New Directors chosen for Us Too! Board

The Board of Directors of Us Too! International announced the selection of several new members. After receiving over three dozen nominees the Nominations Committee tackled the enormously difficult job of selecting a slate of candidates.

Rex Zeiger, Chairman of the Nominations Committee indicated that the committee “we attempted to select nominees from different geographical areas in order to diversify representation and because of this, we were compelled to overlook some very talented candidates. This was a difficult review process because of the extremely high level of competence demonstrated by all of the nominees. I was very impressed with the number and quality of candidates we received in response to our call for nominations. That is very encouraging for the future of Us Too! and for the prostate cancer education and support community.”

The 2002 Us Too! Board of Directors are:

Us Too! Board of Directors:
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Texas doctor and cancer survivor named new head of National Cancer Institute

Dr. Andrew von Eschenbach, a cancer surgeon who twice has been treated for the disease, brings to his new job as head of the National Cancer Institute a personal understanding of “cancer’s frightening effects,” U.S. President George W. Bush said.

Bush, who announced the appointment in a White House ceremony, said von Eschenbach was “one of America’s finest medical researchers” and a man who “understands personally the importance of our war on cancer.

“He is a two-time cancer survivor - all too familiar with cancer’s frightening effects,” Bush said. “He will bring to his new position not only expertise and talent and dedication, but compassion for the millions of cancer patients and their families struggling with this disease.”

“Dr. von Eschenbach is one of the nation’s leaders in the battle against cancer,” said HHS Secretary Tommy G. Thompson. “I am extremely pleased to welcome his leadership at the NCI. I am confident that he will guide NCI to successes in the pursuit of discoveries in the biology, treatment, and prevention of cancer as well as continued progress in reducing the burden of this disease.”

Von Eschenbach was treated successfully for melanoma in 1989 and for prostate cancer two years ago.

“We cannot rest until we translate our new understanding of cancer into interventions that will detect cancer, new drugs that will treat and even prevent cancer,” Von Eschenbach said. “I pledge that we will not rest or yield until we have fulfilled the promise of eliminating the suffering and death caused by cancer.”

He is replacing Dr. Richard D. Klausner who said in October that he would be stepping down.

Von Eschenbach holds the Roy M. and Phyllis Gough Huffington Distinguished Chair in Urologic Oncology at M.D. Anderson and is head of the center’s genitourinary cancers program.

(continued on page 5)
**PROSTATE CANCER NEWS YOU CAN USE**

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**MEDICAL USES OF MYRHR INCREASING**

Scripps Howard / December 21, 2001

Myrrh, the aromatic gift from one of the three Wise Men to the infant Jesus, is turning out to have some pretty amazing medical capabilities, scientists are finding 2000 years later. Researchers have found two compounds in myrrh that are strong painkillers, another that may help lower cholesterol, and, most recently, a potent anti-cancer agent that shows particular promise for treatment of breast and prostate cancer. As part of a larger search for anticancer compounds from plants, the researchers obtained extracts from a particular species of myrrh (Commiphora myrrha) and tested it against a human breast tumor cell line (MCF-7) known to be resistant to anticancer drugs. The extract killed all of the cancer cells in laboratory dishes. In their effort to isolate the active component of the extract, the researchers found it to be a unique, unknown compound belonging to a class called sesquiterpenoids, typically found in natural products. The compound appears to kill cancer cells by inactivating a specific protein, called Bcl-2, which is overproduced by cancer cells. The new compound is not as strong as conventional chemotherapy drugs, such as paclitaxel, which are potent cancer killers but highly toxic. The researchers estimate that the compound is 100 times less potent than paclitaxel but is also likely to have far fewer side effects. They are now trying to determine whether the compound also has other mechanisms of inhibitory action against cancer. As a medicinal compound, myrrh has been used in the past to kill pain, heal wounds, and neutralize bad breath. Today it can be found in natural toothpaste and mouthwash. Scientists at Rutgers University in New Brunswick, N.J. reported results in the Nov. 26, 2001, issue of the Journal of Natural Products, of the American Chemical Society.

**DEVELOPING MARKER FOR EARLY DETECTION OF PROSTATE CANCER**

Scripps Howard / November 20, 2001

Using a genetic marker to test for prostate cancer could greatly improve detection at an early stage when the disease can still be cured, scientists have found. Although the studies on the test are preliminary, researchers at Johns Hopkins University believe using a genetic marker would be a dramatic improvement over the current PSA test, which can signal prostate cancer but is also elevated when men have other prostate problems. “A genetic marker that occurs mostly in early-stage cancers may improve the way we diagnose cancer in the future and help us catch it early,” said Dr. David Sidransky, a professor at Johns Hopkins Medical School and director of the research, which is published in the November 21, 2001 issue of the Journal of the NCI.

**FDA INVESTIGATES DRUG CLAIM**

Associated Press / November 27, 2001

The government is investigating whether a Florida urologist gave diluted doses of the anti-cancer drug Lupron to dozens of patients. The Food and Drug Administration issued an unusual warning urging all men treated for prostate cancer by Dr. Victor Souaid, of Pompano Beach, Fla., to see another doctor immediately for blood tests to determine whether their treatment was adequate. Souaid has not been charged with any crime, said FDA special agent Doug Fabel, who is leading the investigation.

