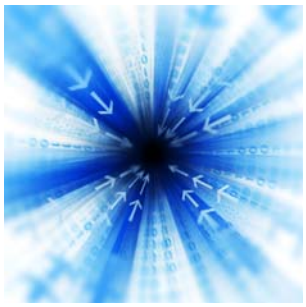
Valley Urologic Associates

Fall 2012

VUA Newsletter

Inside this issue:



VUA opens patient portal to improve patient care and access.

Greetings and New Developments at VUA

Welcome to VUA! Happy Thanksgiving! We welcome you again to another edition of our newsletter, bringing you the latest urology news at VUA.

This Fall, we at VUA have made available the Intergy Patient Portal. This aspect of our EMR offers a secure portal for online patient services, including prescription renewal, electronic requests for records, appointments, bill reconciliation/inquiries, lab results, previsit clinical questionnaires, and access to patient summaries and clinical records. It also offers a secured communication tool between the patient and the practice. It is easy to access this portal by calling our office to obtain an access code.

Dr. Blick has pioneered a center of excellence for erectile dysfunction (ED), being one of a few to offer comprehensive diagnostic services such as penile Doppler to assess vasculogenic ED. Drs. Blick and Agins are becoming the Valley's most proficient in prosthetic implants for ED. On another note, Dr. Blick has been chosen to lead the medical staff at Paradise Valley Hospital after being elected to be the Chief of Staff. The Cancer Treatment Center of America in Goodyear has engaged Dr. Blick to be a pioneer in offering reconstructive services to cancer patients who have undergone extensive or extirpative cancer therapy.

VUA has opened a satellite office in Buckeye Arizona at 525 South Watson Rd., Suite 205. Drs. Blunt and Thaly will be seeing patients there every Thursday to accommodate growth in the West Valley.

In recent months, most of the public have seen late night and daily advertisements soliciting patients who have undergone pelvic floor or incontinence repair resulting in complications. The Federal Drug Administration has demanded further post-market studies in the use of vaginal mesh products, so called section 522 studies. American Medical Systems has chosen Drs. Agins and Blick to lead one of the 522 trials in the Phoenix area due to our volume and surgical outcomes.

Dr. Hua completes a two year assignment and privilege as an Honorary Commander at Luke Air Force Base. He is grateful for the opportunity to be engaged with and to learn from such an important community of military leaders. He continues to be engaged in Fighter Country Partnership, supporting the men, women, families and mission at Luke Air Force Base.

Finally, Dr. Donovan has brought in 1for1Medical Sponsors to help bring healthcare to Third World countries.

Active Surveillance in Low Risk Prostate Cancer

Dr. Torre Rhoades, M.D. Fellowship-Trained in Urologic Oncology

Low risk disease defined as a PSA <10 and Gleason score of 6 or below.

Prostate cancer is the most common nonskin cancer in men. In 2011, approximately 240,000 men were diagnosed with prostate cancer and 33,000 men are projected to die from the disease. The majority of men who are diagnosed with prostate cancer will not die from the disease but will die from other causes. PSA was introduced in 1987 which caused an increase in the diagnosis of prostate cancer. This increase in prostate cancer diagnosis has helped men catch the disease at an early stage before it becomes aggressive.

When evaluating prostate cancer, men undergo a prostate biopsy where a Gleason score is given to the cancer diagnosis. This helps determine the aggressiveness of the tumor. The most common tumor pattern is given a number of 3-5 and the next most common pattern is scored 3-5 which will then give a score ranging from 6-10.

Criteria for active surveillance varies amongst urologist, however the National Institute of Health has developed their own protocol. They define low risk cancers of a PSA less than 10, Gleason score of 6, biopsy performed secondary to having a PSA that is elevated or a small nodule on exam, and the extent of disease on a biopsy. Another important factor to consider is the overall life expectancy of the patient.

