REMINDER

ANNUAL PHCSG MEMBERSHIP $20

Join our Monthly meetings on the third Tuesday (Feb – Dec) 10am – 12:30pm

EFT Payments to:
Prostate Heidelberg CSG
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Prostate Heidelberg

April 2021 Issue 205

For Education, Information and Support

Meeting Hall: Ivanhoe Uniting Church 19 Seddon Street, Ivanhoe
POB 241 Ivanhoe Victoria 3079
Email: prostateheidelberg@gmail.com
Website: www.prostateheidelberg.info

Next PHCSG Meeting – Tues 20 April (via Zoom)
10am – 12:30pm

Join Zoom Meeting: Copy link and paste into your browser
https://us02web.zoom.us/j/86879860581?pwd=UDc5UnNqamlxaGRsWjBJcXloREFUdz09

Meeting ID: 868 7986 0581
Passcode: 104031

PHCSG April

Often, there is no "right" or "wrong" way to manage a prostate cancer diagnosis. Two men of exactly the same age & general health, newly diagnosed with the same type of prostate cancer, can very reasonably come to different decisions about their treatment. Like all treatment decisions, you have to weigh how you feel about potential benefits against potential risks. No one can do that for you.

We hope our newsletter provides you with some extra information and the incentive to do your own research. As our article on page 3 emphasises...Knowledge is Power!

We are pleased to welcome Colin O'Brien at this month's Zoom to talk about the Australian/New Zealand PCa Outcomes Registry & the information it provides clinicians & patients.

In this month's newsletter we highlight:

If there is anything you want to talk through in relation to your treatment or wellbeing please don't hesitate to ring:

Max Shub	0413 777 342
Mike Waller	0438 616 240
Michael Meszaros	0407 837 538

Prostate Heidelberg Cancer Support Group

PHCSG provides information, education and support for those affected by Prostate Cancer. At our meetings we are committed to:

- showing respect to members, speakers and guests
- allowing members to speak without interruption
- respecting confidentiality

Study finds cancer cells may evade chemotherapy by going dormant

Source:
MARCH 13, 2021
By Weill Cornell Medical College

Cancer cells can dodge chemotherapy by entering a state that bears similarity to certain kinds of senescence, a type of "active hibernation" that enables them to weather the stress induced by aggressive treatments aimed at destroying them, according to a new study by scientists at Weill Cornell Medicine. These findings have implications for developing new drug combinations that could block senescence and make chemotherapy more effective.

In a study published Jan. 26 in Cancer Discovery, a journal of the American Association for Cancer Research, the investigators reported that this biologic process could help explain why cancers so often recur after treatment. The research was done in both organoids and mouse models made from patients' samples of acute myeloid leukemia (AML) tumors. The findings were also verified by looking at samples from AML patients that were collected throughout the course of treatment and relapse.

"Acute myeloid leukemia can be put into remission with chemotherapy, but it almost always comes back, and when it does it's incurable," said senior author Dr. Ari M. Melnick, the Gebroe Family Professor of Hematology and Medical Oncology and a member of the Sandra and Edward Meyer Cancer Center at Weill Cornell Medicine. "A longstanding question in the field has been, 'Why can't you get rid of all the cancer cells?' A similar question can be posed for many other types of aggressive cancer in addition to AML."

For years, cancer researchers have studied how tumors are able to rebound after they appear to be completely wiped out by chemotherapy. One theory has been that because not all cells within a tumor are the same at the genetic level—a condition called tumor heterogeneity—a small subset of cells are able to resist treatment and begin growing again. Another theory involves the idea of tumor stem cells—that some of the cells within a tumor have special properties that allow them to re-form a tumor after chemotherapy has been given.

The idea that senescence is involved does not replace these other theories. In fact, it could provide new insight into explaining these other processes, Dr. Melnick said.

In the study, the researchers found that when AML cells were exposed to chemotherapy, a subset of the cells went into a state of hibernation, or senescence, while at the same time assuming a condition that looked very much like inflammation. They looked similar to cells that have undergone an injury and need to promote wound healing—shutting down the majority of their functions while recruiting immune cells to nurse them back to health.

"These characteristics are also commonly seen in developing embryos that temporarily shut down their growth due to lack of nutrition, a state called embryonic diapause," Dr. Melnick explained. "It's not a special process, but normal biological activity that's playing out in the context of tumors."

Further research revealed that this inflammatory senescent state was induced by a protein called ATR, suggesting that blocking ATR could be a way to prevent cancer cells from adopting this condition. The investigators tested this hypothesis in the lab and confirmed that giving leukemia cells an ATR inhibitor before chemotherapy prevented them from entering senescence, thereby allowing chemotherapy to kill all of the cells.

Importantly, studies published at the same time from two other groups reported that the role of senescence is important not just for AML, but for recurrent cases of breast cancer, prostate cancer and gastrointestinal cancers as well. Dr. Melnick was a contributor to one of those other studies.

Dr. Melnick and his colleagues are now working with companies that make ATR inhibitors to find a way to translate these findings to the clinic. However, much more research is needed, because many questions remain about when and how ATR inhibitors would need to be given.

"Timing will be very critical," he said. "We still have a lot to work out in the laboratory before we can study this in patients."

High-risk Localised Prostate Cancer: Changing the Rules

Source: https://vitaljake.com

Knowledge is power: Saving your life may start with you going to the doctor, and knowing the right questions to ask. I hope all men will put prostate cancer on their radar. Get a baseline PSA blood test in your early 40s, and if you are of African descent, or if cancer and/or prostate cancer runs in your family, you need to be screened regularly for the disease. Many doctors don't do this, so it's up to you to ask for it.

©Janet Farrar Worthington

A full-on assault of high-risk prostate cancer with intensive neoadjuvant hormonal therapy before surgery marks a huge shift in medical thinking. Instead of doing things in a well-ordered sequence, oncologists like UCSD's Rana McKay are launching many weapons earlier than ever, when cancer is less prepared for battle, and they're going for a cure.

Why the No-Holds-Barred Approach Now?

Which scenario would you prefer: "I've got high-risk prostate cancer. I sure hope it doesn't come back after surgery or radiation! Fingers crossed! My doctor and I are really hoping for the best!" or,

"I've got high-risk prostate cancer that has a chance of coming back after initial treatment. So, my doctor is going after it relentlessly, like Inspector Javert hunting Jean Valjean in Les Mis."

High-risk prostate cancer is formidable: it will spread if not treated and is more likely to recur after initial treatment. That's why doctors like Rana McKay, M.D., medical oncologist and PCF-funded Young Investigator at the University of California San Diego (UCSD) are now throwing the proverbial kitchen sink at high-risk prostate cancer as soon as it is diagnosed.

This marks a huge shift in medical thinking. Advanced prostate cancer treatment in the past has been like a methodical series of "if: then" statements in math, like, "If A, then B," or "C if and only if B." If cancer spreads beyond the prostate, then the traditional next step has been androgen deprivation therapy (ADT), shutting down testosterone and other male hormones that drive prostate cancer's growth. If the cancer becomes resistant to ADT, then other medications are added: chemotherapy and/or androgen receptor (AR)-targeting drugs (also called androgen-directed therapies, or AR-signaling inhibitors).

Over the last few years, doctors have been compressing this time frame, giving these AR-targeting drugs at the time that ADT is initiated – based on studies such as STAMPEDE, LATITUDE, suggesting that the cancer, which evolves and mutates as it spreads, is more vulnerable to treatment sooner rather than later. Although these treatments can extend survival, they are not a cure.