**US TOO! INTERNATIONAL**

* Procedure freezes PCA, not sex
* *UPI Science News / November 27, 2001*

A new minimally invasive surgery for prostate cancer appear to effectively freeze tumors but does not cause unwanted side effects, such as sexual impotency or incontinence. Focused cryosurgery has been performed on nine patients and the cancer has not returned in any of the cases. Seven of the men have reported they can achieve erections capable of intercourse. And doctors said, at the annual meeting of the RSNA, none of the patients have suffered other side effects often seen with prostate surgery. “We think it is now reasonable to go on to perform a comparative study between focused cryosurgery and traditional surgery,” said Dr. Gary Onik, director of surgical imaging at Florida Hospital Celebration Health a pioneer in using cryosurgery in prostate cancer. Onik said the new procedure gives some prostate cancer patients another alternative. Dr. Fred Lee Jr., associate professor of radiology at the Univ. of Wisc-Madison, said the work being done by Onik is encouraging in that there have not been recurrences and “multiple clinically significant tumors aren’t popping up.” He also said the multicenter trial would also show if the procedure can be performed successfully by several physicians rather than just being the trademark of the one doctor who invented and developed the procedure. Onik said the procedure can be done on an outpatient basis and costs could be expected to be considerably less than other forms of surgery — brachytherapy, external radiation beam or total prostate ablation cryosurgery.

**IMPROVED PROSTATE BIOPSY**

Ivanhoe News / December 21, 2001

Doctors say the gold-standard screening test for prostate cancer is a PSA, or a blood test that suggests the presence of cancer. When PSA levels rise, a biopsy is traditionally done to confirm or reject a diagnosis of cancer. However, doctors discovered it can miss up to 35 percent of cancers. Now they are doing something about it. Traditionally, doctors take six tissue samples from the gland. Since many cancers were missed, they now take 10 samples, and specifically from the areas where cancer tends to start. Urologist Robert Bahnsen, M.D., from Ohio State says, “Our hope is, not only are we detecting cancers, but we’re, in a sense, not missing them with the techniques that we were using before.” Experts say this is the only test to accurately
confirm or rule out cancer. During the exam a small probe is placed in the rectum and uses sound waves to create an ultrasound image on a screen. Using this as a guide, the doctor inserts a narrow needle through the wall of the rectum into the prostate gland. The needle then removes a core of tissue, usually about 1/2 inch long and 1/16 inch across. The sample is sent to the lab to see if cancer cells are present. Some patients say the procedure is painful while others compare it to the prick from a blood test. Doctors traditionally take six samples from the prostate. The pattern used to remove samples has been described as similar to slicing a loaf of bread. This method gives a sample from cross sections through the gland. Recent studies suggest this method has some problems. Doctors discovered approximately 35 percent of PCA’s are missed using this method. They realized many start in the peripheral zone of the prostate, an area that is not thoroughly sampled by the usual method. This is the area that runs along the side of the prostate. More specifically, prostate cancers generally begin in the area closest to the rectum. Now, doctors are looking at different methods to take tissue samples. They hope to cover the area where the cancer is more likely to start. They also take more samples than before. Robert Bahson, M.D. calls the new technique extended sector biopsy. He takes 10 samples, more of which are directed to the area where cancer tends to occur. He says the method is growing in popularity among urologists around the United States. The next goal is to determine the best number of samples to remove.

**Survey Reveals That 7 of 10 Men Are Not Aware of Prostate Cancer**

NewRx.com / December 21, 2001

Men are generally more aware of lung or breast cancer than they are of prostate cancer, a new international survey reveals. The results of an NOP Healthcare survey conducted among 1400 people in 7 countries show that as little as 29% of men in some countries are aware of prostate cancer (average 39%), compared with 54% of men who know of lung cancer and 46% of breast cancer. In addition, women are on average twice as aware about breast cancer than men about prostate cancer (79% vs. 39%). The results of this survey provide important new insights into the level of understanding about the disease among those most at risk. Although prostate cancer, particularly in its early stages is often associated with no symptoms, the study results reveal that most people think that urinary symptoms will warn patients of the disease and only a minority believes that there might be no symptoms (1%). The results also show that half of the interviewed people (46% males, 54% females) and one third of the subgroup of respondents with a friend or family tested or diagnosed with prostate cancer are not aware of any available tests to diagnose the disease. Christian Ligensa of the German federal prostate cancer patient support group BPS said he was not surprised by these results: “The low level of awareness about prostate cancer is shocking but considering that clinical research spending is on average around 100 times higher in breast cancer than in prostate cancer, these results don’t come as a surprise,” he commented. “However, these results highlight the fact that we need to act now and raise awareness especially since we know that patients benefit from early treatment and cheap tests such as PSA are available for diagnosis.”

**Gene Defective in at Least 50-60 Percent of All PCA: Find Key Step in Understanding Basis of This Cancer**

A$cribe Newswire / December 21, 2001

At least 50 to 60 percent of all PCA are the result of failure of just one gene, according to a study by researchers at Mt. Sinai School of Medicine published in the Dec 21 issue of Science. While past studies have shown other genes to be associated with a small percentage of prostate cancers, this is the first single gene shown to be responsible for the majority of cases of this disease. Dr. Friedman and colleagues discovered that the gene, known as KLF6, functions as a tumor suppressor. Its role is to restrict cell growth. When KLF6 fails to function properly cell growth goes unchecked and cancer may result.

