Nearly 10 million screenings for 3 common cancers were missed in the U.S. because of the COVID-19 pandemic, suggests a recent study published in *JAMA Oncology*. A comparison of monthly screening rates during the spring and summer of 2020 to screening rates during 2018 and 2019 revealed a 90.8% decline in breast cancer screening, a 79.3% decline in colorectal cancer screening and a 63.4% decline in prostate cancer (PCa) screening just in April 2020.

Screening rates for breast and prostate cancers had recovered almost completely by July of 2020, but remained reduced by about 13% for colorectal cancers, the study found. “We found there was a deficit of 9.4 million in screening for the 3 major cancers across the U.S. that was most likely related to the COVID-19 pandemic,” said the study’s lead author, Dr. Ronald Chen, the Joe and Jean Brandmeyer Endowed Professor and chair of the department of radiation oncology at the University of Kansas Cancer Center in Kansas City. “This is a deficit we have to make up for in 2021,” he added.

“There needs to be an educational campaign to make sure patients understand the importance of screening,” Dr. Chen said. “If we don’t do the screenings, cancers will be discovered at a later stage and we will have higher cancer deaths.”

(Continued on page 4)

### Late ADT a Problem in Prostate Cancer

Late dosing of luteinizing hormone-releasing hormone (LHRH) agonists used for androgen deprivation therapy (ADT) in prostate cancer (PCa) occurs frequently, a researcher reported.

“Late dosing was particularly common (>80%) when measured against the 28-day dosing schedules used in clinical trials for these therapies, and found in prescribing information,” according to Julia Vandross, NP-BC, BSN, MSN, of Providence Saint John’s Health Center in California.

The findings were presented in an e-poster at the Oncology Nursing Society virtual meeting, and recently published in *The Journal of Urology* [https://www.auajournals.org/doi/10.1097/JU.0000000000001392](https://www.auajournals.org/doi/10.1097/JU.0000000000001392).

“Achieving and maintaining effective testosterone suppression to levels attained with surgical castration is the cornerstone of ADT for advanced PCa,” pointed out Vandross and colleagues. “However, testosterone levels can rise above castrate level (50 ng/dL) between injections, particularly if those injections are administered late,” they added.

The study was an observational analysis of the records of PCa patients who received 1 of 2 different forms of leuprolide acetate, the most commonly used LHRH agonist in the U.S. — (1) GEL-LA, an in situ gel technology delivered subcutaneously; and (2) Msphere-LA, a microsphere technology delivered by intramuscular injection. They used 2 definitions of months -- a 28-day month in which late was defined as dosing after day 28, 84, 112, or 168 for 1-, 3-, 4-, and 6-

(Continued on page 4)
Association of Negative Follow-Up Biopsy and Reclassification During Active Surveillance of Prostate Cancer: A Systematic Review and Meta-Analysis

Rajwa P, Pradere B, Mori K, Ploussard G, Leapman MS, Shariat SF

*J Urol* 205: 1559-1568, 2021

**Purpose:** With the growing adoption of active surveillance (AS) clinical parameters that can tailor the intensity of monitoring are increasingly needed. Therefore, we aimed to evaluate the prognostic value of negative follow-up biopsy for reclassification and upgrading in prostate cancer (PCA) patients managed with AS.

**Materials and Methods:** The PubMed®, Web of Science™, and Scopus® databases were queried to identify relevant studies published until November 2020 according to the Preferred Reporting Items for Systematic Review and Meta-Analysis statement. We performed a formal meta-analysis for the reclassification and upgrading in the full cohort and selected subgroups.

**Results:** We identified 13 and studies eligible for the systematic review and meta-analysis, respectively. A total of 2,628 men were included in the meta-analysis. Any negative follow-up biopsy was associated with significantly lower risk of reclassification (Hazard Ratio [HR] 0.46, 95% Confidence Interval [CI] 0.39-0.55; p <0.01), and upgrading (HR 0.54, 95% CI 0.44-0.66; p <0.01). For the confirmatory biopsy subgroup, the results remained significant for reclassification (HR 0.44, 95% CI 0.36-0.55; p <0.01) and upgrading (HR 0.55, 95% CI 0.42-0.73; p <0.01). These patterns remained robust among patients with only Gleason Grade prognostic group 1 (reclassification HR 0.47, 95% CI 0.39-0.57; p <0.01; upgrading HR 0.54, 95% CI 0.42-0.69; p <0.01).

**Conclusions:** A negative follow-up biopsy is associated with an approximately 50% decrease in risk of future reclassification and upgrading. Incorporation of a negative follow-up biopsy into current protocols should allow for personalized AS tailoring and more precise decision making.