The purpose of active surveillance is to detect disease progression. Follow up should include PSA and digital rectal examination every 3 to 12 months. A repeat biopsy should also be performed to evaluate a change in the Gleason score as well as the percentage of the biopsy that is positive.

Indicators of disease progression that may lead the patient and physician toward treatment include increased Gleason score on repeat biopsy, PSA doubling time under three years, or extent of disease on the biopsy.

American Medical Systems Selects Drs. Agins and Blick For 522 Study

Dr. Jonathan Agins, M.D.

As many Americans are aware, there have been multitudes of television advertisements from Attorneys that decry bladder prolapse repair with mesh. Our patients are aware of our opinion that it is not the mesh, but the practitioner who puts it in, perhaps improperly. Supporting this opinion is the recent news that Gynecare, a company that mainly markets their mesh products to Gynecologists, has ceased production of their bladder prolapse and incontinence kits.

Last year, the Federal Drug Administration demanded safety studies of any mesh manufacturer that wished to continue to exist. This is called a "522 Study" based on section 522 of the Federal Food, Drug, and Cosmetic Act of 2006, which grants the FDA the power to demand such studies and to pull the product off the market, if the company does not comply.

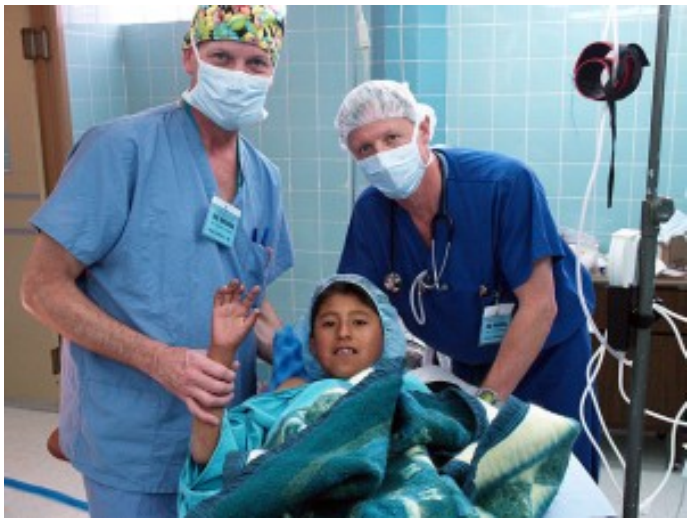
Valley Urologic Associates is extremely proud to announce that Drs. Blick and Agins were selected to be the Principal Investigators of American Medical Systems' 522 study. Both Dr. Blick and Dr. Agins have extensive experience with bladder prolapse and incontinence surgery. They have both served as trainers as well, teaching other doctors to perform these operations.

Being awarded the 522 study solidifies Valley Urologic Associates' position in Arizona as a Center of Excellence for Women's Health, the only such Center in the Phoenix Metro area.

Valley Urologic Associates will inform our patients when we have received the final authorization from the FDA to begin enrollment. In the meantime, we simply want you to know the level of expertise and national recognition of our practitioners.

AMS
an endo health solution

VUA 's Groundbreaking Partnership in Humanitarian Outreach



1for1 Medical is a groundbreaking humanitarian initiative that unites doctors around the world to provide essential medical procedures for those that would not otherwise have access to skilled care. This global initiative is being pioneered by a visionary group of compassionate physicians right here in the Phoenix area. As founding partners, Valley Urologic Associates' Dr. Ben Donovan and Dr. Shawn Blick are playing a catalytic leadership role in the emergence of 1for1 Doctors.

The methodology behind 1for1 Doctors is as simple as it is powerful. For every qualifying procedure performed by a 1for1 Doctor, an essential procedure (vision restoration, cleft lip/palate, club foot, or heart surgery) is provided for a person in desperate need. We focus our efforts on these four procedures because they are highly prevalent, debilitating, relatively easy to diagnose, and relatively simple to treat. These humanitarian procedures are performed by our partnering doctors that live and work in developing countries throughout Asia, Africa, Middle East and South America. 1for1 Doctors here in the United States contribute a portion of their surgical fee to fund the resources and facilities needed for the humanitarian procedure. Their physician counterparts overseas volunteer surgical expertise to actually perform the procedures. It is this highly efficient model, coupled with the generosity of 1for1 Doctors, which makes the initiative possible . . . and extremely powerful.