What's different about this new, full-on, kitchen-sink approach? First, a high-intensity burst of hormonal suppression (ADT plus an androgen-directed drug, such as enzalutamide or abiraterone) is finite, given as neoadjuvant therapy for a few months before surgery and for up to a year afterward. Then it's over, and within a year, testosterone comes back.

Second: "We are going for a cure," says McKay. This is worth repeating: Going for a cure!

Early results of exciting clinical trials, with more on the way, are highly encouraging. One Phase II trial still in progress, led at UCSD by McKay in collaboration with Mary-Ellen Taplin, M.D., of the Dana-Farber Cancer Institute, grew out of a 2014 PCF Challenge Award study, led by Taplin. The investigators tested two combinations of drugs given for six months before surgery: abiraterone and prednisone plus leuprolide (Lupron), vs. abiraterone and prednisone, Lupron, and apalutamide. After surgery, "men were randomized to continue therapy for one year, or simply to be monitored." The initial results of this trial were presented

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at the American Society of Clinical Oncology meeting in 2020.

"We showed that about one out of five men who received intensive hormonal therapy up front demonstrated very residual amounts of tumor, or no tumor at all, in their prostatectomy specimen" when the surgically-removed tumor was thoroughly examined by a pathologist under the microscope. This "pathologic response," seen in the surgically removed tissue, "hasn't yet been proven in prostate cancer to be associated with long-term outcome," notes McKay. "But in several other tumor types – breast, bladder, rectal cancer, and others – evidence demonstrates that the pathologic response is associated with overall survival." In follow-up data from this and two other neoadjuvant studies, recently published in the Journal of Urology, McKay and colleagues showed that "of those patients who had no tumor or very little tumor left behind in their prostate, the rate of recurrence (the average follow-up time so far is 3.6 years) was significantly lower. In our cohort of 117 patients, only two patients who had a pathologic response and minimally residual disease had a recurrence, and no man died of prostate cancer. Our hope is that we will develop data to prove that a pathologic response is associated with long-term outcomes in prostate cancer."

In Some Responders at Prostatectomy, Cancer's Already Dead!

Over time, prostate cancer acquires genomic alterations that help it to be more aggressive. Each tiny mutation gives the cancer extra protection, maybe starting out with the genetic equivalent of a bullet-proof vest or stronger helmet, then becoming much more sophisticated – imagine a fighter jet deploying decoy flares or chaff as missile countermeasures.

Is it more vulnerable, and easier to kill, early on? McKay and colleagues believe the answer is yes, and they're testing this idea in several clinical trials. One phase II study at UCSD still in progress, in collaboration with Taplin, involved 119 men with "unfavorable intermediate or high-risk disease. "More than 90 percent of the patients had high-risk disease, and all of them, from the get-go, had very aggressive tumors," says McKay. "Over one-third of patients had Gleason 9 or 10 disease, and about 60 percent of patients had stage 3 cancer," that had spread slightly beyond the prostate but with no evidence of distant metastases. Men in the trial received either neoadjuvant abiraterone and prednisone plus leuprolide (Lupron), vs. abiraterone and prednisone, Lupron, and apalutamide.

One major reason why McKay and colleagues are testing this approach with surgery rather than radiation is to study the pathologic response: looking at how much residual tumor is present in the surgical specimen that has been removed after treatment. Have they seen any changes? Not in all men, but in about 20 percent, there's a remarkable change: "The primary tumor was dead and necrotic." The pathologists "looked at every little sliver of the prostate," and found that these exceptional responders had either "less than 5 mm of tumor left behind, or no tumor left behind."

Just think about that for a minute: the surgeon removes the prostate, gives the tissue to the pathologist, who starts looking at it under the microscope and sees only corpses of cancer cells!

One patient who participated in this study is Pat Sheffler, who was diagnosed at age 53 with stage 3 prostate cancer and a PSA of 37. He received abiraterone and prednisone, Lupron, and apalutamide for six months before prostatectomy, and started to see results right away. In monthly blood tests before his surgery, his PSA levels dropped: "34, 27, 21, 10, 4, 2, and 0.2." At surgery, he had "very minimal remaining tumor," says McKay. Then he underwent one more year of hormone therapy after surgery. Two months after he stopped taking the trial medications, not only was his PSA undetectable, but his testosterone levels were coming back to normal. "My hope for Pat is that he's cured, that he can go on just being an amazing dad, husband, and advocate for prostate cancer awareness."

In another phase II study led by Taplin, published in the Journal of Clinical Oncology, McKay and colleagues at UCSD, Dana-Farber, Beth Israel Deaconess Medical Center, Johns Hopkins, and the University of Washington reported a complete pathologic response (no remaining live cancer cells in the prostate) or minimal residual disease in 30 percent of patients treated with neoadjuvant enzalutamide, Lupron, abiraterone and prednisone before prostatectomy.

But what about the men who were not exceptional responders to big-gun hormone therapy? The scientists have identified some key genetic changes in men who were non-responders, and they have some ideas about how to help these men, as well.

In several clinical trials, including this one, an intense blast of neoadjuvant androgen deprivation therapy (ADT) and androgen-directed treatment (drugs such as abiraterone and enzalutamide) has shown promising results in some men – but not all men. Why is this?

McKay, Taplin, and colleagues have found an explanation: Men who have not responded (who had a significant amount of tumor remaining after neoaduvant treatment) in these clinical trials have certain genetic differences in their prostate cancer – loss of PTEN (a tumor suppressor gene, which is knocked out in as many as 70 percent of men with prostate cancer) or alterations in ERG (an oncogene that fuses with another gene, called TMPRSS2, in as many as half of all men with prostate cancer).

"Very few of the men who responded had PTEN loss," says McKay, "and ERG positivity was also associated with lack of response." But these men also seem to have something else that might render AR-blocking drugs unhelpful: lower AR expression, compared to other men. Basically, if a tumor does not seem to have a lot of androgen receptor activity, then a medicine that targets these receptors won't have much to work with.

This information is not discouraging, McKay hastens to add: it's helpful! It has taught the scientists that "the responders have a certain tumor profile, and non-responders have a certain profile. Similarly, responders had mutations in a gene called SPOP" (which is mutated in about 10 percent of primary prostate tumors).

Knowing this, McKay adds, could be an opportunity: a springboard for additional or different therapy – perhaps neoadjuvant chemotherapy, for example. Remember: you're still ahead of the game here. You don't

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have metastatic cancer, and many scientists believe that high-risk cancer, when it's localized, is still vulnerable enough to be cured, if it's hit hard with multiple weapons.

"This is an opportunity for us to develop and design a personalized treatment strategy for these men," says McKay. "It would be awesome if we could use somebody's own genomics to help design the best treatment for him – similar to what's being done in the breast cancer I-SPY trials, neoadjuvant studies with multiple treatment arms, some determined by biomarkers (specific genetic alterations that show up in a blood or tissue test).

Some men with high-risk prostate cancer might respond better to a PARP-inhibiting drug, such as olaparib and rucaparib. This is the focus of another study that will be starting soon, McKay says. "In men who have germline (inherited) alterations, such as a BRCA1 or BRCA2 mutation, we hypothesize that giving a PARP inhibitor in a neoadjvant setting before prostatectomy might significantly improve pathologic response. We are finalizing the protocol for NEPTUNE, a biomarker-focused neoadjuvant trial testing PARP inhibitors in localized prostate cancer."

