Hot SHEET
Us TOO INTERNATIONAL Prostate Cancer Education and Support Network

INSIDE

Us TOO Prostate Cancer
SUPPORT - EDUCATION - ADVOCACY

Yearly Biopsy Not Needed for Prostate Cancer Surveillance

It is "acceptable" to biopsy men every two years instead of annually when they have low-risk prostate cancer and are managed with active surveillance (AS), concludes a new analysis that integrates individual patient data from four major studies. The new analysis was published online in Annals of Internal Medicine on 11/28/17.

"The delay in detecting disease progression with biennial testing, relative to annual testing, ranges from three to five months, which is modest and is very unlikely to influence a patient's long-term outcome," said senior author Ruth Etzioni, PhD, a biostatistician at Fred Hutchison Cancer Research Center in Seattle, WA.

The study examined data from the four biggest AS cohorts in North America: Johns Hopkins University (JHU); Canary Prostate Active Surveillance Study; University of California, San Francisco (UCSF); and the University of Toronto (UT). The sites differed in terms of biopsy schedules; periods ranged from every four years at UT to annually at JHU, although not all men at each center were managed as planned.

Investigators compared PSA levels and biopsy Gleason scores for 2,576 men from all sites who were enrolled in an AS protocol between 1995 and 2014. All men had low-risk disease: a Gleason score between 2 and 6 and T1 or T2 prostate cancer. Delays in detecting progression with annual vs. biennial biopsies

(Continued on page 3)

When PSA is 4-10 ng/mL, phi Test Helps with Biopsy Decision

The Prostate Health Index (phi) (Beckman Coulter) significantly changes urologists' opinions about whether men with certain results on prostate-specific antigen (PSA) screening should or should not undergo a prostate biopsy to assess for cancer, according to new observational research.

Use of the test affected the physician's management plan in 73% of the cases in the study, report the authors, led by Jay White, MD, a urologist at Carolina Urology Partners in Huntersville, NC.

The changes included biopsy deferrals when the phi test score was low and biopsy referrals when the score indicated an intermediate or high probability of prostate cancer.

In the study, the most common change in management was to avoid a biopsy. The study was published online November 20 in Prostate Cancer and Prostatic Diseases.

For their study, Dr. White and colleagues compared 506 men who were prospectively enrolled and who received the phi test, and 683 historical control patients, who did not receive the phi test. Notably, the prospectively enrolled participants and the control patients were from the same four large urology groups (in North Carolina, Maryland, Colorado, and Texas) and were managed by the same physicians.

The men who received the phi test underwent significantly fewer biopsy procedures compared to the historical control group (36.4% vs. 60.3%, respectively; P < .0001). "Physicians

(Continued on page 4)

Cancer Survivors Can Develop PTSD

People usually imagine post-traumatic stress disorder (PTSD) as happening to war veterans or assault victims. But new research shows the trauma of a cancer scare often leaves survivors with the condition. "Many may not want to admit how they feel," the study's lead author said.

"Many cancer patients believe they need to adopt a 'warrior mentality,' and remain positive and optimistic from diagnosis through treatment to stand a better chance of beating their cancer," explained Caryn Mei Hsien Chan of the National University of Malaysia.

"To these patients, seeking help for the emotional issues they face is akin to admitting weakness," she said.

In their study, Chan and her colleagues tracked outcomes for 469 adults with different types of cancer. The research showed that nearly 22 percent had symptoms of PTSD six months after their cancer diagnosis. And about six percent still had the condition four years after diagnosis.

And while overall rates of PTSD did seem to decrease over time, a third of patients who had the condition six months after their cancer diagnosis had either persistent or worsening PTSD four years later, the study found.

Reporting 20 November 2017 in the journal *Cancer*, Chan noted that many patients live in fear that their cancer will return, and may believe that any lump or bump, pain or ache, fatigue or fever indicates a return of the disease.

(Continued on page 4)

This Issue of the Us TOO Prostate Cancer *Hot SHEET* is made possible by charitable contributions from

Pfizer Oncology
astellas Leading Light for Life
BAYER
CyberKnife ACCURAY

AND PEOPLE LIKE YOU!

Items contained in Us TOO publications are obtained from various news sources and edited for inclusion. Where available, a point-of-contact is provided. References to persons, companies, products or services are provided for information only and are not endorsements. Readers should conduct their own research into any person, company, product or service, and consult with their loved ones and personal physician before deciding on any course of action.

Information and opinions expressed in this publication are not recommendations for any medical treatment, product service or course of action by Us TOO International, Inc., its officers and directors, or the editors of this publication. For medical, legal or other advice, please consult professional(s) of your choice.