Here in the United States we are fortunate to have many choices of qualified, expert physicians to perform our medical procedures. When a patient chooses a 1for1 Doctor, they are not only choosing the best-possible care for themselves, they are also facilitating a life-changing procedure for someone in need. One life changed, changes another – one for one. 1for1 Doctors sponsor the humanitarian procedure out of their own surgical fee, so there is no additional cost to their patients. Patients receive a certificate that commemorates the life changed because of their decision to choose a 1for1 Doctor.

Rehan, a fourteen-year-old Egyptian girl, is just one example of a life changed by the 1for1 Doctor initiative. Throughout her childhood, Rehan's vision and appearance were impaired by multiple ocular conditions. She had to stop attending school and eventually couldn't even leave her house. Her family was far too poor to pay for the necessary corrective procedures. This innocent child's hope for a future was as dim as her eyesight. Her parents were distraught until, by chance, they learned about a 1for1 clinic nearby in Cairo. Thanks to the 1for1 Doctors initiative, Rehan was able to receive the essential vision-restoring procedures that she needed. Rehan is now attending school again, she is enjoying her life, and she is excited about her future.

Dr. Ben O. Donovan, MD
Fellowship-trained Pediatric Urologist

1for1Medical sponsors the humanitarian procedure to change lives in third world countries.

New Therapies in Castration Resistant Prostate Cancer

Dr. Vi Hua, M.D.

Zytiga (abiraterone acetate) blocks all three sites of androgen synthesis– the testes, the adrenal glands, and the tumor itself.

ZYTIGA® (abiraterone acetate) offers another option to help men who have metastatic castration-resistant prostate cancer. Traditionally, men with metastatic prostate cancer receive hormonal therapy, thereby chemically castrating themselves so that the prostate cancer is derived of its primary growth factor (testosterone). Urologist also call this therapy androgen-deprivation therapy (ADT), and may be given continuously with a medication like Lupron every four months or intermittently when the PSA level reaches a certain point. Lupron is one of the many gonadotropin releasing hormone agonists that tell the pituitary gland to shut down sex hormone production from the testes. ADT works until the population of cancer cells slowly develop resistance, and can grow despite a patient having castrate levels of testosterone.

Other sources of androgens (testosterone like molecules) can aid in the cancer cells breaking out, i.e. despite having castrate levels of testosterone. The adrenal glands which lie above each kidney provides sex hormones such as androstenedione as well as cortisol to control blood sugar (the endogenous form of corticosteroids), salt controlling hormones such as aldosterone, and adrenaline. The adrenal androgens can offer another source of growth factor for the prostate cancer cell despite being on the injections of Lupron. Some patients may have received "combined" androgen deprivation in which they receive Lupron and a medication that block the androgen receptor to mitigate the effects of the adrenal androgens. With this given modality, a patient's survival may be prolonged, just by slowing the growth of the cancer cells. However, within a few years, the cells start to become resistant thru a pathway in which they make *their own* testosterone inside the population of cells (what we call autocrine/paracrine production). Zytiga is a new drug that can block all *three* sites of androgen synthesis- the testes, the adrenal gland and the tumor itself. This is mediated by the tumor mutating and overexpressing key androgen synthetic enzymes and transport molecules to import more androgen precursors into the cells. One of these enzymes is the P450 12-hydrolase/lyase (CYP17). Zytiga is a CYP17 enzyme inhibitor.

