MEMBERSHIP

FULL CALENDAR YEAR PHCSG MEMBERSHIP $20

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

EFT Payments to:
Prostate Heidelberg CSG
BSB 083 256
Acct 583244292

Prostate Heidelberg

November 2021 Issue 212

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 16 November
10am – 12:30pm

To join via Zoom: Copy link and paste into your browser

https://us02web.zoom.us/j/87332185334?pwd=VWl6TWNnMW5Fd05iWG82cXRuc0xFQT09

PHCSG November – Face-to-face is Back!

GOOD NEWS!! After 20 months with our regular meetings via Zoom we can now get back to face-to-face. Usual time and place. There will still be some restrictions ie social distancing and wearing masks.

Our guest speaker at our last meeting was Professor Nikolajs Zeps. The title of his talk was 'What will the treatment of Prostate Cancer be like in 10 years time?' Nik indicated that, while the three main treatment methods for prostate cancer would remain surgery, radiation and drugs (supplemented by advances in imaging), decisions on their use would increasingly be informed by evidence of the relative efficacy shown by carefully structured clinical trials. He pointed to work he had undertaken with colleagues of the economic and clinical value of clinical trials of existing treatments and the integration of this data into Learning Healthcare Systems. While accepted in principle by health policy makers and funders, major obstacles remained in terms of activity based funding and siloed decision-making.

There are four new studies included in this month's newsletter. They are all online questionaires and take little time to complete so we hope that you will give them your support.

In this month's newsletter we highlight:

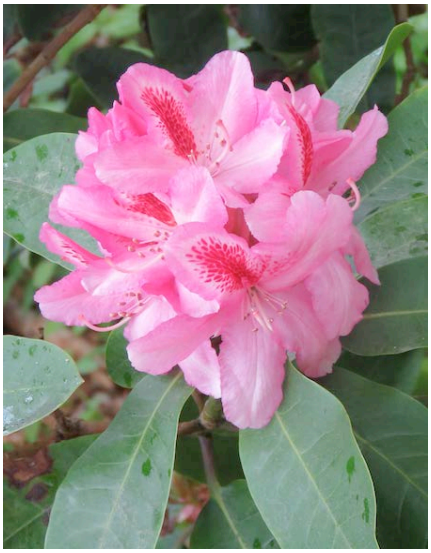
If there is anything you want to talk through in relation to your treatment or wellbeing please don't hesitate to ring:

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



New prostate cancer drug helping men live longer

Prostate Cancer Foundation of Australia (PCFA) is welcoming a decision to make a life-saving drug more accessible to Australians.

NUBEQA (pronounced: New-becca) is the first new medicine to be listed for prostate cancer in seven years, and will become available under the Pharmaceutical Benefits Scheme to eligible patients from November 1, giving around 1,000 Australian men with high-risk prostate cancer a greater chance of delaying its spread.

PCFA Chief Executive, Professor Jeff Dunn AO, is commending Federal Health Minister Greg Hunt for supporting the listing and responding to the organisation's advocacy.

Professor Dunn says listing NUBEQA on the PBS will give more men with the deadliest forms of prostate cancer a greater chance of survival.

"This is an important moment for Australian men and families facing prostate cancer, and the first time in seven years we've seen a new medicine listed on the PBS for the treatment of prostate cancer," Prof Dunn said.

"We commend the Australian Government for heeding our call to give Australian men better prospects for slowing down the spread of prostate cancer.

"The pill works by blocking testosterone from feeding the cancer cells and can help delay the spread of prostate cancer for close to three and a half years - more than twice as long as hormone therapy on its own.

"Data from clinical trials has found the drug also extended overall survival time, lowering the risk of death by 31 per cent compared to hormone therapy alone.

"Eligible patients will include men whose cancers have stopped responding to conventional hormone therapy, when the cancer has not yet spread to other parts of the body.

"PCFA is proud to play a leading role in advocacy to enable outcomes like this for Australian men and families – making multiple submission to the Pharmaceutical Benefits Advisory Committee over recent years and working with hundreds of PCFA Support Group Leaders to mobilise consumer comments."

The drug currently costs eligible patients about $40,000 a year. From Monday (Nov 1) eligible patients will pay $41.30 per script, with 12 or 13 scripts required per year.

Concession card holders will access the drug for $6.60 per script. Between 1,000 and 1,800 patients are expected to benefit.

"Until now, this life-extending medication has been out of reach for hundreds of Australian men who need it. Affordable access to life-saving medicines is vital to national cancer control and helps to reduce the burden of prostate cancer on men and the community," Professor Dunn said.

PCFA is also calling for a review of Australia's PSA testing guidelines, which are out of date.

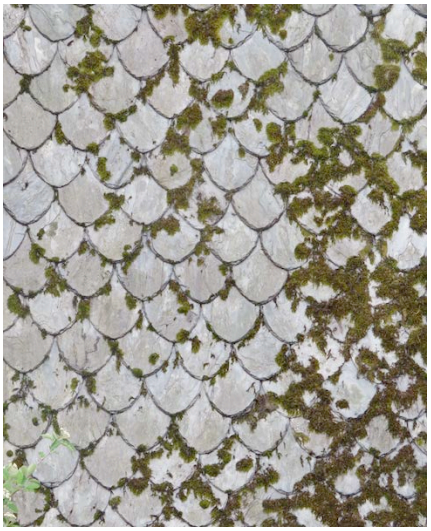
"We now hope to back this up with public funding for a review of the Clinical Guidelines for PSA Testing, so that all men have a fair chance of detecting prostate cancer before it spreads," Professor Dunn said.