Apalutamide in Patients with Metastatic Castration-Sensitive Prostate Cancer: Final Survival Analysis of Randomized, Double-Blind, Phase III TITAN Study

Chi KN, Chowdhury S, Bjartell A, et al.

*J Clin Oncol* 29 April 2021; E-pub ahead of print

**Purpose:** The first interim analysis of the phase III, randomized, placebo-controlled TITAN study showed that apalutamide significantly improved overall survival (OS) and radiographic progression-free survival (r-PFS) in patients with metastatic castration-sensitive prostate cancer (mCSPC) receiving ongoing androgen deprivation therapy (ADT). Herein, we report final efficacy and safety results after unblinding and placebo-to-apalutamide crossover.

**Methods:** Patients with mCSPC (N=1,052) were randomly assigned 1:1 to receive apalutamide (240 mg daily) or placebo plus ADT. After unblinding in January 2019, placebo-treated patients were allowed to receive apalutamide. Efficacy end points were updated using the Kaplan-Meier method and Cox proportional-hazards model without formal statistical retesting and adjustment for multiplicity. Change from baseline in Functional Assessment of Cancer Therapy-Prostate total score was assessed.

**Results:** With a median follow-up of 44.0 months, 405 OS events had occurred and 208 placebo-treated patients (39.5%) had crossed over to apalutamide. The median treatment duration was 39.3 (apalutamide), 20.2 (placebo), and 15.4 months (crossover). Compared with placebo, apalutamide plus ADT significantly reduced the risk of death by 35% (median OS not reached vs. 52.2 months; hazard ratio [HR], 0.65; 95% Confidence Interval [CI], 0.53 to 0.79; p <0.0001) and by 48% after adjustment for crossover (HR, 0.52; 95% CI, 0.42 to 0.64; P <0.0001). Apalutamide plus ADT delayed second PFS and castration resistance (P <0.0001 for both). Health-related quality of life, per total Functional Assessment of Cancer Therapy-Prostate, in both groups was maintained through the study. Safety was consistent with previous reports.

**Conclusion:** The final analysis of TITAN confirmed that, despite crossover, apalutamide plus ADT improved OS, delayed castration resistance, maintained health-related quality of life, and had a consistent safety profile in a broad population of patients with mCSPC.
There are times when exercise research gets quite boring. Why? So, you take some participants, put them on a treadmill in a laboratory, and then declare some potential positive results, but that can seem BORING! Does it really translate to the real world of cancer? Suddenly, several researchers, primarily from Denmark, come along and restore my faith in exercise research humanity, and help countless men dealing with prostate cancer (PCa)!

A total of 214 men from 5 urology departments in Denmark participated in this wonderful "clinical trial." The mental health benefits from this form of exercise were previously demonstrated. Thus, the current focus was on the 41 men with metastatic PCa to their bones.

They were either placed in the usual care group, or in the football competitive group, which consisted of 20 minutes of warmup, 20 minutes of skill training—dribbling/passing/shooting, and then 20 minutes of match play against the usual care group. The football intervention group attended more than 20 sessions in 6 months. After the study period, there was no difference in falls, fractures, or hospital admissions between the 2 groups, and PCa-specific quality of life was found to be significantly better in the footballers.

Okay, before I scare anyone here, we are not talking about tackle football or even flag football, but rather soccer. The premise of this clinical trial design was simple, beautiful, practical, and impressive. In the original clinical trial, men with different forms of PCa played in this soccer group and experienced improved mental health, fat mass reductions, and some small bone mineral density improvements. So, the researchers looked further at the 41 men with bone metastasis (subgroup analysis) because there has always been a concern here in doing anything physically stressful to those bony areas. It also appears men with painful or unstable bone metastasis probably did not participate, and again this is a preliminary study.

So, what is the bottom line? The goal of this month’s column was NOT to encourage men with metastatic prostate cancer to just embrace soccer! It was to encourage men with prostate cancer to embrace life via outside exercise! Dump the inside routines right now! For goodness sakes, it is June! We all need to celebrate life more! Walking outside with your partner? Great for your partnership! Get a dog and walk that dog? Woof, Woof! Walk the golf course sans the electric cart? See you outside of the clubhouse! Canoeing or kayaking? Paddle toward that goal! Pickle ball anyone? Hike a mountain? Fly fishing? Heck yes! Chess outside? Checkmate mate! Meet a friend afterward amongst the trees for a beer, or wine, or a dirty martini, or even a chilled carrot juice? Now, you are talking my language! Bonding, conversation, competition, smash talk, celebrating, the ecstasy (I know it is “agony,” but I am an iconoclast) of defeat, everything else that goes along with many athletic activities makes me and others happy!