Zytiga is given orally and my cause edema (swelling), muscle aches, hypokalemia (low potassium levels), hypophosphatemia (low phosphate), and worsening or new onset hypertension (high blood pressure). In a recent Phase III study enrolling patients who failed chemotherapy on Doxetaxel to a trial of Zytiga versus placebo, there was a median survival benefit of 14.8 months compared to 10.9 months on placebo. Zytiga also showed patients had improved symptoms with less pain. The most common cause of discontinuation of the drug was an elevation of liver enzymes (LFTs).

Additionally, there are other CYP17 enzyme inhibitors that are currently in development such as the TAK700. We are in an era where there are more and more therapies for metastatic castrate resistant prostate cancer. In the past, when a patient became castrate resistant, there were limited options. Today, there are chemotherapeutic agents such as the Taxanes—Docetaxel, Paclitaxel and the new Cabazitaxel (Jevtana). Then there is immunotherapy with sipuleucel-T (Provenge) which immunizes one's T-cells to the prostate cancer and then infusing back to the patient the primed CD54 positive cells (killer T cells). We have used bisphosphonates in osteoporosis, and a new RANKL (rank ligand blocker), denosumab (Xgeva), is preventing bony fractures caused by the metastatic cancer in the bone.

New agents are in development such as MDV3100 (Xtandi/Enzalutamide), TAK700 to inhibit androgen synthesis; new immunotherapies such as lenalidomide, tasquinimod, prostvac; and agents inhibiting the cancer from breaking down the bone such as dasatinib and zibotentan. Others are focusing on the development of other taxanes such as the newly developed Cabazitaxel.

It is very exciting to hear of these new developments adding to our armamentarium. Since the US Preventative Task Force (USPTF) has recommended *against* prostate cancer screening, we physicians will soon see a dramatic rise in patients who present with metastatic prostate cancer once again.

A New Drug for OAB—Myrbetriq

According to the National Association for Continence, one in five adults has overactive bladder. Many patients likely have not talked to their physicians about this condition due to embarrassment or the belief that Overactive Bladder (OAB) cannot be treated. For people with OAB, inappropriate signals are sent to the muscles in the bladder causing them to contract before the bladder is full. These bladder contractions may cause strong, sudden urges, and a frequent need to go to the bathroom, sometimes without any advance warning.

Myrbetriq (mirabegron) is the first new drug in 30 years to offer a distinct mechanism of action to treat Over Active Bladder Syndrome (OAB). Since the introduction of Oxybutynin decades ago all subsequent drugs have been variants of the same antimuscarinic mode of action. The antimuscarinics have proven efficacy for the treatment of OAB in many patients. Unfortunately, they have a side effect profile that makes them difficult for many patients to tolerate. This of course results in decreased compliance with the treatment and often cessation of treatment. Antimuscarinics work by binding to muscarinic receptors in the bladder and inhibiting involuntary bladder contractions. Myrbetriq uses a distinct mechanism of action. Myrbetriq relaxes the detrusor muscle of the bladder during the storage phase of the urinary bladder fill-void cycle. This is accomplished by activation of the beta-3 adrenergic receptors in the bladder muscle, which in turn, increases bladder capacity.

Myrbetriq has been studied extensively in more than 10,000 individuals over the past 10 years. Recent FDA approval was based on safety and efficacy data from three placebo-controlled Phase 3 studies. In these trials patients treated with Myrbetriq 25 mg and 50 mg doses showed statistically significant improvement in efficacy parameters of incontinence episodes and number of urinations per 24 hours. Myrbetriq was evaluated for safety in in more than 2,700 patients in three, 12-week Phase 3 double-blind, placebo controlled studies. As well as a one year, randomized fixed dose, active controlled study in patients with OAB. The most commonly reported adverse reactions (greater than 2 percent of myrbetriq patients and greater than placebo) were hypertension, nasopharyngitis, urinary tract infection and headache. Myrbetriq will be contraindicated in patients with severe hypertension, urinary retention, bladder outlet obstruction, and in patients with severe liver or kidney failure. It should also be used with caution in patients who are already on antimuscarinic agents for OAB and in patients who take drugs, such as digoxin, which are metabolized by the cytochrome P-450 2D6 pathway.