**Antigen Construct, Cytokine Combo Treats & Prevents Male Malignancies**

NewRx.com / December 21, 2001

University of Iowa researchers have developed recombinant therapies that can treat and prevent prostate cancer tumors in mice. According to a contingent of investigators at the Iowa City, Iowa university, “Prostatic malignancies in 95% of patients continue to present. Some patients say the procedure is painful while others compare it to the prick from a blood test. Doctors traditionally take six samples from the prostate. The pattern used to remove samples has been described as similar to slicing a loaf of bread. This method gives a sample from cross sections through the gland. Recent studies suggest this method has some problems. Doctors discovered approximately 35 percent of PCA’s are missed using this method. They realized many start in the peripheral zone of the prostate, an area that is not thoroughly sampled by the usual method. This is the area that runs along the side of the prostate. More specifically, prostate cancers generally begin in the area closest to the rectum. Now, doctors are looking at different methods to take tissue samples. They hope to cover the area where the cancer is more likely to start. They also take more samples than before. Robert Bahson, M.D. calls the new technique extended sector biopsy. He takes 10 samples, more of which are directed to the area where cancer tends to occur. He says the method is growing in popularity among urologists around the United States. The next goal is to determine the best number of samples to remove.

**AVI Biopharma Scientists Demonstrate Neogene Antisense Agents Effective at Blocking Human Prostate Cancer**

Business Wire / December 14, 2001

AVI Biopharma Inc. announced study results demonstrating that a combination of two proprietary NEUGENE(R) antisense drugs had a synergistic effect in halting cell growth of refractory cancer cells in prostate cancer. The company presents its findings at The Tenth International Conference on Gene Therapy of Cancer in San Diego. In the study, a compound directed against c-myc, a gene involved in cell proliferation disorders such as cancer and cardiovascular disease, was combined with an additional agent targeting hormonal signaling. The combination effectively corrected imbalances in hormone or growth factor functions, thereby stopping unchecked cancer cell growth.

**Cell Genesys Updates Results of Phase I/Ii Trial of CG7870 in Advanced PCA**

PR Newswire / December 14, 2001

Cell Genesys, Inc. reported further results of a Phase I/Ii clinical trial of CG7870, an oncolytic virus engineered to target and destroy prostate cancer cells which is being evaluated in patients with advanced prostate cancer. The updated findings demonstrated stabilization of PSA levels in 26 percent for a median duration of four months after just a
Erectile Dysfunction (ED)

J. François Eid, MD / Healthology.com

What is Erectile Dysfunction?

Erectile dysfunction is also called male impotence. It is defined as the persistent inability to maintain or to achieve an erection of sufficient rigidity to have satisfying sexual activity. It is one of the most commonly untreated medical disorders in the world. It is estimated that 30 million men in the U.S. have problems achieving or maintaining an erection. The frequency of ED increases with age. For example, only five percent of 40-year-old men experience erectile dysfunction. The incidence of ED may be as high as 35 percent in 70-year-old men.

Why isn't Erectile Dysfunction Treated?

Erectile dysfunction largely goes untreated because only one out of 20 seeks medical help. Men are often embarrassed about being impotent and most of the time, they prefer to avoid sex rather than seek treatment. This is unfortunate because consistent loss of erection is not normal at any age. In addition, loss of erection can be a symptom of a serious medical illness such as coronary disease or advanced vascular disease. Finally, many effective treatments are now available, which means that erectile dysfunction can always be treated successfully.

What Causes Erectile Dysfunction?

More than 90 percent of all ED can be traced to a physical (organic) cause. This cause is usually due to insufficient blood flow to the penis and or insufficient blood trapping in the penis after it becomes erect.

As was mentioned earlier, difficulty in getting or maintaining an erection is often a predictor of vascular problems elsewhere in the body, including heart disease. Other factors that can affect your erection include: High cholesterol Cigarette smoking (which constricts the blood vessels leading to the penis) Excessive alcohol Diabetes (as many as 60 percent of diabetic men have erection problems at some point) Certain prescription drugs, particularly blood pressure and cardiovascular medications, plus some tranquilizers and antidepressants Radiation therapy Pelvic surgery (bladder, colon) Following radical prostate cancer surgery (60 percent of men, after all types of radical prostatectomy, have impotence) Stroke or neurological disease, including Parkinson’s, Alzheimer’s, and multiple sclerosis. A much smaller percentage of cases of ED are psychological in origin. These patients tend to be younger and usually report no erection at all with a partner, although they may be able to become erect when they are alone, watching an erotic movie, or during sleep.

Men who suffer from ED due to a physical problem, often have a psychological reaction to the ED such as depression, anxiety, or loss of self-esteem. This is a normal reaction and should not be confused with psychological impotence. Men with ED just do not feel normal or as a patient once put it: “I do not feel like myself.”

Is Erectile Dysfunction a Normal Part of Aging?

While its incidence is highest among older men, difficulty maintaining an erection is not a normal part of aging. A healthy male with a willing partner can expect to have one or two usable erections a week well into his 80s.