Around 18,000 men are diagnosed with prostate cancer every year in Australia. Two in every three men diagnosed detect the disease after Stage 1, making it harder to treat.

3,323 Australian men will die from prostate cancer this year.

To find out more about your risks and screening options, call PCFA's Specialist Telenursing Service on 1800 22 00 99 or go to www.pcfa.org.au.

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



What predicts who goes on continuous versus intermittent ADT in the real world?

Source:
20 October 2021
http://www.lifeonadt.com/life-on-adt-blog/2021/10/20/what-predicts-who-goes-on-continuous-versus-intermittent-adt-in-the-real-world

Researchers in Ontario took a retrospective look at data collected over 20 years on men who had been prescribed ADT over at least a five year period. The men were all over the age of 65 and residents of Ontario. Of the 8544 men in the study, only one in six received intermittent ADT. The rest received continuous ADT, even though it's been shown that intermittent ADT doesn't negatively impact survival (particularly if men are non-metastatic at the outset of ADT). The researchers wanted to know why more men on ADT were not encouraged to go intermittent.

A nice and uncommon feature of this real–world study was that the researchers looked at characteristics of not just the patients, but also the clinicians treating those patients. Four variables stood out as predictors of intermittent ADT use. Patients who were financially well-off and had prior treatment for localized prostate cancer were most likely to go on intermittent ADT. They were also more likely to be on intermittent ADT if they were treated by a radiation oncologist rather than a urologist…and preferably a clinician who had been in practice at least 10 years.

The authors are cautious in their speculations about why these factors stood out. They did not have information on education levels for the patients, but many studies on the health impact of socioeconomic status have shown that those who are financially well-off are usually better educated. In turn, those who are better educated are typically more attentive to their health.

We thus expect those men, who had previously been treated for localized prostate cancer and are well educated, to be watching their PSA intently. With better patient engagement and compliance in monitoring PSA, they may be more likely to be good candidates for intermittent therapy.

To extend the speculation, one might guess that patients who eventually get prescribed ADT and go on intermittent therapy are ones who were getting PSA tests regularly and often before they had any prostate cancer treatment. That's a testable hypothesis, but it is not discussed in this paper. That is understandable since the databases the researchers accessed did not have patients' PSA history.

One way to get at this idea, though, would be to look at other populations in other parts of the world where PSA tests are more commonly used to screen for prostate cancer. Our hypothesis is that the proportion of men who go on intermittent ADT will be higher in places where men more commonly get regular PSA tests.

To read the study abstract, see: https://pubmed.ncbi.nlm.nih.gov/34412510/

‘Gut bugs’ can drive prostate cancer growth and treatment resistance

Source:
7 Oct 2021
Institute of Cancer Research
https://www.sciencedaily.com/releases/2021/10/211007145906.htm?utm_medium=email&utm_source=rasa_io&PostID=39328221&MessageRunDet

Common gut bacteria can become 'hormone factories' - fuelling prostate cancer and making it resistant to treatment, a new study shows. Scientists revealed how gut bacteria contribute to the progression of advanced prostate cancers and their resistance to hormone therapy -- by providing an alternative source of growth-promoting androgens, or male hormones. The findings, once further validated in the clinic, could provide new opportunities for the treatment of prostate cancer through manipulation of the microbiome.

Common gut bacteria can fuel the growth of prostate cancers and allow them to evade the effects of treatment, a new study finds.

Scientists revealed how gut bacteria contribute to the progression of advanced prostate cancers and their resistance to hormone therapy -- by providing an alternative source of growth-promoting androgens, or male hormones.

Hormone therapy is the standard of care for advanced prostate cancer and works by lowering levels of androgens. But researchers found that low androgen levels in patients can drive the expansion of gut bacteria, which can become hormone factories to sustain prostate cancer growth.

Bacterial 'fingerprints' identified by scientists may help pick out patients at high risk of developing resistance to treatment who could benefit from strategies to manipulate their 'microbiome'. For example, men could undergo a faecal transplant or take a yoghurt drink enriched with favourable bacteria.

A team of scientists from The Institute of Cancer Research, London, the Institute of Oncology Research in Bellinzona, Switzerland and the Swiss Federal Institute of Technology used mice and patient samples to investigate the role of gut bacteria in prostate cancer growth and progression.

The findings, once further validated in the clinic, could provide new opportunities for the treatment of prostate cancer through manipulation of the microbiome.

The study, published in the journal *Science*, was funded by the Prostate Cancer Foundation, Movember, Prostate Cancer UK, Cancer Research UK and The John Black Charitable Foundation.

Gut bacteria are part of our microbiome and are usually valuable to humans. However, cancer and other diseases can ruin this mutually beneficial balance -- for example by promoting the expansion of gut bacteria and encouraging them to release toxins or other molecules that affect cancer cells.

Given the role these 'gut bugs' can play in cancer, researchers looked at whether the gut bacteria from men with prostate cancer could also alter patients' hormone metabolism, and so affect cancer growth.

Scientists found that getting rid of all gut bacteria in mice with prostate cancer slowed tumour growth and delayed the emergence of hormone resistance.