Given the impact of OAB on a large portion of the population, it is the hope that Myrbetriq will offer another viable oral treatment option for patients with OAB. Especially those patients who do not find efficacy with the currently available antimuscarinic agents or are unable to tolerate the side-effects of antimuscarinics. Myrbetriq will be available in 25 mg and 5o mg doses. Astellas Pharma, Inc., the manufacturer of the drug, expects it to be available in pharmacies in the United States in the fourth quarter of 2012.

Dr. Lynn W. Blunt, M.D.

Myrbetriq is the first drug of a new class in 30 years, with a distinctly different mechanism to treat Overactive Bladder Syndrome

Testosterone Treatment and Prostate Cancer Risk: A review of a recent study on the safety of long-term treatment.

Despite the well-proven benefits for testosterone replacement therapy (TRT), physicians are still fearful that testosterone may cause the progression of undiagnosed prostate cancer (PCa) or its development with advancing age. This is despite the evidence from several published reviews (Morgentaler and Roddam et al.), suggesting that the concept above is a "myth". Similarly, Shabsigh et al. concluded from an extensive analysis of 44 studies that "none" demonstrated that TRT for hypogonadism increased prostate cancer risk or increased the Gleason grade of cancer detected in treated vs. untreated men.

Interestingly, the fears about TRT inducing PCa remain the main reason why many patients with hypogonadism remain untreated. According to a study by Gooren et al, it has been shown that about 68% of physicians are more concerned about the risks of TRT than the benefits (more so in Europe than elsewhere). The main reason quoted by 51% of the physicians surveyed was PCa. Furthermore, when asked if their readiness to prescribe testosterone to elderly men would increase if authoritative scientific evidence dismissed the fear that TRT would increase the risk of PCa and Benign Prostatic Hyperplasia (BPH), the response was overwhelmingly "yes" in 62% from Europe and 74% elsewhere.

In a very recent article by Feneley et al (J Sex Med 2012;9:2138-2149), an updated review of PCa safety from the UK Androgen Study was carried out to analyze the incidence of PCa during long-term TRT. The UK Androgen Study describes the long term outcomes for 1365 hypogonadal men who were treated with several different forms of treatment for at least 3 months and as long as 20 years. The men were aged 28-87 (mean 55), and they were prescreened for PCa by digital rectal exam (DRE) and PSA at baseline and every 6 months. The abnormal findings on DRE or rising PSA were investigated by transrectal ultrasound with prostate biopsy. During the study, 14 cases of prostate cancer were diagnosed in men between 57 and 78 (mean 66) years of age, and 1-12 (mean 6.3) years of treatment. In most of these cases, the diagnosis was preceded by a clinically significant rise in PSA; however, any initial PSA change had no predictive relationship to the subsequent diagnosis of PCa. Furthermore, initiating TRT had no statistically significant effect on total PSA, free PSA, or free/total PSA ratio. Importantly, all new cases of PCa were clinically localized and suitable for potentially curative intent.

Despite the limitations that are inherent in an "observational clinical study" starting 20 years ago, the findings suggest that hypogonadal men can be treated safely and effectively without the increased risk for prostate cancer. The detection rate of PCa in this study was equivalent to that expected in the general population, implying that TRT does not cause prostate cancer. The majority of the hypogonadal men treated with TRT will have no adverse effects on the prostate; however, TRT may stimulate prostate cancer cells within a normal prostate gland to produce more PSA, improving the early detection of PCa in these patients. This is actually a clinical advantage (not a disadvantage) for patients undergoing TRT. Furthermore, there is a growing literature suggesting that normal testosterone levels can actually decrease the risk for high grade PCa.

