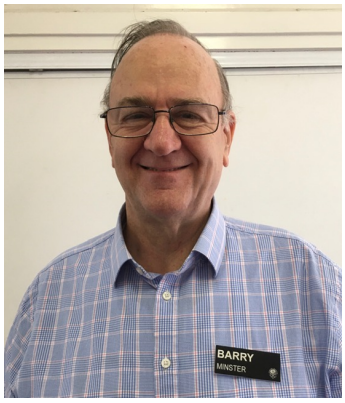
Prostate Heidelberg cancer support group
Information, education and support for men and their families affected by Prostate Cancer

Newsletter **November 2019** – Issue 190 Next Meeting: **Tuesday 19th November 2019**
Meeting Hall, Ivanhoe Uniting Church
19 Seddon Street, Ivanhoe

Prostate Heidelberg provides information, education and support for those affected by Prostate Cancer. At our meetings we:

Show respect to members, speakers and guests.
Allow people to speak and other attendees to listen.
Respect confidentiality.

Last meeting 15th October 2019



We would like to thank Barry Minister OAM for coming along to our last meeting and providing us with an enlightening talk on what we need from life, friendships and much more.
Barry is the Grand Almoner with Freemasons Victoria

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Mayo Clinic Researchers Find Dairy Products associated with an Increased Risk of Prostate Cancer

A high consumption of dairy products, like milk and cheese, appears to be associated with an increased risk of prostate cancer, according to research published in *The Journal of the American Osteopathic Association*.

Researchers note that prior studies have shown dairy products are the primary source of calcium in Western countries, where rates of prostate cancer are high. Conversely, there are lower rates of prostate cancer in Asian countries, where intake of dairy products is low.

The study authors found no clear association of increased risk of prostate cancer linked to other animal-based foods, including red and white meat, processed meats and fish. However, they identified a decreased risk of prostate cancer associated with plant-based diets.

"Our review highlighted a cause for concern with high consumption of dairy products," says John Shin, MD, a Mayo Clinic oncologist and lead author on this study. "The findings also support a growing body of evidence on the potential benefits of plant-based diets."
The researchers reviewed 47 studies published since 2006, comprising more than 1,000,000 total participants, to better understand the risks of prostate cancer associated with plant- and animal-based foods. While patterns of association emerged, Dr. Shin says more

investigation is needed to understand the nature and strength of those associations.

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Exercise has arrived at the ONJ Centre.

The Olivia Newton-John Cancer Wellness & Research Centre is a treatment centre of Austin Health that provides wellness information and support to those with Cancer.

A new service providing exercise classes for people undergoing cancer treatment is now available on;

Tuesdays, Wednesdays and Fridays

Further information can be obtained from one of the exercise physiologists, Kirsty or Lachlan.

To arrange an appointment, contact:
ONJEXERCISE@austin.org.au
Ph; (03) 9496 9445 (Leave a message)

You can also drop in and use the centre to relax, wait for appointments, meet with others, or attend any of the wellness programs that you may benefit from.

Open Mon-Fri: 8.30am - 4.30pm
(Located past Level 3 Cafe, Lift accessible)

Level 3R, ONJ Centre
145 Studley Road
Heidelberg VIC 3084
P: 03 9496 3799
E: wellness@austin.org.au

More information can be found on their website:
https://www.onjcancercentre.org/

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Understanding the influence of exercise on cancer patients undergoing treatment

A new study Investigating the influence of illness perceptions on exercise among adults undergoing treatment for cancer, is now recruiting participants
Participation in this study is entirely voluntary.

Lead investigator

Prof Carlene Wilson from Austin Health in Victoria.

Summary of project

Undergoing treatment for cancer is often difficult and associated with both physical and emotional challenges. Some people appear to benefit from exercise while others find physical activity difficult. This study will examine factors that influence intention to exercise during treatment as well as actual behaviours. The results will help to develop supportive care designed to ameliorate the impacts of cancer treatment.

Participants will be asked to complete a survey with questions about symptoms, illness perceptions and exercise.

Ethics approval has been granted by the Austin Health Human Research Ethics Committee.

Who is this study for?

You may be eligible for this study if you are:

- Currently being treated for cancer, and
- Over 18 and can read English.

For more information, please contact:

Name: Dr Sian Cole

Phone: (03) 9496 9974

Email: sian.cole@austin.org.au

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Preliminary results from Phase IIb Liproca® Depot dose-finding study show a strong maximum PSA decrease and sustained PSA reduction effect

Study confirms Liproca® Depot's potential as drug treatment for men with prostate cancer who currently are under 'Active Surveillance' and receiving no treatment

The company "LIDDS" most advanced project is Liproca® Depot for the treatment of prostate cancer. Liproca® Depot makes it possible to inject a well-tested anti-hormonal drug, 2-hydroxyflutamide, directly into the tumor region where Liproca® Depot forms a solid depot and releases the active substance slowly over a period of up to six months. It is estimated that the tissue concentration can be increased up to 40,000 times compared to oral treatment.