"It is really exciting to be part of this paradigm shift," says McKay. "We have the opportunity to improve outcomes for men with high-risk localized disease, and we're in the midst of trying to prove that through well-organized, thoughtful clinical trials.

"At the end of the day, the question is, how can we help our patients live longer and live better? That's really the big driver. The good thing about localized disease is that we can try to cure more men of prostate cancer – not just extend life for metastatic disease, but can we develop a pathway so they don't ever develop metastatic disease, and so they can be cured? That's what we're aiming to do." And, bonus: after the big blast of intense hormonal treatment, most men get their testosterone back. "Most patients actually recovered their testosterone fully within the first year of discontinuation of treatment."

Are we Closer to Automated Pathological Assessment of Prostate Cancer Biopsy Slides?

Source: https://prostatecancerinfolink.net/2021/04/01/are-we-closer-to-

According to a recent artcicle in Modern Pathology, a team of researchers at Yale University and at Memorial Sloan-Kettering Cancer Center (MSKCC) have been able to show that an artificial intelligence (AI) system designed and validated at MSKCC could be used to diagnose prostate cancer as either "suspicious" or "not suspicious" based on data from nearly 2,000 slides of prostate tissue acquired at Yale Medicine.

Perincheri *et al.* used to AI system to analyze 1876 prostate core biopsy slides from 118 consecutive patients procured at Yale Medicine and processed at Yale Pathology in June and July 2019. They found that, compared to expert pathological evaluation by specialists in the pathology of prostate cancer at Yale Pathology, the AI system was able to identify core biopsies with cancer with:

- A sensitivity of 97. percent
- A positive predictive value of 97.9 percent
- A specificity of 99.3 percent
- A negative predictive value of 99.2 percent

Now we need to be very clear that this AI system is *not* (well, not yet anyway) capable of identifying specific Gleason scores of Grade Groups with this level of accuracy. It is only capable of telling whether a specific slide shows signs of cancer or the absence of cancer, but for many labs this may on its own be extremely useful because it can potentially be used *either* to validate the findings of pathologists with less experience in the identification of prostate cancer or to "pre-screen" slides into those that show signs of cancer and those that don't.

There will undoubtedly need to be further study of this type of AI system to evaluate pathology slides objectively, when it comes to the diagnosis of prostate cancer. What appears to be true, however, is that just as AI has started to be used to evaluate things like MRI scans and CT scans objectively, we are beginning to see the initial use of AI in the evaluation of pathological materials too.

Final Results from TITAN

Apalutamide Confirmed as Benefit in Metastatic Castration Sensitive Prostate Cancer

Source: https://ustoo.org/PDFs/HotSheets/UsTOO_HotSHEET_April_2021.pdf

Final Results from TITAN Study Confirm Apalutamide Benefit in Metastatic Castration Sensitive Prostate Cancer The survival benefit of adding apalutamide to standard care for metastatic castration sensitive prostate cancer (mCSPC) persisted at nearly 4 years of follow-up, according to the final analysis of the phase 3 TITAN trial.

At a median follow-up of 44 months, the median overall survival (OS) was not reached in men who received apalutamide plus standard androgen deprivation therapy (ADT), but the median OS was 52.2 months in men who received placebo plus ADT.

"In the final analysis, the risk of death with apalutamide was reduced by 35% (Hazard Ratio [HR] 0.65, P < 0.0001). This was similar to the hazard ratio of 0.67 in the primary analysis of TITAN, despite an almost 40% crossover rate from the placebo to the apalutamide group," said Kim N. Chi, MD, a medical oncologist at BC Cancer Vancouver Prostate Centre. Dr. Chi reported these results at the 2021 Genitourinary Cancer Symposium (GuCS).

The international, double blind TITAN trial compared apalutamide (240 mg daily) with placebo, both added to standard ADT, in 1,052 men with mCSPC, including those with high- and low-volume disease, prior docetaxel use, prior treatment for localized disease, and prior ADT for no more than 6 months.

At the primary analysis, reported in the New England Journal of Medicine in 2019, the dual primary endpoints of radiographic progressionfree survival (rPFS) and OS met statistical significance at a median follow up of 22.7 months. At the final analysis, the median treatment duration was 39.3 months for the apalutamide arm, 20.2 months for the placebo arm, and 15.4 months for men who crossed over from placebo to apalutamide.

"After adjusting for crossover, the effect of apalutamide on OS increased (HR, 4in the risk of death by 48% vs. placebo," Dr. Chi said. He noted that the treatment effect on OS favored apalutamide in men with both high- and low-volume disease.

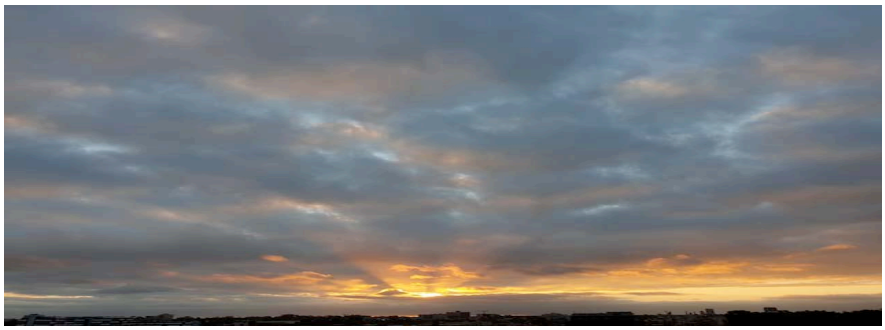
"Treatment with apalutamide also significantly prolonged second PFS on subsequent therapy and delayed onset of castration resistance," Dr. Chi said. Median second PFS was 44.0 months with placebo and was not reached with apalutamide. Median time to castration resistance was 11.4 months in the placebo arm and was not reached in the apalutamide arm.

Health-related quality of life was also maintained with apalutamide throughout the study and did not differ from the placebo group. Safety was consistent with previous reports. "Importantly, the cumulative incidence of treatment-related falls, fracture, and fatigue was similar between groups, as was the cumulative incidence of treatment-related adverse events and serious adverse events," Dr. Chi said.

An increased incidence of any-grade rash that was seen in the apalutamide group was expected but plateaued after about 6 months. "These results confirm the favorable risk-benefit profile of apalutamide," Dr. Chi concluded.

Presented at the 2021 GuCS, Abstract 11 MDedge Hematology and Oncology 13 February 2021

PLEASE NOTE:
Treatments may vary in Australia. Please ensure you discuss your diagnosis and treatment options with your consulting specialist



SBRT for High-Risk Patients

Source: https://www.prostatecancer.news/2021/01/sbrt-for-high-risk-patients.html

As we have seen, SBRT is a preferred therapy for low and intermediate-risk patients (https://www.redjournal.org/article/S0360-3016(18)31271-9/fulltext). It is effective, safe, convenient, and relatively inexpensive. However, its use for high-risk patients remains controversial.

