarelix causes an immediate suppression of testosterone.

Alpha-blockers- drugs that were originally designed for high blood pressure. They act on smooth muscles such as those in arteries and in the prostate. These drugs are often used for BPH.

Alprostadil- a drug composed primarily of prostaglandin E-1. It is used in drugs used for erectile dysfunction and is found in Caverject, Edex, and MUSE.

AMA-American Medical Association. They have an excellent web site at www.ama-assn.org

Analgesics- Pain killers (from Greek, an = not plus algos = pain.)

Analog or analogue- A synthetic drug or chemical that is similar or a look-alike of another.

Androgens- Usually refers to male hormones such as testosterone or hormones produced by the adrenal glands. (andros from Greek meaning man, gennan meaning to produce).

Aneuploid- Refers to an abnormal cell that does not have the normal 23 pairs of chromosomes. (an=not, eu=good, plo=fold, oid=shape or form.)

Angiogenesis- from Greek, angio=vessel, genesis=birth or generation. Cancers produce substances that force the body to build new blood vessels to feed them.

Antiandrogens-drugs or substances that act to inhibit or prevent the action of androgens. Eulexin or Flutamide, Casodex or Bicalutamide, Nilandron or Nilutamide are synthetic drugs that appear to the prostate cells to be androgens.

Once these drugs are attached to the cell receptor, the actual androgens are blocked from entering the cell.

Antigen-Greek- anti=against, gen-to produce, generate. A protein marker on a cell surface that identifies it as "self" or "non-self". If it detects a "non-self" marker, it can stimulate the production of antibodies.

Apex- The prostate is shaped somewhat like an upside down pyramid. The base is attached to the bladder, the tip or apex is at the bottom.

Apoptosis-(pronounced ahpotosis) Programmed cell death. Most cells in our body have a finite life, then die off and are replaced. Cancer cells do not normally experience apoptosis so they are immortal. (Gr. apo=from, ptosis = dropping.)

Aredia-trade name for Pamidronate Disodium. It is a bone resorption inhibitor. It can help to prevent osteoporosis, a risk for men who are on CHT for extended periods.

Artificial Urinary Sphincter- a device that can be implanted to control urine in severe and chronic incontinence.

ASCO-American Society of Clinical Oncologists. They have an excellent web site at www.asco.org. You can read abstracts and other information on their site.

ASTRO-American Society for Therapeutic Radiology and Oncology

Asymptomatic- Prostate cancer usually causes no pain or symptoms until it has become advanced. Why screening is so important.

AUA- American Urological Association-They have a web site at www.auanet.org They also publish the Journal of Urology and place the Journal on the web at www.jurology.com but it is available only to members or subscribers to the Journal of Urology. Their Journal is one of the most expensive of all journals. In the year 2000, it costs \$401 for a year's subscription. It goes up every year.

Autologous-Greek- auto=self, logous=word, reason. Means something that has its origin within an individual. It often refers to a blood donation made by a person before surgery so that his own blood can be used if necessary.

Benign- Harmless, opposite of malignant. (L. benignus= mild).

BPH- Benign prostatic hyperplasia or hypertrophy. An enlargement of the prostate due to excessive growth of normal cells.

Bicalutamide-trade name is Casodex- an antiandrogen similar to Flutamide (Eulexin) and Nilutamide (Nilandron).

Biopsy- A small sample of the cells, usually taken with a needle. The cells are examined by a pathologist to determine if they are cancerous.

Blood Chemistry- the many blood tests that are necessary. Abnormal values can indicate many different diseases.

bNED- biochemical No Evidence of Disease

BPSA- Beginning PSA when first detected

B/P- Blood Pressure

Bone Scan- An x-ray test that can detect cancer that has invaded the bones. Cancer often metastasizes to the bones. A radioactive substance is injected into the blood stream. It tends to migrate to any bone metastases or "hot spots" which can be seen on the x-ray film. At one time every patient who was diagnosed with prostate cancer was automatically given a bone scan. In most cases it is a waste of money. This test is valuable only in those with advanced prostate cancer. Bone scan may also be called radionuclide scintigraphy.

bRFS-biochemical relapse-free survival

Brachytherapy- Usually refers to implants of radioactive seeds. (brachy is Greek for short). Also called interstitial brachytherapy.

