Informed Prostate Cancer Support Group Inc.
"A 501 C 3 CORPORATION ID # 54-2141691"

Thursday, March 16, 2023

# MARCH 2023 NEWSLETTER

P.O. Box 420142 San Diego, CA 92142
Phone: 619-890-8447 Web: http://ipcsg.org

Volume 16 Issue 03

## Next Meeting Saturday, March 18, 2023 IPCSG—10:00am PT.

## Prostate Cancer Testing

- Dr. Paul Dato is a urologist and currently serves as Director for Medical Quality and Director of the Prostate Cancer Center for Genesis healthcare. Dr. Dato will be discussing New Prostate Cancer Tests…and some Old Ones.
  *After the meeting a light lunch will be served in the foyer outside the meeting room*
- **For links to further Reading: https://ipcsg.blogspot.com/ (includes member suggested links)**
- **If you have Comments, Ideas or Questions,** email Newsletter@ipcsg.org
- **If you would like some copies of our new brochure by mail for distribution to your friends or physicians, please send email to bill@ipcsg.org or call Bill at (619) 591-8670**

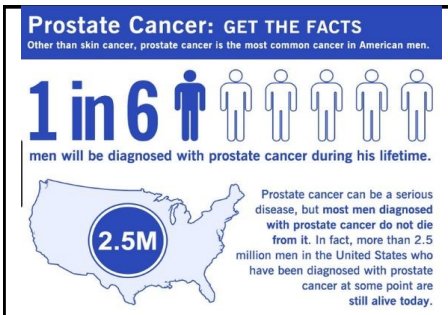
## February 2023 Informed Prostate Cancer Support Group Meeting Summary by Bill Lewis "bill@prostatecancerhelp.info"

## IPCSG Roundtable – Member Stories, Questions and Breakout Session

Meeting Agenda:

- **Darrel Dixon** will tell us how he has coped with prostate cancer for many years, including recent developments.
- **Dan Peddie** will share his journey, including radiation, Lupron, Zytiga, Xtandi and Lynparza, challenges with doctors and current decisions.
- **The third part** of our meeting will be an open mic session, focusing on attendees who are undecided about what to do next. A panel of experienced members including Gene Van Vleet, Bill Lewis, and Aaron Lamb will provide some answers, and the audience will provide more suggestions.

*(Continued on page 3)*




**Organization**

a 501c3 non-profit organization - all positions are performed gratis

IPCSG

**Officers**

Bill Lewis President

**Additional Directors**

Gene Van Vleet

Aaron Lamb

Bill Manning

---

**Honorary Directors**

Dr. Dick Gilbert

Judge Robert Coates

Past President –Lyle Larosh

Aaron Lamb, ..... Facilitator

Bill Manning, .....Videographer

John Tassi, .....Webmaster

Bill Bailey, .....Librarian

Mike Corless,.....Greeter

Aaron Lamb, ..... Meeting Set-up

Stephen Pendergast ..... Editor

**NEWSLETTER**

**Table of Contents**



# PROSTATE CANCER—*2 WORDS, NOT A SENTENCE*

## What We Are About

Our Group offers the complete spectrum of information on prevention and treatment. We provide a forum where you can get all your questions answered in one place by men that have lived through the experience. Prostate cancer is very personal. Our goal is to make you more aware of your options before you begin a treatment that has serious side effects that were not properly explained. Impotence, incontinence, and a high rate of recurrence are very common side effects and may be for life. Men who are newly diagnosed with PCa are often overwhelmed by the frightening magnitude of their condition. Networking with our members will help identify what options are best suited for your life style.

## Join the IPCSG TEAM

If you consider the IPCSG to be valuable in your cancer journey, realize that we need people to step up and HELP. Call **President** Bill Lewis @ (619) 591-8670 "bill@prostatecancerhelp.info"; or **Director** Gene Van Vleet @ 619-890-8447.

## From the Editor

**In this issue:**

Bill Lewis produced a summary of the roundtable last meeting. Articles of interest include:.