Amar Kishan has accumulated data from 8 institutions that have used SBRT for 344 high-risk patients. They were treated as follows:

They received from 35 Gy-40 Gy in 5 treatments (7-8 Gy per treatment)
72% received adjuvant ADT for a median of 9 months
19% received elective nodal radiation

After a median follow-up of 49.5 months:
4-year biochemical recurrence-free survival (bRFS)was 82%
Higher dose, longer ADT, and nodal radiation were associated with better bRFS
4-year metastasis-free survival was 89%
Late grade 3 GU toxicity was 2.3%
Late grade 3 GI toxicity was 0.9%
Toxicity was associated with dose and ADT use

Although the results of different prospective trials aren't comparable, the following table gives an idea of 4-6 year outcomes of prospective trials of high-risk patients using various therapies.

	Followup	bRFS	BED	ADT (median)	Late GU Toxicity Grade ≥3
SBRT (1)	4yrs	82%	1980253 Gy	9 mos	2.3%
Surgery+SRT (2)	5yrs	78%	154 Gy	6 mos	8% (3)
HDR-BT (4)	5yrs	91%	227-252 Gy	6.3 mos	3-16%
LDR-Brachy Boost (5)	5yrs	86%	227 Gy	12 mos	19%
HDR-Brachy Boost (6)	6yrs	88%	267 Gy	12 mos	2.5%
IMRT (7)	5yrs	88%	174 Gy	28 mos	2.5%

SBRT = stereotactic body radiation therapy,. External beam radiation (EBRT) concentrated in 5 treatments

bRFS= biochemical (PSA) recurrence-free survival

BED= biologically effective dose (comparable effectiveness)

ADT= androgen deprivation therapy used for a limited time to improve outcomes late GU toxicity ≥3 = serious urinary side effects requiring intervention, occurring more than 3 months after therapy

HDR-BT = high dose rate brachytherapy (temporary implants)

LDR-BT = low dose rate brachytherapy (permanent implants/seeds)

Brachy Boost therapy - External beam radiotherapy (EBRT) with a boost of radiation to the prostate using brachytherapy

IMRT = intensity-modulated radiation therapy, usually given in about 40 treatments

(1) https://www.redjournal.org/article/S0360-3016(21)00068-7/pdf

(2) https://riskcalc.org/ProstateCancerAfterRadicalProstatectomyNew/ with GS 8

(3) https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(16)00111-X/fulltext

(4) https://www.redjournal.org/article/S0360-3016(11)00552-9/abstract

(5) https://www.redjournal.org/article/S0360-3016(16)33484-8/abstract

(6) https://www.thegreenjournal.com/article/S0167-8140(18)30238-X/fulltext

(7) https://www.thelancet.com/journals/lanonc/article/PIIS1470-

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As we've seen, brachy boost therapy is the gold standard for long-term recurrence-free survival. At about 5 years, however, all therapies seem to be about equally effective, with biochemical recurrence-free survival in the range of 78-91%. However, they differ markedly in the incidence of serious late-term urinary side effects. For LDR Brachy Boost therapy, the risk of urinary retention is high, while the risk of incontinence and urinary retention is elevated among patients having salvage radiation (SRT). External beam monotherapy, using either IMRT or SBRT, had a low risk of serious late-term urinary side effects (and almost no risk of serious rectal side effects).

IMRT, as a primary therapy for high-risk patients, requires long-term use of ADT to be effective. The DART RADAR trial showed that for high-risk patients, 6 months of adjuvant ADT wasn't nearly enough. *Nabid* suggests that 18 months of adjuvant ADT may be optimal when paired with IMRT. SBRT seems to be equally effective with less adjuvant ADT, but the optimal duration is yet to be determined.

The question that will only be resolved with longer follow-up is whether the recurrence rates are stable after 4 years, or whether they will deteriorate with longer follow-up. In the ASCENDE-RT trial of brachy boost therapy vs external beam radiation only, biochemical recurrence rates were similar after 5 years. Recurrence increased at a rate of 5% per year among those treated with EBRT alone, but only at a rate of 1% per year if they got the brachy boost. There was similar stability of outcomes when HDR brachytherapy was used. Recurrence after salvage radiation increased from 22% at 5 years to 30% at 10 years. There is every reason to believe that SBRT, which uses biologically effective doses (BED) of radiation similar to brachy boost therapy, will follow a stable recurrence pattern over time, but that remains to be shown.

Ensuring the safety of patients is critical, and high-risk patients are usually treated with wider margins that can affect toxicity. As we saw, SBRT there are many factors that must be considered when giving radiation this intense.

The first randomized trial of radiation delivered in 6 treatments compared to 39 treatments to intermediate to high-risk patients proved that the cancer control and toxicity were similar. Another randomized trial (PACE-B) has already shown that the toxicity is lower with SBRT. An ongoing arm of that trial (PACE-C) is focusing on high-risk patients.

NCCN has included SBRT as a reasonable standard-of-care option for high-risk patients (Table 1 Principles of Radiation Therapy PROS-E 3 of 5 in NCCN Physicians Guidelines 3.2020). Due to the pandemic, an international panel of radiation oncologists is recommending that high-risk patients consider its use.

For men with high risk PCa is there benefit in taking ADT for at least one year after radiation therapy?

Introduction

To determine the prognostic significance of long-term adjuvant androgen deprivation therapy (A-ADT) over 1 year in achieving undetectable levels of prostate-specific antigen (PSA) less than 0.001 ng/mL in prostate cancer patients with high- or very high-risk prostate cancer who underwent radiotherapy (RT).

Materials and methods

A total of 197 patients with prostate cancer received RT, with a follow-up of ≥12 months. Biochemical failure was defined as PSA ≥nadir + 2 ng/mL after RT. We analyzed clinical outcomes, including survival, failure patterns, and prognostic factors affecting outcomes.

Results

Biochemical failure-free survival (BCFFS), clinical failure-free survival, distant metastasis-free survival, cancer-specific survival, and overall survival (OS) rates at 5 years were 91.1%, 95.4%, 96.9%, 99.5%, and 89.1%, respectively. Administration of long-term A-ADT significantly predicted favorable BCFFS (p = 0.027) and OS (p < 0.001) in multivariate analysis. Nadir PSA ≤0.001 ng/mL was an independent prognostic factor for BCFFS (p = 0.006) and OS (p = 0.021). The use of long-term A-ADT significantly affected nadir PSA ≤0.001 ng/mL (p < 0.001). The patients with A-ADT for 1 year or longer had better BCFFS or OS than those for less than 1 year or those without A-ADT (p < 0.001). The best prognosis was demonstrated in patients treated with long-term A-ADT and nadir PSA ≤0.001 ng/mL in BCFFS (p < 0.001).

Conclusion

The addition of long-term A-ADT over 1 year to RT demonstrated good treatment outcomes in patients with locally advanced prostate cancer. Achieving a nadir PSA value ≤0.001 ng/mL using combination therapy with RT and A-ADT is a powerful clinical predictor of treatment outcomes.

Favorable prognosis of patients who received adjuvant androgen deprivation therapy after radiotherapy achieving undetectable levels of prostate-specific antigen in high- or very high-risk prostate cancer

Source: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0248463

Source:
Medscape Medical News 10 March 2021

Novel Radiopharmaceutical Beats Cabazitaxel in Metastatic Castrate Resistant PCa

A novel radiopharmaceutical was more active than cabazitaxel against metastatic castration-resistant prostate cancer (mCRPC) and caused fewer grade 3/4 adverse events, according to results from the first and so for only comparator trial, known as TheraP. Results of the phase 2 trial, which was conducted in 200 Australian men, were published online on February 11 in *The Lancet*.