Imagine that! Humans are simply being encouraged by a humane group of researchers and health care professionals to actually act more like humans! Thus, despite being humanized by a difficult medical condition, they are being encouraged to go outside and improve others as they simultaneously improve their own health.

(Continued on page 8)
Late ADT a Problem in Prostate Cancer (Continued from page 1)

month formulations. However, they noted that scheduling of ADT is likely based on calendar months assuming that efficacy extends beyond labeling instructions. Thus, the authors added approximately 4 days per month and defined late as dosing after day 32, 97, 128, or 194. A total of 10,398 patients received either of the two therapies – 2,038 and 8,360 men received Gel-LA and Msphere-LA, respectively. Vandross and colleagues reported that for a 28-day month, 80% and 86% were late with the 2 therapies, respectively, while 27% were late for both with the extended-month definition. The authors stated that testosterone levels were high with late injections regardless of which therapy was used. However, they also noted that all Gel-LA formulations demonstrated lower mean testosterone levels and lower rates of testosterone above 50 ng/dL or above 20 ng/dL than Msphere-LA. For example, GEL-LA demonstrated lower proportions of testosterone breakthroughs than Msphere-LA for late injections. For a 28-day month, 14% of Msphere-LA testosterone tests compared to 10% of Gel-LA testosterone tests were above 50 ng/dL (Odds Ratio [OR] 1.5, 95% Confidence Interval [CI] 1.2-1.9), while for an extended month 25% compared to 18%, respectively, were above 50 ng/dL (OR 1.5, 95% CI 1.1-2.0).

And one-third of Msphere-LA testosterone tests were above 20 ng/dL compared to one-quarter of Gel-LA testosterone tests for a 28-day month (OR 1.5, 95% CI 1.3-1.8), while rates were 44% and 34%, respectively, for the extended month (OR 1.5, 95% CI 1.2-1.9).

For late injections, GEL-LA patients had significantly lower mean testosterone levels than Msphere LA patients for both the 28-day month (34 ng/dL and 46 ng/dL, respectively) and the extended month (48 ng/dL and 76 ng/dL).

From a nursing perspective, Vandross and colleagues noted that since higher levels of testosterone, including testosterone escapes, can adversely affect PCA disease progression, as well as survival, “nurses should ensure dosing schedule compliance, recommend an ADT product that optimizes [testosterone] suppression, and educate men on the importance of adherence to labelled dosing periods.”

“ADT is the foundation we build on for advanced PCA treatment” co-author E. David Crawford, MD, of the University of California San Diego, told MedPage Today. Crawford observed that the trials that resulted in FDA approvals were based on 28-day dosing or multiples of that for 3-, 4-, and 6-month dosing. Yet “84% of over 22,000 injections given as documented in our analysis were administered late.

“We demonstrated that there were testosterone escapes and also PSA rises,” said Crawford. “We need to follow guidelines.”

MedPage Today 22 April 2021

Putting Off Cancer Screenings Because of COVID-19 (Continued from page 1)

One bit of good news from the study: telehealth visits seemed to be associated with getting cancer screenings back on track. “Those (physicians) who were able to access patients through telehealth were able to come up with a plan for screening,” Dr. Chen said. “This emphasizes the importance of telehealth and the importance of continuing it after the pandemic is over.”

Dr. Chen and his colleagues analyzed data from the HealthCore Integrated Research Database, which contains single-payer administrative claims and enrollment information on approximately 60 million patients enrolled in Medicare Advantage and commercial health plans among demographically diverse regions of the U.S.

For each the 3 years, the researchers evaluated monthly cancer screening rates from January to July. While monthly screening rates for breast, prostate and colorectal cancer were similar in 2018 and 2019, they dropped sharply in March through May of 2020 compared to the prior years.

“Steepest declines in screenings for all 3 cancers were in the U.S. Northeast during that period while the West had a slower recovery vs. Midwest and South, patterns that were in keeping with differential rates of COVID-19 across the U.S. in the study period,” the authors note.

When the researchers looked at screening declines by socioeconomic status (SES), the greatest declines were among people in the highest SES quartile, which effectively reduced disparities in screening, they also found.

Despite the overall recovery in monthly screening rates, a deficit remained in total screenings from January through July of 2020 compared with the same time period in 2019, including missed screenings of 3.9 million women for breast cancer, 3.8 million men and women for colorectal cancer, and 1.6 million men for PCa.

“This is a very interesting study,” said Dr. Nicholas Rohs, an assistant professor of medicine, hematology, and medical oncology at the Icahn School of Medicine at Mount Sinai. “I don’t think anybody would be particularly surprised by this data, but I think it’s important to analyze some of the things we didn’t have bandwidth to look at when the pandemic hit. In New York, we had to face the acute issue in front of us and now we’re back with a more normal flow and infection rates at least plateauing if not declining.”