Us TOO International, Inc. is incorporated in the state of Illinois and recognized as a 501(c)3 not-for-profit charitable corporation

Donations/gifts to Us TOO are tax deductible

2720 S. River Rd., Ste. 112,
Des Plaines, IL 60018
T: (630) 795-1002 / F: (630) 795-1602

Website: www.ustoo.org

Phase 1 Trial Shows ProscaVax Vaccine Stopped Prostate Cancer Progression in 80 Percent of Patients

Six injections of OncBioMune Pharmaceuticals' prostate cancer vaccine ProscaVax stopped the progression of the disease in 80% of men in a Phase 1 clinical trial, the company announced.

Results applied to men who were treated for 19 weeks. All the participants had cancer that had returned after other treatment regimens.

"All data to date is consistent with prior study data demonstrating that ProscaVax elicits immune responses to fight tumor growth in prostate cancer," stated Dr. Jonathan Head, chief executive officer of OncBioMune. "We are impressed that 80% of the men treated with ProscaVax demonstrated stable disease – that is, no progression."

ProscaVax immunizes men against the protein PSA, high levels of which are associated with cancer. The vaccine includes PSA plus two immune system activators, interleukin-2 (IL-2), and granulocyte-macrophage colony-stimulating factor (GM-CSF). It is designed to boost the immune response against prostate cancer cells.

The ongoing Phase 1 trial (NCT02058680) is evaluating the vaccine's effectiveness against recurrent prostate cancer in patients whose PSA levels had increased for more than six months before the trial started. The study is also assessing vaccine safety.

In the Phase 1a part of the trial, the 20 participants received vaccine shots at weeks 1, 2, 3, 7, 11, and 15.

At the first follow-up at 19 weeks, researchers discovered that cancer in 16/19 men had failed to progress. Among the four patients whose disease progressed, three had higher PSA levels. Imaging indicated that the cancer of the other had spread to the brain.

Researchers also found the vaccine to be safe. They observed no serious adverse events or dose-limiting adverse events in the 30 days after vaccination began.

OncBioMune is conducting more analyses to determine if the vaccine can increase the immune response against PSA and decrease PSA doubling times — a measure of cancer progression.

"We look forward to continuing to follow the patients in this study to collect additional data and also to conducting a larger study to further validate the therapeutic benefit of our vaccine platform technology," Head said.

Phase 1b of the trial will involve men receiving booster shots at weeks 27, 35, and 43, along with IL-2 injections.

The trial is being conducted at UCSD Medical School, with support from the U.S. Navy Cancer Vaccine Program.

ProstateCancerNewsToday
14 November 2017

Amiloride is Effective in the Management of Abiraterone-Induced Mineralocorticoid Excess Syndrome Without Interfering With Its Antineoplastic Activity

Bedussi F, Galli D, Fragni M, et al.

Pharmacology 2017 Aug 11 [Epub ahead of print]

Administration of abiraterone leads to an adrenocorticotropic hormone (ACTH)-driven increase in mineralocorticoid (salt- and water-retaining) hormones, requiring glucocorticoid (e.g., prednisone) supplementation that may stimulate the growth of prostate cancer. Amiloride is a drug that selectively reduces the aldosterone-sensitive sodium/potassium exchange and could be effective in managing mineralocorticoid excess syndrome (MCES).

The efficacy of amiloride + hydrochlorothiazide (HCT) in the clinical management of abiraterone-induced MCES was assessed in five consecutive men with castration-resistant prostate cancer (CRPC). Then, using the in vitro experimental model of prostate cancer cell lines, the possible effects of drugs usually used in the clinical management of CRPC patients on prostate cancer cell viability were investigated.

Amiloride/HCT led to a complete disappearance of all clinical and biochemical signs of abiraterone-induced MCES in the five treated men. The in vitro study showed that abiraterone treatment significantly decreased cell viability of both androgen receptor (AR)-expressing VCaP (vertebral-cancer of the prostate) and LNCaP (lymph node carcinoma of the prostate) cells, with no effect on AR-negative PC-3 cells (a hormone-resistant cell). Prednisolone, spironolactone, and eplerenone increased LNCaP cell viability, while amiloride reduced it. The non-steroid aldosterone antagonist PF-03882845 did not modify prostate cancer cell viability.

Combination amiloride/HCT was effective in managing abiraterone-induced MCES. Amiloride did not negatively interfere with abiraterone's inhibition of prostate cancer cell viability in vitro.

Doc Moyad's What Works & What is Worthless or "No Bogus Science" Column

"Low-Calorie Liquid Diet Reverses Type 2 Diabetes? Yup!"