The new product, a radiolabeled small molecule, lutetium-177 [177Lu] Lu-PSMA6170, is under development by Endocyte/Novartis. It binds to prostate-specific membrane antigen (PSMA) and delivers high doses of beta radiation (RT). The short mean path length of the beta particles with 177Lu-PSMA (0.7 mm), limits damage to surrounding tissues.

The unblinded trial was conducted at 11 centers in Australia. Participants were men with mCRPC (median age, 72 years) whose disease progression while receiving docetaxel and androgen receptor-directed therapy.

To be eligible for the trial, men had to have metastases that expressed PSMA (detected after screening with 2 PET-CT scans). About one quarter of the men that were screened were not eligible to take part.

Men were randomly assigned to receive cabazitaxel 20 mg/m2 every 3 weeks IV for up to 10 cycles or 177Lu-PSMA 6.0-8.5 GBq IV every 6 weeks for up to 6 cycles.

The primary outcome was a ≥ 50% reduction in PSA level from baseline. On intentionto-treat analysis, this was achieved by 66 and 37% of the men in the 177Lu-PSMA and cabazitaxel groups, respectively (P < 0.0001).

Median progression-free survival (PFS) was 5.1 months in both arms, but at 12 months, PFS was 19% with 177Lu-PSMA, vs. 3% with cabazitaxel, translating to a significant delay in progression after 6 months of treatment (Hazard Ratio [HR], 0.63; P = 0.0028).

There are no data on overall survival.

"This trial provides strong evidence that [Lu-PSMA] is more active than cabazitaxel and is a potential alternative, particularly when cabazitaxel is unsuitable, owing to the patient's age or comorbidities," say the investigators, led by Michael Hofman, MBBS, professor of nuclear medicine at the Peter MacCallum Cancer Center, Melbourne, Australia.

Grade 3/4 thrombocytopenia was more common with the radiopharmaceutical than with cabazitaxel (11% vs. 0%), but overall, grade ¾ adverse events were less common (33 vs. 53% with cabazitaxel). Events included neutropenia (4 vs. 13%) and febrile neutropenia (0 vs. 8%). Patient-reported pain, fatigue, social functioning, diarrhea, and insomnia also favored Lu-PSMA. No deaths were attributed to treatment in either arm.

Fifteen of the men assigned to receive cabazitaxel withdrew from the trial before receiving it, possibly opting for 177Lu-PSMA instead. The reduction in PSA level of greater than 50% held when these 15 patients were excluded from the analysis.

The use of cabazitaxel as a comparator is the "most important strength of the TheraP trial.... Cabazitaxel is an effective therapy for patients who have already received docetaxel," comment Thomas Hope, MD, associate professor of radiology at UC San Francisco, and Jeremie Calais, MD, assistant professor of translational theranostics at UC Los Angeles, in an accompanying editorial.

"Although TheraP is a smaller study than the studies in progress, it will be the only study to compare the efficacy of PSMA-targeted radiopharmaceutical therapy with a real competitor for a while," they note. Other ongoing trials "will not tell us the relative value of PSMA targeted radiopharmaceutical therapy compared with that of an active therapy ... We encourage company sponsored trials to learn from the TheraP study and consider using a more active comparator," they write.

The separation of PFS curves at 6 months "might be the most interesting aspect of this study," the editorialists comment. Unlike chemotherapy, PSMA-targeted radiopharmaceutical therapy is cumulative, so "the treatment effect might not be shown immediately... As we await the planned overall survival analysis from TheraP, researchers in nuclear medicine are hoping that PSMA-targeted radiopharmaceutical therapy will bring the promise that was not achieved with radium-223 for patients with mCRPC, and instead replicate the benefit of somatostatin receptor targeted radiopharmaceutical therapy for patients with neuroendocrine tumours," the editorialists comment.

In general, "we are in the infancy of radiopharmaceutical therapy," they add.

One problem with this approach is that 2 PET scans are needed to ensure that the patients' metastases express PSMA. The 2 scans were undertaken with gallium-68 [68Ga] Ga-PSMA-11 to assess PSMA expression and with 2- flourine-18 [18F] fluoro-2- deoxy-D-glucose to delineate metastases. For patients to be eligible to participate in the trial, the 2 scans had to overlap; this ensured that all metastatic sites expressed PSMA.

"The fact that more than a quarter of the men who were screened did not qualify, mostly because of a mismatch, could be a problem," say the editorialists. "In the United States, it's unlikely that insurance companies will approve 2 PET scans for PSMA-targeted therapies once they hit the market, and the magnitude of benefit reported in TheraP is probably higher than would be seen from empiric treatment of all men with PSMA positive disease," Hope and Calais say.

Source: https://www.novartis.com/news/media-releases/novartis-announces-positive-result-phase-iii-study-radioligand-therapy-177lu-psma-617-patients-advanced-prostate-cancer

Novartis announces positive result of phase III study with radioligand therapy 177Lu-PSMA-617 in patients with advanced prostate cancer

Phase III VISION study with ^{177}Lu-PSMA-617 met both primary endpoints, significantly improving overall survival (OS) and radiographic progression-free survival (rPFS) in patients with PSMA-positive metastatic castration-resistant prostate cancer[1]

VISION trial findings to be presented at upcoming medical meeting, with regulatory submissions in the US and EU anticipated in 2021

Novartis is committed to reimagining prostate cancer through targeted radioligand therapy with ^{177}Lu-PSMA-617

More than 15 dedicated early to late development and research programs underway to identify the next wave of radioligand therapies for cancer

Basel, March, 23, 2021 — Novartis today reported the first interpretable results of the Phase III VISION study evaluating the efficacy and safety of ^{177}Lu-PSMA-617, a targeted radioligand therapy in patients with progressive PSMA-positive metastatic castration-resistant prostate cancer (mCRPC) compared to best standard of care alone. The trial met both primary endpoints of overall survival and radiographic progression-free survival[1], helping to move closer the ambition of becoming the targeted treatment for >80% of patients with advanced prostate cancer. The safety profile was consistent with data reported in previous clinical studies[1]. Results from the VISION trial will be presented at an upcoming medical meeting and included in US and EU regulatory submissions.

"Patients with metastatic castration-resistant prostate cancer have a less than 1 in 6 chance of surviving 5 years[2] and need new treatment options. These groundbreaking data confirm our belief in the potential of ^{177}Lu-PSMA-617 to reimagine outcomes for these patients through phenotypic precision medicine. We intend to submit these data to regulatory authorities as soon as possible," said John Tsai, Head of Global Drug Development and Chief Medical Officer for Novartis. "We would like to thank the patients who volunteered to participate in this study as well as the clinical teams at each of the trial sites. We would not be able to realize our commitment to reimagining medicine without the partnership of patients and their families."

Radioligand therapy combines a targeting compound that binds to markers expressed by tumors and a radioactive isotope, causing DNA damage that inhibits tumor growth and replication. This therapeutic approach enables targeted delivery of radiation to the tumor, while limiting damage to the surrounding normal tissue. Novartis has established global expertise and specialized supply chain and manufacturing capabilities across its network of four radioligand therapy production sites, and is further increasing capacity to ensure delivery of radioligand therapies like ^{177}Lu-PSMA-617 to patients in need.

Novartis is the only pharmaceutical company which is pursuing four different cancer treatment platforms. These include radioligand therapy, cell and gene therapy, and targeted therapy and immunotherapy, with an opportunity to combine these platforms for the best outcomes for each cancer patient.