1. Death Spurs Country's Shift to Safer Prostate Biopsies—Norwegians switch biopsy technique, eliminate infections.
2. Localized Prostate Cancer — Then and Now | NEJM—statistics favor active surveillance.
3. Prostate cancer treatments can be avoided or delayed in many cases, huge study finds | Live Science
4. Digital Rectal Exams Could Miss Early Prostate Cancers: Study—no more finger exam.
5. Largest study of its kind finds new genetic links to prostate cancer—discovered nine previously unknown genetic risk factors for prostate cancer, seven of which are more common to, or found exclusively in, men of African descent. genetics plays a crucial role in determining cancer risk in younger men. It also highlights the need for including diverse populations in future large-scale genetic studies. “

*(Continued from page 1)*

- **Fourth**, we will invite members to break into additional groups to ask questions on radiation, surgery, active surveillance, hormone therapy, and the rest of those who are undecided about what to do next.

**Darrel Dixon**, age 83, shared his convoluted cancer story and all he has overcome. In 2011, he was diagnosed with lymphoma and prostate cancer at the same time. He treated the lymphoma with chemo for two years, and it went away. He joined the IPCSG and went on active surveillance, but waited "too long," and metastases were found in his back, which took away the option of cure by a prostatectomy or by radiation, since the cancer was assumed to be throughout his body. So he went on Lupron/Casodex and his PSA dropped from 17 to 0.2. In 2016, he joined a UCSD clinical trial of Xtandi (enzalutamide), Zytiga (abiraterone) and prednisone, but had disturbing side effects, feeling he aged years in 3 months. Then a tennis-ball sized PCa tumor in a shoulder lymph node appeared, he was dropped from the trial, and got 13 radiation treatments from Dr. Mundt. In two months, the tumor shrank and disappeared.

IPCSG talks led him to Dr. Fabio Almeida for a C-11 scan, and to Dr. Paul Dato for Provenge immunotherapy and to Dr. Richard Lam.

In January 2017, a regular PET scan showed that his lymphoma was still gone, but this whole-body scan shockingly showed a large tumor in his brain. Dr. Pamela Jones at UCSD was able two days later to "Take out the bad, and leave the memories" in an entirely successful operation that required 20 staples to close the incision. Follow-on radiation to the tumor bed showed the brain tumor was gone, but his monthly scans showed a PCa tumor in his adrenal gland. He went on Keytruda, supplemented with Lupron and Xgeva. But he got a side effect of bullous pemphigoid – blisters on his legs and trunk – so the Keytruda was dropped. It took a year of prednisone and Cellcept (a transplant rejection prevention medicine) to clear it up.

He used Nubeqa for about a year, and had some proton radiation, but wasn't sure how much either helped. Then a PSMA scan showed about 30 spots all over his body! Dr Lam suggested going back to Keytruda (not a good idea due to the side effects) then instead offered chemo as biweekly infusions, in preparation for eventually getting Pluvicto (Lutetium 177). Over the five months of treatment, his PSA dropped from 84 to 7.8. Now it's rising slowing, and he expects that he has time to get on the Pluvicto he had planned a year ago – before the Russian-Ukrainian war disrupted the supply. He noted he has had two ports, the first one used for his lymphoma chemo, and again now for Keytruda and his recent chemo, along with regular blood draws. Very convenient!

In conclusion, he would have liked to have started radiation a year earlier, but has no ongoing concerns and is enjoying upgrading his tennis game. He is pleased with all the medical procedures. His supporting factors are diet, exercise, spiritual growth and family support.

**Dan Peddie**, 68, had increasing back pain for two years, starting in 2017, eventually culminating just after his 65th birthday, in a diagnosis of advanced/aggressive metastatic prostate cancer. His primary care physician (pcp) said to him "I'm so sorry. You have incurable prostate cancer. All that can be done is palliative care." Dan was actually relieved, to know the source of the past two years of problems. But he wanted to know how to best arrest the disease and live long with a high quality of life. As a frequent half-marathon runner, he wanted to know, "How do I finish well?"