Mark A. Moyad, MD, MPH, University of Michigan Medical Center, Department of Urology

Editor's Note: Us TOO invites certain physicians and others to provide information and commentary for the *Hot SHEET* to enrich its content to empower the reader. This column contains the opinions and thoughts of its author and are not necessarily those of Us TOO International.

Even a low-calorie liquid diet can help some lose enough weight and reverse type 2 diabetes.[1] And, since weight gain and obesity also appears to encourage prostate and some other cancers to behave more aggressively, perhaps it is time to entertain this new diet? Yup!

When the holiday season has passed, it is sad because that means no more gifts for me, unless of course you (yes you, reading my column) would like to send me a gift for being such an amazing volunteer?! I am thinking a Porsche or Cadillac or even floor seats to an important basketball game?! Anyhow, I digress. It is now New Year's resolution time where humans love to establish difficult, unrealistic goals that are almost impossible to reach, such as to lose only 20 or 30 pounds by summer.

Yet, wait a moment! A new study of patients in the United Kingdom with type 2 diabetes (diagnosed in the past six years) started on an 850 calorie/day diet for three to five months and then gradually re-introduced food. Well, average weight loss at six months was 30 pounds, and average weight loss after a year was 22 pounds, respectively, in the diet and control groups! Wow! In fact, to make things even more interesting, the diet group stopped any diabetes medications they were taking on the same day they started the liquid diet! Wow (gutsy call)! A total of 46% of the diet group went into remission of their diabetes vs. just 4% in the control group.

Okay, now here comes the politically correct part – of course, this is not a long-term study and you should check with your doctor first, but it is an option. In reality, the important take home message from this study was not that type 2 diabetes can be reversed by weight loss; but rather that there is a moderate-sized window that exists when someone carries enough weight that leads to development of type 2 diabetes.

The time required for cells that make insulin to permanently stop functioning varies widely from person-to-person (10 to 20 years). However, within a decade of a diagnosis of type 2 diabetes, many cells can start working again if weight loss occurs! That's why the researchers in this study were brilliant for studying patients that had only been diagnosed in the past six years.

So, after you get frustrated by your New Year's resolution, perhaps you should use this study to inspire you to work with a health care professional you trust to follow your health numbers before and after starting your liquid diet to show just how well the body can respond to a small amount of weight loss. Oh, and feel free to add to your New Year's resolution, this Moyad resolution: "Michigan can never lose to Ohio State in football again while I am on this planet or else I am going to freak out!" Yes, I was at "the game" and let's just say the pain is still is too massive to talk about. Hopefully by the time you read this column we will have won our bowl game.

References:

1. Lean M, Leslie W, Barnes A, et al. Lancet 5 December 2017; [E-pub].

NOTE: This article details the nutritional profile of the liquid diet referred to in this column.

Yearly Biopsy Not Needed for Prostate Cancer Surveillance *(Continued from page 1)*

were similar across the cohorts of men. The mean delay was highest at Johns Hopkins at about five months; the lowest delay was at the University of Toronto and UCSF at about three months.

"Given the natural history of prostate cancer, a delay of six months or less in detecting disease progression is not going to change the final outcome in the vast majority of cases," Dr. Etzioni told Medscape Medical News. "Yet it halves the number of times a patient has to come for a biopsy [over the years]."

The findings are important because there is no consensus about implementing the relatively new approach of AS, including the timing of the multiple-core needle biopsy, which is invasive and is associated with potential risks.

She also pointed out that the cancer upgrades are "generally" from Gleason scores of 3+3=6 to 3+4=7, which would lead to a reclassification of a patient's disease from low-risk to intermediate-risk.

Notably, in the new analysis, after the researchers accounted for variables in the protocols and competing treatments, risks for upgrading or progression differed among men in the four AS cohorts. Variables such as eligibility criteria and the indicators that trigger a recommendation for definitive treatment are complex, suggest the authors.

The risk for cases being upgraded was highest in the UCSF cohort and lowest at Johns Hopkins. The risk at Toronto was similar to that reported in the Canary Prostate Active Surveillance Study. However, when the variable of competing treatments was removed the differences in upgrading rates emerged dramatically among the cohorts. For example, 10-year cumulative risk for upgrading in the absence of competing treatments ranged from 25% at Johns Hopkins to 65% at UCSF.

The authors speculated that uncaptured differences in patient profiles among the four cohorts may be at play. For example, the Johns Hopkins patients all had very low-risk prostate cancer, with low PSA densities (<0.15 ng/mL/mL) which, in turn, may be due to a higher prostate volume. Thus, in men with larger prostates, it is likely that the chance of identifying high-grade foci is reduced.

Overall, the authors caution that findings from a single active surveillance cohort may not reflect the risks for prostate cancer progression in another study population.