Most chronic erection problems are not in a man’s head, but in the blood vessels and muscle cells of the penis. Ninety percent of physical ED occurs because the penis loses flexibility and elasticity over time until its ability to trap and store blood becomes impaired. No matter how much blood flows into the penis, it leaks back out.

This leakage occurs because the muscle cells in the penis become thinner (atrophy) with age, while their supporting network of collagen (connective tissue) is no longer renewed as quickly as it was in youth and becomes less elastic (stiff or less compliant). As a result, the muscles in the penis are unable to fully expand, which is a necessary condition for blood to remain in the penis and erection to occur.

An occasional loss of erection is nothing to worry about. But if it happens consistently, you should see a physician specialist in this area, either an internist specializing in erectile dysfunction or a urologist. Only a urologist can treat all forms of ED.

Treatment Options for Erectile Dysfunction

Oral Medications: Currently there is only one oral medication approved by the FDA to treat erectile dysfunction. Sildenafil (Viagra) was approved by the FDA in 1998 and represents a milestone in the field of erectile dysfunction. Viagra works by increasing blood flow to the penis, as well as causing penile muscles to relax. It does not initiate an erection however, rather it helps to store penile blood flow in response to sexual stimulation by countering the chemical Phosphodiesterase V that takes away an erection.

This is very important to understand because it means that for Viagra to be effective one must be able to initiate a partial erection in response to sexual stimulation. In the absence of this partial erection or without sexual, tactile stimulation, Viagra will be ineffective. A high-fat meal will delay absorption and if the stomach is empty Viagra will be fully absorbed in a little less than an hour. If an erection occurs before it is fully absorbed, the chemical that takes away erections will not be fully counteracted and will begin to take away the erection. One must be patient. Fatigue, anxiety, a heavy meal, and large amount of alcohol intake will diminish the erectile response to Viagra. Viagra will remain in the body four to eight hours and the higher the dose (100 milligrams) the broader the window of sexual opportunity becomes. Most men (80 percent) require the 100-milligram dose. Finally, Viagra is effective regardless of the cause of the erectile dysfunction, including hypertension, coronary disease, prostate cancer, diabetes, depression, or age of the patient. Side effects of Viagra include headaches, redness of the face, nasal stuffiness, and heartburn. Three percent of men may experience visual disturbance in the form of an increased sensitivity to light or seeing a bluish tint to everything. All side effects are very mild, well-tolerated, transient, and actually very few patients discontinue use because of them. Viagra is contraindicated for men who take medications that contain nitrates of any form or schedule. Viagra should never be taken by a patient who is on nitrates.

TAP Pharmaceuticals is investigating apomorphine SL (Uprima) but withdrew its new drug application in October 2000. This drug works on the brain centers that control erections and helps men obtain and/or maintain an erection. Although effective in clinical trials, the medication is currently not available for clinical use. Side effects are very infrequent and mild and include nausea and dizziness to the point of passing out (syncope). With correct use these side effects may be prevented.

Yohimbine is a popular oral medication, but its effectiveness has been disappointing. In men who suffer from physical ED, it is as effective as a sugar pill (placebo).

Phentolamine (Vasomax) was found to cause liver abnormalities in study animals, prompting the company (Nonagon) to withdraw the new drug application from the FDA. This medication most likely will never be available clinically.

The antidepressant drug Trazodone, taken one hour before sexual activity, has been found to prolong erections in men who are able to obtain, but not maintain an erection during intercourse. Trazodone, however, is much less effective than Viagra.

Finally, (as reported in the Nov. 2001 Us Too! HOTSHEET) several Phosphodiesterase Inhibitors (Viagra-like) are currently being
Internal Penile Pump™ The Internal Penile Pump (IPP) is a soft-fluid-filled (saline) device that can expand and contract without losing elasticity. It consists of three small components: very thin tubes, pump, and reservoir. The reservoir contains the saline, which is transferred by the pump into the penis, causing the penis to expand and become rigid. There are more than 250,000 men who have the Internal Penile Pump. Once inserted, the pump is invisible and the penis and scrotal sac look normal both in the flaccid and erect position. The entire IPP can be placed through a very small (two- to three-centimeter) opening in the skin of the scrotum in less than an hour. This is a breakthrough when compared to previous techniques, which made much larger openings that required a longer and more painful healing process. The beauty of this technique is that the skin on the penis itself is never opened so that there are no visible scars and normal sensation is preserved. In my hands, this is a safe procedure with an infection rate of less than 0.3 percent. It can even be done with a local anesthetic and on an outpatient basis. Again, the penis looks and feels normal. The internal pump does not interfere with normal sensation or ejaculation.

Men also report additional benefits from the IPP that include: opportunity for spontaneous sexual activity, restoration of normal penile anatomy (many patients after radical prostate cancer surgery lose penile length and girth), larger looking flaccid penis, and the ability to maintain an erection after orgasm. Use of the Internal Penile Pump has resulted in documented high satisfaction rates for both patient and partner, and doesn’t require additional treatments, such as injection or vacuum.

