AN EXAMPLE OF MAINTAINING PROSTATE CANCER STATISTICS
by CHARLES C. MAACK – Prostate Cancer Advocate/Activist

Prostate Cancer diagnosed November 1992 at age 59 with PSA 6.3ng/ml **RADICAL PROSTATECTOMY** December 16, 1992 at Wesley Medical Center, Wichita, Kansas, by Urologist from the Urology Department of the Wichita Clinic..

Biopsy prior to surgery gave a Gleason score of 5. Pathology after surgery used 28 slides to review **101.2g(!)** prostate gland measuring 4.5cm anterior to posterior, 6.5cm transversely, and 4.7cm from distal to proximal surgical margins (**NOTE: In retrospect, this size gland should never be administered surgery or radiation without first reducing to at least 55g)**. Slides determined Gleason score of 7 (3+4), pathological staging T3aNOMX which equates to T3a-extraprostatic extension (in my case, into fatty tissue) without seminal vesicle invasion, NO-no lymph node involvement, MX-unable to determine distant metastasis.
Three slides covering four lymph nodes found no carcinoma
Four slides covering seven other lymph nodes found no carcinoma
Slide of seminal vesicle found no carcinoma
Two slides covering sections of the vas deferens found no carcinoma
No urethral involvement was identified
However, the posterior and bilateral distal portions of the gland showed positive margin involvement into fatty tissue.
Both neurovascular bundles excised (Little wonder, see "note" above. It is unlikely neurovascular bundles can be saved when attempting to extract such an enlarged prostate!).

Following recovery from the surgery, from February to April of 1993 I received 37 treatments of **EXTERNAL BEAM RADIATION** at Wesley Medical Center Radiation Department five days a week. After the radiation treatments my PSA reading was 0.1ng/ml and subsequent bone and CT scans were negative.
For the next three years scans were negative and PSA reading remained less than 0.1ng/ml.

In April 1996 my PSA reading was 0.25ng/ml. By November 7, 1996 my PSA reading had risen to 0.81ng/ml. On November 20, 1996 began **ANDROGEN DEPRIVATION THERAPY (ADT2)** with a LUPRON injection every three months, accompanied by a daily 50mg CASODEX pill, for what was considered a total testosterone blockade (later learned it was not). After turning 65 in December 1997 and having to switch to Medicare

as my primary coverage and no military coverage except for those medications a military pharmacy had in it's formulary, I was no longer covered for the CASODEX pill and the military would not stock it or provide it to me because of it's expense. Fortunately, the HMO I signed up to provide me supplemental insurance for what Medicare did not pay said they would pay for this oral cancer medication. However, in late 1999 they said they had made a mistake, and would no longer pay for that medication. I then was able to get NILANDRON from Brooke Army Medical Center in San Antonio, TX and took that medication until late in 2000 when, though continuing Lupron (**ADT**), I discontinued taking any pill, so went from ADT2 to only ADT.

Earlier, on May 8, 2000, 3 years and 6 months with ADT2, I had a DEXA bone mineral density interpretation done to see if the androgen deprivation had effected that density. The result was Lumbar Spine: BMD 1-286, T Score 0.4, Z Score 0.1. Total Average Femur: BMD 0.984, T Score –0.8, Z Score –0.5. Interpretation of data: There was no evidence of osteopenia or osteoporosis.

Since by October 23, 2001 and five years of ADT2/ADT my PSA had not risen beyond 0.lng/ml, I requested an ultra-sensitive 3rd generation PSA reading to get a more accurate marker of any PSA in my system. The result was a reading of 0.01ng/ml which, by several prostate cancer authorities, is considered in the range of "undetectable" PSA. I followed this having a testosterone serum reading done on November 6, 200l to also get a marker for my current testosterone level . The result was a reading of 33 ng/dl, which is above what is considered the castration level of <20 ng/dl. This would indicate that I likely had/have an androgen dependent prostate cancer. (These tests should have been ordered by my physician five years ago after my first month of ADT2! It was only after my own research into procedures to be followed to ensure the ADT is working that I knew this should be necessary).