Why he had no PSA tests yet: his pcp belongs to the American Association of Family Practice, which does not promote PSA testing because of "false results and unnecessary surgery." Yet when he talked to the Urology Department there at Kaiser, they said, "Oh yeah, we begin annual testing at age 50." His bi-

*(Continued on page 4)*

opsy came back with Gleason = 4+3 and his PSA was over 1000. On the advice of a friend who is an expert medical malpractice attorney, he chose not to sue – since malpractice would be hard to prove – but just to move on.

A bone scan showed metastases all over, including on his skull. Hence the designation as aggressive cancer, despite the modest Gleason score. His first line of therapy was Lupron (after two weeks of Casodex to prevent a flare) and Zytiga (abiraterone). He also got SBRT radiation to various spots, especially one hip. He looked for alternative treatments, and started CBD balm (helpful vs bone pain), gummies, and tincture as well as turmeric, Vitamins C, D & E, along with fenbendazole "dog dewormer" (used a year and a half, without definite benefit, but no side effects).

His therapy was interrupted by a stroke in his right vertebral artery, probably due to Zytiga in combination with a prior history of mild atrial fibrillation. He was in the hospital for 8 days, used a walker for 6 weeks, and had 15 weeks on a feeding tube. During this time, he had no hormone therapy (couldn't swallow Zytiga), but his PSA actually improved very slightly. Recovery became a full-time job for three months, with speech and vocal therapy 3X per day, swallowing exercises 3X per day, and walking 2X per day (getting to 7 miles per day after seven months). For another year, he used oxycodone for pain management, then switched to THC/CBD tincture, gummies and balm.

Several unsuccessful therapies were tried next, after switching from Kaiser to Scripps, including Xtandi (enzalutamide), radiating some spots (giving pain relief but not halting the spread significantly), Lynparza (Olaparib) which gave fatigue, nausea, and shortness of breath – and then a stopgap treatment with Zytiga. Based on discovery of a CDK12 mutation, he looked unsuccessfully for a clinical trial directed at that mutation. Now he is starting a Phase 1b clinical trial at UCSD with Dr. Rana McKay, of Taxotere (docetaxel) in combination with cirmtuzumab (a monoclonal antibody vs. PCa). Current PSA is 88.8.

Dan's learnings from the Journey: Own your health – No one else is responsible nor can manage better than you. Research all you can – Gain knowledge to make decisions and to direct #1 (ignore doctors like he had who said, don't go on the internet, don't research, we'll tell you all you need to know!). Advocate for yourself – Make your plan and be the air traffic controller to therapies and insurance. Work hard on therapies: scans/tests/pills, esp. diet (plant-based), resistance exercise – which lead to QoL benefits. Ask questions – If you don't get answers or proper treatment…CHANGE!!!! Your support group is really important – and he also used an antidepressant. And finally, connect with faith/spiritual life, and learn from Tim McGraw's song: Live Like You Were Dying.

Questions:

What about negative press on Vitamin E? Stay away from the synthetic stuff. Get the natural mixed tocopherols, which are red in color. Also, there is natural vs. synthetic selenium.

How do we pay for our medications? There are many organizations that can provide funds. Contact Bill Lewis for information.

What about the UCSD patient summit in January? The slides from the talks are available online, and Bill has an audio recording of the key talks.

How about getting the word out about PSA testing? We just sent information about our group and meetings to the 90 oncologists and urologists in the San Diego area. We have a list of 200 hospitals to contact next. Then we plan a social media campaign directed at the children and grandchildren of men who should be tested, offering discounted PSA testing. Exciting times going forward!

A member was considering a TURP, but a doctor recommended low-dose Cialis for his urination difficulties. Flow-max didn't work for him. Aaron noted that low-dose Cialis helps him with continence. Two effects!