BTW- short hand for By The Way on the Internet

BUN- a blood urea and nitrogen test to check kidney function.

Bx- shorthand for biopsy.

CAB- Combined Androgen Blockade- another one of the many acronyms that means the same as Combined Hormone Therapy (CHT)

CaP- cancer of the prostate

Cancer- from Greek karkinos meaning crab. The abnormal and uncontrolled growth of cells

Carcinoma- from Greek, carcin from karkinos=crab and oma=tumor.

Casodex, flutamide and nilutamide- drugs that prevent the prostate cells from utilizing the androgenic hormones.

Castration-suppression of testosterone by surgical removal of the testes. It can also be done medically by usage of Abarelix, Lupron or Zoladex. Medical castration is reversible if the person chooses to go on intermittent therapy or if

the cancer should go into remission. Orchiectomy is a less harsh way of saying castration.

Catheter- A tube such as a Foley catheter that is used to drain urine from the bladder.

Cat Scan-(CT Scan)- Computerized Axial Tomography- (tomo=Greek for incision, graphien is to write)- combined images from an x-ray to produce cross sectional or 3 D images of internal organs and structures.

CGA- Chromagranin A, a blood test that can indicate small cell prostate cancer.

cGMP-cyclic Guanosine Monophosphate- A chemical that is involved in erections. Phosphodiesterase 5 (PDE 5) breaks down cGMP. Viagra is a PDE 5 inhibitor.

cAMP-cyclic Adenosine Monophosphate- helps to relax the cavernosal bodies to create an erection when Prostaglandin E1 is injected.

CHB- Complete Hormone Blockade-

CHB2- CHB with 2 drugs such as Lupron and Casodex

CHB3- CHB with 3 drugs such as Lupron, Casodex and Proscar

Chemoprevention- The use of a pharmaceutical or other substance to prevent the development of cancer.

Chemotherapy-The use of drugs or chemicals to kill cancer cells.

Chromosomes- from Greek chroma=color and soma=body. The chromosomes are microscopic thread like bodies in the nucleus of the cell. They contain all of the genes and DNA information of the person. Humans have 23 pairs in each cell, other species of animals and plants each have different numbers of chromosomes. They are called chromosomes because they were first discovered by using colored dye to stain them.

CHT-Combined Hormonal Therapy or Treatment

Cialis- an oral drug for erectile dysfunction- it is a phosphodiesterase inhibitor, similar to Viagra.

Clinical Stage (CS)- An estimate made by the doctor based on the PSA, digital rectal exam (DRE), ultrasound, biopsy and other tests. The actual stage can only be determined by a pathologist after the prostate is removed.

Cohort- A cohort can refer to a group of people such as those who are taking part in a trial or whose morbidity and mortality is being studied and analyzed.

Corpora Cavernosa- from Latin, corpora=bodies, cavernosa=hollow spaces. The two penile bodies on the sides of the penis that fills with blood to cause an

erection. Erectile tissues such as those in the penis, the clitoris and nipples have hollow spaces which fill with blood when erect.

Corpus Spongiosum- the spongy tissue that surrounds the urethra which fills with blood during an erection.

Cryosurgery, cryoablation or cryotherapy- Using probes to freeze portions of the prostate. (G. krymos or kryos = cold).

CUPS- Acronym for cancer of an unknown primary site.

Cytokines-from Greek kytos=cell and kinein=to move- growth factors important to cellular function.

Cystoscope- from Greek kystis=bladder and skopein=to examine. An instrument that can be inserted through the urethra into the bladder.

DDET- Acronym for Detection, Diagnosis, Evaluation and Treatment.

DES- Diethylstilbestrol, an estrogenic hormone that can counteract testosterone. Sometimes used to treat advanced prostate cancer. It is less expensive than many other drugs, but it may cause heart problems in some men.

DHT-Dihydrotestosterone. When testosterone is exposed to the 5-alpha reductase enzyme, it is converted to DHT in the prostate. There are drugs such as Proscar that can inhibit 5-alpha reductase so that testosterone is not utilized.

Diagnosis-from Greek dia=through and gignoskein= to discern. The use of scientific methods, skills and tools to establish the cause and nature of an illness.

