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Cover Photography: Jack Venables



## Sock it to prostate cancer

exclusively from GAZMAN.

Created from a blend of sustainably sourced bamboo and cotton, the socks are designed for enduring comfort and style. 100% of profits from the sale of GAZMAN Blue Ribbon socks go to our mission. Get into GAZMAN for your pair today!



### Your future, our fund

Welcome to the April 2024 edition of Blue Sky News. In this issue, we examine the next generation of nuclear medicines and therapies that are transforming prostate cancer treatment and care. And researchers say it's just the beginning.

We also explore a landmark study that has proven a link between cardiorespiratory fitness and a reduction in the risk of prostate cancer.

Thank you for supporting the work of our Prostate Cancer Future Fund, which is changing and saving lives.



Adjunct A/Prof Steve Callister AM National Board Chairman



Professor
Jeff Dunn AO
Chief of Mission and
Head of Research

#### With your Will, we can find a way.

If your family has been affected by prostate cancer, please consider leaving a gift in your Will to PCFA's Prostate Cancer Future Fund.

When you decide to leave a gift in your Will to PCFA, you are supporting our aim to eliminate prostate cancer as a life-threatening disease for Australian men.

Please call our team today on 1800 22 00 99 to find out more.

✓ For wording, go to pcfau.org/Wills

### YOUR ONE-STOP-SHOP:

# New website for men with prostate cancer

PCFA's new Prostate Cancer Survivorship Toolkit is the first of its kind, dedicated to Australian men impacted by prostate cancer.

Anyone who has been impacted by prostate cancer knows the feeling - no two prostate cancers are the same, and knowing what it will do is challenging.

With high numbers of men in need of support, PCFA has just launched a new web app to help eliminate confusion about the disease and its treatment.

The Survivorship Toolkit is a one-stop-shop for expert information and support, bringing together a library of information in one place so that men can navigate their diagnosis and treatment.

Importantly, the app gives men and their loved ones direct access to evidence-based information, advice and expert nursing services.

"Men often feel overwhelmed and isolated when they are diagnosed

with prostate cancer. Until now, detailed information about all aspects of the disease has been hard to find in one place," says Professor Jeff Dunn, PCFA's Chief of Mission and Head of Research.

"The Toolkit marks a new day in our connection with the community, giving men and their families all the information they need on testing, treatment, survivorship, and support."

Prostate cancer remains the most commonly diagnosed cancer in Australian adults, with one in five men impacted in their lifetime.

"The Toolkit has been designed to address the individual needs of the men we love, covering all topics along the continuum of cancer care, from diagnosis to life after treatment.

"We know that awareness levels of prostate cancer in Australia are low, which often makes diagnosis and treatment that much harder," says Professor Dunn.

"The Survivorship Toolkit puts complex concepts into easyto-understand terms, making it easier for men and their families to make decisions about their diagnosis and treatment."

The website also covers treatment side effects.

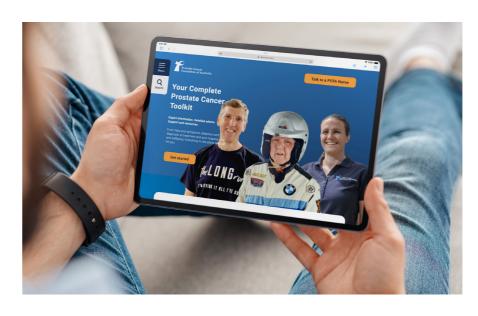
"Prostate cancer treatment can result in lifelong side effects, which means we must support patients and offer specialised care well beyond their initial treatment," he says.

"Our Toolkit helps to debunk myths and misconceptions about living with prostate cancer, providing guidance on health and fitness practices that aid in recovery."

The Survivorship Toolkit offers specialised support for recurrent or advanced prostate cancer, ensuring that no man faces this terrible journey alone.

"This new Toolkit is one more weapon in our armoury to defeat prostate cancer."

The website also includes information on supporting health and wellbeing, access to PCFA Nurses, and connection with support groups around Australia.



Z Everything in one place - tailored for you. Discover more at prostate.org.au

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# A new age in medicine for Australian men

Improving access to new types of targeted prostate cancer therapies and nuclear medicines is saving men's lives.