A member is considering surgery or radiation with a Gleason 4+3. Recommendations? Get scans, preferably a PSMA test (Pylarify is the most widely available) to ensure that no cancer has escaped the prostate. If getting radiation, following an MRI scan instead of PSMA, insist on knowing the lowest DWI

*(Continued from page 4)*

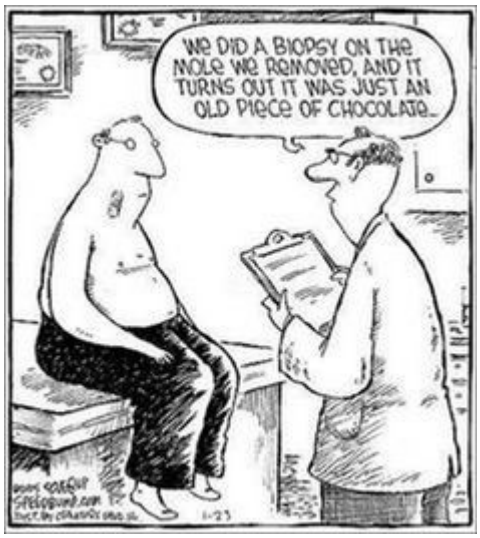
value in any suspected tumor areas. This is a strong indicator of the seriousness/aggressiveness of the cancer, with values under 1000 being of greatest concern. Better yet, is to get an rsi-MRI, available at UCSD and Imaging Healthcare Specialists locally. This "restriction spectrum imaging" technology (available for licensing to other distant facilities – contact Bill) gives precise location of the tumor(s), for targeting a boost of radiation, with no additional side effects, and with the chance of recurrence cut in half. See Dr. Seibert's talk in the January 2023 IPCSG video on YouTube.

See the video online for the entire meeting and slides: https://www.youtube.com/watch?v=7IRUFXt4b-g

Note that you can skip to the individual talks using links in the information section under the video.

DVD's of IPCSG meetings are no longer being made. See the talk online on your own device, or on that of a friend or relative, or elsewhere.

## On the Lighter Side








# Death Spurs Country's Shift to Safer Prostate Biopsies

medscape.com

Howard Wolinsky

In 2018, a 68-year-old Norwegian stonemason named Roar Gulbrandsen died after undergoing a routine transrectal biopsy. When the cause of death was determined to have been a massive, preventable infection, Gulbrandsen's daughter, Agnes, helped lead a campaign to abandon transrectal biopsies in favor of transperineal biopsies — a safer but at the time less widely employed approach.

The result: Severe infections, including sepsis, and deaths have all but disappeared since the shift, according to a new study presented last week at the European Association of Urology (EAU) 2023 Congress in Milan.

Dr Truls Bjerklund Johansen

"We have shown that switching to transperineal biopsies can bring deaths and infection rates to zero," Truls Bjerklund Johansen, MD, who'd performed the biopsy on Gulbrandsen and worked with the man's daughter to change national practice, told *Medscape Medical News.*

Bjerklund Johansen, professor emeritus of urology at the University of Oslo, and his colleagues found that annual deaths in Norway that were linked to transrectal prostate biopsies fell nationally from fewer than 20 in 2017 to zero in 2021–2022 as transperineal biopsies caught on in that country. Their figures were based on follow-up data from 99,196 biopsies from the period of 2008–2017 and 36,550 biopsies from 2017–2022 reported to the National Norwegian Patient Registry.

The national rate of severe infections, including sepsis, resulting in hospitalization dropped from 6.8% in 2017 to 0.5% in 2022. In Oslo County, where the transrectal biopsies had been phased out earlier than in the rest of the country, no cases of infections or deaths occurred in 2021 and 2022.

Twenty annual deaths after transrectal biopsy in Norway, which has a population of 5.5 million people, corresponds to 1230 deaths in the United States, Bjerklund Johansen noted.

*The Zeroes Speak for Themselves*

Prostate cancer experts hailed the new findings.

"I think the zeroes speak for themselves," said Jeremy Grummet, MD, a urologic surgeon at Monash University, in Melbourne, Australia. "These data are all in line with the literature. Transrectal biopsy is untenable and should be stopped."