About Advanced Prostate Cancer
Prostate cancer is a form of cancer that develops in the prostate gland, a small walnut shaped gland in the pelvis of men. In castration resistant prostate cancer (CRPC), the tumor shows signs of growth, such as rising Prostate Specific Antigen (PSA) levels, despite the use of hormone treatments that lower testosterone[3]. In metastatic CRPC (mCRPC), the tumor spreads to other parts of the body, such as neighboring organs or bones and remains unresponsive to hormone treatment[4]. The five-year survival rate for patients with mCRPC is approximately 15%[2].

About Phenotypic Precision Medicine in Advanced Prostate Cancer
Despite advances in prostate cancer care, there is a high unmet need for new targeted treatment options to improve outcomes for patients with metastatic castration resistant prostate cancer. More than 80% of prostate cancer tumors highly express a phenotypic biomarker[5] called Prostate Specific Membrane Antigen (PSMA)[4,6-9], making it a promising diagnostic (through positron emission tomography (PET) scan imaging) and therapeutic target for radioligand therapy[6].

About ^{177}Lu-PSMA-617
^{177}Lu-PSMA-617 is an investigational PSMA-targeted radioligand therapy for metastatic castration-resistant prostate cancer. It is a type of precision cancer treatment combining a targeting compound (ligand) with a therapeutic radioisotope (a radioactive particle)[10-12]. After administration into the bloodstream, ^{177}Lu-PSMA-617 binds to prostate cancer cells that express PSMA[13], a transmembrane protein, with high tumor-to-normal tissue uptake[10,14,15]. Once bound, emissions from the radioisotope damage tumor cells, disrupting their ability to replicate and/or triggering cell death. The radiation from the radioisotope works over very short distances to limit damage to surrounding cells[14,16].

About VISION
VISION is an international, prospective, randomized, open-label, multicenter, phase III study to assess the efficacy and safety of ^{177}Lu-PSMA-617 (7.4 GBq administered by i.v. infusion every 6 weeks for a maximum of 6 cycles) plus investigator-chosen best standard of care in the investigational arm, versus best standard of care in the control arm[17]. Patients with PSMA PET-scan positive mCRPC, and progression after prior taxane and androgen receptor-directed therapy (ARDT), were randomized in a 2:1 ratio in favor of the investigational arm. The alternate primary endpoints were rPFS and OS. The study enrolled 831 patients[1].

Estrogen - Our Sister Hormone

Source: https://prostatecancerfree.org/estrogen-our-sister-hormone-addressing-the-dark-side-of-androgen-deprivation-therapy-adt/

Addressing the Dark Side of Androgen Deprivation Therapy

Many of the important adverse effects associated with androgen suppression with Lupron, Firmagon, or orchiectomy result from estrogen deficiency. Estimates vary, but 50%, 75%, or as much as 80% of a man's serum estrogen arises from enzymatic conversion of serum testosterone. And when ADT drops serum testosterone into the low range of 20 – 30 ng/dL, a profound estrogen deficiency results. Loss of muscle strength and muscle mass, and erectile dysfunction can be directly attributed to diminished testosterone (T). However, estrogen deficiency is largely responsible for hot flushes (experienced by ~70-80% of men on ADT), loss of libido, osteoporosis and associated fracture risk, elevation of serum lipids, increased cardiovascular risk, increased fat deposition and weight gain, increased insulin resistance and diabetes, and, arguably, memory loss.

The thrust of current studies is to devise treatments that control prostate cancer while at the same time maintaining a normal male estrogen level so as to avert these adverse effects.

HOW COULD THIS BE ACCOMPLISHED?

Two current strategies:

1. Supplementation of ADT with "add-back" low-dose transdermal estrogen is a strategy designed to return male estrogen levels to normal while maintaining castrate T levels with traditional LHRH inhibition.

2. Employing high-dose transdermal estrogen as a *single agent* to achieve castrate T and gain the beneficial effects of estrogen. This regimen is under study in the ongoing randomized phase III trial, "Prostate Adenocarcinoma Transcutaneous Hormones (PATCH) (NCT00303784)," currently under study in the United Kingdom.

A (LITTLE) BIT OF BASIC SCIENCE:

A natural question is how exogenous (transdermal) estrogen achieves castrate levels of testosterone. Estrogen achieves this via a negative feedback loop which turns off pituitary luteinizing hormone (LH) whose function is to promote testosterone production in the testes — the same general mechanism utilized by the LHRH inhibitors. Transdermal estrogen patches contain estradiol (E2), the most biologically relevant of the three subtypes of estrogen. In the PATCH trial, early results recorded that T was reduced at 30 months to <50 ng/dL in 96% of men in both the LHRH agonist and the E2 patch cohorts and remained similar at 6 months.

Earlier studies using oral estrogens were associated with significant cardiovascular adverse effects due to the induction of clotting factors in the liver. By utilizing the transcutaneous route, this hepatic "first-pass" metabolism is bypassed and the adverse effects averted.

Just as prostate cells have the all-important androgen receptor (the target for testosterone and dihydrotestosterone), similarly they contain receptors for estrogen which are activated by estradiol (E2): i.e. the estrogen receptors ER alpha and ER beta. ER beta is considered a tumor suppressor while ER alpha serves to promote prostate cell proliferation and possibly carcinogenesis. However, clinical studies have not demonstrated this consequence. The PATCH trial, however, will closely monitor for this.

A WORD ABOUT MALE ESTROGEN LEVELS:

Men's serum estrogen levels decrease with age and levels vary considerably among men of the same age.

The average E2 level in men 65 – 85 years old is ~86 pmol/L with a range of 23 to 160 pmol/L (the preferred unit for this measurement). For perspective, as will be noted below, the low-dose E2 patch used in the "add-on" regimen raises the E2 level to a mean of ~208 pmol/L (interquartile range 157-332). The higher E2 dose used in the PATCH trial raises E2 to ~685 pmol/L (range from 1400-4500).

A study by Russell (2018, see below) recorded that ADT lowers men's E2 levels to ~11 pmol/L.

In his 2017 study he noted that it requires E2 levels above 40 pmol/L to sustain bone health and libido,

(continued page 12)

above 70 pmol/L to avoid gain in body fat and maintain insulin sensitivity, and greater than 90 pmol/L to prevent hot flushes.

REVIEW OF THE E2 'ADD-BACK' STUDY — WHAT WERE THE RESULTS?

TITLE: "Short-term effects of transdermal estradiol in men undergoing androgen deprivation therapy for prostate cancer: A randomized trial," Russell *et al. Eur Soc Endocrinology,* Mar 2018.

In this small study, 37 men with nonmetastatic CRPC were randomized between the daily application of 1 mL of E2 gel (0.9 mg) vs. a placebo and were evaluated at 28 days for hot flush frequency and biomarkers of bone resorption and insulin resistance. The baseline median T was

6 ng/dL; baseline E2, 11 pmol/L.

Findings:

76% of men (16/21) found the treatment helpful in reducing hot flushes. "This benefit effect occurred despite not selecting men for troublesome hot flushing" (23% of men on placebo found the treatment helpful). Evidence of bone resorption decreased significantly. Nipple tenderness was seen in 17% in the E2 group.
In another study, "Transdermal Estrogen in the Treatment of Hot Flushes in Men with Prostate Cancer," hot flushes were reduced in men using transdermal patches during ADT (Gerber *et al. Urology*, Jan 2000):

In the Gerber study two patch doses were used: 0.05 mg or 0.10 mg of estradiol twice weekly. The higher dose reduced hot flush frequency significantly. Overall, 83% of men experienced benefit to any extent. Nipple tenderness occurred in 12% and 42% at the two doses. Estradiol increased from 44.4 pmol/L (baseline) to 60.0 and 98.8 pmol/L. The transdermal patch formulation utilized was "Estraderm," Novartis Pharmaceuticals.