A new era of innovative targeted therapies to treat prostate cancer is dawning around the world, with health systems globally scaling up in order to accommodate a bright future of new technologies in patient care.

Radioligand therapy, broadly referred to as nuclear medicine, has proven powerful in harnessing the power of radioactive atoms to treat metastatic castration resistant prostate cancer and slow, or stop, prostate cancer from spreading.

Both locally and globally, clinical trials of targeted radioligand therapy have observed improved treatment response rates, reduced pain, the minimisation of toxicity, and improvements in quality of life.

Advocates of these emerging therapies say health systems need to evolve more rapidly to keep up, allowing for more rapid uptake of new medicines that can save men's lives.

"We have been working around the clock to try and get new medicines and therapies listed faster," says PCFA's CEO, Anne Savage.

"Australia has an opportunity to lead the world in this field, but we can't do it without Government action to work more closely with us to bring these new medicines and therapies to market.

"Our goal is clear - we want to eliminate avoidable deaths from prostate cancer.

"The fact is that we know we can achieve that goal if we give men timely access to the very best imaging and therapy.

"We are committed to bringing researchers and governments together to make it happen."

The rapid emergence of radioligand therapy comes on the back of clinical trials in men with deadly forms of prostate cancer, where the therapy has eliminated

and slowed the growth of tumours in many men, proving superior to the existing standard of care.

"Almost 100% of men with early-stage prostate cancer will be alive five years after diagnosis, but this drops to around 36% for men diagnosed with late-stage cancer.

"With around 4,000 Australian men newly diagnosed with advanced prostate cancers each year, and many more already fighting it, these new radioligand therapies are absolutely key to survival."

One of the first radioligand therapies to breakthrough internationally is the Novartis therapy, Pluvicto, which is not yet available in Australia.

"The pace of innovation is just tremendous and radioligand therapy is one specific area that we, and many others, are quite excited about for advanced cancers," says Novartis Australia and New Zealand Country President, Matt Zeller.

"There have been limited treatment advancements for advanced forms of prostate cancer, and that is something we and many organisations working across radioligand therapy are trying to change.

"The last time we looked there were more than 30 companies undertaking more than 300 trials globally in the space. We really want to make this therapy available to eligible patients diagnosed with metastatic castration resistant prostate cancer, helping to extend the lives of patients.

"The system as it exists in Australia, is not necessarily optimised for creating broadly equitable and sustainable access to new therapies like radioligand therapy. And so, we have to come together as industry, government, clinicians, and patients to overcome those barriers and ensure long term sustainable access to new innovations."

"Taking radioligand therapy, as an example, or even gene therapies - there are other markets across the world that are able to ensure both faster as well as more sustainable mechanisms for access to those therapies for patients.

"We need to work together on

a multistakeholder level to ensure fast and sustainable mechanisms to introduce these new therapies for patients."

TARGETING ZERO DEATHS

New medications and therapies for prostate cancer are being developed all the time and are often researched in clinical trials for safety and efficacy before being widely available.

Your doctor or healthcare team can advise you whether any new treatments are suitable for you.



The pace of innovation is just tremendous and radioligand therapy is one specific area that we, and many others, are quite excited about for advanced cancers.

Matt Zeller, Novartis Australia and New Zealand Country President

✓ To support our work, go to pcfa.org.au/donate or phone 1800 22 00 99

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"This is a landmark study," says
Professor Rob Newton, Professor
of Exercise Medicine at the
Exercise Medicine Research
Institute, Edith Cowan University.

"This study is so significant because the authors looked at changes in cardiorespiratory fitness and cancer incidence and mortality in more than 57,000 Swedish men - this is an enormous epidemiological study."

The research has been published in the British Journal of Sports Medicine and is the largest study ever to examine the relationships between change in cardiorespiratory fitness and cancer incidence and mortality. It is also the first study globally to examine changes in cardiorespiratory fitness specifically on prostate cancer.

Prior to this publication, studies examining the link between physical activity and its effect on the reduction of prostate cancer risk were largely inconclusive.

Unlike other cancers where research has proven a more direct link to the effects of physical activity on risk (for example, breast, colon and lung cancer), with prostate cancer the effect of exercise and relationship of physical activity to the disease has not to date been determined.

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What is exciting about this study is that the researchers found quite a strong effect of an increase in cardiorespiratory fitness on the reduced risk of prostate cancer incidence - this is the first time that's been shown.