Many centers now offer transperineal biopsy under local anesthesia, "so clinicians can't blame a need for general anesthesia," Grummet added.

Richard Szabo, MD, a urologist at the Southern California Permanente Medical Group in Orange County, who has published on biopsy issues, said that not only is transperineal biopsy safer than the transrectal approach, as the new data and other studies demonstrate, the method is more accurate when coupled with MRI/ultrasound fusion targeting, too. "It's thought that this increased accuracy is largely due to better sampling of the anterior prostate and more efficient sampling of the peripheral zone," Szabo said.

## Localized Prostate Cancer — Then and Now | NEJM

nejm.org

Editorial

Oliver Sartor, M.D.

Between 1999 and 2009 in the United Kingdom, 82,429 men between 50 and 69 years of age underwent prostate-specific antigen (PSA) testing as part of the Prostate Testing for Cancer and Treatment (ProtecT) trial. After a median follow-up of 15 years, we can now review the results of this herculean

*(Continued on page 7)*

(Continued from page 6)

task.[1] Of the men who first joined the trial, 2664 (3.2%) received a diagnosis of localized prostate cancer. A total of 1643 men (61.7%) were randomly assigned to undergo active monitoring, prostatectomy, or radiotherapy plus a short course (3 to 6 months) of androgen-deprivation therapy. Treatments were originally stratified according to age, Gleason score (<7, 7, or 8 to 10), and PSA level.

At 15 years, follow-up data were available for a remarkable 98% of the men who had enrolled in the trial. The incidence of death was low and similar in the three groups. Overall, 21.7% of the men had died from any cause and 2.7% from prostate cancer. The incidence of metastasis was 9.4% in the active-monitoring group and approximately half that in the prostatectomy and radiotherapy groups. The incidence of clinical progression was also higher in the active-monitoring group than in the other two groups, but that end point was quite heterogeneous and represented a somewhat nebulous measure of outcome.

The authors conclude that the choice of therapy for men with localized prostate cancer involves weighing trade-offs between benefits and harms of treatment — perhaps not the hoped-for conclusion for treatment advocates, given the duration and size of the trial. The side effects of radical prostatectomy and radiation therapy are well annotated, and many men have substantial sexual or urinary dysfunction after definitive local treatments.[2,3] Today, as ever, less intensive approaches to the treatment of prostate cancer are clearly needed.

When the ProtecT trial was initiated, the typical approach of screening men for prostate cancer was to assess the PSA level, biopsy those with an elevated PSA, and treat the cancer. That simplistic approach has dramatically changed in the wake of evidence that has been gathered since 1999. PSA testing is no longer the norm. In many clinics, PSA testing is not done at all, and the legal consequences of not testing are diminished, given that guidelines now embrace patient-centric informed decision making.[4] Unfortunately, such an evaluation is often problematic at best, given that busy primary practitioners are faced with an array of issues and have only limited time to discuss the nuances of the decision and the possible outcomes.

Today, if a patient has an elevated PSA level, data suggest that the clinician may use multiparametric magnetic resonance imaging (MRI) to selectively biopsy only patients with a score of 3 to 5 on the Prostate Imaging Reporting and Data System (PI-RADS), which classifies a lesion on a scale from 1 to 5, with higher scores indicating a higher suspicion of cancer. A targeted biopsy appears to be sufficient to diagnose tumors in grade groups 3 to 5.[5] Additional risk-stratification methods beyond clinical stage, PSA level, and Gleason score are also readily available. Transcriptomic assays (also known as genomic classifiers) can provide important prognostic information and help guide treatment decisions.[6] Germline genomic assessments are also endorsed by expert groups in patients with higher-grade tumors or selected family histories. Prostate-specific membrane antigen (PSMA) positron-emission–tomographic (PET) scans are now approved to better assess staging in patients with unfavorable intermediate or high-risk localized disease. In certain circumstances, PSMA PET scans may also be useful in determining appropriateness for biopsy.[7] Once risk stratification regarding the tumor is complete, clinicians can undertake appropriate action on the basis of additional factors, such as age, family history, coexisting conditions, and (possibly most important) patient preference.