Differentiated- When the sperm and egg come together to form a complete cell, cell division begins immediately. As more cells are created from the original, they begin to become different or to differentiate into cells that form the various parts and organs of our body. When cells first become cancerous, they may look very much like the ordinary cells of our body, or well differentiated. They may then become less like normal cells or moderately differentiated. The more aggressive cancer cells are usually poorly differentiated and may not look anything at all like a normal cell. See Gleason Score.

Diploid- Refers to the normal cell which has 23 pairs of homologous chromosomes, or two full sets of 23 each. (di=two.) Homologous means similar, such as your two hands are opposite but similar.

Docetaxel- trade name Taxotere. A chemotherapeutic drug that has shown promise in both prostate and breast cancer treatments. It is similar to Taxol.

Double-blind- a clinical trial in which neither the physician or the patient knows whether they are receiving the actual drug or a placebo.

Doubling time- the time that it takes a cancer to double in size. The PSA correlates fairly closely to the cancer activity. So if the PSA doubles in a given period, then we can be fairly sure that the cancer has doubled.

DRE-digital rectal exam- the peripheral portion of the prostate can be felt through the rectal wall. About 70% of prostate cancers originate in this area. Cancer often forms a relatively hard lump because of the tightly packed cells. An experienced doctor can feel any lumps or abnormalities.

Dysuria- from Greek dys=bad, painful, difficult or disordered and uria=urine. Painful or difficult urination which may indicate cystitis, urethritis, urinary infection, or several other diseases.

Dx- shorthand for diagnosis

ED- Erectile Dysfunction-a nice way of saying impotence

Edema- A swelling or accumulation of fluids.

Emcyt-the brand name of estramustine phosphate, a chemotherapy drug used for advanced prostate cancer.

Endogenous- from Greek endon=within and gennan to produce- something that is produced within the cell or body.

Enzyme- from Greek en=in and zyme=leaven or yeast- An organic catalyst that is capable of inducing chemical changes in other substances without being changed themselves. They are complex proteins. Most enzymes have the suffix -ase added to the name or part of the name of the substance on which it acts. There are many different enzymes.

Estrogen- The female hormones produced by the ovaries. (G. oistros = mad desire, such as estrus in animals, gennan= to produce).

Erectile Dysfunction-a less harsh way of saying impotence.

Eulexin- brand name for flutamide.

External Beam Radiation Therapy or XRT- X-ray treatments, usually a few minutes each day for several weeks. May also be called teletherapy since the beams have to travel some distance. See brachytherapy.

F.A.C.P., F.A.C.S. Fellow of American College of Physicians, Surgeons.

FACT- Functional Assessment of Cancer Therapy. A Quality of Life measurement scale. There are several FACT scales for different types of cancer such as FACT Prostate and FACT Breast. The scales consist of questionnaires. The patient answers several questions regarding Physical Well-Being, Social/Family Well-Being, Emotional Well-Being and Functional Well-Being. Each question is given a score on a scale of 0-4.

False Negative- No test is absolute. Occasionally a test will indicate a negative result when in fact, it should indicate a positive result.

False Positive-A test that indicates a positive result when in fact it should indicate a negative result.

Finasteride-trade name is Proscar, a 5 alpha-reductase inhibitor. It prevents the conversion of testosterone into dehydrotestosterone (DHT), the form of testosterone that cancer cells favor.

Flare Reaction- An initial increase in the production of testosterone caused by the LHRH agonists. This increase can be dangerous if a person has advanced cancer. The flare can be prevented by giving the patient one of the anti-androgens for about a week before starting the Lupron or Zoladex.

Female Sexual Arousal Disorder (FSAD)- The persistent or recurrent inability to attain or maintain an adequate vaginal lubrication/swelling response of sexual excitement. FSAD is often accompanied by decreased sexual desire and/or inhibited orgasm.

Female Sexual Dysfunction (FSD)- Physical and mental difficulties with arousal, lack of desire, fear of intimacy and overactive sexual activity. Difficulties may be persistent or happen just occasionally.

Foley Catheter- A tube that is inserted through the penis into the bladder to drain the urine. It has a small balloon on the bladder end that is inflated when in place to anchor it. After a radical prostatectomy, the Foley is left in place for up to two weeks while the urethra heals.