THE PATCH TRIAL: TRANSDERMAL E2 AS A POTENTIAL ALTERNATIVE TO LHRH INHIBITION (NCT00303784) — EARLY RESULTS:

(Langley *et al.*, "A Randomized Comparison Evaluating Changes in Bone Mineral Density in Advanced Prostate Cancer: Luteinizing Hormone-releasing Hormone Agonist Versus Transdermal Oestradiol," *Eur Urol.* 2016.

Changes in bone density and cardiovascular safety issues were reported at 2-yr follow-up. DEXA bone scans evaluated bone density at baseline, 1 and 2 years. The ultimate long-term trial goal is assessment of safety and progression-free and overall survival in a target cohort of 2150 men.

In the study, 74 men with locally advanced or metastatic cancer in whom long-term ADT was planned were randomized between an LHRH inhibitor or transdermal E2 patches (0.1 mg/24 hrs changed twice/wk). Both regimens achieved similar castrate T levels.

Findings:

- At 2 years, for those men remaining in the study (n=48) the lumbar spine bone mineral density mean percentage change for LHRH agonist group was -3.0%. [Various studies report a range of decrease of 5 – 10%.] For men on E2 patches there was +7.9% gain in bone density.
- In an initial cohort of 254 men at 19 mo follow-up "the proportion of patients in the E2 arm experiencing a cardiovascular system event (10.1%) was relatively similar to that in the LHRH agonist arm (7.1%), "with half of the events assigned to men on E2 occurring sometime after treatment with patches was stopped and LHRHa started."
- Gynecomastia occurred in 75% of men on E2, but was generally mild. It is seen in ~19% of men on LHRH inhibitors.
- Hot flushes were reported in 25% of men on E2, whereas flushes occurred in 54% on the LHRH agonists.

Editorial Comment:

The longer-term data on progression-free and overall survival in the PATCH trial have the potential of providing a new option for ADT that avoids many (but not all) of the well-recognized side effects of Lupron, Degarelix and orchiectomy. In the initial 2 year period, clear clinical benefits were seen and a satisfactory short-term safety profile was demonstrated — especially the lack of adverse cardiovascular events. Long-term safety is a requisite.

In current clinical practice, the "add-on" regimen offers benefits. It might be a useful treatment for men with troublesome hot flushes. Ideally, before starting ADT all men would be well served by a pre-treatment DEXA scan. Those men with osteopenia (diminished bone density) or frank osteoporosis would be excellent candidates for "add-on" E2.

Dosage guidelines for transdermal E2 in males have not been established, but a reasonable plan was suggested in the Gerber article (see above): start with the low dose patch of 0.05 mg 2X/wk and increase to 0.10 if needed.

BOTTOM LINE:

The "add-on" regimen – E2 patch plus ADT — can be beneficial to men with troublesome hot flushes and those at risk for deterioration of bone density. The PATCH study at 2 years follow-up has demonstrated safety and effectiveness comparable to LHRH inhibition, and if confirmed in long-term analysis, transdermal E2 as a *single agent* will offer an additional option for ADT.

PLEASE NOTE:
Treatments may vary in Australia. Please ensure you discuss your diagnosis and treatment options with your consulting specialist

Prostate Heidelberg Cancer Support Group Meetings

While we are having to distance ourselves and are unable to hold face-to-face group meetings we are engaging speakers via video conferencing.

Guest Speaker

Tuesday 20 April 2021

Colin O'Brien will talk about the work and findings of the Prostate Cancer Outcomes Registry – Australia and New Zealand (PCOR-ANZ).PCOR-ANZ is a large-scale prostate cancer registry that collects information on the care provided and the outcomes for men diagnosed with prostate cancer in Australia and New Zealand. The scale of the registry and the important information in it is intended to help the medical system provide men with prostate cancer the best standard of care and enable them to live the best quality of life possible.

Guest Speaker

Tuesday 19 May 2021

Angela Mellerick, Nurse Unit Manager, Ambulatory Cancer Services, Olivia Newton John Cancer and Wellness Centre will talk about the role of the services in supporting people undergoing chemotherapy and other treatments to deal with the challenges of these treatments in ways that minimise the need for inpatient of emergency admissions and attendant

New Prostate Cancer Trials

Enzalutamide With Lu PSMA-617 Versus Enzalutamide Alone in Men With Metastatic Castration-resistant Prostate Cancer (ENZA-p)

This is an open label, randomised, stratified, 2-arm, multicentre phase 2 clinical trial recruiting 160 participants over 12 months and followed until 150 events occurred (approximately another 18 months). Participants will be randomised to enzalutamide or enzalutamide and Lu-PSMA in a 1:1 ratio. A minimisation approach will be used to minimise chance imbalances across the following stratification factors: study site, volume of disease (>20 versus ≤20 sites of disease measured on 68Ga-PSMA PET/CT), prior treatment with early docetaxel for castration-sensitive disease (yes vs no), and prior treatment with early abiraterone for castration-sensitive disease (yes vs no).

Locations
NSW: St Vincents
SA: Royal Adelaide
Victoria: Austin Health; Peter MacCallum Cancer Centre

Recruiting

Study Start Date: 17 Aug 2020
Estimated Primary Completion Date: 1 June 2022
Estimated Study Completion Date: 1 June 2023

Darolutamide Augments Standard Therapy for Localised Very High-Risk Cancer of the Prostate (DASL-HiCaP)

The purpose of this study is to determine the effectiveness of darolutamide as part of adjuvant androgen deprivation therapy (ADT) with a luteinising hormone releasing hormone analogue (LHRHA) in men having radiation therapy for localised prostate cancer at very high risk of recurrence.

Locations throughout Australia
Victoria: Peter MacCallum Cancer Centre; Box Hill; The Alfred; Sunshine Hospital, St Albans

Recruiting

Study Start Date: 31 March, 2020
Estimated Primary Completion Date: 31 Jan 2028
Estimated Study Completion Date: 31 July 2028

Learn to be your own researcher to make the best treatment decisions, by being proactive and an advocate for your own health

Internet Resources

Members have found the following websites useful

Prostate Cancer Foundation of Australia for guides & help
https://www.pcfa.org.au
https://onlinecommunity.pcfa.org.au/

Australian Cancer Trials Information on clinical trials
https://www.australiancancertrials.gov.au

USA Prostate Cancer Foundation (Guide) PDF guide for men newly diagnosed with PC
https://www.pcf.org/guide/

Us TOO International PCa Education (USA) USA PC support groups' information & newsletter
https://www.ustoo.org

Cancer Council Victoria for general support services
https://www.cancervic.org.au

ExMed Cancer Program Melbourne based 'best practice' exercise medicine program
https://www.exmedcancer.org.au

ProstMate (PCFA) A companion to record PC results

Beyond Blue for help with depression and anxiety
HELPLINE 1300 22 4636

Continence Foundation of Australia for assistance with incontinence aids
HELPLINE 1800 33 0066

PCRI Prostate Digest (USA) Prostate Cancer Research Institute supporting research and disseminating information to educate and empower patients, families and the medical community
https://pcri.org/insights-newsletter

PAACT Newsletter (USA) Patient Advocates for Advanced Cancer Treatments
http://paact.help/newsletter-signup/

A Touchy Subject
https://www.youtube.com/channel/UCdyuxGuAuCWJbe-kZvwVSzQ

The internet is a good source for research but it should not be trusted to give you answers for your personal care. Always speak to your doctor to clarify any medical advice.