I now had transferred from my urologist to an oncologist at the Cancer Center of Kansas (CCK) (telephone 316-262-4667) who agreed with my reasoning that it was time to "test the waters." **WATCHFUL WAITING:** I discontinued androgen deprivation therapy (last injection August 2001). He directed that in view of the necessity to now keep a very close check on my level of PSA, I monitor my PSA and testosterone levels monthly. Should my PSA begin to rise, I should return to androgen deprivation Lupron injections and, if necessary CASODEX.
12/17/01 Normal PSA test <0.l ng/mL, Testosterone 37 ng/dL

01/14/02 Normal PSA test <0.l Testosterone 38
02/11/02 3rd Gen. PSA test 0.01 Testosterone 52
03/11/02 Normal PSA test <0.1 Testosterone 30
04/15/02 Normal PSA test <0.1 Testosterone 45
05/13/02 Normal PSA test <0.1 Testosterone 24
The 5/13/02 PSA test was supposed to be a 3rd Generation test but lab failed to realize that. I decided at this time I will just get quarterly 3rd Generation PSA tests until such time that I see any change in the readings.
05/21/02 3rd Gen PSA test 0.04ng/ml (figured this may be a miss-reading)
06/10/02 Another Dexa Bone Mineral Density test. Result: Compatible with normal bone density at each site examined (T-scores all above -1.0 – No evidence of osteoporosis).
08/20/02 3rd Gen. PSA test <0.01ng/ml Testosterone 122ng/dl **(Please note: Having been kept on Lupron continuously for 5 years, this was the highest level my testosterone ever returned. If a patient's PSA level maintains at <0.05ng/ml and testosterone level near or below 20ng/dl for at least one year, the patient should be taken off LHRH agonists and antiandrogens as intermittent therapy to give one's testosterone level a chance to return to near normal. Keeping a patient on continuous LHRH agonist for more than two years will likely result in little return of testosterone.)**
08/21/02 Bone Scan: No evidence of metastatic disease.
11/08/02 was supposed to be 3rd Generation but came back as a normal reading of <0.1ng/ml Testosterone 98ng/dl

AS OF DECEMBER 16, 2002, IT HAS BEEN TEN YEARS SINCE INITIAL RADICAL PROSTATECTOMY.

02/04/03 3rd Gen. PSA test 0.01ng/ml Testosterone 89ng/dl
04/29/03 3rd Gen. PSA test 0.02 Testosterone 95
06/12/03 3rd Gen. PSA test 0.04 No testosterone result
With this increase to 0.04ng/ml my oncologist wanted to resume Lupron. I requested we wait another two months.
08/05/03 3rd Gen. PSA test 0.05ng/ml Testosterone 88ng/dl
Oncologist agrees that we wait for more significant progression before recommending return to any treatment.
11/06/03 3rd Gen. PSA test 0.13ng/ml Testosterone 87ng/dl
RETURN TO ANDROGEN DEPRIVATION THERAPY (ADT)
(I saw this as a ten-fold rise and at the time thought it better to return to androgen deprivation therapy)

11/18/03 began two weeks of Casodex 50mg w/Proscar 5mg to prevent a biochemical flare before returning to Lupron. (With Congress enacting the law that retired military members and their dependents are entitled to military insurance coverage for life (Tricare-for-Life), I became covered for all medications, thus Casodex, Proscar, Avodart, etc. would now be covered by Tricare-for-Life.)
12/04/03 began Lupron 4-month injection and discontinued the Casodex and Proscar.
12/5/03 after reading a presentation by Dr. Charles "Snuffy" Myers, a nationally recognized oncologist specializing in prostate cancer treatment, I added 10mg Lycopene, a powerful antioxidant that causes prostate cancer cells to self-destruct, and 1000mg Fish Oil (Omega-3 fatty acid), a very powerful factor for general health as well as having a major impact on the evolution of prostate cancer
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AS OF DECEMBER 16, 2003, IT HAS BEEN ELEVEN YEARS SINCE INITIAL RADICAL PROSTATECTOMY.