Frozen Sections- During a radical prostatectomy, the lymph nodes may be removed and rushed to a pathologist who freezes them and checks for cancer. If cancer is present, the operation is usually halted because the cancer has already escaped the prostate.

FWIW- for what it is worth

FYI- for your information

GG- Gleason Grade

Gleason Score- A cancer is usually made up of cells at several different stages of development and differentiation. Dr. Gleason set up a classification of five different grades that can help determine the type of cancer. He looked at the two most prevalent types of cells and gave each type a grade of 1 to 5 then added the two grades for a final score. A tumor with well differentiated cells would have a score of 2, 3, or 4 and be classified as low grade. A tumor with moderately differentiated cells would be scored as a 5, 6 or 7 and would be a middle or moderate grade. A tumor with poorly differentiated cells would be scored as an 8, 9 or 10 and would be a high grade tumor. The high grade tumors are usually aggressive and life threatening.

Goserlin Acetate-trade name Zoladex, a LHRH agonist that causes the testes to initially increase testosterone production, but eventually cause the suppression of testosterone. It is essentially a medical castration.

GS- Gleason Score

Gynecomastia- Development of large breasts in men, usually as a result of hormone treatments. The breasts may become very tender and sore and may even secrete milk. The man may have to have X-ray treatments or surgery for breast reduction. (G. gyne = woman, mastos = breast).

Haploid- means having a single set of chromosomes, such as the single set of 23 in the sperm and the single set of 23 in the ovum. Two haploid sets of chromosomes are required to make a complete cell. (haploos=simple.)

HC- Hydrocortisone-An important hormone produced by the adrenal glands. There are dozens of synthetic analogues for many different therapies.

HDR- an acronym for High Dose Radiation or temporary seed implants.

HGPIN- Acronym for high grade prostate intraepithelial neoplasia. A precursor of prostate cancer. HGPIN is more prevalent in African Americans. It is susceptible to androgen ablation.

Histology- from Latin historia=observation and logus=word, reason. The microscopic study of tissue and cells.

HMO- Health Maintenance Organization

Hormone-from Greek hormon=urging on. A substance that originates in a gland, organ or body part. There are many different hormones produced in the body. Many of them cause an action to be performed, others have an inhibitory action. The actions may be roughly compared to an accelerator and brakes of an automobile.

Hot Flash- the sudden sensation of warmth in the face, neck and upper body; a side effect of many forms of hormone therapy. These are the same sensations that affect women who are going through menopause.

Hormone Refractory PCa (HRPC)- prostate cancer that has stopped responding to CHT.

HRPC- Hormone Refractory Prostate Cancer

Hx-short hand for Patient history.

Hypercalcemia- abnormally high concentrations of calcium in the blood, indicating leeching of calcium from bone (tumors raise serum calcium levels by destroying bone. Symptoms of hypercalcemia may include drowsiness, lethargy, headaches, depression or apathy, irritability, confusion; weakness, muscle flaccidity, bone pain, pathologic fractures; signs of heart block, cardiac arrest in systole, hypertension; anorexia, nausea, vomiting, constipation, dehydration, polydipsia (excessive thirst); renal polyuria, flank pain, and eventually, azotemia (excess of urea or other nitrogenous substances in the blood). Hypercalcemia is sometimes the ultimate cause of death.

Hyperplasia- hyper=Greek for over, excessive, above, -plasia=to form. It is usually an enlargement of an organ or tissue because of an increase in the number of cells in that organ or tissue. This is the preferred term for BPH

Hyperthermia- treatment that uses heat, for example, heat produced by microwave radiation to treat BPH

Hypertrophy- hyper is Greek for over, above, excessive, -trophy means nourishment. This term is often used for BPH.

IAS-Intermittent Androgen Suppression

IHT-Intermittent Hormone Therapy

IIEF-International Index of Erectile Function- A questionnaire to help determine sexual dysfunction.

Imaging- a technique, method, instrument or tool such as an x-ray that allows one to see something which would not normally be visible.