Medscape Medical News
29 November 2017

PTSD

(Continued from page 1)

"PTSD can have a real impact on cancer care," she added. "Some survivors may skip visits with doctors to avoid triggering memories of their cancer experience, leading to delays in seeking help for new symptoms or even refusal of treatment for unrelated conditions."

Counseling and support are key. For example, the study found that breast cancer patients were 3.7 times less likely to have PTSD six months after diagnosis than patients with other types of cancers. This may be because the breast cancer patients received support and counseling in the first year after cancer diagnosis.

"We need psychological evaluation and support services for patients with cancer at an initial stage and at continued follow-ups because psychological well-being and mental health – and by extension, quality of life – are just as important as physical health," Chan said in a journal news release.

"There needs to be greater awareness that there is nothing wrong with getting help to manage the emotional upheaval – particularly depression, anxiety and PTSD – post-cancer," she added.

Source: *Cancer*, news release, 20 November 2017

The U.S. National Institute on Mental Health has more about PTSD: https://www.nimh.nih.gov/health/topics/post-traumatic-stress-disorder-ptsd/index.shtml.

phi Test Helps with Biopsy Decision

(Continued from page 1)

were less inclined to do a biopsy on men receiving a low phi score," said Dr. White in a press statement.

All of the men in the study were at least 50 years old and had digital rectal examinations, the results of which were not suspicious. The men's PSA values ranged from 4 to 10 ng/mL.

Other studies have shown that men with PSA values in this range who undergo a biopsy have a 30% to 35% chance of being diagnosed with prostate cancer.

This poor diagnostic specificity is one of the leading issues related to PSA testing. As a result, 65% to 70% of men who undergo PSA testing and whose PSA value is in this range undergo unnecessary biopsies and are exposed to complications, including pain, infection, and costs.

In the new study, 28.3% of the physicians stated that knowing the phi score helped to alleviate patient anxiety.

The phi test has been available for clinical use for a few years. It was cleared by the US Food and Drug Administration in 2012 to help clinicians distinguish between prostate cancer and other prostatic conditions in men with PSA values in the 4 to 10 ng/mL range. The test combines the results of three immunoassays – total PSA, free PSA, and p2PSA – into a single numerical score.

The new study is only the second in which the clinical utility of the phi test was evaluated in "real world" practice. In the other study, which was conducted at Johns Hopkins University in Baltimore, MD by academic researchers, the findings were similar (Prostate Cancer Prostatic Dis. 2017; 20:228-33).

That study compared a prospective registry of 345 men who received a phi test to a contemporary cohort of 1,318 men who did not have the test and who served as control patients. Notably, phi testing reduced the rate of biopsies performed without changing the frequency of higher-grade cancers detected. Overall, 39% of men in their registry underwent a biopsy when the phi test was included in the assessment; this represented a 9% reduction in the rate of prostate biopsies performed compared to the control group (48%; P < .001).

"Both studies show a reduction in rate of biopsy when phi is used," Jeffrey Tosoian, MD, MPH, a resident at the James Buchanan Brady Urological Institute at Johns Hopkins School of Medicine, commented in an email to Medscape Medical News. Dr. Tosoian is the lead author of the Johns Hopkins study.

He noted that Dr. White and colleagues administered a two-part questionnaire to the participating physicians, which made their study "more of a true 'clinical utility' study, where you assess decision making in the absence and presence of the test." The questionnaire allowed physicians to record their recommendations before and after receiving the phi test results. Through use of this tool, 73% of all patient management plans were changed.

Thus, the study from Dr. White and colleagues builds on the earlier study from Johns Hopkins by "showing specifically that the information provided by phi impacted the physician's management plan, providing more direct evidence that phi can aid in the decision-making process," he commented.

Dr. Tosoian also said that urologists at Johns Hopkins have begun, in the past one to two years, to use the phi test routinely in cases in which the PSA level is 4 to 10 ng/mL. "Personally, I routinely use phi in cases where deciding whether to biopsy is not clear cut," he commented.

There are other blood tests, including the 4KScore test (OPKO Diagnostics), that men without prostate cancer who undergo PSA testing and whose result is concerning may choose to have performed. However, the phi test is substantially less expensive. In 2014, Medscape Medical News reported that the 4KScore test cost $395, vs. $80 for the phi test.

Medscape Oncology, 30 November 2077

Veterans

If you have been exposed to Agent Orange or other chemicals in the line of duty, please read our brochure on prostate cancer, specifically for veterans.