2/15/04 From an Email from Dr. Stephen B. Strum, another nationally recognized oncologist who specializes only in prostate cancer to a patient recommending Lycopene at 15mg twice daily, I increased my intake to that level this date.
2/27/04 **PSA <0.01ng/ml, Testosterone 26ng/dl.**
Since testosterone has not yet reached "castrate" level of <20ng/dl,
3/2/04 added Casodex 50mg daily.
3/25/04 At appointment with oncologist discussed the Casodex addition and my interest in adding dutasteride (Avodart) to bring down testosterone level to <20ng/dl. Oncologist reasoned that since Lupron alone has returned my PSA to virtually undetectable <0.01ng/ml and brought my testosterone down to 26ng/dl his preference would be to keep Casodex in reserve in the event my PSA were to begin a rise, and Avodart as well unless we determine that the testosterone is also not maintaining its current low level. He agreed with my preference for 84-day Lupron rather than 112-day Lupron.
3/25/04 **ADT.** Received 84-day Lupron injection (but continued Casodex 50mg one per day on my own, **ADT2**, while typing up my reasoning why I would prefer to be attacking any PC still present with full three-level blockade (ADT3) rather than ***waiting*** for some change to occur. ADT only buys time, ADT3 attacks PC cells and can kill them (apoptosis) or cause them to remain dormant for many years).

4/10/04 **ADT3.** Oncologist acquiesced to my preference to continue Casodex and add Avodart 0.5mg one per day to my regimen.
(During a presentation at our Us TOO meeting , a noted physician indicated that Avodart remains working in the system for more than two days, therefore it could be taken every other day and remain effective)
5/27/04 3rd Gen. **PSA <0.01ng/ml**, **Testosterone 23ng/dl.**
6/10/04 Received 84-day Lupron injection. Continuing **ADT3.**
8/24/03 **Testosterone 22ng/dl** – Lab lost blood sample for 3rd Gen PSA test.
8/25/04 Another Dexa Scan – No evidence of osteoporosis - all areas normal with all T-scores above -1.0, in fact for Lumbar Spine 5% improvement since 2002 scan and 3% improvement since 2000 scan; Right Femoral Neck 2 % improvement since 2002 scan and 1% improvement since 2000 scan; Left Femoral Neck 5% improvement since 2002 scan and 9% improvement since 2000 scan. (As a several year patient on ADT, I find this very questionable!)
9/2/04 Provided another blood sample for 3rd Gen. PSA test. Received 84-day Lupron Injection. Continuing **ADT3.**
9/7/04 Result of 9/2/04 test 3rd Gen. **PSA <0.01ng/ml.**
11/15/04 **PSA <0.01ng/ml, Testosterone 38ng/dl.**
11/23/04 Received 112-day Lupron injection because neither the Cancer Center of Kansas nor Via Christi St. Francis Hospital had 84-day Lupron in stock.

AS OF DECEMBER 16, 2004, IT HAS BEEN TWELVE YEARS SINCE INITIAL RADICAL PROSTATECTOMY.

1/26/05 Recognizing that the DEXA scan received and noted herein on 8/25/04 appears suspect since it is hard to imagine an "improvement" in bone density after being on androgen deprivation therapy for over eight years, a Pyrilinks-D (Deoxypyridinoline – Dpd) urine test was administered as another measure to determine if excessive bone resorption or breakdown is occurring. This test measures a fragment of the bone matrix that is excreted in urine. Per Dr. Strum, a normal reading of Dpd/Creatinine ratio is considered <5.4nmol/mmol, within a range from 2.3 to 7.4 nmol/mmol. **Today's test result of 9.4nmol/mmol is significantly high!** This supports my opinion that the DEXA scan has falsely read either arthritic changes in the lumbar spine and hip, curvature of the lumbar spine, and/or vascular calcifications in either spine or hip area as bone density, thus under-stating the degree of bone loss. (Note to readers: In that a DEXA scan can provide false readings, a QCT BMD (Quantitative Computerized Tomography Bone

Mineral Densitometry) scan should be the choice of testing if available in your area.)
2/1/05 **PSA <0.01ng/ml, Testosterone Free Direct reading of .8pg/ml of a normal range 6.6-18.1pg/ml** (When taking lab sample, clerk erroneously checked Testosterone , Free, rather than Testosterone, Serum)
2/15/05 Oncologist agreed that a bisphosphonate should be included in my medications and prescribed Fosamax 70mg, 1 per week, take with 6-8 oz. water same day of week first thing upon arising while empty stomach, no other meds or food for thirty minutes, and remain up and active after taking.
3/15/05 will be the final date of expected effectiveness of the Lupron injection received on 11/23/04. **ACTIVE OBJECTIFIED SURVEILLANCE:** Having maintained a PSA of <0.01ng/ml for the past full year with ADT3, this will also be the commencement date of my second off-phase from ADT (Intermittent Androgen Deprivation – IAD) but this time maintaining with Avodart following the manner of the trial and results of Dr. Strum described in "A Primer on Prostate Cancer," pages 144-149. I ceased intake of Casodex on 2/15/05. According to Dr. Strum, the concept behind using Intermittent Androgen Deprivation (IAD) is based on at least the following:

1. The finding of sufficient adverse effects (fatigue, muscle loss, hot flashes) from AD (androgen deprivation) to warrant giving the patient a "holiday."
2. The belief that a testosterone surge has pro-apoptotic (cell killing) effects against the PC cell population (if there is residual active PC).
3. The ability of a normal testosterone milieu to stop the bone loss and release of bone-derived growth factors that are known stimulants for PC growth.
4. In men with intact neurovascular bundles, potency is usually recaptured in the off phase of IAD

5/10/05 **PSA <0.01ng/ml, Testosterone 23ng/dl.** In ADT off-phase (IAD) maintaining with Avodart 0.5mg one in the evening.
5/31/05 MRI of the Lumbar Spine with and without contrast. Wichita Open MRI. Findings: The sagittal imaging shows no evidence of compression fracture or evidence of altered signal from the marrow of the vertebral bodies. The transverse series does show some moderate stenosis at the L3-4 level secondary to disk bulging as well as some ligamentous and bony hypertrophic change. More moderate to severe stenosis is at the L4-5 level secondary to ligamentous and bony hypertrophic change. The AP dimension of the dura at the L4-5 level measures about 9mm. I do not see any evidence to suggest metastasis or evidence to suggest any abnormal enhancement.

Impression: There is moderate to severe stenosis most marked at the L4-5 level secondary to ligamentous and bony hypertrophic change with the AP diameter of the dural sac here measuring about 9mm. I do not see any metastatic disease or compression fractures.
8/9/05 **PSA <0.01ng/ml, Testosterone 45ng/dl. Continuing in IAD off phase but maintaining with 0.5mg Avodart daily.**
10/4/05 Pyrilinks-D (Deoxypyridinoline-Dpd) lab result **6.4 nmol/mmol**. A significant reduction from 1/26/05 9.4 nmol/mmol reading as an obvious improvement result from the administration of Fosomax 70mg one per week begun 2/15/05. Normal range is 2.3-7.4 nmol/mmol but hope to reach preferred level 5.4 nmol/mmol recommended by Dr. Stephen Strum.
11/7/05 **PSA <0.01ng/ml, Testosterone 51ng/dl. Continuing in IAD off phase but maintaining with 0.5mg Avodart daily.**

AS OF DECEMBER 16, 2005, IT HAS BEEN THIRTEEN YEARS SINCE INITIAL RADICAL PROSTATECTOMY.

02/06/06 PSA <0.01ng/ml, Testosterone still 51ng/dl. Continuing in IAD off phase but maintaining with 0.5mg Avodart daily.
4/11/06 Pyrilinks-D result 4.9 nmol/mmol. Fosamax doing its job!
05/10/06 PSA <0.01ng/ml (CCK failed to get T level). Continuing in IAD off phase but maintaining with 0.5mg Avodart daily.
7/25/06 Pyrilinks-D result 5.0 nmol/mmol. Fosamax continuing doing its job.
8/15/06 PSA 0.02ng/ml (???, will check this again in November!), Testosterone 45ng/dl. Continuing IAD but maintaining with 0.5mg Avodart daily.
11/13/06 PSA 0.04ng/ml (Ooops…maybe getting nasty again…will keep monitoring for awhile). T 53ng/dl. 25-hydroxy Vitamin D3 25.5ng/ml (extremely deficient in Vitamin D3! Will increase Vitamin D3 intake to 7200IU daily to try to reach preferred 65ng/ml).

AS OF DECEMBER 16, 2006, IT HAS BEEN FOURTEEN YEARS SINCE INITIAL RADICAL PROSTATECTOMY.

1/10/07 5a-Dihydrotestosterone (DHT) 2.9mg/dl. 25-hydroxy Vitamin D3 38.5ng/ml (Vitamin D3 movin' on up!)
2/13/07 PSA 0.07ng/ml (More ooops….if it doesn't level off before reaching 2.0ng/ml I'll return to Lupron and Casodex added to my continuing Avodart) T has dropped to 39ng/dl.