IMHO- In my humble opinion

IMNSHO- In my not so humble opinion

Immune System- the tissues, organs, and physiological processes which protects a person or animal from the effects of foreign materials such as proteins,

bacteria, viruses, cancer cells, and other things which might harm person or animal

Implant-a device that may inserted into the body such as a radioactive seed, a penile implant or a breast implant

Impotence- the inability to have or to maintain an erection. Erectile Dysfunction (ED), a more euphemistic term, is now preferred. There are several methods to treat ED

Informed Consent- permission to proceed given by a patient after being fully informed of the purposes and potential consequences of a medical procedure

Interferon- a body protein that affects antibody production and can modulate (regulate) the immune system

Interleukin- a blood protein that helps fight infection and cancer

Incidental cancer- Type A, or T1a, a small foci of cancers that may be discovered incidentally during a TURP or as a result of a PSA.

Incontinence-The loss of urinary control- It may be just a few drops at times or can be severe. If severe, there are several methods to control it.

I¹²⁵- Iodine 125, radioactive seeds used for brachytherapy.

Indolent or Latent cancers- forms of prostate cancer that are usually slow growing and are little or no threat. Unfortunately, we have no good way to determine which ones are harmless pussy cats and which ones may become deadly tigers.

Interstitial Brachytherapy- The implantation of radioactive “seeds” in the prostate. (Interstitial = means placed within the interstices or spaces within an organ, brachy is Greek for short since the radiation needs only travel a short distance).

IPSS- International Prostate Symptom Score, a list of BPH symptoms. It is similar to the AUA symptom score questionnaire. This questionnaire is usually filled out before treatment, then answered after treatment to determine any improvement.

IR¹⁹²- The very potent radioactive source for High Dose Radiation or temporary seed implants.

IV- Intravenous

JAMA-Journal of the American Medical Association-they have a web site with all of the Journal articles at <http://jama.ama-assn.org/>

Kegel Exercises- Exercises that help strengthen the pubococcygeal muscles to control incontinence. As you are urinating, try to determine which muscles that are used to stop in midstream. Exercising these muscles several times a day can improve continence.

Ketoconazole- trade name is Nizoral. It is a drug that was originally used for toe nail fungus and other fungal diseases. It is also be used in dandruff shampoos. It is often used as the next therapy after a man becomes hormone refractory. In high doses (400mg every 8 hours) it can shut down the adrenal gland cortex, eliminating its production of androgenic hormones. It is usually used with a LHRH agonist such as Lupron or Zoladex. Hydrocortisone (HC) tablets must be taken to replace the HC that the adrenal cortex also stops producing; HC is essential to life and must not be stopped suddenly.

Leuprolide Acetate- Lupron, a synthetic LHRH agonist.

LHRH- Luteinizing hormone-releasing hormones help regulate the blood level of testosterone by acting on the hypothalamus and pituitary. The LHRH agonists, Lupron and Zolodex, are synthetic analogues of the body's LHRH. The synthetic Lupron and Zolodex keep telling the hypothalamus to cause the testes to produce more and more testosterone. Eventually the pituitary ignores the signals and completely shuts down the production of testosterone. These drugs are equivalent to surgical castration.

LNCap- a cell line of human prostate cancer used in lab studies.

Lymph Nodes- Rounded bodies found in the lymph system. The lymph system is similar to the venous system of vessels. The lymph nodes filters out bacteria and other foreign materials from the lymph fluid. They often trap migrating cancer cells.

MAB- Maximum Androgen Blockade- CHT

MAD- Maximum Androgen Deprivation

M^2 - This means area square meter. Since we are not all the same, drugs often have to be tailored to the person, especially so in some chemotherapeutic drugs. A 150 pound man might not need the same amount of a drug that would be given to a 300 pound man.

Magnetic Resonance Imaging (MRI)- the use of a large machine to use magnetic resonance with atoms in body tissues to produce distinct cross-sectional and even 3D images of internal organs and other body structures. MRI can be useful in staging prostate cancer.

Malignant- A tumor that is cancerous as opposed to one that is benign. (from Latin malignus, of a bad kind).

Margins The amount of tissue that is removed beyond the prostate capsule. It is desirable to remove as much tissue outside the prostate as possible so that it will include any extra capsular extension (ECE). In some men there is very little margins possible, especially between the peripheral portion of the prostate that is adjacent to the rectum.

Metastasis- The spread and growth of a malignant tumor. Plural is metastases. (Greek meta = beyond or over, stasis = stand).