Visit www.ustoo.org/PDFS/Veterans_Brochure.pdf

Also visit our Military Veterans/Agent Orange webpage at www.ustoo.org/Military-Veterans

Video of Our Panel Discussion and Webcast on

Advanced Prostate Cancer

is now available for viewing in its entirety at:

www.ustoo.org/Advanced-Prostate-Cancer-Webcast

Index of Medical Articles/Abstracts Published in the Us TOO *Hot SHEET* During 2017

To Access These Articles, Visit www.ustoo.org/read-the-hotsheet-newsletter

Name of Article	Month
$1.5 Million Prostate Cancer Grant	October
5-α Reductase Inhibitors & Risk of Prostate Cancer Mortality	March
Adding Abiraterone to Standard Treatment Improves Survival	July
Adjuvant RT for Positive Surgical Margins Post-RP	October
ADT and Heart Failure in Men with Localized Prostate Cancer	October
ADT and Risk of Dementia in Prostate Cancer Patients	January
Adverse Pathology in Low-Volume Intermediate-Risk PCa	September
African American and Caucasian Men Receiving Sipuleucel-T	July
African American Men with Low-Risk PCa are AS Candidates	October
Aggressive Variant CRPC Predicts Platinum Sensitivity	July
AR-V7 mRNA & CRPC Outcomes	June
AUA Consensus Statement Says MRI Okay for Prostate Biopsy	February
Axumin PET/CT Scans & Treatment Plans for Suspected BCR	November
Benefits of MP-MRI in Clinically Significant Prostate Cancer	March
Black Men Should be Screened Earlier for Prostate Cancer	June
Blocking Enzalutamide Resistance in Men with Prostate Cancer	April
Blood Test Instead of Biopsy for Metastatic Prostate Cancer	April
Bone Health & Bone-Targeted Therapy in Localized PCa	October
Cabazitaxel & Overall Survival in Metastatic PCa	September
Can We Stop Monitoring PSA 20 Years after RP?	October
Cancer Biomarker Delivers Lethal Drug to PCa Cells	January
Cancer Can Change Surrounding Tissue – UCSF Study Finds	December
Cardiovascular Risk with ADT: GnRHa vs. Orchiectomy	November
MRI-Guided Prostate Biopsy Techniques Critically Compared	October
Differences in PSA Production by Benign and Cancer Tissue	January
Doc Moyad: "Aspirin is Having a Good Year!"	June
Doc Moyad: "Beware of the Nocebo?!"	August
Doc Moyad: "Eat Fat to Lose Fat..."	March
Doc Moyad: "Exercise & Drugs for CRF"	April
Doc Moyad: "Glucosamine & Chondroitin?"	January
Doc Moyad: "IV Vitamin C Fights Cancer? What?!"	December
Doc Moyad: "Jack-Moyad Patient PSA Choice?!"	September

Name of Article	Month
Doc Moyad: "Melatonin Fights Prostate Cancer!?"	November
Doc Moyad: "So What about Lifestyle Changes?"	October
Doc Moyad: "Testosterone & Weight Loss?!"	July
Doc Moyad: "Turmeric/Curcumin Supplements?!"	February
Doc Moyad: "Vitamin D & VITAL Results"	May
Effect of Longer vs. Standard Dose Intervals of Zoledronic Acid	February
Effect of Short- vs. Long-Term ADT Following Post-RT BCR	March
Exploring Optimal Sequence of Abiraterone & Enzalutamide	April
Extraprostatic Extension Rare in Gleason Score 6 PCa	February
First Guide to Second-Line Hormonal Therapy for PCa	June
Genomic Test Can Predict PCa Metastases After Surgery	August
Genomic Testing for Localized Prostate Cancer – What's Next?	November
Genomic Testing Predicts Metastasis & Mortality in PCa	April
Harm Seen in Alternative Treatments	December
HIFU vs. Robotic Prostatectomy to Manage Unilateral PCa	February
High Dose Rate Brachytherapy Monotherapy for Localized PCa	December
Higher PSA Levels Diagnosis of Metastatic Prostate Cancer	December
Immediate vs. Delayed ADT for Asymptomatic Non-Curable PCa	October
In Sunny LA, Prostate Cancer Patients on AS Just Walk Away	April
Incidence of Aggressive PCa Diagnoses Declining in US	February
Influence of Prednisone on the Efficacy of Cabazitaxel	November
Inherited Mutations in Three Genes Predict Aggressive PCa	February
Intermediate-Term Outcomes from AS by Recurrence Risk	May
Intermittent Auricular Electroacupuncture for Hot Flashes	December
Intervention Improves Appropriate Imaging in Localized PCa	January
LATITUDE: Randomized Trial of ADT ± Abiraterone	July
Life Insurance and Primary Treatment for Prostate Cancer	October
Life with Sexual Dysfunction After Prostate Cancer Treatment	September
Light Therapy 'A Huge Leap Forward' for Early Prostate Cancer	February
Long Term Data Confirm QoL Benefits of SpaceOAR Hydrogel	November
Low-Dose Brachytherapy for Low-Risk PCa: Long-Term Results	November
Low-Fat Meal May Boost Blood Levels of Costly Cancer Drug	April