Despite the laudatory nature of the ProtecT trial and the long-term follow-up, certain issues deserve further scrutiny. The median PSA was quite low among randomized patients (4.6 ng per milliliter). Of the 1643 patients, 1268 (77.2%) were in grade group 1 (Gleason score of 6), and only 169 (10.3%) had a PSA level of 10 or higher. Although subclassification of intermediate-risk patients was not performed, only 99 patients (6.0%) had grade group 3 disease (Gleason score of 7 [4+3]) or higher. The vast majority of the trial patients were at low risk or favorable intermediate risk and would today be considered appropriate

(Continued on page 8)

candidates for active surveillance. The patients who were at unfavorable intermediate risk or high risk represent an underpowered subgroup. Conclusions regarding underpowered subgroups are not appropriate on the basis of the ProtecT data, especially when numerous excellent guidelines are available to guide appropriate decision making.[8]

Active monitoring as performed in the ProtecT trial should not be used today. We can do better by adding serial multiparametric MRI assessments.[9] The increased rate of metastasis that was noted in the active-monitoring group would likely be diminished with the active surveillance protocols that are being used today.[9] Surveillance for low-risk prostate cancer is more accepted today than in 1999, although at times patients remain anxious about leaving a cancer untreated. However, treating anxiety by removing a prostate often creates larger problems. Various forms of focal therapy are increasingly being used, especially now that tumors can be better visualized and potentially targeted with the use of advanced imaging techniques.[10] Taken together, the management of localized prostate cancer has undergone a wholesale change since 1999 when the ProtecT trial was started. Even so, the results of this trial provide valuable data to inform decision making in the large group of men with low- or intermediate-risk prostate cancer.

## Prostate cancer treatments can be avoided or delayed in many cases, huge study finds | Live Science

livescience.com

Nicoletta Lanese

Many patients with prostate cancer can opt for "active surveillance" instead of seeking aggressive treatment right away.

Many men with prostate cancer can delay or skip harsh treatments, such as surgery or radiation, without undermining their chances of survival, a decades-long study finds.

Instead, they can have their cancer "actively monitored" following diagnosis, rather than having their prostate removed or exposed to high-energy radiation. Such treatments can cause long-lasting side effects, such as urinary leakage, erectile dysfunction and other problems with urinary, bowel and sexual function.

"The good news is that if you're diagnosed with prostate cancer, don't panic, and take your time to make a decision" about how to proceed, lead study author Dr. Freddie Hamdy (opens in new tab), professor of surgery and urology at the University of Oxford, told CNN (opens in new tab). Crucially, this advice only extends to people with low- or intermediate-risk prostate cancer — those with high-risk cancer still need prompt and aggressive treatment, he said.

The new study, published Saturday (March 11) in the New England Journal of Medicine (opens in new tab), included more than 1,600 men in the U.K. who'd been diagnosed with prostate cancer and ranged from 50 to 69 years old at the start of the trial. These patients were randomly divided into three groups that received different cancer treatments: one-third had their prostates removed, one-third got radiation in combination with a short-term hormone blocking treatment, and one-third underwent active monitoring, now commonly called "active surveillance."

During the study, which began in 1999, active surveillance meant regularly measuring levels of a specific protein in the patients' blood. Levels of this protein, called prostate-specific antigen (PSA), tend to rise as prostate cancer progresses. Today, active surveillance can involve additional tests, such as magnetic resonance imaging (MRI) scans of the prostate and genetic testing, Dr. Oliver Sartor (opens in new tab), medical director of the Tulane Cancer Center, wrote in a commentary (opens in new tab) of the research.

The researchers monitored each participant for 11 to 21 years post-diagnosis, and found that all the patients had a similarly low risk of death, regardless of the treatment they'd received. Overall, 45 participants, or 2.7%, died of prostate cancer. This included 12 people (2.2%) in the surgery group; 16 people (2.9%) in the radiation group; and 17 people (3.1%) in the active-monitoring group; these small differences are not considered statistically significant.