Medical Oncologist- a physician who specializes in the treatment of cancer.
Metastron-the trade name of strontium 89, a radioactive substance often used to treat bone pain.

Monoclonal- formed from a group of identical cells.

MUSE- is an acronym meaning Medical Urethral System for Erections. It is a drug made from alprostadil, or PGE-1. It is a small pellet that is inserted into the urethra. It dissolves and is absorbed into the corpora cavernosa to create an erection.

Nadir- the lowest point reached, for instance, the lowest PSA value.

Necrosis- from Greek, nekrosis=state of death. The death of areas of tissue or bone surrounded by healthy tissue.

NED- No evidence of disease. This may be the good news from a pathologist who examines a biopsy or a removed prostate.

Neoadjuvant Hormone Treatment (NHT) This is the practice of starting the patient on anti-androgen treatments before the major treatment such as surgery, radiation, brachytherapy or cryotherapy.

Neoplasia- a new and abnormal formation of a growth or tumor.

Nerve Sparing- there are nerves that lie alongside the prostate that control erections. It is possible to peel these nerves away from the prostate and "spare" them unless it appears that they may have been invaded by the cancer.

NHB-Neoadjuvant Hormone Blockade

Nilutamide- trade name Nilandron- an androgen that is similar to Flutamide and Casodex.

Nocturia-the need to get up frequently at night to urinate.

NPV, PPV, FNPV, FPPV- Negative Predictive Value, Positive Predictive Value, False Negative Predictive Value and False Positive Predictive Value. There are no tests that are absolute. Quite often a test such as a PSA test may indicate

cancer when there is only BPH, or PSA may be absent when there is actually cancer present. In cancer, and many other aspects of life, there are no rules.

OCD- Organ confined and specimen confined -“Organ-confined” means its within the anatomical borders of the prostate, i.e., the tumor does not penetrate through the capsule. “Specimen-confined” means the tumor does not extend to the surface of the tissue (the specimen) that the surgeon removed.

Orchiectomy-from Greek, orchis=testicle and -ektome= excision. A less harsh word that means castration.

Osteoblast- a cell that forms bone.

Osteoclast- a cell that breaks down bone.

Osteolysis- the destruction of bone.

PAACT- Patient Advocates for Advanced Cancer Treatments- A patient support group. Call 616-453-1477

Paclitaxel- trade name Taxol. A chemotherapeutic drug that has shown some promise in both prostate and breast cancer treatments.

Palliative- from Latin palliates=cloaked. An agent that serves to relieve or ease pain without being curative.

Palpable- from Latin palpabilis= a stroke, touch. Capable of being touched for examination such as the prostate during a DRE

Pd¹⁰³- Palladium 103- Radioactive seeds.

Partin Tables- Alan Partin used retrospective data from thousands of men who had been treated for prostate cancer to devise the Partin tables. Using the person's PSA, clinical stage and Gleason Score, the tables can help determine a person's risk of having organ confined disease and seminal vesicle or lymph node involvement.

Pathologist- a physician who specializes in the examination of biopsied and other tissues and blood samples.

PC or PCa- prostate cancer

PDE-5 - Phosphodiesterase 5, an enzyme that breaks down cGMP which is needed for an erection. Viagra, Cialis and other drugs are inhibitors which counteract the PDE 5.

Perineal- the area between the scrotum and anus.

Perineal Prostatectomy- the surgical removal of the prostate through an incision in the perineal area.

PGE-1 - Prostaglandin E1- one of the drugs used for penile injections to cause an erection

PIN- Prostatic Intraepithelial Neoplasia. It can be low grade, intermediate or highgrade (HGPIN). HGPIN is thought to be a precursor of prostate cancer.

Placebo- from Latin, I shall please- In many patients, if they think they are getting an effective drug or treatment, they will get better, even if it is a sugar pill. It is a form of safe but non-active treatment frequently used as a basis for comparison with pharmaceuticals and trials in research studies.

Ploidy: a term used to describe the number of sets of chromosomes in a cell; see also diploid and aneuploid

PNI- perineural invasion- cancer that has migrated into the prostatic nerves

Polyploid- Refers to a cell that may have several sets of chromosomes. (poly=many.)