Physicians are just now “looking at all the ‘collateral’ damage from the pandemic and, in the world of oncology, one of the biggest casualties has been the lack of preventive medicine we were able to provide for our patients,” Dr. Rohs said. “We will be paying the cost going forward. Anecdotally, we’re seeing a lot more of disease and advanced disease presenting late. There are heartbreaking stories of patients who knew something was on their scan a year ago but were too scared to come in to pursue care during the pandemic.”

MedPage Today April 30, 2021

Get the Latest on COVID-19 and Prostate Cancer

Including resources, tips on holding virtual meetings, and an ongoing series of informational articles with some important comments regarding the coronavirus, cancer patients, and safety from Dr. Mark A. Moyad at www.ustoo.org/covid
SBRT Safe for Cancer Patients with Multiple Metastases (Continued from page 1)

The Clinical Significance of Bone Mineral Density Changes Following Long-Term Androgen Deprivation Therapy in Localized Prostate Cancer Patients


J Urol 205: 1648-1654, 2021

Purpose: Long-term androgen deprivation therapy (ADT) has been associated with decreased bone mineral density (BMD) in men with prostate cancer (PCa). Some evidence suggests that there is no impact on fracture risk despite this BMD loss. Our study aimed to quantify changes in BMD in men with high-risk PCa on long-term ADT and calcium and vitamin D supplementation.

Materials and Methods: BMD analysis was conducted for localized high-risk PCa patients enrolled in the phase III randomized trial PCS-V (Prostate Cancer Study 5), comparing conventional and hypofractionated radiation therapy (RT). Men received 28 months of luteinizing hormone-releasing hormone agonist and calcium and vitamin D supplementation (500 mg calcium twice a day + 400 IU vitamin D3 twice a day). The areal density (A BMD measurement) and T-scores (spine, femoral neck, and total femur) at baseline and 30 months of follow-up were extracted, and the absolute change was calculated. Clinical bone density status (normal, osteopenia, osteoporosis) was monitored.

Results: The lumbar spine, femoral neck and total femoral BMD were measured for 226, 231, and 173 men, respectively. The mean percent change in BMD was -2.65%, -2.76% and -4.27% for these respective sites (p <0.001 for all sites). The average reduction in BMD across all sites was -3.2%, with no decline in BMD category in most patients (83%). Eight men (4%) became osteoporotic.

Conclusions: Despite a mild decline in BMD, the change in clinical BMD category remained low with long-term ADT. Consequently, calcium and vitamin D supplementation alone may suffice for most localized PCa patients on long-term ADT.

Salvage Cryotherapy for Recurrent PCa May Provide Long-Term Oncologic Control

Men receiving salvage cryotherapy (CRYO) for radiorecurrent prostate cancer (PCa) had overall survival rates of 90%, 77%, and 54% at 5, 10, and 15 years, respectively. Salvage whole gland CRYO provides adequate oncologic control of locally recurrent PCas following radiation therapy (RT), a new study finds.

“In a retrospective study of 268 men treated with salvage whole gland CRYO from 1992 to 2004, diseasespecific survival (DSS) was 81% and overall survival (OS) was 77% at 10 years,” Louis Pisters, MD, of The University of Texas MD Anderson Cancer Center in Houston, and colleagues reported in The Journal of Urology. Median OS was 15.8 years and median DSS was not reached. At 10 years, 69% of men had freedom from androgen deprivation therapy (ADT), and 76% had freedom from CRPC. Men who received neoadjuvant ADT had a significant 78% improvement in OS and a significant 59% improvement in DSS, but not freedom from CRPC or adjuvant ADT.

A pre-salvage PSA >10 ng/mL was significantly associated with a 3-fold increased risk for CRPC and a 2-fold increased risk of initiating ADT. Of 223 complications, 168 had a Clavien score of 1 or 2 and 55 had a Clavien score of 3. Severe incontinence developed in 16.4% of men and bladder neck contracture developed in 10.4%.

“Overall, our data demonstrate adequate long-term oncologic outcomes for men with (radiation refractory PCa) undergoing salvage (Continued on page 8)
Black men with metastatic castration-resistant prostate cancer (mCRPC) treated with abiraterone acetate plus prednisone (A+P) had similar survival outcomes but more toxicity compared with White men, as shown by a multicenter prospective study published online in Cancer.

“Median radiographic progression-free survival (r-PFS), was similar at 16.6 and 16.8 months for the Black and White men, respectively,” reported Daniel George, MD, of Duke University Medical Center in Durham, NC, and colleagues. And median overall survival (OS) was nearly identical (35.9 vs. 35.7 months, respectively). In addition, Black men had a median time to PSA progression (TPP) of 16.6 for Black men vs. 11.5 months for White men.