Index of Medical Articles /Abstracts Published in the Us TOO *Hot SHEET* During 2017

Name of Article	Month
Men Uncertain About Benefits & Risks of Active Surveillance	May
MRI Accuracy for Prostate Cancer Questioned	July
MRI in Diagnosis of PCa in Men with PSA Level 2-10 ng/mL	May
Multimodal Treatment for Early-Stage Metastatic PCa	June
Negative Confirmatory Biopsy a Good Sign for AS in PCa	August
Nerves & Prostate Cancer Growth	December
Old Data Confirms Mortality Benefit of PSA Screening	October
Nonsteroidal Anti-Inflammatory Drugs (NSAIDs) and PCa	November
Novel Molecule Plus Radiation Kills PCa Cells in Mice	January
One RT Dose May be Enough	July
Opdivo, Rubraca Combo Studied in Prostate, Other Cancers	September
Outcomes Mostly Similar Between Racial Groups After RP	January
Patterns of PSA Test Use in the U.S. – 2005 to 2015	December
PCa Screening Benefits vs. View of Treatment Side Effects	August
PET CT & Treatment Outcome Early in Metastatic CRPC	August
Phase 1 Trial for Immunotherapy	March
Physicians Continue to See Merits of PSA Screening	February
Poor Responders Benefit from Taxane Switch	August
Post-RP BCR-Free Survival After Grade Reclassification on AS	May
Post-RP Radiotherapy Benefits Selected Men with Elevated PSA	August
Predicting Post-RP Metastases Using the Decipher® Test	June
Lymph Node Invasion Using Sentinel Node Biopsy	November
Prognostics Significance of a Negative Prostate Biopsy	May
PCa Diagnosis and Treatment Decision-Making & QoL	December
Prostate Cancer Mortality Risk May Depend on Where You Live	March
Prostate Cancer Patients Offered the Lure of Robotic Surgery	November
PCa Patients on AS May Benefit from MRI/Fusion Biopsy	February
PCa Patients Unclear on Differences Among Treatments	November
Prostate Cancer Specialists Argue for Early Chemotherapy	January
Prostate Cancer Surveillance Works for Younger Men	July
PCa Treatment-Related Factors Differ in Black, White Men	August
PSA Nadir May Guide High-Risk Prostate Cancer Care	March

Name of Article	Month
PSA Testing Rates Leveling Off	June
QIAGEN & Liquid Biopsy to Detect Blood AR-V7 mRNA	June
Radium-223 Dichloride Safe Long-Term in Metastatic PCa	September
Reduced Cabazitaxel Dose After Docetaxel Effective in CRPC	October
Re-Examining PSA Density for Predicting Prostate Cancer	June
Relative Toxicities: Intermittent vs. Continuous ADT	June
Researchers Link New Mutation to PCa Risk in Black Men	April
Retreatment with Radium-223	November
Risk of Prostate Cancer Dx & Mortality in Men with BPH	March
RP Innovation and Outcomes at Military/Civilian Institutions	August
RT + ADT for 18 Months May be Sufficient in High-Risk PCa	July
Single Dose of Brachytherapy May be an Effective Treatment	April
Some Younger Men with Prostate Cancer are Candidates for AS	August
Stereotactic Body RT for Low-Risk PCa – 10-Year Analysis	December
Structure-Based IsoPSA Assay Outperforms Level of PSA	June
Surgery for Early Prostate Cancer May Not Save Lives	September
Targeted Biopsy to Detect Gleason Score Upgrading During AS	April
TMPRSS2:ERG and PCA3 RNA Tests for Aggressive PCa	July
Treat Older Prostate Cancer Patients According to Fitness	March
Treatment Duration of Abiraterone Acetate or Enzalutamide	March
Treatment Regret Not Common in Prostate Cancer Survivors	September
Two New Treatments Equally Beneficial for Metastatic CRPC	October
Updated Guideline on Brachytherapy in Prostate Cancer	May
Urine Assay for Detecting Prostate Cancer	April
Urologists vs. Radiation Oncologists on High-Risk PCa	May
USPSTF Backs Individualized Prostate Cancer PSA Screening	May
USPSTF Names AUA-Nominated Urologist to Review Panel	March
Utility of Digital Rectal Exam as an Adjunct to PSA Screening	December
Vessel-Sparing RT Preserves Erectile Function in PCa	May
Stress Management for Newly Diagnosed Cancer Patients	July
Why BCRA-2 Mutant Prostate Tumors are So Aggressive	March
With PSA Screening Physicians Practice What They Preach	September

Doctor Chodak's Bottom Line

Gerald Chodak, MD, Author, *Winning the Battle Against Prostate Cancer*, Second Edition http://www.prostatevideos.com/

Editor's Note: Us TOO has invited certain physicians and others to provide information and commentary for the *Hot SHEET* to enrich its content to empower the reader. This column contains the opinions and thoughts of its author and are not necessarily those of Us TOO International.