The Internal Penile Pump is an excellent alternative for men who do not respond to Viagra. For most men, it represents a cure. Excellent candidates are men between the ages of 50 and 90 years old, sexually motivated and active; men who have had prostate, bladder, or colon cancer treatment, and who have penile deformity and/or atrophy (shrinkage). (The Internal Penile Pump is also referred to as penile implant or prosthesis.)

Topical Creams MUSE (Medicated Urethral System for Erection) contains a prostaglandin pellet that can be applied one-and-a-half inches deep into the opening of the urethra just prior to intercourse. The pellet acts by widening the penile blood vessels, causing blood flow to go to the penis. Since its FDA approval in 1996, patient response to MUSE has been very disappointing. This method is less effective and more painful than penile injection therapy. Also since FDA approval of Viagra, MUSE has become much less popular. Finally, Topiglans is a paste of Alprostadil (it is currently under investigation), which is applied to the head of the penis and may cause enlargement of the glans penis. This method, however, also causes penile ache and does not improve the rigidity of the erection.

Injection treatments Prior to the FDA approval of Viagra, injection therapy was the most effective medical treatment available. Injection therapy works by injecting a type of medication through a very small hypodermic needle at the base of the penis five minutes before intercourse. The medication injected dilates the blood vessels to produce an erection. In the 1980s, the injection consisted of a mixture of papaverine and phentolamine. Side effects from the injections of these two drugs have led to scarring (from repeated injections) and sometimes painfully prolonged erections (solved by reducing the drug dosage).

Prostaglandin E-1 (Alprostadil) (Caverject or Edex) has been the drug used for injections since 1995. Alprostadil is a naturally occurring substance in the penile tissue. It can be self-injected safely at home with few side effects. A dull penile ache is experienced by 40 percent of patients using prostaglandin E-1. This is transient and well-tolerated in the majority of patients. Tests show that scarring from prostaglandin E-1 injections is minimal (occurring in only five percent of cases) and the satisfaction rate is high. This is currently the only FDA approved medication for penile injection. Off-label use of Trimix (Papaverine, Phentolamine, and Alprostadil) is very successful and safe, and is currently the preferred penile injection method. The instance of long-term use, however, is poor; more than 50 percent of men stop using the injection method after two months and less than 30 percent use this technique for more than two years.

External Penile Pumps This vacuum device doesn’t involve medications or surgery. A tube is placed over the end of the penis and the device is activated, creating a vacuum that encourages blood to flow into the penis to create an erection. A rubber ring is then snapped over the base of the penis to help maintain the erection. A semi-hard erection is obtained. While the initial success rate is high with vacuum devices, less than one-third of the men who buy them end up using the vacuum pump long-term. Many of the men who no longer use the external penile pumps say that they are too cumbersome and the erection that results can be somewhat painful and not quite normal. This is definitely not the preferred treatment option for couples who enjoy spontaneous, normal, and frequent sexual activity.

Psychological Treatment If the dysfunction has a psychological cause, then you will be referred to a certified sex therapist. If the problem turns out to be a simple issue of communication with your partner, a therapist could help you resolve it relatively quickly. When the dysfunction involves more deeply ingrained issues—for example, inhibition or performance anxiety related to upbringing, religion, and social background, it tends to be more difficult and time consuming to treat.

The bottom line is that ED is debilitating for most men, and I believe that for many couples, a supportive partner is the most important factor in regaining a full, healthy sex life.

Source: Healthology (healthology.com)
A Slice of Pizza Cuts Prostate Cancer Risk

HealthScout / December 20, 2001

Men with a taste for ketchup, tomato juice or pasta sauce may have an extra edge against prostate cancer, suggests a new study.

Researchers in Chicago suspect that lycopene, the pigment that gives tomatoes their red color, may reduce damage to DNA linked to prostate cancer, raising its potential as a therapy for this type of tumor.

The findings, which appear in the Dec. 19 issue of the Journal of the National Cancer Institute, add to a growing body of evidence about lycopene's effects against conditions that include cancer and cardiovascular disease.

Lycopene is part of a family of pigments called carotenoids, which occur naturally in fruits and vegetables.

Venketeshwar Rao, a professor of nutritional sciences who studies lycopene and health at the University of Toronto, says that North Americans get between 85 percent and 90 percent of their dietary lycopene from tomatoes, although it can also be found in foods like watermelon and pink grapefruit.

The chemical form of lycopene found in processed tomato-based foods, like pasta sauces and ketchup, is absorbed more efficiently than the lycopene found in fresh tomatoes, says Rao. Lycopene is also a powerful antioxidant that neutralizes harmful oxygen radicals that have been linked to various forms of cancer, including PCa.

In the latest study, Phyllis Bowen and her colleagues at the University of Illinois in Chicago followed 32 men recruited between May 1998 and July 1999. All were between the ages of 57 and 69, had been diagnosed with prostate cancer and were scheduled for a radical prostatectomy, or removal of the entire prostate.

For the three weeks prior to the surgery, Bowen had the men eat a tomato-based pasta dish, containing three-quarters of a cup of tomato sauce or roughly 30 milligrams of lycopene, once a day. Fullerton, Calif.-based Hunt-Wesson, Inc., which partially funded the study, provided the tomato sauce.