They also found that transplanting faeces from mice with hormone-resistant prostate cancer into mice with low androgen levels that had not yet developed resistance encouraged tumour growth.

The researchers demonstrated in mice that gut bacteria were able to make androgen hormones from precursor molecules.

To translate the findings into humans, researchers analysed the gut bacteria from patients who were being treated at The Royal Marsden NHS Foundation Trust. They looked at two different groups of patients -- 19 men whose prostate cancers were still responding to hormone therapy and 55 men with advanced hormone-resistant prostate cancer.

Transplanting stool from prostate cancer patients with hormone-resistant prostate cancer into mice whose cancers were not resistant promoted tumour growth and hormone resistance.

Scientists also analysed microbial genetic material from the stool of men with prostate cancer and identified a specific bacterium -- *Ruminococcus* - that may play a major role in the development of resistance. In contrast, the bacterium *Prevotella stercorea* was associated with favourable clinical outcomes.

Researchers incubated mini-tumours called organoids derived from prostate cancer patients with different gut bacteria and attempted to treat them in the lab. This helped them identify favourable and unfavourable bacterial 'fingerprints' linked to prostate cancer outcome, which could help identify men who could benefit from strategies to manipulate the microbiome.

Study author Professor Johann de Bono, Professor of Experimental Cancer Medicine at The Institute of Cancer Research, London, and Consultant Medical Oncologist at The Royal Marsden NHS Foundation Trust, said:

"Our findings reveal that the initiation of hormone therapy for prostate cancer can trigger 'gut bugs' to start producing androgen hormones. These androgens can then sustain prostate cancer's growth and drive resistance to hormone therapy -- worsening men's survival outcomes.

"Excitingly, our research has identified particular signatures among gut

(continued page 5)

bacteria which could indicate that some men with prostate cancer who have these gut bugs are more likely to develop resistance to hormone therapy. The next step will be to further explore how we apply these signatures in patients, with the aim of devising tests to pick out men who would benefit from faecal transplants, antibiotic therapy and other strategies to manipulate the microbiome. In the long-term, our aim would be to produce a 'yoghurt' enriched with favourable bacteria to prevent resistance to treatment."

Professor Kristian Helin, Chief Executive of The Institute of Cancer Research, London, said:

"The influence of the gut microbiome on cancer is a fascinating new area of science that we are just beginning to understand. These exciting findings are the first to unveil a mechanism through which the gut microbiome can drive prostate cancer growth and resistance to hormone therapy.

"Understanding how common, 'good' bacteria in the gut -- which play a vital role in keeping us healthy -- can interfere with hormone metabolism in men with prostate cancer could help us devise new treatment strategies. I look forward to this research moving forward into the clinic and hope that strategies to manipulate the microbiome could make a real difference for patients."

Professor Andrea Alimonti, Head of Molecular Oncology at the Institute of Oncology Research (IOR), Professor at Università della Svizzera italiana (USI), at the University of Padova and at the Swiss Federal Institute of Technology (ETH), said:

"Our discoveries pave the way to adjuvant therapeutic strategies that, through microbiota manipulations, counteract the expansion of androgen-producing bacterial species."

The project is being conducted by Dr Eva Yuen, in collaboration with researchers and nurse clinicians from Deakin University, Monash Health and Austin Health.

The team is conducting a survey study that aims to explore the health information needs (I.e., health literacy) of people with cancer and their family members and friends. As background, we understand that people diagnosed with cancer face a number of practical, personal, and informal challenges. We also understand that partners, husbands, wives, family members, and friends play an important role in the treatment and recovery process for people with cancer.

The study explores how a person's health information and health literacy needs impact their own, and their family member's health and wellbeing.
We are now looking for 190 people with cancer and their family member or friend to complete a survey to understand the relationships between health information needs and health and wellbeing.

Participants have the option to complete the survey via pen and paper, or online. A reply-paid envelope will also be provided for participants to return the pen and paper survey.

Once the patient and their caregiver have both completed a survey, the caregiver will receive a $30 Coles eGift Card as a token of thanks for their time.

Ultimately, we are looking to use this information to guide the development of services, supports and interventions to better support people with cancer, and their caregivers.

Exceptions to "early salvage" radiation treatment for recurrence after prostatectomy

Source:
18 October 2021
https://www.prostatecancer.news

Three major randomized clinical trials and a meta-analysis have proved that for most men waiting for early signs of recurrence after prostatectomy (e.g., 3 consecutive PSA rises or PSA of 0.1 ng/ml) to give radiation gave the same outcome as immediate ("adjuvant") radiation. But there are exceptions. In some men, adjuvant treatment is better. In some men, early salvage may overtreat them.

Adjuvant Radiation Therapy

Tilki et al. did a retrospective study of 26,118 men given prostatectomies at several hospitals in Germany, UCSF, and Johns Hopkins. 2, 424 of them had "adverse pathology" defined as:

- positive lymph nodes, *or*
- Gleason score = 8-10, *and*
- Stage T3 or T4

Patients were treated with adjuvant (within 6 months of prostatectomy) radiation therapy (ART), salvage radiation therapy (SRT) after PSA rose above 0.2 ng/ml (biochemically recurrent - BCR), or no radiation therapy. They matched patients on age, initial PSA, and positive/negative margin status. 10-year all-cause mortality was:

for men with adverse pathology including positive lymph nodes:

- 14% for ART
- 27% for no RT
- 28% for SRT

for men without positive lymph nodes:

- 5% for ART
- 25% for no RT
- 22% for SRT

for men with no adverse pathology:

- 8% for ART
- 9% for no RT
- 8% for SRT

This suggests that for men with adverse pathology, ART improves outcomes over early SRT.