In summary, physicians should not be deterred from initiating TRT due to theoretical fears and myths. The data from the study above (and others) demonstrates no increased risk for prostate cancer; however, close monitoring of the patients' PSA is necessary as TRT may improve the early detection of PCa.

Dr. Shawn D. Blick, M.D.
President and Founder

Physicians should not be deterred from initiating TRT due to theoretical fears and myths

Q&A Session: Kidney Stones

What causes a kidney stone?
Kidney stones affect 1 out of 10 people during their lifetimes. They are more common than most people realize. There are many factors that determine whether someone will develop a stone with some being under a person's control while others are out of their hands.

Common factors influencing kidney stone development:
■Gender: Men are two to three times more likely to form stones
■Race: Caucasians have the highest stone rates as compared to other races
■Age: Stones occur most commonly between the 20s to 50s
■Geography: Those living in hot dry environments are at increased risk. Additionally, those living in the Southeastern United States appear to be at particularly increased risk of forming stones.
■Seasonal climate: Stone development is more common during the summer months due to dehydration from higher summertime temperatures and possibly also from higher concentrations of calcium in urine resulting from increased sun exposure which can lead to higher levels of Vit D production.
■Occupation: Those working in jobs with exposure to climate and dehydration are more prone to stone development.
■Body weight: There are higher rates of stones in those with increased weight and body mass index.
■Genetics and medical conditions: Individuals with a history of some conditions, such as medullary sponge kidney or renal tubular acidosis are prone to forming stones. Those with a personal family history of stones may have two to three times increased risk of forming stones.
■Infections: Chronic urinary tract infections can lead to the development of infection related stones, known as struvite stones.

Can I take something to dissolve my kidney stone?
Patients often ask whether something can be taken to dissolve their stones. Unfortunately, the most common stone types (calcium oxalate and calcium phosphate, accounting for 80% of all stones) cannot be dissolved with medications.
However, in patients with uric acid stones, which account for 5-7% of stones, medication (potassium citrate) can be successfully given to dissolve the stones, helping them to pass and preventing them from redeveloping.
Patients with the less common cystine type stones (1-3% of stone formers) can also benefit from potassium citrate and water intake to help dissolve their stones. Cystine stone formers additionally can be treated with D-penicillamine or α-mercaptopropionylglycine to help bind and dissolve their stone.
Finally, patients with struvite, or "infection", stones were in the past more commonly treated with hemiacidrin irrigation solution which is dripped directly onto stones through a tube placed directly into the kidney. However, because of potentially serious side effects from this medication and the difficulty in giving it, this type of therapy is now uncommon.

Was it something I ate/drank?
In most patients, we find diet is not the main reason that caused a stone to form in the first place. Other important factors also play a role in determining whether someone is "prone" to forming stones. In other words, a non-stone-former can eat the exact same diet as a stone-former and never get stones.
That said, diet can play an important role in the prevention of future stones. The three most important dietary factors for most stone formers to modify in reducing their risk of future stones are to increase total fluid intake, decrease sodium intake, and decrease protein (meat) intake.
Some commonly held beliefs of foods that promote stones including cola, tea, coffee, and calcium intake have not been shown to be true. In fact, research suggests that increasing tea, coffee, and calcium intake can actually reduce stone risk, while cola does not appear to have a significant effect (Curhan et al, Am J of Epidemiology, 1996).

Can I prevent another kidney stone?
Yes! There are many effective ways to help prevent another stone. Basic dietary changes can reduce your chances of forming another stone by half while more involved medical treatment can reduce that even further. While these changes may not guarantee that you will not form another stone, they can make it less likely that you will have to experience another painful stone episode

Dr. Lipika R. McCauley M.D.

Stay tuned for the next newsletter for kidney stone prevention!!!