The men’s blood and prostate lycopene concentrations and PSA were measured before and after the sauce regimen was put in place. The researchers also measured levels of oxidative DNA damage in each man. The men experienced a threefold increase in lycopene levels during the diet and surgery, and the researchers found that oxidative DNA damage was reduced by an average of 28 percent after the men started the sauce diet.

“Lycopene is a good antioxidant,” says Bowen, adding that one theory suggests that the prostate is prone to cancer because it’s under more oxidative stress than other tissues. “Therefore, an antioxidant might prevent the DNA damage — which is necessary for all cancers to get started — that might occur in an oxidatively stressed prostate.”

PSA levels were also reduced by 17.5 percent, but it’s less clear whether lycopene was directly responsible for that effect, says Bowen. Other substances in tomatoes, including phenolic compounds, vitamin C and salicylic acid, could be responsible, she says.

“Levels of lycopene are significantly lower in PCa patients,” says the University of Toronto’s Rao. “We’re finding, actually, the same thing with breast cancer patients.”

“Lycopene seems to be, in fact, the first level of defense for these patients,” says Rao. Because a prostate cancer patient is fighting more oxidative damage, his body uses up his normal dietary intake of lycopene to protect his DNA from oxidative damage.

“In that sense, [lycopene] protects the DNA against the reactive oxygen species that would otherwise react with the DNA and caused oxidative lesions,” he says. “Only when lycopene is depleted are vitamin E and other [antioxidants] called upon.”

Rao says this suggests that supplementing lycopene to maintain normal levels in prostate cancer patients may slow the progression of the disease. “Lycopene, perhaps, can not only prevent it from growth but also be responsible for the regression of the tumor,” Rao says.

Exactly how much lycopene is required to have this effect in cancer patients is still a subject of debate. However, Rao says that some of his research has suggested that between five milligrams and 10 milligrams daily may be sufficient for healthy people.

Bowen says that these findings call for a larger scientific trial of lycopene or tomato products.

“We don’t have definitive answers that translate into advice to men who are at high risk for prostate cancer or who have prostate cancer,” she says. “However, since one of the important pieces of dietary advice is to eat at least five servings of fruits and vegetables a day, tomato products should be part of this mix. I think a lot of people overlook tomato sauce on their pizza or pasta as counting for a serving of vegetables.”

Stanford University Researcher Shows Selenium May Help Prevent Prostate Cancer

AScribe NewsWire / November 30, 2001

Men with low blood levels of selenium - a trace element supplied in certain foods and supplements - are four to five times more likely to contract prostate cancer, according to a federally sponsored study published by a Stanford University urologist and colleagues.

James D. Brooks, MD, lead author of a paper in the Dec. 1 issue of the Journal of Urology, said the research confirmed that higher blood levels of selenium were associated with lower risks of prostate cancer.

“Perhaps the most interesting finding of this study was that blood selenium levels decreased with age - a fact not previously known. Furthermore, this study showed there was a direct connection between selenium and prostate cancer - older men with higher levels of selenium were at lower risk.”

The study suggests that eating more selenium-rich foods, such as Brazil nuts and tuna, or taking a dietary supplement, may reduce the risk of prostate cancer. Brooks said further study is needed to determine if supplements will actually raise selenium levels in the blood.

Nevertheless, the researchers concluded that the results support the hypothesis that supplemental selenium may reduce the risk of prostate cancer. Because selenium in blood decreases with patient age, supplementation may be beneficial to older men.

A large study is now under way at Stanford and other major medical centers to test whether supplements will reduce prostate cancer rates. (Healthy men over age 55 may volunteer or receive details about the study at Stanford and other sites by calling the NCI information line, 1-800-4-CANCER.)

Brooks’ study included 52 men with prostate cancer and 96 men without the disease. The median age was just under 69. The men’s health histories and medical risks have been tracked for many years as part of the federally sponsored Baltimore Longitudinal Study of Aging.

Brooks, an assistant professor of urology at Stanford, was joined in the study by scientists
at the Laboratory of Clinical Investigation of the National Institute on Aging, and Johns Hopkins University School of Medicine. The project was supported by a grant from the National Institute on Aging.

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**Antioxidants Seen Key to Fighting Prostate Cancer: Study Has Shown Vitamin E Supplements Reduce Risk**

PR Newswire / December 03, 2001

Scientific research is showing increasing evidence that the risk of prostate cancer can be reduced by antioxidants. Antioxidants are naturally-occurring compounds in foods and vitamins that fight off free radicals, which are harmful chemicals believed to contribute to a number of diseases and disorders. Antioxidants are found in a variety of fruits and vegetables and in vitamins, including Vitamins C and E.

A recent study by the Memorial Sloan-Kettering Cancer Center in New York found that men who had higher blood levels of certain antioxidants, from diets including dark green leafy vegetables, were “significantly less likely to develop prostate cancer than others,” according to the Tufts University Health & Nutrition Letter.

The Tufts publication also cites a study in Finland that found men who took Vitamin E daily for up to eight years had almost half the deaths from prostate cancer than other men.

A major United States study is underway to assess the benefit of both Vitamin E supplements and selenium on prostate cancer. The study is being conducted by the National Cancer Institute, part of the National Institutes of Health (NIH) in Bethesda, Md. More than 32,000 men are being enrolled in the study in the United States, Puerto Rico and Canada.