Professor Rob Newton,
Professor of Exercise Medicine
at the Exercise Medicine
Research Institute,
Edith Cowan University

the first time that's been shown," Professor Newton says.

"We see a reduced risk of around 35% in terms of developing prostate cancer - this is quite a strong effect and similar to what we see in terms of the protective effects of fitness particularly for breast and colon cancer."

Importantly, the research found that small increases in cardiorespiratory fitness each year contributed significantly to the reduction in prostate cancer incidence. For many healthy Australian men, integrating this level of exercise into their routines should be achievable.

"The participants' increase

in cardiorespiratory fitness, by 3% each year, is quite a modest improvement. With that, you're probably looking at about 75 to 100 minutes of exercise per week - perhaps 25 minutes of vigorous activity three times a week.

"It is probably the case that more vigorous exercise is more effective - it's certainly more time effective. The dosage of exercise required is relatively small per week - but there's very good evidence that it probably needs to be more vigorous exercise, and while this study looked only at cardiorespiratory fitness, we know we also need to concentrate on incorporating resistance training into exercise routines for the additional benefits.

"This is something proactive that men can do which could vastly reduce their risk of developing the disease," Professor Newton says.

Currently, there is no known way of preventing prostate cancer. Living a healthy lifestyle, including eating a balanced diet, maintaining a healthy weight and engaging in regular physical activity is important for overall health and wellbeing, and may help men reduce the risk of prostate cancer.

A healthy lifestyle is also important for a person's mind and body during prostate cancer testing, diagnosis, and before and after treatment. Evidence shows being healthy can improve treatment and recovery outcomes, while reducing the risks of other diseases.

Read more about health and wellbeing at prostate.org.au/health-wellbeing





The development of new or novel hormone therapy medicines to treat prostate cancer is a rapidly evolving area of medical research both in Australia and internationally.

Essentially, these medications work in different ways to existing tablets to block the effects of testosterone on prostate cancer.

Novel hormonal therapies (for example, novel androgen receptor inhibitors including enzalutamide, apalutamide and darolutamide), have been found to work in castrate resistant prostate cancer, and many have also proven effective in treating prostate cancer before it has become castrate resistant.

Castrate resistant prostate cancers are notoriously difficult to treat, because they continue to spread even when a man's testosterone level has been reduced to a very low level.

Over the last 20 years, thanks to a range of clinical trials into the efficacy of novel hormonal therapies, (from the TITAN trial, to EMBARK, ENZAMET and PROSPER, to name a few) there are now more treatment options available to people with prostate cancer than ever before.

Professor of Medicine and Medical Oncologist, Monash University and Eastern Health, and Chair of ANZUP, Ian Davis, says progress over the past 20 years has turned prostate cancer treatment completely on its head.

"In the olden days, we used to use terms like hormone refractory prostate cancer, or androgen independent prostate cancer. And the implication of that was that the prostate cancer cells which were previously very dependent on signalling through the androgen receptor, didn't care about it anymore.

"And we now know that that's completely incorrect for the majority of cases - even in these cancers that are growing despite very low levels of serum testosterone. So firstly, those terms were completely wrong.

"The cancer cares, in most cases very deeply, about whether it's been stimulated through the androgen receptor or not. And it's even worked out really cunning ways of getting around the fact that there's not much testosterone around to trigger those receptors.

"So that led to the development of a whole new range of drugs, which are still being called novel hormonal agents, although they're not that novel anymore. We've now started to see real advances in the way these drugs affect clinical outcomes."

Among the findings of notable clinical trials involving novel hormonal therapies in the past two decades is the addition of apalutamide to androgen deprivation therapy for men with different types of prostate cancer (the TITAN trial), the EMBARK trial which discovered enzalutamide plus leuprolide was superior to leuprolide alone with respect to metastasisfree survival, and the SPARTAN trial - which found among men with nonmetastatic castration-resistant prostate cancer, metastasis-free survival and time to symptomatic progression were significantly longer with apalutamide than with placebo.

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**EVIDENCE IN PRACTICE CLINICAL TRIALS** 

Importantly, these landmark national and international clinical trials have also shown the effectiveness of using novel hormonal therapies earlier in the prostate cancer treatment cycle.