During the roughly 15-year follow-up period, about 330 men in the monitoring group, or 60%, eventually had either surgery or radiation treatment. But waiting to get treatment didn't seem to impact their risk of death. Furthermore, 133 people in the monitoring group never had surgery, radiation or hormone blocking therapy and still survived.

At 15 years post-diagnosis, cancer had metastasized, or spread, in 9.4% of the active-monitoring group, 4.7% of the surgery group and 5% of the radiation group. However, the monitoring group may have fared better if the study had been conducted with today's methods of surveillance, Dr. Stacy Loeb (opens in new tab), a prostate cancer specialist at NYU Langone Health who was not involved in the research, told The Associated Press (opens in new tab). "We have more ways now to help catch that the disease is progressing before it spreads," Loeb said.

It's key to note that "the vast majority of the trial patients were at low risk or favorable intermediate risk and would today be considered appropriate candidates for active surveillance," and only a small fraction of study participants would be considered high-risk and in need of immediate treatment, Sartor wrote in his commentary.

In general, high-risk prostate cancer diagnoses account for only 15% of cases — so most of the time, prostate cancer is of low- to intermediate-risk, CNN reported. For low-risk patients, the potential risks and benefits of surgery and radiation should be carefully weighed, since "more aggressive therapy can result in more harm than good," the study authors concluded.

## Digital Rectal Exams Could Miss Early Prostate Cancers: Study

webmd.com

March 9, 2023 – Every now and then, new research comes along that questions the normal standard of care in medicine. In this case, a study out of Germany raises a concern about the value of digital rectal examinations for detecting prostate cancer, particularly in its early stages.

Investigators enrolled 46,495 men screened for prostate cancer at age 45 in the PROBASE trial between 2014 and 2019. Half of the men were offered a digital rectal exam, or DRE, where a health care professional uses a finger to check their prostate gland for any lumps or unusual swelling, followed by a prostate-specific antigen blood test 5 years later at age 50. The other half were offered only the PSA test at age 45.

Lead investigator Agne Krilaviciute, PhD, and colleagues found the PSA test detected four times as many cases of early prostate cancer as a digital rectal exam alone.

"One of the main reasons for screening for prostate cancer is to detect it in patients as early as possible," Krilaviciute, a researcher at the German Cancer Research Center, Deutsches Krebsforschungszentrum, in Heidelberg, said in a news release. "Our study suggests that the DRE is simply not sensitive enough to detect those early stage cancers."

The researchers suggest other tools be used to screen men for prostate cancer, such as PSA testing and MRI scans, instead of digital rectal exams. The findings were presented at the European Association of Urology Annual Congress in Milan.

Of the 23,194 people enrolled in the delayed PSA group, 6,537 had a rectal exam. Within this group, 57 had suspicious findings and had a biopsy. Three of them were diagnosed with prostate cancer.

"We speculate in our paper that not only is the DRE not useful for detecting cancer, but it may also be one reason why people don't come to screening visits – the examination probably puts a lot of men off," Krilaviciute said. "In Germany, for example, the participation rate is less than 20% in the screening program for men 45 to 50 years. If we were to offer PSA testing instead, more of them might be willing to come."

## Largest study of its kind finds new genetic links to prostate cancer

## newatlas.com

By Paul McClure

Men of African descent are known to have a far higher incidence of prostate cancer than other men. A new meta-analysis, the largest to date, has shed light on why this is so, identifying nine new genetic variants that increase the risk of prostate cancer in men of African ancestry.

In the UK, one in four men of African descent will be diagnosed with prostate cancer in their lifetime. In the US, African American men are 1.7 times more likely to be diagnosed with – and 2.1 times more likely to die from – prostate cancer than white men.