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PHCSG Correspondence

Mike Waller Convener
Max Shub Co-Facilitator
Peter Anderson Treasurer
Spiros Haldas Library
David Bellair Web Site
Michael Meszaros Welfare Officer
Sue Lawes Secretary/Newsletter

PHCSG Meetings 2021 10am – 12:30pm

Tues 16 Feb
Tues 16 March
Tues 20 April
Tues 18 May
Tues 15 June
Tues 20 July
Tues 17 August
Tues 21 September
Tues 19 October
Tues 16 November
Tues 14 December (including Xmas lunch)

Please note that all face-to-face meetings have been cancelled until further notice. Please check your email regularly for updates from the PHSCG Committee.

2021 PHCSG Articles

If you have any feedback or wish to include articles on specific aspects of Prostate Cancer please contact Sue at:

prostateheidelberg@gmail.com

January 2021

- Exercise Infographic
- Sexual Dysfunction & Shared Decision Making
- FDA Approves first Oral Hormone Therapy
- Prolonged ADT Reduces Cardio Fitness
- Reducing the Burden of Out-of-Pocket Expenses
- BAT Sensitizes CRPCa to Subsequent Therapy
- Targeting Bone Mets with Radiation in Oligorecurrent Men

Prostate Cancer Trials

- PEACE V:STORM
- UpFront PSMA Phase II
- NINJA

February 2021

- Advantages of Coffee
- Our Biological Clock
- Statins tied to Better Outcomes
- What's New in Inflammation
- New PC Management Techniques
- About the Patch Trial
- Eating a Colourful Diet
- Dose Painting
- Advancement in Focal Therapy

Prostate Cancer Trials

- Enza-P
- DASL-HiCaP Trial
- Lu-177-PSMA-617
- Adding Apalutamide to Radiotherapy & LHRH Agonist

March 2021

- Challenging Your Private Health Provider
- How Research is Prioritised – Norman Swan podcast
- Metastatic PCa – Don't Accept Complacency
- An mRNA Vaccine for Cancer
- Life After Treatment – Wellness Program
- Focal Therapy – If It Sounds Too Good to be True
- Immune Checkpoints on CTCs

April 2021

- Study finds cancer cells evade chemo by going dormant
- High Risk Localised PCa: Changing the rules
- Automated Pathological Assessment of PCa Biopsy Slides
- Final Results from TITAN Study
- SBRT for High Risk Patients
- Benefit of taking 1year of ADT after radiation for high risk PCa
- Novel Radiopharmaceutical beats Cabazitaxel in MCRPC
- Novatis announces phase III positive results
- Estrogen – Our Sister Hormone

Prostate Cancer Trials

- Enzalutamide With Lu PSMA-617 Versus Enzalutamide Alone
- Darolutamide Augments Standard Therapy for Localised Very High-Risk Cancer

2020 PHCSG Articles

If you have any feedback or wish to include articles on specific aspects of Prostate Cancer please contact Sue at:

prostateheidelberg@gmail.com

March 2020
- PCFA Consumer Advisory- Coronavirus and Cancer

April 2020
- Telehealth & Delayed Hospital Treatments due to COVID-19
- Fexapotide Triflutate (FT) injection – a new kind of focal treatment to extend time on active surveillance

Prostate Cancer Trials
- DASL-HiCaP Trial
- Evaluation of a mainstream model of genetic testing for men with prostate cancer

May 2020
- ADT May Offer Some Protection From COVID-19 in Men with Prostate Cancer
- TULSA – Novel MRI-guided ultrasound treatment destroys prostate cancer
- Whack-a-Mole A Treatment of Oligometastasis
- Long-term adjuvant ADT improves results of brachy boost therapy in unfavorable-risk prostate cancer patients
- Harnessing the immune system to control prostate cancer spread to the bone

Prostate Cancer Trials
- A study to see whether PET scans using a chemical called Exendin can detect metastatic PC
- Evaluation of a mainstream model of genetic testing for men with prostate cancer

June 2020
- Evaluating the Outcomes of AS in Gleason Grade 2 Prostate Cancer
- Advancing precision medicine for metastatic prostate cancer
- Impact of Primary Prostate Cancer Treatment with Subsequent Metastatic Disease
- Comparative Analysis & Survival Outcomes in a Real-World Practice Setting
- Fexapotide Triflutate (FT) injection – a new kind of focal treatment to extend time on AS

Prostate Cancer Trials
- Impact of 18F-DCFPyL PET scanning in patients undergoing post-prostatectomy Radiotherapy

July 2020
- Testosterone Therapy does not Increase the Risks of PCR or Death after Definitive Treatment for Localised Disease
- Association of Pre-Salvage Radiotherapy PSA Levels after Prostatectomy with Outcomes of Long-term Antiandrogen Therapy in Men with Prostate Cancer
- Testosterone Replacement in the treatment of Advanced Prostate Cancer
- Memorial Sloan Kettering Cancer Center PCa nomograms Prediction Tools

August 2020
- Advanced Prostate Cancer Algorithm
- Blood Test Predicts Response to PC Treatment (liquid biopsy)
- The Perils and Pitfalls of Treating PSA in PCa
- Reprogramming Immune Cells could Switch Defence into Attack in PCa
- Maintenance of Sexual Activity Following ADT

September 2020
- ProtecT Trial showing patient outcomes after AM, RP & EBRT
- Changes in Penile Length after RP
- Active Surveillance for PC – is it right for you?
- The final part of The Perils and Pitfalls of "Treating PSA" in Advanced Prostate Cancer
- Managing Erectile Dysfunction – A Patient Guide

Prostate Cancer Trials
- Efficacy and Safety of Pembrolizumab (MK-3475) Plus Enzalutamide Plus Androgen Deprivation Therapy (ADT) Versus Placebo Plus Enzalutamide Plus ADT in Participants with (mHSPC)
- Navigate: An online treatment decision aid

October 2020
- World Osteoporosis Day
- Lifestyle Factors and Chronic Disease
- Hormone Therapy for PC
- Early ADT for Recurrent PC Challenged
- Unexpected aPC weakness can be targeted by drugs
- Hijacking an Epigenetic Program
- New PC Research: Immunotherapy; Gut Microbiome
- Veyonda New Research on Survival Rates

Prostate Cancer Trials
- MIndonline - mindfulness

November 2020
- Life insurance & Genetic Testing
- World First Surgery in NZ
- Melatonin increases survival
- SBRT disease control
- Public vs Private Hospitals
- Early ADT for Recurrent PC challenged
- Enzamet trial results

Prostate Cancer Trials
- Randomised Phase 2 of sequential 177Lu-PSMA & Docetaxel
- Exercise for Heart Health

December 2020
- ACTA Trial Award
- Rethinking Metastasis
- ESMO Phase 1 AMG160
- Five Ways to Get it Right
- Immunotherapy Offers Hope
- SBRT Doubles Pain Response
- Elevated Streess Hormone Levels

Prostate Cancer Trials