5/8/07 PSA 0.08ng/ml (Ahha! Very small increase! At this rate, could be another couple years before a return to Lupron and Casodex). T back up to 59ng/dl but obviously not going to go higher. As a recurring PC patient, I have no intention to attempt T replacement therapy. 25-hydroxy Vitamin D3 41.6ng/ml so increasing at slow rate. Will increase Vitamin D3 supplement by another 1800 IU to a total daily intake of 9200 IU to see if that will provide a more significant increase.
5/22/07 Pyrilinks-D result 5.1nmol/mmol. Still below Dr. Strum's preferred 5.4nmol/mmol. Fosamax continue to do its job.
7/8/07 Pyrilinks-D result 4.9nmol/mmol.
7/31/07 PSA 0.11ng/ml (Hmmm! This is what is meant by Active Objectified Surveillance (AOS)!). T went way up (if you can call an 18ng/dl rise from previous steady levels of any value!) to 71ng/dl – yippee? 25-hydroxy Vitamin D3 level 51ng/ml (still goin' up!). Parathyroid hormone level 8pg/ml. Calcium serum level 9.6mg/dl.
10/30/07 PSA 0.17ng/ml (still sneaking up), T 48ng/dl so dropped back down, 25-hydroxy Vitamin D3 level 60.8ng/ml so will probably cut current 9000 IU daily intake to 5000 IU and see how things look in three months.
10/31/07 Experiencing lower back pain, so had MRI this date. Result: Spinal stenosis at L4-L5 due to combination of degenerative disc, ligamentous and bony disease. No evidence of nerve root encroachment. Remainder of lumbar spine unremarkable and no sign of any acute bony abnormality or of metastatic disease.

AS OF DECEMBER 16, 2007, IT HAS BEEN FIFTEEN YEARS SINCE INITIAL RADICAL PROSTATECTOMY.

2/5/08 PSA 0.29ng/ml (continuing rise), T68ng/dl (whoopee!?).
5/6/08 PSA 0.37ng/ml (continuing rise but NOTE: The PSA is only a 0.08 rise in past three months and a 0.29 rise in the past year), T45ng/dl (back down), Vitamin D3 92.4ng/ml (so time to cut back to 4000 IU total daily to see if maintains 65ng/ml – my chosen plateau).
8/12/08 PSA 0.47ng/ml (continuing slow rise). T57ng/dl (gone forever, sigh). Erroneous lab report stated 25-hydroxy Vitamin D level as 38ng/ml. With previous report 3 months prior at 92.4ng/ml, re-tested for both 25-hydroxy and 1,25 dihydroxy Vitamin D levels. Result: 25-hydroxy Vitamin D 60.7ng/ml, 1,25 dihydroxy Vitamin D 50.7pg/ml. Since I would prefer my 25-hydroxy level at 65ng/ml, will add another 1000 IU Vitamin D supplement to the 4000 IU I had dropped to after

having jumped to 92.4ng/ml while taking in a total 9000 IU daily, to see if a total daily intake of 5000 IU will maintain
8/24/08 Colonoscopy. Significant diverticulosis, otherwise nothing unusual.

11/11/08 PSA 0.66ng/ml (+0.19), T 27.0ng/dl, Vitamin D 37.2ng/ml(!). This is surprising, and indicates I may as well up my daily Vitamin D intake to 8600 IU to get the level back in the 60ng/ml-75ng/ml range. This may have again been an erroneous lab result, however, since we didn't retest, I'll continue my increase to 8600 IU then see result in February 2009. If back up in the over 90ng/ml range, we will know this was an erroneous lab results and I'll cut back again to around 4600 to 5600 IU daily.

AS OF DECEMBER 16, 2008, IT HAS BEEN SIXTEEN YEARS SINCE INITIAL RADICAL PROSTATECTOMY.

02/10/09 PSA 1.05NG/ML (+0.39 – larger rise and time to consider return to ADT3 – will check PSA again in six weeks rather than three months), T was not checked and PSA rise despite castrate T of concern, 25-hydroxy Vitamin D 100ng/ml (top of normal range, which supports that lab reports on both 8/12/08 and 11/11/08 reporting 25-hydroxy Vitamin D levels as 38ng/ml and 37.2ng/ml were in error and likely reporting 1,25 dihydroxy levels but stating as 25-hydroxy levels. Had the lab not erred, I would have reduced my Vitamin D intake last August. I have now backed down to 4600 IU daily. All other important blood levels are within normal ranges.