No/Delayed SRT

At the other end of the risk spectrum are men with such low risk for clinical recurrence, that salvage radiation can be delayed, perhaps indefinitely. This is based on the observation that while 40% of post-prostatectomy patients may experience a BCR, only 30% of BCR patients develop a clinically relevant recurrence, and all but 16% die of something else before the recurrent cancer kills them. In a major review for the European Urological Association, Van den Broeck et al.reviewed 77 studies covering 20,406 patients who were biochemically recurrent (conventionally measurable PSA) after prostatectomy. They sought to define the patient and disease characteristics that determined which of the BCR cancers led to distant metastases and death from prostate cancer. They found that the following risk characteristics defined a "low risk" BCR prostate cancer that could be safely watched:

- PSA doubling time > 1 year
- Gleason score < 8
- Interval to biochemical failure > 18 months

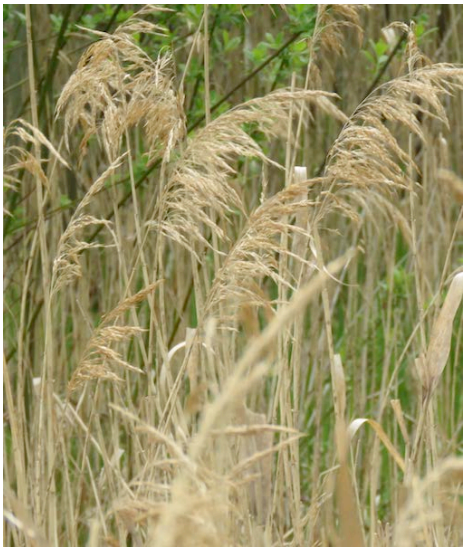
Tilki et al. validated the EAU study in a retrospective study of 1,125 patients. Preisser et al. validated the study retrospectively among 2,473 men. Pompe et al. validated the risk group in a retrospective study of 1,821 men. To date, there has been no prospective validation in a randomized clinical trial.

Zaorsky et al. point out some additional characteristics of recurrent patients who may be safely watched:

- PSA < 0.5 ng/ml at time of recurrence
- Age > 80 years of age
- Significant comorbidities
- No distant metastases detected with PET/CT imaging (Ferdinandus et al)

It is undoubtedly better to have a low Decipher score as well.

Lacking prospective validation, this is a decision that should be carefully discussed between the patient and the radiation oncologist.



Prostate-specific Membrane Antigen Positron Emission Tomography–detected Oligorecurrent Prostate Cancer Treated with Metastases-directed Radiotherapy: Role of Addition and Duration of Androgen Deprivation

Source:
05 September 2019
https://europepmc.org/article/med/31495759

Abstract

Background

Approximately 40–70% of biochemically recurrent prostate cancer (PCa) is oligorecurrent after prostate-specific membrane antigen (PSMA) positron emission tomography (PET) staging. Metastasis-directed radiotherapy (MDT) of PSMA-positive oligorecurrence is now frequently used, but the role of concurrent androgen deprivation therapy (ADT) remains unclear.

Objective

To determine the effect of concurrent ADT with PSMA PET–directed MDT on biochemical progression-free survival (bRFS).

Design, setting, and participants

This was a retrospective multicenter study of 305 patients with biochemical recurrence and PSMA PET–positive oligorecurrence following initial curative treatment between April 2013 and January 2018.

Intervention

MDT with fractionated or stereotactic body radiotherapy for all PSMA-positive metastatic sites; 37.8% received concurrent ADT.

Outcome measurements and statistical analysis

The primary outcome was bRFS, which was measured using Kaplan-Meier curves and log-rank testing. Secondary outcomes were ADT-free survival, overall survival (OS), and toxicity was analyzed using the Common Terminology Criteria for Adverse Events v4.03. Univariate and multivariate analyses were performed to determine independent clinicopathological factors.

Results and limitations

The median follow-up was 16 mo (interquartile range 9–27). Some 96% of the patients initially had high-risk PCa. A median of one (range 0–19) nodal metastases and one (range 0–5) distant metastases were treated. MDT + ADT significantly improved bRFS and remained an independent factor (hazard ratio 0.28, 95% confidence interval 0.16–0.51; $p < 0.0001$). bRFS was not significantly different between MDT + ≤6 mo of ADT and MDT alone ($p = 0.121$). Patients receiving MDT had 1- and 2-yr ADT-free survival of 93% and 83%, respectively. New therapies, most frequently MDT (23%), were required more frequently after MDT (85% vs 29%; $p < 0.001$). Grade ≥3 acute toxicity was observed in 0.9% of patients and late toxicity in 2.3%.

Conclusions

In this cohort of patients with oligorecurrent PCa, concurrent ADT with MDT improved bRFS significantly, but a large number of patients treated with MDT were spared from ADT for 2 yr, although a greater need for other salvage therapies was observed.