"We've also shown now that if you move these drugs earlier in the treatment cycle, so what we're now calling hormone sensitive prostate cancer, you see an even bigger effect, that the improvements in survival that you can expect in that sort of situation are much more substantial than when we use it later on down the track," Professor Davis says.

"So that's kind of changed the way that we're using these things. And we're now trying to see if we can build even further on that."

As demonstrated by these outcomes, clinical trials across a range of approaches and treatments are a crucial mechanism to inform and improve prostate cancer care globally.

"This is a really important point because we don't make any progress at all in medicine without clinical trials. If we don't have trial data to inform us, then we're guessing, we're extrapolating from what we know

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Ian Davis, Professor of Medicine and Medical Oncologist, Monash University and Eastern Health, and Chair of ANZUP

and hoping that it applies.

"Until something's tested, you don't know. So that's why clinical trials are so very important. It can be a really good option for anybody to be considering with their doctor when they go through all the various treatment options. And it's certainly going to help other people down the track with the knowledge that generates."

Despite the advancements and outcomes of research into novel hormonal therapies in previous years, Professor Davis says there is still an enormous amount of work to do.

"We're not under any illusions. We're not curing people with this condition.

We're improving their outcomes and making people live longer with, and hopefully improving, the quality of their lives at the same time.

"But we still need to do better. We need to understand a whole lot of things that we don't know yet. For prostate cancer in the year 2000, we had almost no options beyond hormone treatment. And in the last 20 years, we've seen incredible advances in prostate cancer that I would never have anticipated, which has just given us a whole new set of options for people to consider and that's a terrific thing."

Thanks to your donations and support, PCFA funds and partners on a range of clinical trials as part of our research program focused on the needs of men with prostate cancer, their partners and their families.

To learn more about clinical trials or to find clinical trials currently being run, check out the Survivorship Toolkit at prostate.org.au, and search for "clinical trials".

Clinical trials are a way to get access to new treatments, but these treatments are still considered to be experimental while under trial. Make sure you know the potential benefits and risks before signing up.

## therapy?

Hormone therapy, otherwise known as Androgen Deprivation Therapy (ADT), is a group of medicines used to reduce the male sex hormone (androgens) testosterone and commonly used to treat prostate cancer.

In men with prostate cancer, testosterone also causes prostate cancer cells to grow and spread, and so depriving prostate cancer cells of testosterone is important to slow growth and reducing risk of cancer spreading and reduce some symptoms caused by the cancer. Hormone therapy may also, over a number of weeks, reduce your PSA levels and offer long term control of the cancer by limiting the amount of testosterone available to prostate cancer cells wherever they are in the body.

### There are different types of hormone therapy:

**Luteinizing hormone-releasing hormone** agonists (LHRH agonists) LHRH agonists trick the body into stopping production of its own LHRH, causing the testicles to stop producing testosterone. Examples of LHRH agonist medications include Eligard®, Lucrin®, Zoladex® and Diphereline®.

LHRH antagonists reduce testosterone production by blocking the messages from the pituitary gland to the testicles. The drug Firmagon® or Degarelix is a LHRH antagonist.

Anti-androgens anti-androgen medicines are a type of hormone therapy that works by blocking the action of testosterone on the prostate cancer cells. For example: Bicalutamide (Cosudex®), Cyproterone acetate (Androcur®) or Nilutamide (Anandron®).

**Novel Hormonal agents** also work to reduce the ability of prostate cancer cells to grow and spread through several different mechanisms. Examples include Abiraterone acetate (Zytiga®), Darolutamide (NUBEQA®) or Apalutamide (Eryland®) and Enzalutamide (Xtandi®).

Many men with prostate cancer may be on one or a combination of hormone therapy, delivered in oral and/or injection form.

People seeking any further information can call PCFA's Telenursing Service on 1800 22 00 99 to talk with the team about their options. We're here to help. •

What is hormone

Testosterone is important for the development of male sexual organs, including the prostate, and libido (or sex drive) and other masculine features like an increased muscle and bone mass and body hair. Most of this testosterone is produced in the testes and a smaller proportion in the adrenal glands which sit above the kidneys.

You can support our Prostate Cancer Future Fund for research by donating online at pcfa.org.au/donate



Former Australian off-spinner Tim May has spoken publicly about his prostate cancer treatment in the hope men don't skip a PSA test like he did and increase their risk of missing a cancer diagnosis.