04/07/09 PSA dropped down to 0.87ng/ml – a reduction of 0.18ng/ml - GREAT!

5/20/09 MORE GOOD NEWS: PSA dropped down to 0.81ng/ml. 25-hydroxy Vitamin D dropped down to preferred level 72ng/ml. T only 50ng/dl.

9/01/09 Oops, PSA now up to 1.16ng/ml! T still hovering around "castrate" level at 53ng/dl. 25-hydroxyVitamin D 76.6ng/ml. Discussed PSA levels with Medical Oncologist Charles "Snuffy" Myers while at PCRI National Conference on Prostate Cancer in L.A., and he suggested giving Rapamycin 1mg e/o day a try to see if PSA stabilized.

Rapamycin is a mTOR pathway inhibitor that in low dosage has no side effects but slows aging and reduces hormone resistance. Will wait for December PSA result to determine adding this medication to my "mix."

12/02/09 Well, PSA 1.31ng/ml so still elevating. Beginning Rapamycin 1mg e/o day to see what occurs over next three months. Testosterone is only 12ng/dl, so when do return to ADT once reaching a PSA level of 2.0ng/ml, I'll likely forego a return to Lupron since there is no need, and will go with bicalutamide at 150mg daily to add to my continuing dutasteride/Avodart 0.5mg daily. My 25-hydoxy Vitamin D3 level is holding at 79.2ng/ml with 4600 IU daily.

AS OF DECEMBER 16, 2009, IT HAS BEEN 17 YEARS SINCE INITIAL RADICAL PROSTATECTOMY

9/7/10 I haven't been keeping up this record, however since the last entry 3 months later PSA had elevated to 1.46.ng/ml, then 6 months later 1.86ng/ml, and the test on this date has now reached 2.0ng/ml.
My testosterone, as usual, shows no recovery remaining in the 12 to 13ng/dl range . 25-hydroxy Vitamin D level has been fluctuating down below 50ng/ml earlier this year, and the test on this date has it at 52ng/ml, so I will up my Vitamin D3/cholacalciferel another 2000IU for a total daily intake of 6600ng/dl and see what the next test in December shows. Had my PAP, CGA, CEA, and NSE checked with PAP 1.0ng/ml/in range , CGA 12nmol/L/in range, CEA 2.4ng/ml/in range, and NSE 5.1ng/ml/in range. Also, I had both a full body nuclear bone scan as well as a CT scan of the chest, abdomen, and pelvic area, and happy to learn that no metastasis is yet evident. So, my cancer is somewhere, likely pretty low level in development, but we don't know where. My excellent Medical Oncologist, Bassam Mattar, ordered 150mg bicalutamide (generic of Casodex) to begin daily as soon as it arrives from ExpressScripts to see if it totally shuts down what little testosterone still being produced from testicular as well as adrenal glands to add to my continuing daily dutasteride/Avodart.

10/19/10 After only about a month on bicalutamide 150mg daily along with continued dutasteride/Avodart 0.5mg daily, my PSA has dropped just slightly to 1.6ng/ml. Actually still too early for the bicalutamide to have fully kicked in, so will likely check it again in January. **Testosterone remains** low at 15ng/dl. 25-hydroxy Vitamin D level has risen to 62ng/ml as the result of my upping my Vitamin D3 intake to 6600 IU daily. Intend to

keep taking this level to see if still increases, and if so, will taper back to somewhere around 5500 IU daily to maintain within the 60 to 75ng/ml range.