Fall 2012

Valley Urologic Associates

State of the Art with Compassion and Sensitivity

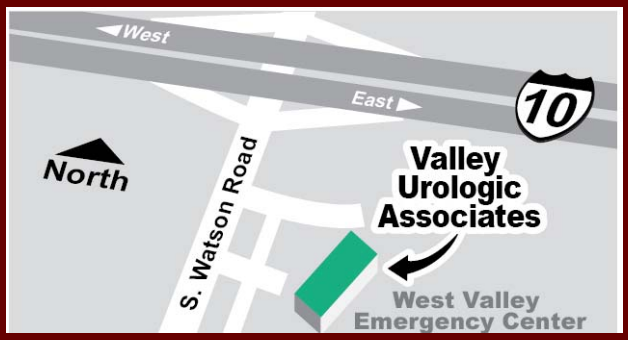
Valley Urologic Associates
A Division of ACHO, PLC
13555 W. McDowell Rd. Suite 304
Goodyear, AZ 85395
Phone: 623-935-5522
Fax: 623-935-3220
www.vuaurology.com

Shawn D. Blick, M.D.
Jonathan Agins, M.D.
Lynn W. Blunt, M.D.
Ben O. Donovan, M.D.
Vi Hua, M.D.
Torre Rhoades, M.D.
Rahul Thaly, M.D.
Lipika McCauley, M.D.
Timothy Coyne, PA-C
Beth Dean, PA-C

Visit us on the Web!
http://www.vuaurology.com

Come see Us in Buckeye

525 South Watson Rd., Suite 205



Chiltern Prostate Cancer Research Study

VUA is actively recruiting patients in a research study to investigate the efficacy and safety of a new Leuprolide Acetate 22.5 mg Depot Formulation in the Treatment of Prostate Cancer. Please let us know if you are interested.

Inclusion Criteria

· Patients with histologically documented prostate carcinoma who might benefit from medical androgen deprivation therapy

· Life expectancy of at least 1 year.

· WHO/ECOG performance status of 0, 1 or 2.

There are some Exclusion Criteria

· Brain metastases, spinal cord compression, severe urinary tract obstruction with threatening urinary retention, severe pain from extensive osseous deposits

· Coexistent malignancy

· Uncontrolled congestive heart failure, MI or a coronary vascular procedure or significant symptomatic cardiovascular disease within 6 months before Baseline; resting uncontrolled HTN (≥160-100 „Hg) or symptomatic hypotension within 3 months before Baseline

· Venous thrombosis within 6 months of Baseline

· Uncontrolled diabetes,

· History of drug and/or alcohol abuse within 6 months of Baseline

· Serious concomitant illness or disease that may interfere with or put patients at additional risk for, their ability to receive the treatment outlined in the protocol

· Patients on anticoagulative therapy including warfarin (Coumadin) Dabigatran Etexilate (Pradaxa) and heparin. · Abnormal coagulation studies (PT/PTT) at Baseline.

· History of serious bleeding on injections, an elevated INR, concomitant medications or any other conditions

· Blood donations/losses within 2 months of Baseline, apart from previous prostatic surgery patients

· Known hypersensitivity to GnRH, GnRH agonists, including any LHRH analogues, or any excipients of the study formulation

· History of Immunization (within 4 weeks of Baseline) and specifically flu shots

· Skin disease that would interfere with injection site evaluation.

· Previous prostatic surgery within 2 weeks before Baseline

· Previous local therapy to the primary tumor with a curative attempt other than surgery (external beam radiotherapy, brachytherapy, thermotherapy cryotherapy) within 2 weeks before Baseline

· Previous cancer systemic therapy such as chemotherapy, immunotherapy

· Testosterone levels < 1.5 ng/mL at Screening

· Previous orchiectomy, adrenalectomy, or hypophysectomy

· Previous androgen ablative therapy lasting more than 6 months, Also, therapy must have not occurred within 12 months before the screening visit.

· Previous treatment with androgen-receptor blockers

· Administration of 5-alpha-reductase inhibitors

· OTC or alternative medical therapies that have an estrogenic or antiandrogenic effect

· Hematological parameters , outside 20% of the ULN