Patient summary

The role of concurrent androgen deprivation therapy (ADT) with radiotherapy for prostate cancer oligorecurrence identified on prostate-specific membrane antigen positron emission tomography was studied. We concluded that radiotherapy alone could prolong the time to start of ADT. However, the risk of disease progression and consequently the need for further treatments is higher after local radiotherapy alone without immediate ADT.

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

Source:
2 November 2021
https://www.sciencedaily.com/releases/2021/11/211102210147.htm?utm_medium=email&utm_source=rasa_io&PostID=40982415&MessageRunDetailID=6972273303

Prostate cancer urine test identifies good prognosis patients

Researchers at the University of East Anglia have shown that a prostate cancer urine test can identify men at 'intermediate risk' who can safely avoid immediate treatment and benefit from 'active surveillance' instead.

A new pilot study published reveals how urine biomarkers can show the amount of significant cancer in a prostate, highlighting with more certainty which men need treatment.

Previously, the team's Prostate Urine Risk (PUR) test could identify men with high and low risk cancers.

But thanks to some fine-tuning, it can now help men with intermediate-risk disease -- for whom treatment options had been less clear.

Prostate cancer is the most common cancer in men in the UK. It usually develops slowly and the majority of cancers will not require treatment in a man's lifetime.

The most commonly-used tests for prostate cancer include blood tests, a physical examination known as a digital rectal examination (DRE), an MRI scan and an invasive biopsy.

However, doctors struggle to predict which tumours will progress to a more aggressive form, making it hard to decide on treatment for many men.

Lead researcher Dr Jeremy Clark, from UEA's Norwich Medical School, said: "While prostate cancer is responsible for a large proportion of all male cancer deaths, it is more commonly a disease men die with rather than from.

"Therefore, there is a desperate need for improvements in diagnosing and predicting outcomes for prostate cancer patients to minimise over-diagnosis and overtreatment whilst appropriately treating men with aggressive disease, especially if this can be done without taking an invasive biopsy.

"Here at UEA, we have developed a urine test for prostate cancer called the Prostate Urine Risk Test -- or PUR for short.

"The 'risk' here refers to the aggressiveness of the cancer and its potential to spread to other organs, which would eventually kill the patient. But prostate cancer is very complex and risk levels vary widely between men.

"Previously we have shown that PUR can identify men with high-risk cancer which requires immediate treatment and also low-risk cancer that has a very low rate of progression and does not generally need treatment.

"But there is a third category of men with 'intermediate-risk', which falls in between these extremes. Around half of men diagnosed with prostate cancer fall into this group and the treatment pathways for them have been less clear, until now.

"It is known that disease progression in intermediate-risk men is associated with the presence of increasing amounts of Gleason pattern 4 cancer in their prostate. Our study shows that the PUR test can assess the amount of Gleason pattern 4 without the need for a biopsy.

"So not only can PUR measure the presence of aggressive cancer, but it can also measure increasing amounts of aggressive cancer in a prostate.

"This means that it can show us which men at intermediate risk may require treatment and which may instead be managed conservatively with surveillance.

"PUR will also be useful for monitoring disease in men that do not currently require treatment, and flag up the emergence and expansion of aggressive disease," he added.

The results of this pilot study will be further investigated in a much larger cohort of men using samples collected with a prostate screening box which the patients receive by mail and return samples by post directly for analysis at UEA.

Prof Daniel Brewer, also from UEA's Norwich Medical School and a visiting worker at the Earlham Institute, said: "Prof Dan Brewer, also from UEA's Norwich Medical School and a visiting worker at the Earlham Institute, said:

"We have recently developed a urine biomarker test for prostate cancer named PUR that can distinguish whether men should be placed on active surveillance or have radical treatment.

"In this research we examine in more detail what biological change PUR is detecting. This is an exciting finding that helps explain why PUR works so well.

"This test is currently being validated in a large multiple site study supported by Prostate Cancer UK and Movember," he added.

Dr Sarah Hsiao, Director, Biomedical Research and Impact at Movember, said: "This new research from Dr Clark's team shows that the PUR test can be used to estimate the level of a specific pathological characteristic (Gleason Pattern 4) that is linked to increased risk of disease progression in men with prostate cancer.

"This is important because, for men whose prostate tumour contains varying levels of Gleason Pattern 4, a prostate biopsy is necessary to determine whether men should receive active treatment or be managed by active surveillance.

"We look forward to seeing further validation of this research in a larger study cohort. If successful, this non-invasive PUR test may be able to support decision-making process without needing an invasive prostate biopsy that is associated with discomfort and risk of infection."

This study was led by UEA in collaboration with researchers in the Urology and Cellular Pathology departments at the Norfolk and Norwich University Hospital, Hull University Teaching Hospitals NHS Trust, the Institute of Cancer Research, The Royal Marsden, and the Earlham Institute.

It was funded by Movember, Prostate Cancer UK, the Masonic Charitable Foundation, the Bob Champion Cancer Trust, Big C, the King family, the Andy Ripley Memorial Fund, the Hargrave Foundation, the Provincial Grand Lodge of Norfolk and the Tesco Centenary Grant.

New strategy against treatment-resistant prostate cancer identified -

RNA molecule suppresses prostate tumor growth

Source:
5 November 2021
https://www.sciencedaily.com/releases/2021/11/211105134626.htm?utm_medium=email&utm_source=rasa_io&PostID=41148553&MessageRunDetailID=6972273294

Many patients with prostate cancer are treated with drugs that lower or block hormones that fuel tumor growth. While the drugs are effective for a time, most patients eventually develop resistance to these therapies.