AS OF DECEMBER 16, 2010, IT HAS BEEN 18 YEARS SINCE INITIAL RADICAL PROSTATECTOMY

1/18/2011 PSA dropping slowly to current 1.47ng/ml. 25-hydroxy Vitamin D 73ng/ml. Continuing 150mg bicalutamide and 6600 IU Vitamin D.
5/2011 early May PSA increased to 1.82ng/ml. MedOnc and I decided to add back Lupron to see if this has any effect.
6/2011 early June revealed another PSA rise to 2.3ng/ml.
6/2011 late June found a PSA drop to 2.2ng/ml. Also found fasting Prolactin level is high 7.4ng/ml, so taking Dostinex/cabergoline, one 0.5mg tablet Monday, Wednesday, and Friday for a month to see then if down to preferred below 5ng/ml, and hopefully below 3ng/ml. With the slight drop subsequent to 56 days of Lupron, going to give another 28 days Lupron a check to see if the removal of bicalutamide and addition of Lupron may be having an effect. If this fails, then will look at either HDK/HC or a combination of Leukine, Cytoxan, Celebrex, and Revlimid.
7/21/2011 PSA dropped again to 2.03ng/ml. DHT <1.0ng/dl. Dostinex brought the prolactin level down from 7.4ng/ml to 0.4ng/ml. Suspect the combination of Lupron, Avodart, and Dostinex played the role in bringing down the PSA level. Will continue with another 28-day Lupron injection 7/28; continue the Avodart, and continue the Dostinex at 0.25mg every Monday/Wednesday/Friday to maintain the now lower prolactin level. Administration of abiraterone/Zytiga in the works to see if it can result in bringing the PSA back down into the ultrasensitive range.
8/18/2011 PSA back up to 2.55ng/ml. Continuing Lupron; continuing Avodart; continuing cabergoline(Dostinex), and abiraterone acetate/Zytiga is on order.
8/26/2011 Pre-and post-intravenous contrast axial imaging of the abdomen and pelvis with post-contrast axial imaging of the chest…Stable CT of the abdomen and pelvis. Liver, bladder, and spleen unremarkable. Pancreas, adrenal glands, and kidneys unremarkable. Abdominal aorta calcified but nonaneurysmal. No retroperitoneal or mesenteric lymphadenopathy seen. In other words, NO METASTASIS evident despite PSA playing games.
9/2/2011 Began daily Zytiga regimen: 4 - 250mg tablets first thing in morning on rising before any food; then no food for at least one hour or more. Then one 5mg Prednisone w/breakfast, and another Prednisone 5mg

tablet w/evening dinner. Warfarin INR dropped to 1.7, so upped dose from 7.5mg to 8.5mg and back up to INR 2.5 a week later.
9/3/2011 Circulating Tumor Cells (CTC) blood test determined zero CTC in bloodstream.
9/21/2011 PSA dropped from 2.55ng/ml prior to beginning Zytiga to 1.61ng/ml.
11/3/2011 PSA again dropped to 1.28ng/ml after two months on Zytiga. Only side effect I have experienced from Zytiga is a weakening of my urinary sphincter causing an increase in leakage and requiring changing pads more frequently. Started pseudophedrine/Sudafed 30mg 3X/day to see if will help.

As prescription requirements or my choice of medications or supplemental vitamins, I currently take the following (AS OF 7/27/11):

PRESCRIPTION MEDICATIONS:

@LUPRON/LUTEINIZING HORMONE-RELEASING HORMONE (LHRH agonist (28-day lasting injection – 7.5mg) - forces the pituitary to over-stimulate the Leydig cells in the testicles to "wear them out" or to reduce the ability of the messenger to stimulate those cells; the messenger is LH or Luteinizing Hormone-Releasing Hormone of the hypothalamus. The end product is a diminution of Leydig cell testosterone (T). This is better known as Androgen Deprivation Therapy (ADT), chemical castration, for prostate cancer control. Though historically termed ADT, it would be better termed TRT, since it is, in reality, Testosterone Reducing Therapy)
STOPPED 6/2011 #CASODEX/BICALUTAMIDE - (CURRENTLY "OFF" THIS MEDICATION since it appears to have finally failed blocking androgen receptors – Androgen Receptor Mutation/ARM) An anti-androgen expected to block prostate cancer cell androgen receptors and prevents natural androgens from stimulating cancer cell growth
#AVODART/DUTASTERIDE 0.5mg at night (5-alpha reductase (5-AR) inhibitor that blocks both Type I and Type II enzymes in prostate cancer cells from converting testosterone (T) to ten times more potent metabolite dihydrotestosterone (DHT) that profoundly stimulates cancer cell growth. Avodart/dutasteride also serves to cause prostate cancer cell apoptosis and inhibit cell proliferation. ADT3 Androgen Deprivation Therapy for prostate cancer control when all three foregoing medications are taken.
&ZYTIGA/ABIRATERONE ACETATE W/+PREDNISONE 4 - 250mg Zytiga tablets first thing in morning on rising before any food; then no food