P1, "Cancer Survivors Can Develop PTSD"

Post-traumatic stress disorder (PTSD) no longer appears to be limited to people in combat; cancer patients also appear to be at risk according to the report by Chan and co-workers. They found that nearly one-quarter of cancer patients had this problem six months after their diagnosis. Fortunately, it disappeared in almost all patients by four years. The fact that it is less common in women with breast cancer may be due, in part, to the support network available to those individuals. It would be interesting to note the incidence in men with prostate cancer. Another helpful fact would be to determine whether the incidence is less common among individuals who are in support groups. If so, formal programs might be developed by health care workers rather than leaving it up to individual patients or support groups to seek out support.

The Bottom Line: PTSD appears to develop in cancer patients and studies are needed to determine if support networks can lower the incidence and/or shorten the duration.

P1, "Yearly Biopsy Not Needed for Prostate Cancer Surveillance"

How often is a follow-up prostate biopsy needed for men on active surveillance? Etzioni, et al. recently evaluated men on active surveillance from four cancer centers to address this question. They used mathematical models to make their determination based on over 2,000 men that underwent biopsies at different intervals at these centers. Overall, the authors found that the length of time to detect disease progression among the four sites differed by only three to five months. However, their conclusion that doing a prostate biopsy every other year vs. yearly may not result in significant harm is based on this limited amount of data.

One piece of information not provided in the abstract is what fraction of the men had non-localized disease on the alternate year vs. yearly biopsy approach. Also, it would be useful to try to identify factors that permit choosing men for annual vs. alternate year biopsies such as the total amount of cancer or percent of cancer in a biopsy. That information would be useful to present to patients when their doctor discusses the pros and cons of performing a yearly vs. alternate year biopsy. Another curious feature of this report is the wide disparity between upgrading at ten years from the different centers ranging from 25% to 65%. The lower value occurred in the Hopkins cohort, which may be due to the inclusion of PSA density when selecting men for AS. More evaluation is needed to sort this out.

The Bottom Line: More data are needed to determine the safety of performing a prostate biopsy every other year instead of once a year for men on active surveillance.

P1, "When PSA Is 4-10 ng/mL, phi Test Helps with Biopsy Decision"

Is the phi test a useful adjunct to decide who should have a prostate biopsy? White, et al. reported new data on this question. They conducted an uncontrolled study to determine how often decisions were affected by including this test. They found that when the doctors used this test, the decision about management was modified in about 73% of the cases and a lower percentage of men had a prostate biopsy compared to a historical control cohort.

While the findings are interesting, there are several limitations to this study. First, we do not know how many cancers were missed. In both the tested and untested historical controls, about 60% had a positive biopsy, so without actually checking the biopsy in men omitted, we cannot determine the missed cancer rate. Another limitation is that the study design was not randomized, therefore the test was not administered in a standard fashion.

The phi test result is a numerical value estimating the percentage likelihood of finding cancer; it does not give an absolute answer. So, in the men with a phi score less than 36, physicians chose different approaches, ranging from no biopsy (monitoring) to performing a biopsy. If the phi result was low, meaning the patient had a lower risk of cancer, then why was the decision switched from monitoring to doing a biopsy? Similarly for men with values of 36-55+, about 30% of physicians decided to switch from biopsy to monitoring, modifying the monitoring plan or keeping the monitoring plan the same.

Theoretically, men with a higher phi result are in the higher-risk group for having prostate cancer and a conservative approach should not be taken, yet that is not what happened. In other words, the decision was subjective, left up to the doctor, which does not really provide an accurate assessment of the utility of the test. A clinical trial with a different design is needed before the value of the phi test can be accurately determined.

The Bottom Line: The true clinical utility of the phi test needs to be determined with a better study design to make this assessment.

P2, "Phase 1 Trial Shows ProscaVax Vaccine Stopped Prostate Cancer Progression in 80% of Patients"

ProscaVax is a new prostate cancer vaccine that is being studied in men with prostate cancer. In a small phase 1 study, 80% of men did not have PSA progression during a short period of follow-up. These results are likely to lead to the next level of investigation, but ultimately a randomized study assessing its impact on survival will need to be conducted to determine its true value.

The Bottom Line: ProscaVax is a new vaccine under investigation, which has shown some encouraging preliminary results. Further studies will be anxiously awaited.