“To our knowledge, our study is the first intervention trial in mCRPC to prespecify parallel patient treatment groups by self-identified race and to evaluate clinical efficacy and safety outcomes prospectively by race,” the researchers wrote. They noted that Black men are more likely to develop PCs at an earlier age, present with advanced-stage disease, have a greater risk of early biochemical recurrence and metastasis, and have a shorter cancer-specific survival.

“But Black Americans are really underrepresented in PCs clinical trials, particularly in the studies that lead to FDA registration,” George stated. “We need to do a better job of accruing these men, and one of the reasons may be differences in how these drugs affect patients by their genetic diversity, and consequently by race. “Combined A+P was approved by the FDA in 2011 for men with mCRPC based on the results of the Cougar 302 trial, but only 3.6% of the men studied were Black. A retrospective analysis of the trial, showed a trend of Black men having a longer TPP and greater PSA response,” he noted. “And then we looked at this retrospectively with our own clinical experience at Duke and saw the same trends when we matched (the Black patients) to White patients. So we wanted to look at this prospectively,” George said.

Directly comparing outcomes between the 2 sets of men would have required a large, phase III trial. Instead, George and his colleagues performed a prospective, multicenter study of A+P treatment of 50 Black and 50 White men who had mCRPC. The aim was to both demonstrate that it is feasible to enroll an equal percentage of Blacks and Whites and to see whether the trends seen in the retrospective analysis would be reproduced.

“The primary end point was r-PFS based on Prostate Cancer Working Group 2 criteria. Secondary end points included various PSA kinetics such as the estimation of the percentage of men who achieved PSA declines of 30%, 50%, or 90% from baseline. The estimated rates of PSA decline from baseline in the study were 82%, 74%, and 48%, respectively, for Black men, and 78%, 66%, and 38% for White men,” the researchers reported.

“What we were surprised at was not this trend in PSA response, which we have seen before, but that there were actual differences in toxicity and side effect profiles that correlated with race, that had not been seen before,” George said. Specifically, there were greater rates and severity of adverse events related to adrenal hormone suppression in Black vs. White men. For example, there was a substantial difference in grade 3 and 4 rates of hypertension between Black men (24%) and White men (16%). Estimated rates of hypokalemia (low potassium in blood – 34% and 20%) and hypomagnesemia (low magnesium in blood – 16% and 8%) also differed in Black men and White men, and more severe grade 3 and 4 rates of hypokalemia were more frequent in Black vs. White men – 12 vs. 4%, respectively.

“If the results are confirmed, the findings could support having different thresholds for monitoring and managing adverse events in Blacks vs. White patients,” George and co-authors said. They noted that newer trials evaluating A+P in mCRPC have been using a lower starting dose of prednisone (5 mg daily rather than 5 mg twice daily). “That may be insufficient, however, to compensate for the adrenal suppression that this drug causes in Black patients,” said George. “So it will be really important to look in some of these earlier disease settings, where we use these lower doses of prednisone, to see if the toxicity seen in Black patients is even higher.

“The new study also shows it is possible to enroll a representative number of Black patients into PCs trials,” George said. “And it reinforces why it is important to have these patients represented in clinical trials, and why genetic diversity is a good thing in clinical trials, rather than having our studies populated by a more limited genetic pool.”

“The study also shows,” he added, that Black men with PCs fare just as well as White men, even with accompanying health issues, suggesting that future trials should enroll Black men who might otherwise be excluded because of disqualifying health conditions.”

Investigators said that larger prospective randomized studies where Black men are proportionally represented are also necessary to “investigate fully the biologic determinants associated with ancestry and outcome.” The team also performed some preliminary analyses that appeared to identify a candidate single-nucleotide polymorphism (SNP) – SPHKAP/SPHK1 – that appeared to be associated with the outcomes of men in a model that included ancestry.

“Study limitations,” the researchers said, “included that, because it was a non-comparative trial designed to evaluate clinical outcomes for each group in parallel, the cross-population comparisons should be interpreted as exploratory and hypothesis-generating/supportive, but not conclusive. Similarly, the sample size was small so the preliminary SNP analyses should be considered only as exploratory, with a potential for measurement error.”

MedPage Today
12 May 2021

Find a Prostate Cancer Event
Or Post One at:
www.prostatecancercalendar.org

US TOO INTERNATIONAL PROSTATE CANCER EDUCATION & SUPPORT

Hot SHEET – JUNE 2021
Radiotracer Use Boosts Prostate Cancer Outcomes
Adding 18F-Fluciclovine PET/CT During RT Planning Led to Increase in 3-Year Event-Free Survival

The inclusion of 18F-fluciclovine PET/CT to guide post-prostatectomy (RP) salvage radiotherapy (SRT) improved outcomes, researchers reported online in *Lancet*.