for at least one hour or more. Then first Prednisone 5mg w/breakfast, and another Prednisone 5mg tablet with evening dinner. (Began 9/2/2011)
STOPPED 1/1/09+FOSAMAX/ALENDRONATE SODIUM 70mg in morning once a week and on same day (Sunday) every week (as a bisphosphonate to stop bone mineral loss and bone resorption that can result from androgen deprivation therapy (ADT). Also considered to inhibit osteonecrosis of the jaw). WAS OFF LHRH AGONIST SINCE 2004, SO SAW NO NEED FOR CONTINUING. WILL RECONSIDER IF RETURN TO LUPRON APPEARS TO BE REINING IN RECURRING PC.
+FOSINIPRIL/MONOPRIL 10 mg at night (ACE Inhibitor/diabetes aid)
+STOPPED ZOCOR/SIMVASTATIN 40 mg at night (to reduce cholesterol) since not to be taken while taking Zytiga/abiraterone acetate.
+PRILOSEC/OMEPRAZOLE 20 mg in morning (to prevent gastric reflux/heartburn)
+STOPPED ADVAIR/FLUTICASONE PROPIONATE 250 mcg **& SALMETEROL** 50 mcg inhalation powder 1 inhalation in morning, 1 at night (to keep clear from bronchial & lung congestion) since want to determine if still required.
+GLIPIZIDE 5 mg in morning, 5mg in evening (to control glucose serum level)
#ZYRTEC/CETIRIZINE) 10mg in morning (for allergy control)
#MOBIC/MELOXICAM 7.5mg in morning daily (to relieve signs and symptoms of osteo-arthritis and rheumatoid arthritis
#**RAPAMUCIN (Sirolimus)** 1mg tablet e/o day (mTOR, inhibitor to inhibit cancer cell proliferation)
+**WARFARIN 7.5MG** blood thinner one tablet each evening. Experienced Pulmonary Embolism (two large blood clots) to both lungs simultaneously 12/28/10. ICU3 days/ward 4 days. Reason unknown. Questioning whether triple dose bicalutamide may have been causal but nothing indicates likelihood. Never had blood clots in my life up to this time.
+COLACE 100mg stool softener one capsule each morning and evening.
%DOSTINEX/Cabergoline 0.25mg Monday, Wednesday, Friday to keep Prolactin level less than 5ng/ml as an anti-angiogenesis medication.

SUPPLEMENTS/VITAMINS:
***CALCIUM CITRATE** 945mg **W/VITAMIN D3** 600 IU (Sam's Club Members Mark) at bedtime (to counter loss of bone density that could otherwise be caused by ADT)

***VITAMIN D3** 5000 IU in morning that by adding daily the Calcium/Vitamin D combination **TOTALS 5600 IU VITAMIN D3 DAILY** (to maintain 25-hydroxy Vitamin D level in 60ng/ml to 75ng/ml range for heart and prostate health

***FISH OIL/OMEGA-3 FATTY ACIDS** **1400mg** in morning - as antioxidant reduces risk of recurrent prostate cancer as well as powerful factor for general health.)

***POMEGRANATE EXTRACT** (POM Wonderful 1000mg. Pomegranate has substances, such as polyphenols, that have anti-oxidant, anti-viral, and anti-tumor activity. Pomegranate may also be helpful in maintaining healthy cholesterol and triglyceride levels, and a recent study indicates pomegranate has compounds that play a role in osteoarthritis and prostate health.

***COENZYME Q10 (COQ-10)** 200mg one capsule in morning for many areas of general health.

***VITAMIN C** 1000mg daily. Antioxidant that may help immune system. Also for the growth and repair of tissues in all parts of your **body**.

***VITAMIN E (alpha-tocopherol)** 400mg every-other day. A leading antioxidant. Vitamin E helps ease respiratory problems, and may also prevent some of the damage that diabetes does to the body, particularly to the eyes. It also boosts your immune system's ability to fight off infectious diseases by increasing levels of interferon and interleukin, the biochemicals that are produced by the immune system to fight infection.

***SENNA (sennosides)** 8.6mg one tablet at bedtime when needed to aid against constipation.

@ Administered in oncologist's office
+ McConnell AFB Pharmacy
# Express Scripts 1-877-283-3858 physician-to-pharmacist number
*Over-the-counter
%Local Pharmacy
&CuraScript (subsidiary of ExpressScripts)