Positive- the term used to describe a test result which shows the presence of the substance or material for which the test was carried out; for example, a positive bone scan would show signs of bone metastases

Prognosis-from Greek=foreknowledge- the patient's potential clinical outlook based on the status and probable course of his disease; chance of recovery

Proscar- brand name of finasteride

ProstaScint- a test using monoclonal antibodies that have an affinity for prostatic tissue (in particular malignant tumors). It is combined with a radioactive material (Indium 111) and is injected intravenously and allowed to "settle" for 3 days. During this time the radiolabelled antibodies attach to prostate cancer sites. The person is then scanned with a gamma detector camera. Any site that has an accumulation of radioactive emissions can be suspect for cancer sites.

Prostate- A walnut sized gland that is immediately below the bladder. It surrounds the urethra. It is a musculo-glandular organ and manufactures almost all of the ejaculate, then squeezes down to force it out during ejaculation.

Prostatectomy- a simple prostatectomy may be a surgical removal of part of the prostate such as reaming out the urethra for BPH. A radical prostatectomy is the complete removal of the prostate.

Prosthesis- a man-made device used to replace a normal body part or function

Protocol- a precise set of methods by which a research study is to be carried out- it may also be a treatment regimen.

PSA-Prostate Specific Antigen, a substance that is produced by the prostate cells. It is usually elevated if prostate cancer is present.

PSA II- also free to total PSA- a test that measures the amount of free PSA to the total PSA. If the PSA is less than 10ng/ml and the free is greater than 20% then the man may not need to have a biopsy. He may not have cancer.

PSMA-Prostate Specific Membrane Antigen

PSA Velocity (PSAV) the rate at which PSA values increase

Quality of Life-(QOL) an evaluation of health status relative to the patient's age, expectations, and physical and mental capabilities. There are several Functional Assessment of Cancer Therapy (FACT) questionnaires that can help evaluate the patient's QOL while undergoing a specific therapy.

Radical- in a surgical sense a radical treatment is directed at the cause of a disease with a curative intent. A radical prostatectomy is the complete removal of the prostate with the intent to cure the problem.

Randomized-the process of randomly assigning patients to different forms of treatment in a research study then comparing results in each arm.

Refractory- resistant to therapy; e.g., hormone refractory prostate cancer (HRPC) is resistant to forms of treatment based on the use of hormones.

Regression- reduction in the size of a single tumor or reduction in the number and/or size of several tumors

Remission- the real or apparent disappearance of some or all of the signs and symptoms of cancer. It may be a period, temporary or permanent, during which a disease remains under control, without progressing.

Resectoscope- an instrument that can be inserted through the urethra and used to cut out tissue, usually from the prostate.

Response- a decrease in PSA or other indicators that the disease is responding to the treatment

Retention- the inability to completely empty the bladder

Retropubic Prostatectomy- the surgical removal of the prostate through an incision in the abdomen

RP-Radical Prostatectomy

RPP- Radical Perineal Prostatectomy

RRP- Radical Retropubic Prostatectomy

RT-PCR- reverse transcriptase-polymerase chain reaction; a blood test that can detect cancer cells circulating in the blood stream.

Rx- shorthand for prescription- from Latin to recipe.

Salvage- a procedure intended to "rescue" a patient following the failure of a prior treatment; for example, a salvage prostatectomy would be the surgical removal of the prostate after the failure of prior radiation therapy or cryosurgery

Screening- as used in this book to test men for prostate cancer.

Semen-from Latin=seed- the ejaculate that includes the sperm.

Seminal- relates to the semen; for example, the seminal vesicles are glands at the base of the bladder. They are connected to the prostate and vas deferens which brings the sperm up from the testes. Note: Here are some other meanings of seminal from the American Heritage Dictionary-Of, relating to, or having the power to originate or be creative. Also something that is highly influential in an original way, constituting or providing a basis for further development.

Sensitivity- the probability that a diagnostic test can correctly identify the presence of a particular disease assuming the proper conduct of the test; specifically, the number of true positive results divided by the sum of the true positive results and the false negative results; see Specificity.