A new study from Washington University School of Medicine in St. Louis has identified an RNA molecule that suppresses prostate tumors. The scientists found that prostate cancers develop ways to shut down this RNA molecule to allow themselves to grow. According to the new research -- conducted in mice implanted with human prostate tumor samples -- restoring this so-called long noncoding RNA could be a new strategy to treat prostate cancer that has developed resistance to hormonal therapies.

The study is published Nov. 5 in Cancer Research, a journal of the American Association for Cancer Research.

"The drugs that we have to treat prostate cancer are effective initially, but most patients start developing resistance, and the drugs usually stop working after a year or two," said senior author Nupam P. Mahajan, PhD, a professor of surgery in the Division of Urologic Surgery. "At that point, the options available for these patients are very limited. We are interested in addressing this need -- developing new therapies for patients who have developed resistance -- and we believe the RNA molecule we've pinpointed may lead to an effective approach."

The key protein that drives prostate tumor growth, the androgen receptor, binds to testosterone and stimulates cancer growth. Studying the stretch of DNA that codes for the androgen receptor, the researchers discovered that a section of the DNA molecule next to the androgen receptor produced a molecule called a long noncoding RNA. They found that this long noncoding RNA plays a key role in regulating the androgen receptor and vice versa. Because of its position next to the androgen receptor in the genome, the researchers dubbed it NXTAR (next to androgen receptor).

"In prostate cancer, the androgen receptor is very clever," said Mahajan, who is also a research member of Siteman Cancer Center at Barnes-Jewish Hospital and Washington University School of Medicine. "Our research shows that it suppresses its own suppressor; essentially it binds to NXTAR and shuts it down. This means that in all the prostate cancer samples that we study, we rarely find NXTAR, because it is suppressed by the heavy presence of the androgen receptor in these types of tumors. We discovered NXTAR by using a drug that my lab developed that suppresses the androgen receptor. When the androgen receptor is suppressed, NXTAR starts to appear. When we saw this, we suspected that we had discovered a tumor suppressor."

The drug, called (R)-9b, was developed to attack a different aspect of prostate cancer biology, knocking down expression of the androgen receptor overall rather than just blocking its ability to bind to testosterone or reducing overall testosterone levels in the body, as currently approved drugs do. But in this study, (R)-9b ended up serving as a tool to reveal the presence and role of NXTAR.

Studying human prostate tumor samples implanted in mice, the researchers showed that restoring NXTAR expression caused the tumors to shrink. They also showed that they didn't need the entire long noncoding RNA to achieve this effect. One small, key section of the NXTAR molecule is sufficient for shutting down the androgen receptor.

"We are hoping to develop both this (R)-9b drug and NXTAR into new therapies for prostate cancer patients who have developed resistance to the front-line treatments," Mahajan said. "One possible strategy is to encapsulate the small molecule drug and the key piece of NXTAR into nanoparticles, perhaps into the same nanoparticle, and shut down the androgen receptor in two different ways."

Mahajan worked with Washington University's Office of Technology Management to file a patent application on potential uses of NXTAR as therapeutics. In addition, the Moffitt Cancer Center in Tampa, Fla., where Mahajan was a faculty member before joining Washington University, has filed a patent application on the (R)-9b drug. The (R)-9b inhibitor has been licensed to a biotechnology startup company called TechnoGenesys. Mahajan and co-author Kiran Mahajan are co-founders of the company.

This work was supported by the National Cancer Institute (NCI) of the National Institutes of Health (NIH), grant numbers 1R01CA208258 and 5R01CA227025; the Prostate Cancer Foundation (PCF), grant number 17CHAL06; and the Department of Defense (DOD), grant number W81XWH-21-1-0202.

The (R)-9b inhibitor has been licensed to a biotechnology startup company called TechnoGenesys. Mahajan and co-author Kiran Mahajan are co-founders of the company. They also own stock and serve as consultants to TechnoGenesys.

Blood test may help in treating prostate cancer

Source:
8 October 2021
https://www.thetimes.co.uk/article/blood-test-help-treating-prostate-cancer-risks-t5qdtkln5

The study raises the prospect of sparing patients painful biopsies and enabling a switch to more effective therapies

Caitlin Davies, a PhD research student at Barts Cancer Institute, Queen Mary University of London, and colleagues looked at markers of cancer in the blood known as circulating tumour cells (CTCs), which are shed into the bloodstream.

She added that the new insights, if borne out by further research, would mean clinicians could "make early changes of treatment from docetaxel to an alternative, which may significantly improve patients' chances of long-term survival."

The researchers took blood samples from 56 patients with advanced prostate cancer who were being treated at St Bartholomew's Hospital in London.

The samples were taken over six to eight months — before the patients started docetaxel treatment, after their first dose of chemotherapy, before their fifth dose and once they had finished all doses — and 205 were collected in total.

The team looked for patterns in the data from men who responded to treatment or who did not, and whose cancer further advanced and at what speed.

They found that men were less likely to respond to docetaxel, the disease was more likely to recur or progress within three months and they were more likely to die within 18 months if more than six CTCs per 7.5ml of blood was detected before the first docetaxel dose. This compared to progression-free survival of 17 months and an overall survival time of three years for men with fewer than six CTCs per 7.5ml of blood.