Video from the 2017
SEA Blue Chicago Prostate Cancer Walk and Run
is now up at:
http://bit.ly/2jwKI6i

Existing Parasite Drug May Fight Prostate and Colon Cancer

Researchers Are Hoping That an Existing Drug May Lead the Way to New Colon and Prostate Cancer Treatments

According to the American Cancer Society (ACS), prostate cancer is the second most common cancer type among men in the U.S. Prostate cancer makes up 9.6% of all new cancer cases in the U.S., while colorectal cancer accounts for 8% of all newly diagnosed cases.

In the case of both prostate and colon cancer, the dysregulation of a cellular signaling pathway called Wnt (wingless)/Beta-catenin signaling can lead to the growth and proliferation of cancer cells. Researchers from the University of Bergen in Norway have recently been looking to explore the potential of already-available drugs to interact with and inhibit this cancer cell proliferation.

Prof. Karl-Henning Kalland and his team have now isolated a substance called nitazoxanide (NTZ), contained in existing antiparasitic drugs, as potentially effective against cancer cell growth. "We discovered that this specific substance is blocking the signaling pathway in the cancer cells, and [making] them stop growing. It is not often that researchers discover a substance that targets specific molecules as precisely as this one."

Study findings were recently published in the journal *Nature Chemical Biology*.

"We assessed the effects of NTZ on Wnt-activated human colon cancer cells," the team reports. They also note that colon cancer and prostate cancer cells exhibit high levels of Wnt (wingless)-activated Beta-catenin. This is a protein that helps to regulate gene transcription and cellular interaction.

When Beta-catenin signaling is faulty, cancerous cells can develop. It can also render cancer cells more resilient.

The team found that NTZ could act on the activated Beta-catenin pathway to effectively block it and stop the growth of cancer cells.

"We are the first researchers," claims Prof. Kalland, "who have mapped the complex molecular mechanisms involved in this process." He also explains why experimenting with drugs that are already known and approved by the Food and Drug Administration (FDA) is so important. FDA-regulated drugs have already been tested in clinical trials and used in treatments, so scientists and healthcare professionals are familiar with their possible effects on the body.

"The advantage of testing already-approved drugs," says Prof. Kalland, "is that we know they work in the human body and have no serious side effects, which means that a future treatment may happen quicker."

Still, further research is needed to ascertain NTZ's full potential in the treatment of prostate and colon cancer.

The effect of this substance on the activated Beta-catenin signaling pathway also impacts the immune response of the body, the researchers explain. In their experiments, they noted that NTZ seems to stimulate the immune system into action.

"At the moment," Prof. Kalland adds, "we are working on how to strengthen our ongoing immune therapy against prostate cancer by using the mechanisms we discovered of the NTZ."

Following the results obtained in this study, he and his team are conducting the first phase of a clinical trial targeting the use of immunotherapy in the treatment of prostate cancer.

Medical News Today
17 November 2017

Hot SHEET Personal Subscriptions Available

We can deliver the *Hot SHEET* newsletter right to your home or office. Support the creation and distribution of the *Hot SHEET* with a suggested annual subscription donation of $35 for 12 issues (includes shipping and handling). To obtain an order form or to order online, go to: www.ustoo.org/Hot_Sheets.asp, or Call 1-800-808-7866 (1-800-80-USTOO).

OUR MISSION:
THE MISSION OF US TOO IS TO PROVIDE HOPE AND IMPROVE THE LIVES OF THOSE AFFECTED BY PROSTATE CANCER THROUGH SUPPORT, EDUCATION AND ADVOCACY/AWARENESS.

Affected by Prostate Cancer?
Us TOO
SUPPORT - EDUCATION - ADVOCACY
www.ustoo.org

Us TOO INTERNATIONAL
PROSTATE CANCER EDUCATION
& SUPPORT NETWORK
SEA BLUE
SUPPORT • EDUCATE • ADVOCATE

Us TOO International Tax Deductible Donation

Name: _____ Company: _____

Address: _____ Suite/Unit #:_____

City: _____ State: _____ ZIP: _____ Country: _____

Phone: ( ) _____ Fax: ( ) _____ Email: _____

Please accept my enclosed tax-deductible donation to Us TOO International, a non-profit 501(c)(3) organization.

Amount: _____ $50 _____ $75 _____ $100 _____ $200 Other: $ _____ Check # _____

VISA/MC/AMEX/DISC # _____ Expiration Date: _____ /_____ CVV#: _____

Signature _____ Date: _____

☐ Check here if you wish to remain anonymous Annual Report donor recognition listing

Us TOO International, 2720 S. River Road, Suite 112, Des Plaines, IL 60018