“Results from the EMPIRE-1 trial showed that when the radiotracer was used to guide final RT decisions, men had an approximately 12% absolute improvement in event-free survival (EFS) at 3 years compared with men who underwent therapy guided by conventional imaging,” according to Ashesh Jani, MD, of Winship Cancer Institute of Emory University in Atlanta, and colleagues.

The single-center, open-label, phase II/III randomized controlled trial was conducted from Sept. 2012 to March 2019 and included 165 men who had undergone RP with biochemical recurrence (BCR) or persistence, and were evaluated with conventional imaging. Men were assigned on a 1:1 basis to receive RT guided by either conventional imaging, or conventional imaging plus 18F-fluciclovine PET/CT and followed for a median of 3.52 years.

The primary endpoint was 3-year EFS, defined as BCR or clinical recurrence or progression, or start of systemic therapy, using univariate and multivariable analyses in men who received RT.

Three-year EFS was 63.0% (95% Confidence Interval [CI] 49.2-74.0; 22 events) in the conventional imaging group compared with 75.5% (95% CI 62.5-84.6; 15 events) in the 18F-fluciclovine PET/CT group (a difference of 12.5%, 95% CI 4.3-20.8%).

A multivariable analysis for EFS showed a significantly higher risk of events in the conventional imaging group (Hazard Ratio [HR] 2.04, 95% CI 1.06-3.93).

“ Toxicity was similar in the 2 groups, with the most common being late urinary frequency or urgency and acute diarrhea,” the researchers reported. Grade 3 toxic effects were infrequent in both groups, and none of the patients had grade 4 or 5 adverse events.

Thomas Hope, MD, director of molecular therapy at the University of California San Francisco, not involved in the study, noted that the trial began in an era before the use of prostate-specific membrane antigen (PSMA)/PET. “So, the question is how is the data from EMPIRE-1 relevant in a PSMA/PET era? Presumably PSMA/PET will be even better because we all know it has a higher sensitivity and specificity,” he told *MedPage Today*. “I think this study is still relevant, though. If you target these things we see with molecular imaging, patients really do better, and that does support the use of these radiotracers.”

Co-author David Schuster, MD, director of Winship’s Division of Nuclear Medicine and Molecular Imaging said EMPIRE-1 “set a certain bar: We have a proof-of-concept of how molecular imaging can, not only improve our ability to find cancer, but also improve outcomes.”

Jani and Schuster noted that they are also leading another trial – EMPIRE-2 – which is similar to EMPIRE-1 in that it has EFS as the primary endpoint, but will extend randomly assigned patients to either PSMA or 18F-fluciclovine PET/CT.

Study limitations included variability in pre-PET decisions related to general target volumes and that the role of ADT is difficult to interpret as it was not formally analyzed. Also, longer follow-up is needed to confirm EFS is still warranted.

*MedPage Today*  14 May 2021

**Association of Prostate Cancer Polygenic Risk Score with Number and Laterality of Tumor Cores in Active Surveillance Patients**

**Background**
Prostate cancer (PCa) is characterized by its tendency to be multifocal. However, few studies have investigated the endogenous factors that explain the multifocal disease. The primary objective of the current study is to test whether inherited PCa risk is associated with multifocal tumors in PCa patients.

**Methods**
Subjects in this study were PCa patients of European ancestry undergoing active surveillance at Johns Hopkins Hospital (N = 805) and NorthShore University HealthSystem (N = 432). The inherited risk was measured by genetic risk score (GRS), an odds ratio-weighted and population-standardized polygenic risk score based on known risk associated single nucleotide polymorphisms. PCa multifocality was indirectly measured by the number and laterality of positive tumor cores from a 12-core systematic biopsy.

**Results**
In the combined cohort, 35.7% and 66.3% of patients had ≥2 tumor cores at the initial diagnostic biopsy and on at least one subsequent surveillance biopsy, respectively. For tumor laterality, 7.8% and 47.8% of patients had bilateral tumor cores at diagnostic and surveillance biopsies, respectively. We found, for the first time, that patients with higher numbers of positive cores at diagnostic and surveillance biopsies, respectively, had significantly higher mean GRS values; p = .01 and p = 5.94E-04. Additionally, patients with bilateral tumors at diagnostic and surveillance biopsies, respectively, had significantly higher mean GRS values than those with unilaterial tumors; p = .04 and p = .01. In contrast, no association was found between GRS and maximum core length of tumor or tumor grade at diagnostic/surveillance biopsies (all p > .05). Finally, we observed a modest trend that patients with higher GRS quartiles had a higher risk for tumor upgrading on surveillance biopsies. The trend, however, was not statistically significant (p > .05).