The type of CTC detected may also play a role in predictions, the study suggests, while high numbers of CTCs towards the end of treatment predicted that men were more likely to suffer a rapid spread of cancer and an earlier death.

Davies said: "Using these patterns, we can apply them to future patients with the goal to predict whether they will respond to therapy and pre-emptively decide on the best course of action that will have maximal benefit. For instance, an increase in CTC numbers may indicate a lack of response to treatment. Furthermore, by monitoring the appearance of potentially drug-resistant CTCs, we can change treatment tactics early on and in a patient-personalised and timely manner."

The study also suggests that a protein encoded by a gene called KLK2 may predict time to disease progression and death better than prostate-specific antigen, the current gold standard.

Hashim Ahmed, chairman of the NCRI prostate group and professor of urology at Imperial College London, said the results had the potential to change clinical practice. "Assessing the responsiveness of a patient's tumour to docetaxel treatment by means of blood tests will enable clinicians to personalise cancer treatment more easily and effectively, without the patient having to undergo invasive procedures such as tissue biopsies. It could also help to avoid unpleasant systemic treatments that are going to be unsuccessful."

Prostate Heidelberg Cancer Support Group Meetings

Guest Speakers:

Tues 14 December 10:30am

Dr. Dixon Woon
Urological Surgeon, Uro-Oncologist
Senior Lecturer, Department of Surgery, University of Melbourne, Australia.
MBBS (Hons), DMedSc, FRACS (Urology)

"Prostate Cancer Treatment Progress over the last 10 years"

Dixon is a consultant urologist at Epworth Health, Austin Health, and Olivia Newton-John Cancer Wellness and Research Centre. He is also a senior lecturer at the Department of Surgery, University of Melbourne, Australia.He has a special interest in urological cancers.

Dixon completed his urological training at the Royal Australasian College of Surgeons (RACS) in 2016. He then went on to complete a further 2 years of fellowship training in robotic and open cancer surgery at the University of Toronto, at one of the largest cancer centres, Princess Margaret Cancer Centre. Dixon is now a member of the Society of Urologic Oncology (SUO), the peak North American body for urology cancer surgery.

In 2018, Dixon completed his Doctor of Medical Science degree through the University of Melbourne in advanced prostate cancer treatments and cancer immunology. As a result of his research in this field, he was awarded a number of grants and awards.

Dixon is passionate about research in the urology field, he has authored multiple peer-reviewed publications and has attended and presented at a number of international conferences.

Co-designing Elements of Care for Optimal Dietary & Exercise Referral Practices for Cancer Survivors (Round 3)

DELPHI STUDY CONSUMER ROUND

Professor Ray Chan, who addressed PHCSG recently, is now looking for the assistance of members of PCa support groups to complete a survey for a study on dietary and exercise support for prostate cancer sufferers. The purpose of this study is to achieve consensus on essential elements of care that health professionals can implement to provide optimal dietary and exercise care to cancer survivors, and referrals to dietitians and exercise specialists.

The survey will take approximately 5-10 minutes to complete.

To participate in this study please click https://survey.qut.edu.au/f/195931/1328/

PCa Clinical Trials & Studies

For Further information on current and recruiting trials visit:

https://www.anzup.org.au/content.aspx?page=prostatecancertrialdetails

Like all treatment decisions, you have to weigh how you feel about the potential benefits against the potential risks. No one can do that for you.

Study title

Understanding culturally and linguistically diverse (CALD) cancer patients' engagement with supportive care programs

Lead investigator

Dr Wilson is Professor of Psycho-oncology at Austin Health, Olivia Newton-John Cancer Wellness and Research Centre, Adjunct Professor in the School of Psychology and Public Health, La Trobe University, and Emeritus Professor at Flinders University, College of Medicine and Public Health.

Summary of project

People receiving services within the health system for a diagnosis of cancer face a number of practical and personal challenges. Both culture and gender have been shown to influence help-seeking for both physical and psychological support with men less likely than women to reach-out for help despite significant need. Consequently, this study is wanting to recruit as many men as possible in order to obtain insights into how we may improve the use of supportive care by men diagnosed with prostate cancer.

Researchers at La Trobe University are seeking men diagnosed with cancer in the past two years, aged 18+ years, who are from an English-speaking background to participate in a survey about their experiences of supportive care services. Participants will be reimbursed $20 for their participation in the survey.

Findings from the study will be used to inform the development of resources and services designed to better support people who are receiving care for a diagnosis of cancer.

Ethics approval has been granted by the La Trobe University Human Research Ethics Committee.

Who is this study for?

You may be eligible for this study if you:

- are over 18 years old
- have been diagnosed with cancer in the past two years
- are from an English-speaking background
- can access a computer or smart device with internet access

For more information or to take part in this study please contact:

Name: Sidney Davies

Email: 20025290@students.ltu.edu.au

Study title

The availability and access to nutrition information after active cancer treatment: A[BB1] survey study including cancer patients and carers.

Lead investigator

Dr Brenton Baguley, Deakin University, Institute for Physical Activity and Nutrition, Burwood, Victoria

Summary of project

Dietary recommendations for prostate cancer strongly endorse dietary behaviour change, however, reviews indicate there is high confusion and uncertainty in the role of nutrition after prostate cancer treatment. Whilst there is a plethora of nutrition information available on multiple platforms (i.e. internet, blogs, books, journal articles, social media) to men diagnosed with prostate cancer, it is unknown whether this information is evidence based and/or results in changed dietary intake.