Specificity- the probability that a diagnostic test can correctly identify the absence of a particular disease assuming the proper conduct of the test; specifically, the number of true negative results divided by the sum of the true negative results and the false positive results

Stage- a term used to define the size and physical extent of a cancer

Staging- the process of assigning a stage to a cancer in a patient by using the available diagnostic information. It is used to help determine appropriate therapy; there are two staging methods: the Whitmore-Jewett staging classification (1956) and the more detailed TNM (tumor, nodes, metastases) classification (1992) of the American Joint Committee on Cancer and the International Union Against Cancer.

Stricture-scarring as a result of a procedure or an injury that constricts the flow of a fluid; for example, a urethral stricture would restrict the flow of urine through the urethra

Strontium-89: an injectable radioactive product which is used to relieve bone pain in some patients.

Subcapsular-under the capsule; for example, a subcapsular orchiectomy is a form of castration in which the contents of each testicle is removed but the testicular capsules are then closed and remain in the scrotum

Suprapubic: Refers to that region of the lower abdomen, between the navel and pubic bone.

Suture- surgical stitching used in the closure of a cut or incision

Symptom- Any perceptible change in the body or its functions that may indicate disease. Symptoms may be classified as objective or subjective.

Systemic- pertaining throughout or to the whole body

Taxol- trade name for Paclitaxel. A chemotherapeutic drug that has shown promise in both prostate and breast cancer treatments.

Taxotere- trade name for Docetaxel. A chemotherapeutic drug that has shown some promise in both prostate and breast cancer treatments. It is similar to Taxol.

Testosterone- the male hormone or androgen which comprises most of the androgens in a man's body; chiefly produced by the testicles; may be produced in tissues from precursors such as androstenedione from the adrenal glands

Transperineal- through the perineum

Transrectal- through the rectum

Transurethral- through the urethra

TRUS- Transrectal Ultrasound- a method that uses echoes of ultrasound waves to image the prostate by inserting an ultrasound probe into the rectum. It is commonly used to visualize prostate biopsy procedures

Tumor- an abnormal tissue growth that can be either benign or malignant

TUIP-Transurethral Incision Prostate- for BPH

TUMT- Transurethral Microwave Thermotherapy for BPH

TUNA- Transurethral Needle Ablation for BPH

TURP: Transurethral Resection of the Prostate- a surgical procedure to remove tissue obstructing the urethra; the technique involves the insertion of an instrument called a resectoscope into the penile urethra, and is intended to relieve obstruction of urine flow due to enlargement of the prostate - Commonly known as the "roto roter" operation.

Tx -shorthand for treatment.

Ureter- an anatomical tube which drains urine from one of the two kidneys to the bladder

Urethra the tube that drains urine from the bladder through the prostate and out through the penis

Urinalysis- Microscopic examination of the urine.

Urinary System- the group of organs and their interconnections that permits excess, filtered fluids to exit the body, including (in the male) the kidneys, the ureters, the bladder, the urethra, and the penis

URL- on the Internet it is the Universal Resource Locator.

Urologist-a doctor trained first as a surgeon who specializes in disorders of the genitourinary system

UTI: Urinary Tract Infection- an infection identifiable by the presence of bacteria (or theoretically viruses) in the urine; may be associated with fever or a burning sensation on urination

Vas Deferens- tubes through which sperm travel from the testes to the prostate prior to ejaculation

Vasectomy-an operation to make a man sterile by cutting the vas deferens, thus preventing passage of sperm from the testes to the prostate

Vesicle- a small sac containing a biologically important fluid such as the seminal vesicles.

Viagra- a phosphodiesterase inhibitor oral drug that can be used for erectile dysfunction.

White blood cells(WBC): Those blood cells used to fight infection or inflammation.

Weights and volumes-

1000 ml = 1 liter or 2.1133 pints or 33.815 oz.

1 liter = 1.0567 qts.

1 qt. = 2 pints or 32 oz.
1 pint = 453.59 grams or 16 oz.
250 ml = 8.454 oz.
8 oz. = 236.58 ml
29.57 ml = 1 oz.
28.35 gms. = 1 oz.
1 ml = .2705 drams
1 ml = .03381 oz.
1 gm = 1.043 ml
12 ml = 12.5 gm

WW- Watchful Waiting- a practice use by some who have minimal types of prostate cancer

WWW- on the Internet- World Wide Web-

YO- Short hand for years old.

Zoladex- Goserlin Acetate- a LHRH agonist