**Conclusions**
The associations of GRS with two measurements of PCa multifocality (core numbers and laterality) provide novel and consistent evidence for the link between inherited PCa risk and multifocal tumors.

---

**Join a Virtual Prostate Cancer Support Group**
While we all must remain safe and socially distant due to COVID-19 restrictions, it is important for everyone to continue to monitor and address their health concerns, and stay connected to others. Us TOO has virtual prostate cancer support groups that continue to meet regularly and host guest speakers. These meetings can be accessed by phone or by internet, and can be attended from any location. For a list of groups, please visit: www.ustoo.org/virtual-ustoo-support-groups
PCa distant metastasis (DM) and associated with 20 years, the GPS test was allowed for approximately 20 years, oncological outcomes following radical prostatectomy onco-lurgical outcomes following radical prostatectomy. The team assessed the association between the Onco-type DX Genomic Prostate Score and Active Surveillance. The study adds to a previous study that reported similar results for 10-year outcomes, the researchers noted. These findings suggest that genomic changes in the tumor tissue, quantified by the Genomic Prostate Score (GPS), provide additional biological insight into the long-term risk of DM and PCSM. This information may be valuable to those considering AS. Prospective studies should be pursued to validate these results.

Reference:


MedPage Today
20 May 2021

Doc Moyad: Football for Metastatic Prostate Cancer?

(Continued from page 3)

The team assessed the association between the Onco-type DX Genomic Prostate Score (GPS) and long-term oncological outcomes following radical prostatectomy (RP). In the 428 patients followed for approximately 20 years, the GPS test was found to be significantly associated with 20-year risk of distant metastasis (DM) and PCA-specific mortality (PCSM).

Each 20-unit increase in GPS was associated with a more than 2-fold increased risk for DM [Hazard Ratio (HR) 2.24, 95% Confidence Interval (CI) 1.49-3.53] and PCSM (HR 2.30, 95% CI 1.45 to 4.36).

The study adds to a previous study that reported similar results for 10-year outcomes, the researchers noted.

“Genomic changes in the tumor tissue, quantified by the Genomic Prostate Score, provide additional biological insight into the long-term risk of DM and PCSM. This information may be valuable to those considering AS. Prospective studies should be pursued to validate these results.”

Reference:


MedPage Today
20 May 2021

Salvage CRYO

(Continued from page 5)

CRYO,” the authors stated.

“We feel that failure rates of salvage CRYO may be reduced using contemporary selective imaging, targeted biopsies and biomarker criteria. Further studies utilizing advanced imaging and molecular modalities in the salvage setting may result in better oncological outcomes as exclusion of advanced disease is more precise.”

Renal & Urology News
04 May 2021

References:

3. Andre’s Cantor at https://www.youtube.com/watch?v=EUTzRMZVAA

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).
This column provides the platform for experts in the field to help men and women by providing answers to questions about sexual health and intimacy challenges that can result from prostate cancer treatment.

This column was compiled with the help of Dr. Anne Katz, Certified Sexuality Counselor and Clinical Nurse Specialist at CancerCare Manitoba. She has educated thousands of healthcare providers and cancer survivors about cancer, sexuality and survivorship. She is an avid blogger for ASCO Connections and the author of 14 books on the topics of illness, sexuality and cancer survivorship. (www.drannekatz.com)

QUESTION FROM PROSTATE CANCER SURVIVOR:
It’s been 5 years since my prostate surgery, and nothing has helped me to get erections. Not the pills or the pump or even the injection and I don’t want to have an implant and, anyway, I can’t afford it. I am so sad about this and also mad that I was not told that this could happen. But I can’t turn back the clock and here I am. How do I get over this?

RESPONSE FROM DR. ANNE KATZ:
I am sorry for what you are going through and also that you were not warned that this could happen. It sounds like you have tried everything to help yourself and want to move on.

Something that is important for both you and your partner if you have one, is to actively mourn and grieve the loss of what used to be, personally and as a sexual partner. The desire for penetrative sex is a strong one, both because it is pleasurable and also because, for many people, this is what ‘sex’ means. But there are many other ways to receive (and give) pleasure without penetration. Non-penetrative activities (remember when you were younger, and sex was off the table, how exciting ‘fooling around’ used to be?) should not be ignored. But with each encounter that does not involve an erection, it is important to acknowledge (and thereby grieve) what has been lost, but also appreciate what remains.

It is only through this mourning that you can discover what other activities you can enjoy – and there are many! You and your partner may also benefit from a few sessions with a sexuality counselor or sex therapist who understands the issues related to treatment of prostate cancer.