Researchers at Deakin University Institute for Physical Activity and Nutrition and Peter MacCallum Cancer Centre are seeking patients or carers that have finished active cancer therapy to volunteer and complete a 15-20minute survey exploring where/how nutrition information is sourced after cancer treatment.

This study will allow the investigators to gather a large data base on where nutrition information is sourced after treatment. Importantly, the preferences for improving the access, reach and uptake of nutrition information will be assessed to provide cancer-specific recommendations.

The results of this project are anticipated to reduce confusion in where to provide nutrition information from health professionals/clinicians, but also direct cancer patients to evidence-based resources that are cancer and treatment specific.

Ethics approval has been granted by the Deakin University Human Research Ethics Committee.

Who is this study for?

You may be eligible for this study if you:

- Are over 18 years old
- Have a histological diagnosis of cancer OR care for an adult with a histological diagnosis of cancer
- Have finished active treatment OR care for an adult that has finished active cancer treatment
- Can access a computer or smart device with internet access

For more information or to take part in this study please contact:

Name: Dr Brenton Baguley

Tel: (03) 9246 8525

Email: b.baguley@deakin.edu.au

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.

PHCSG Correspondence

Prostate Heidelberg
POB 241 Ivanhoe Vic 3079
prostateheidelberg@gmail.com
prostateheidelberg.info

PHCSG Correspondence

Mike Waller Convener
Max Shub Co-Facilitator
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 – (subject to COVID)

Please note from Tues 16 November we are able to resume face-to-face meetings. Members will be able to log in via Zoom if they are unable to attend in person.

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

May 2021
- Full on Kitchen Sink for High Risk Localized PCa
- Calcium & Vitamin D Supplements
- Favourable prognosis with adjuvant ADT after RT
- Healthy Lifestyle may offset Genetic Risk
- Additional Treatment Option
- New Type of Treatment could reawaken Immune Response
- Penile Rehabilitation
- Prostate Cancer Trial Results

June 2021
- Dry July
- Breakthrough in Disease resistance to drugs
- PyL PSMA Pet Imaging
- Does thel level of your Testosterone matter when on ADT?
- Stay Bone-Healthy
- ADT and the risk of Cariovascular Disease
- The Pros & Cons of Orchiectomy
- Risk of Serial Biopsies
- Reflections on 10 years on AS
- Improvements on Oligo-recurrent Therapies
- Time Pressure Decisions
- Research making Chemo Friendlier
- Trial Results on Exercise

July 2021
- Ground Breaking Early Cancer Detection
- What Should You Eat
- ADT What You Really Need to Know
- Anti Androgen Therapy
- Overall Survival with Metachronous MHSPC
- New Guidelines for Salvage Radiation
- Help for ED after RP
- Germline Testing

Prostate Cancer Trials
- Enz-P; DASL HiCaP; NINJA; Upfront PSMA
- 45 & Up Study Results

August 2021
- Targeting PSMA
- What is the Role of Modern Imaging
- Observation Vs SBRT for Oligometastatic PC
- Combined High-dose Salvage RT & HT in Oligorecurrent Pelvic Nodes
- Long Term Urinary & Erectile Function following RP
- Bone Resportion Inhibitors
- RT After RP
- Take Responsibility

Prostate Cancer Trials
- UpFront PSMA & MOSES Study

September 2021
- Targeting PSMA
- PEEK Study
- Skeletal Events & Bone Modifying Agents in Castration Resistant PC
- Abiraterone +docetaxel+ADT for Newly Diagnoses Metastatic PC
- Brief, Intense Radiation & Hormone Therapy for Very High Risk PCa
- Progression-directed Therapy for Oligoprogression
- Insights into PC metabolism
- Diagnostic Accuracy of PSMA 18F-DCFPyL PET/CT
- Risk of PC in relatives of PC
- Relugolix – Expected to Alter Treatment
- Whole-pelvic radiation Therapy for High-Risk Patients
- It's time to Retire a Common Biopsy
- Cognitive Function / Marital Status & PC Incidence
- Covid Passports
- Medical Bills: Out of Pocket Costs
- Prostate Cancer Trials
- UpFront PSMA & ENZAp

October 2021
- Continuous vs Intermittant ADT
- Predict Risk Tool
- Doubling Time Tool
- High Discontinuation Rate in AS
- AI Program Helps Detect PCa
- Plant Based Diet
- Obesity Ups MCRPCa Survival
- Impact of Hypofractionated RT on Patient Outcomes
- Controversy Around Testosterone Therapy
- Medications for ADT Hot Flashes
- Best Way to recover Urinary Continence after PR
- Diabetic Risk & ADT
- Abiraterone for NMPC
- When to Use Chemo

November 2021
- New PCa drug helping men live lomger
- What predicts who goes on continuous vs intermittent ADT
- Gut Bugs can drive PCA growth & resistance
- Exception to early salvage radiation
- PCa Urine Test
- New Strategy against Treatment resistant PCa
- Blood Test may help treat PCa
- Prostate Cancer Studies
- Caregiver Health Literacy/Supportive Care Program/access to Nutrition Info
- Optimal Dietary & Exercise

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