The 12-year study is expected to produce firm results on the roles of Vitamin E and selenium in lowering the risk of prostate cancer. Almost 200,000 new cases of prostate cancer are expected to be diagnosed in the United States this year, and more than 31,000 men will die of the disease.

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**Anticancer Mechanism of Green Tea Identified**

NewsRx.com / December 21, 2001

Researchers at the University of South Florida’s H. Lee Moffitt Cancer Center and Research Institute have identified one plausible reason for the well-documented but poorly understood anticancer effect of green tea polyphenols (GTP) in a study using prostate cancer cell lines. In this study, different concentrations of GTP were tested in a single treatment.

“The higher the concentration, the better the response - meaning more apoptosis - occurring as a result of a greater decrease in Bcl-XL, a protein that protects cancer cells from apoptosis,” said Aslamuzzaman Kazi, PhD, research fellow in the Drug Discovery Program at Moffitt Cancer Center. “At all concentrations, response was apparent within three hours.”

“Because Bcl-XL is overexpressed in many cancers, it could be a key target in all cancers and explain why GTP is able to prevent human cancers in mouse models,” suggested Ping Dou, PhD, associate professor of oncology, biochemistry, and molecular biology at Moffitt.

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**Ohio State Scientists Claim to Bake Heart-Healthy Soy Bread**

NewsRx.com / December 21, 2001

A team of scientists at The Ohio State Comprehensive Cancer Center (OSUCCC) has something in the oven: the first soy bread that’s both good for your heart and easy on the taste buds, too.

“This is the first baked good that can legitimately carry the FDA claim that consuming it is associated with a lower risk of heart disease,” says Dr. Yael Vodovoz, an assistant professor of food science. “It’s a big deal.”

Soy is a potential cancer fighter because it contains certain ingredients called isoflavones and a variety of other phytochemicals. Isoflavones are a class of plant-based chemicals that are used by the plant as hormones to ward off pests such as insects. There is some evidence that isoflavones may mimic human estrogen. Tomatoes, on the other hand, contain substantial amounts of lycopene, which has been shown to help prevent prostate cancer. The question is, does combining them make sense?

“People haven’t really looked at combinations of functional foods,” says Bomser. “We know that the Asian diet is full of soy, but it really hasn’t caught on here. We’re interested in putting soy in tomato sauce or combining them in other soups, juices, or sauces that are already part of the Western diet,” he adds.

So how about a tomato-soy bread? Maybe, says Schwartz.

His colleagues in the OSUCCC are already experimenting with a diet rich in soy and tomatoes as a possible way to slow the growth of existing prostate cancers.

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**PCA News You Can Use** (continued from P. 3)

single intravenous injection in patients with advanced hormone refractory prostate cancer. The Phase I/II trial was conducted at three medical centers under the direction of Eric Small, M.D., clinical professor of medicine and urology at the Univ. of CA, San Francisco Comprehensive Cancer Center. These data were reported at the International Conference on Gene Therapy of Cancer.

In a separate presentation data were reported from a preclinical study that demonstrated significant synergistic antitumor activity when CG7870 was used in combination with chemotherapy currently used to treat prostate cancer. In mouse tumor models of Prostate Cancer, a single injection of CG7870 in combination with taxotere completely eliminated tumors within four weeks of treatment without dose-limiting toxicity — a 1000 fold increase in the therapeutic index compared to treatment with CG7870 alone.

Also included in this presentation were preclinical data demonstrating that CG7060, an oncolytic virus therapy currently being evaluated in clinical studies of early-stage prostate cancer, demonstrated a 95 percent reduction in tumor volume within six weeks following treatment when used in combination with local tumor radiation. This combination therapy was also observed to have significantly reduced the number of blood vessels supplying the treated tumors. Additionally, 50-fold less CG7060 virus was needed when used with radiation to produce comparable results to that seen with CG7060 alone. Similar preclinical studies demonstrated synergistic antitumor activity when using chemotherapy in combination with CG8900 and CG8840 for liver and bladder cancer, respectively. Cell Genesys expects to initiate a Phase I/II clinical trial in the near future evaluating the combination of CG7060 and external beam radiation therapy in early-stage prostate cancer patients.

**MRI Contrast Agent Detects Prostate Cancer’s Spread To Nodes**

Medinews.com / December 17, 2001

A study has found that an investigational magnetic resonance imaging (MRI) contrast agent is able to distinguish malignant from normal lymph nodes in the majority of prostate cancer patients. More-accurate staging could identify more-effective and less-invasive treatments for some patients. The study was presented at the annual meeting of the RSNA in Chicago. The study involved 44 patients with confirmed PCa.

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PCA NEWS YOU CAN USE
(continued from P. 7)
Lymph nodes were evaluated using MRI before and after the administration of the contrast agent, called Combidx, and later compared to pathology results following surgery. When the image evaluation was compared to pathology findings, the results showed that Combidx was able to detect malignant lymph nodes with 93% specificity and 92% sensitivity. The new contrast agent was developed by Advanced Magnetics, Inc. Cyrogen Corp. has exclusive US rights to the agent.