Watch Dr. Katz’s presentation on sexual health and intimacy from the Prostate Cancer Pathways for Patients and Caregivers event recorded at Englewood Health in Englewood, NJ on September 29, 2018 at: https://www.youtube.com/watch?v=A2ZdDHw2WGY&t=8542s.

Read previous issues of Between the Sheets at www.ustoo.org/BTS.

Do you have a question about sexual health or intimacy? If so, we invite you to send it to Us TOO. We’ll select questions to feature in future Between the Sheets columns.

Please email your question to: ustooBTS@ustoo.org

Or mail your letter to:
Us TOO International
Between the Sheets
2720 S. River Road, Suite 112
Des Plaines, IL 0018
Advancements in prostate cancer research provide hope for finding a cure and lead to the discovery of new treatments to minimize the impact of a man’s prostate cancer and maximize his quality of life. This regular Hot SHEET supplement includes some of the latest research from the Prostate Cancer Foundation (www.pcf.org).

The PCF is the world’s leading philanthropic organization funding and accelerating prostate cancer research. Founded in 1993, the PCF has raised more than $745 million and provided funding to more than 2,000 research programs at nearly 200 cancer centers and universities.

Sleep, Sex, and Prostate Cancer: What’s the Connection?
Sleep and sex are two very important and personal concerns that many people struggle with at times. But if you have prostate cancer, the challenges can be even greater. Treatment with surgery, radiation, or hormone therapy can affect sexual function and desire. Urinary issues after treatment and worry about cancer recurrence can affect sleep … the list goes on. But how exactly are these problems related in prostate cancer, and how can doctors use this connection to better help their patients? A team of researchers in New Zealand and Canada aimed to find out more about the link between sleep problems and sexual problems in prostate cancer patients. They sent an anonymous survey to patients with prostate cancer around the globe.

The final study results have been published in the Journal of Sex and Marital Therapy (https://www.tandfonline.com/doi/full/10.1080/0092623X.2020.1848947). The majority of patients (59%) had at least mild insomnia, and many (nearly 70%) were bothered by sexual problems. While most patients reported having a sex drive and being able to get an erection, only about 20% were able to have an orgasm. The main finding of the study is that orgasmic difficulty and insomnia are not only common, they are also statistically related – having one predicts that a person may have the other. This suggests that when men seek help for sexual problems, clinicians should ask about insomnia, as poor sleep may be contributing to problems with orgasm. Furthermore, treatments for insomnia – such as cognitive behavioral therapy or increased physical activity – may improve sexual functioning. Conversely, when patients present with sleep problems, providers should proactively ask about problems with orgasm – potentially identifying another way to help improve the patient’s quality of life.

Ultimately, this is good news for patients with prostate cancer: identifying and treating problems in one area may boost functioning in the other. Better sleep and better sex can improve survivorship both during and after prostate cancer treatment. Don’t hesitate to tell your doctor about symptoms or side effects you may be experiencing, even if you’re not sure whether it’s related to treatment.

For more information visit www.pcf.org, email info@pcf.org, or call 1-800-757-2873.
Us TOO is proud to offer our 2021 webinar series, What is Right for Me in My Prostate Cancer Treatment? This series of educational and interactive webinars will bring people together virtually and safely to access empowering, decision-making information and personal connections in a time of social distancing.

The fourth webinar in this series is a discussion on the topic of Imaging. Continuing advances in imaging technology and usage can mean more accurate testing and diagnosis related to prostate cancer, and can help guide patients toward the best treatment options for them. Join us as we discuss the latest on this very important topic.

**Imaging**  
*Presented by Us TOO International*  
Thursday, June 24  
7:00 - 8:30pm Central

**Featuring:**

**Brian T. Helfand** MD, PhD - Chief, Division of Urology, Ronald L. Chez Family and Richard Melman Family Endowed Chair of Prostate Cancer, NorthShore University HealthSystem, Evanston, IL; Clinical Associate Professor, University of Chicago, Pritzker School of Medicine, Chicago, IL

**Laurence Klotz**, MD, FRCSC - Professor of Surgery, University of Toronto, Toronto, Canada; Sunnybrook Chair of Prostate Cancer Research; Member of the Us TOO Board of Directors

Register at [www.ustoo.org/mypcawebinar](http://www.ustoo.org/mypcawebinar)

Other Upcoming Webinars in this Series:

**Genetics and Genomics** - Thursday, July 29  
with Dr. Heather H. Cheng and Dr. Brittany Szymaniak

For Sponsorship Opportunities, Please Email James Hutson, Us TOO Director of Development at: jamesh@ustoo.org or call 630-795-1002.