It's understood that genetic susceptibility plays a large role in the risk of developing prostate cancer. What's not well known is why men of African descent are particularly vulnerable to the disease. Before now, only small genome-wide association studies (GWASs) have been undertaken on these men in an attempt to identify African-ancestry-specific risk variants.

A new meta-analysis led by researchers at the Keck School of Medicine of USC undertook the largest-ever analysis of GWAS data to examine these risk factors. The researchers also developed a multiancestry polygenic risk score (PRS) comprising known and new risk variants associated with prostate cancer risk and disease aggressiveness.

A PRS tells you how a person's risk compares to others with different genetic makeup. It is typically calculated as a weighted sum of trait-associated alleles, which are matching genes inherited from biological parents that occur at a given gene site on a chromosome. Most traits are caused by more than two alleles, and some traits are controlled by two or more gene sites.

The researchers pooled the data collected from 10 GWASs undertaken in the US, Africa and the Caribbean which included data from over 80,000 men: 19,378 prostate cancer cases and 61,620 healthy controls. They discovered nine previously unknown genetic risk factors for prostate cancer, seven of which are more common to, or found exclusively in, men of African descent.

One new variant, found on the 8q24 chromosome region and known to be associated with prostate cancer susceptibility, is only found in men of African ancestry.

"This particular variant is influencing the risk of aggressive disease in this population," said Christopher Haiman, corresponding author of the study.

The meta-analysis also confirmed patterns seen in previous studies, namely that genetics plays a crucial role in determining cancer risk in younger men. It also highlights the need for including diverse populations in future large-scale genetic studies.

"The vast majority of studies to date have been conducted in populations of European ancestry, which creates a huge bias in our understanding of genetic risk for disease," Haiman said.

The study's identification of new genetic variants can now be incorporated into genetic testing to help determine a person's cancer risk and guide how early and how often they get screened. More accurate PRS for men of African descent would assist with the early identification of those at high risk of developing prostate cancer.

"Prostate cancer survival is significantly lower among men diagnosed with aggressive disease," said Fei Chen, PhD, lead author of the study. "Our findings suggest that these polygenic risk scores could be useful for identifying men who may benefit from earlier and more frequent screenings."

Haiman and his colleagues plan to continue their research into prostate cancer amongst men of African ancestry, including how access to care and other social determinants influence the incidence, progression and survival rates of the disease.

The study was published in the journal *European Urology*.

## NETWORKING

Please help us in our outreach efforts. Our speakers bureau consisting of Gene Van Vleet and Bill Lewis is available to speak to organizations of which you might be a member. Contact Gene 619-890-8447 or gene@ipcsg.org or Bill 619-591-8670 (bill@prostatecancerhelp.info) to coordinate.

Member John Tassi is the webmaster of our website and welcomes any suggestions to make our website simple and easy to navigate. Check out the Personal Experiences page and send us your story. Go to: https://ipcsg.org/personal-experience

## *FINANCES*

We want to thank those of you who have made special donations to IPCSG. Remember that your gifts are tax deductible because we are a 501(c)(3) non-profit organization.

We again are reminding our members and friends to consider giving a large financial contribution to the IPCSG. This can include estate giving as well as giving in memory of a loved one. You can also have a distribution from your IRA made to our account. We need your support. We will, in turn, make contributions from our group to Prostate Cancer researchers and other groups as appropriate for a non-profit organization. Our group ID number is 54-2141691. Corporate donors are welcome!


DIRECTIONS TO MEETINGS

**Directions to Sanford-Burnham-Prebys Auditorium**
**10905 Road to the Cure,**
**San Diego, CA 92121**

- Take I-5 (north or south) to the Genesee exit (west).
- Follow Genesee up the hill, staying right.
- Genesee rounds right onto North Torrey Pines Road.
- **Do not turn into the Sanford-Burnham-Prebys Medical Discovery Institute or Fishman Auditorium**
- Turn right on Science Park Road. Watch for our sign here.
- Turn Left on Torreyana Road. Watch for our sign here.
- Turn Right on Road to the Cure (formerly Altman Row). Watch for our sign here.