*CANCER PRODUCT SUPPRESSES THE GROWTH OF PROSTATE TUMORS AND ENHANCES THE EFFECTS OF RADIATION THERAPY*
*Business Wire / December 17, 2001*
GenStar Therapeutics announced pre-clinical data describing the efficacy of its prostate cancer product, the DUAL-AD vector system. In these studies, GenStar’s vector system was shown to eradicate tumors through a combination of direct tumor destruction, radiation enhancement and the generation of anti-tumor immunity. This data was presented at the 10th International Conference of Cancer Gene Therapy in San Diego, CA.

**NEW DISCOVERY ON MOLECULAR STRUCTURE OF KEY PCA MARKER**
*PR Newswire / December 06, 2001*
The PSMA Development Company LLC announced new findings on the molecular structure of prostate-specific membrane antigen (PSMA), which may have fundamental implications for development of PSMA-targeted cancer immunotherapies. Scientists from the joint venture reported for the first time that PSMA exists on human cancer cells as a homodimer, a protein complex consisting of two identical PSMA chains. The PSMA dimer is abundantly expressed on the surface of prostate cancer cells and is an attractive target for treatment with vaccines or monoclonal antibodies. The findings were presented at a meeting of the American Association for Cancer Research (AACR), New Discoveries - Prostate Cancer Biology and Treatment.

**VIRAL VECTORS CARRYING BAX GENE INCREASE LIKELIHOOD FOR APOPTOSIS**
*NewsRx.com / November 29, 2001*
Tumors that are resistant to apoptosis could be treated with gene therapies designed to counteract that resistance, researchers in Ireland suggest. The researchers, who work at Trinity College and University College, both located in Dublin, have studied an expression vector that induces apoptosis in rodent prostate cancer cells. The gene therapy could be used to treat other kinds of tumors that resist apoptosis, researchers say. Key points reported in this study include:
- Semliki Forest virus (SFV) inherently induces apoptosis
- Recombinant SFV expressing genes for Bax enhances apoptosis in rodent prostate cells expressing genes for the antiapoptotic protein Bcl-2
- Recombinant SFV particles might be useful for treating solid tumors known to resist apoptosis

**MITOXANTRONE SAFE, BIOCHEMICALLY ACTIVE IN PATIENTS WITH HORMONE-NAIVE PCA AND PSA PROGRESSION**
*FaxWatch Inc. / November 26, 2001*
Study results demonstrated mitoxantrone treatment in patients with PSA progression after local therapy, but before androgen ablation (AA), was safe and biochemically active. “Further studies are warranted to determine whether pharmacogenomic assessment of topoisomerase II, MRP, or bcl-2 may predict response to mitoxantrone,” the researchers concluded. (DiPaola R, et al. Cancer 2001;92:2065-71.)

**OBESITY MAY INFLUENCE PREVALENCE OF ADVANCED PCA IN BLACK MEN**
*FaxWatch Inc. / November 26, 2001*
New data suggest that obesity may be a factor associated with the higher prevalence of advanced prostate cancer in black men. “These findings lend support to the hypothesis that more aggressive disease in black patients is related at least in part to an increased degree of obesity in this population,” the authors wrote. “It is also interesting to note that the racial incidence of prostate cancer parallels the BMI distributions we found in black, white, and Asian men,” they added. (Ameling C, et al. Urol 2001;58:723-8.)

**FOLLOW-UP DRE NOT NECESSARY AFTER RADIOTHERAPY FOR PCA**
*FaxWatch Inc. / November 26, 2001*
A digital rectal examination does not need to be included during routine follow-up evaluations in patients with prostate cancer after radiotherapy, researchers recommended after evaluating patients at a large tertiary care military hospital. For this population, follow-up DRE was not recommended, “especially when current guidelines for colorectal cancer screening have been met by other providers in the managed care system.” (Johnstone P, et al. J Urol 2001;166:1684-7.)
hot sheet (plural hot sheets). A list of items of high current interest. The patrolmen were given a hot sheet of stolen cars. The brokers worked initially from a hot sheet of new listings. 2006, Cheryl Woodard, Starting & Running a Successful Newsletter Or Magazine, page 287: Anne's daily faxed hot sheet product is very profitable. You can see on line 14 that she earns about $100 from every subscriber. Hot Sheet is built for speed and designed to be an uncluttered and easy to use web portal/home page for all modern desktop or notebook PCs, tablets and mobile devices. See our Homepage Instruction page on how to update your web browser settings to set www.hotsheet.com as your web browser start up homepage. Subscribe to The Hot Sheet. The best publishing industry news and analysis especially for authors for $59 per year. Market Trends. Learn what's selling and what's not for traditionally published authors and indies alike. Exclusive Reporting. Receive original articles and analysis you won't find anywhere else. Author Earnings. sheet-European Union Table 50 Hot-rolled sheet-India Table 51 Summary - Certain Economic Indicators. This method for cooling a hot-rolled steel sheet comprises: a target ratio setting step for setting, as the target ratio Xt, an upper/lower heat transmission coefficient ratio X1 at which the temperature standard deviation Y of a hot-rolled steel sheet takes the minimum value Ymin, the target ratio Xt being set on the basis of correlation data between the. Show declension of hot sheet. hot sheet (plural hot sheets). Example sentences with "hot sheet", translation memory. Giga-fren. sheet-European Union Table 50 Hot-rolled sheet-India Table 51 Summary - Certain Economic Indicators.