> "My PSA level went from one to 11.7 which was a massive red flag as anything over four is cause for alarm, so if I hadn't skipped the test I might have caught my diagnosis earlier," Tim says.

"For the past 12 months I've undergone chemotherapy and radiation and despite my scans coming back all clear the other day I still have to continue chemo for another 12 months to keep it at bay. "I really want all men to get

a simple blood test to check their PSA (prostate-specific antigen) levels and don't skip a test like I did because I was scared to get a test as I hadn't been feeling well.

May played in 24 Tests and 47 One Day Internationals between 1987 and 1995 and was part of the Australian team that won their first world titles during the 1987 Cricket World Cup.

PCFA is currently reviewing the Clinical Practice Guidelines for PSA Testing, recognising that early detection of the disease is essential.

"Only 36% of prostate cancers are detected at Stage 1, when the disease can be more effectively treated," says PCFA's CEO, Anne Savage.

"We'll be working with Tim May and other ambassadors this year to increase awareness and improve outcomes for Australian men." •

### **LATEST NEWS:**

### **Progress in prostate cancer** from around the world

We are proud to be part of a worldwide community working to combat prostate cancer. Every day, our work helps to inform new developments in the diagnosis and treatment of prostate cancer at home and abroad. Read more about what's in the news right now.

AI may help find more cases of prostate cancer more quickly

The use of artificial intelligence could help diagnose prostate cancer more accurately and efficiently,

leading to better patient outcomes, reduced costs of care and improved survivorship. It is hoped investment in AI will improve cancer care globally, from early detection to treatment.

Read more pcfau.org/ai

Hot flash: Helping patients with an often-overlooked

side effect

Hot flashes, usually associated with women undergoing menopause, have often been overlooked as a side

effect of hormonal therapy, or androgen deprivation therapy (ADT), to treat men with advanced prostate cancer. A new study has tested the effectiveness of a novel thermal device to help men suffering from the symptom - with promising initial results.

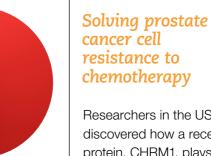
Read more **pcfau.org/helping-patients** 

Two could be better than one: Treating prostate cancer recurrence

A phase 3 clinical trial has discovered using a combination of two testosterone-blocking drugs to treat prostate cancer

recurrence prevents the spread of cancer better than the treatment of only one drug. The research supports other studies which promote intensive testosterone-blocking therapies for patients, without worse side effects.

Learn more **pcfau.org/recurrence** 



resistance to chemotherapy Researchers in the US have

discovered how a receptor protein, CHRM1, plays a

major role in prostate cancer cell

resistance to docetaxel - a chemotherapy often used to treat advanced cancer that has spread outside the prostate. The findings could point to new combination treatments which help to solve chemotherapy resistance, and ultimately extend patients' lives.

Read more **pcfau.org/resistancetochemo** 

Subscribe to our monthly newsletter via enquiries@pcfa.org.au or call 1800 22 00 99

✓ For more information on PSA testing, go to prostate.org.au/testing-and-diagnosis.

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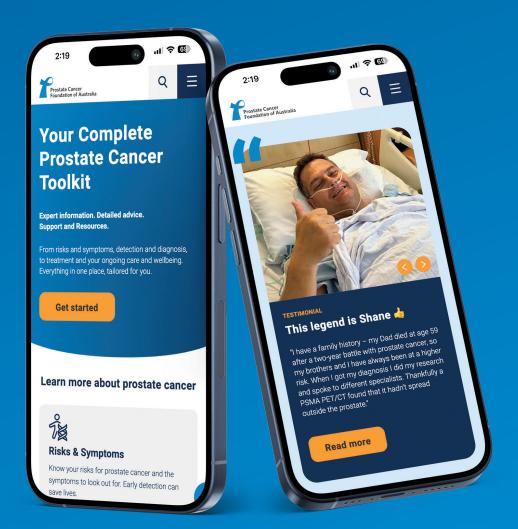


### Your Complete Prostate Cancer Toolkit

Expert information. Detailed advice. Support and resources all in one place, tailored for you.

Q prostate.org.au

**%** 1800 22 00 99



Scan the QR code to get the Toolkit