A phase IIb clinical trial is being conducted at urology clinics in Canada and Finland, aiming to identify the highest tolerable dose and to demonstrate that Liproca® Depot prevents the progression of early stage prostate cancer.
Three clinical trials with 57 patients have already been conducted with promising results for tolerability and safety as well as effect on tumor tissue, prostate volume and the PSA biomarker. Clinical data indicates that Liproca® Depot has an enhanced effect at higher doses, without the hormonal side effects that are common with tablet treatment.
More information can be found here:

https://liddspharma.com/pipeline/

New Blood Test for Prostate Cancer is Highly Accurate and Avoids Invasive Biopsies

A new and simple blood test has been found to efficiently and accurately detect the presence of aggressive prostate cancer (PCa), according to research by Queen Mary University of London. In combination with the current PSA test, the new test could help men avoid unnecessary and invasive biopsies, over-diagnosis and overtreatment

PCa is the most common cancer in Western men, with 1.3 million new cases being diagnosed each year worldwide. It is currently detected using a blood test that measures PSA levels. Although it provides early diagnosis, the PSA blood test has a low specificity (high false positives) with about 75% of all PSA positive results ending up with negative biopsies that do not find cancer. When a high PSA level in the blood is detected, the patient undergoes a tissue biopsy of the prostate gland, which is invasive and carries a significant risk of bleeding and infection. On biopsy, the majority of patients with elevated PSA levels are found not to have cancer. Additionally, most diagnosed early-stage PCa are not fatal if left untreated. The current practice of combining PSA testing and biopsy for PCa results in unnecessary biopsies and over-diagnosis and overtreatment of many men.
The new prostate cancer test (the Parsortix® system from ANGLE PLC) detects early cancer cells, or circulating tumour cells (CTCs), that have left the original tumour and entered the bloodstream prior to spreading around the

body. By measuring intact living cancer cells in the patient's blood, rather than the PSA protein which may be present in the blood for reasons other than cancer, it potentially provides a more accurate test for PCa. The study, published online ahead of print in The Journal of Urology, looked at the use of the CTC test in 98 prebiopsy patients and 155 newly diagnosed PCa patients enrolled at St. Bartholomew's Hospital in London.

The research team found that the presence of CTCs in pre-biopsy blood samples were indicative of the presence of aggressive PCa and efficiently and non-invasively predicted the later outcome of biopsy results. When the CTC tests were used in combination with the current PSA test, it was able to predict the presence of aggressive PCa in subsequent biopsies with over 90% accuracy, better than any previously reported biomarkers. Additionally, the number and type of CTCs present in the blood was also indicative of the aggressiveness of the cancer. Focusing on more aggressive PCa may reduce over-treatment and unnecessary biopsies for benign and non-aggressive conditions. Lead researcher Professor Yong-Jie Lu from Queen Mary University of London said: "The current PCa test often leads to unnecessary invasive biopsies and overdiagnosis and overtreatment of many men, causing significant harm to patients and a waste of valuable healthcare resources.

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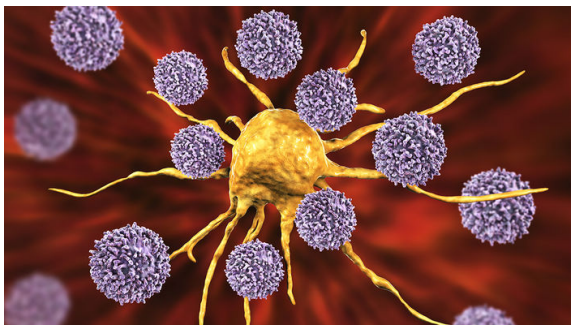

Revamped cancer drug starves tumours in mice

Tumours are greedy and need huge amounts of nutrients to fuel their runaway growth. For decades researchers have tried to develop drugs that cut off their food supply. A study out today shows that an updated version of a failed cancer drug can not only prevent tumour cells from using an essential nutrient, but also spur immune cells to attack the growths.

Cancer cells eat to obtain molecules vital for survival and replication, but their gluttony also turns their surroundings into an acidic, oxygen-deprived moat that stymies immune cells trying to eliminate them. One of the nutrients many tumours need in abundance is the amino acid glutamine, which provides the building blocks for fabricating molecules such as DNA, proteins, and lipids. "Glutamine is incredibly important for cellular metabolism," says immunologist Jonathan Powell of the Johns Hopkins School of Medicine in Baltimore, Maryland.

Starting in the 1950s, researchers tried to turn tumors' glutamine dependence against them, developing drugs to block its metabolism. A bacteria-derived compound called DON, for instance, kills tumors by inhibiting several enzymes that allow cancer cells to use glutamine. In clinical trials, however, the drug provoked severe nausea and vomiting, and it was never approved.

Now, Powell and colleagues have crafted a new version of DON that may be easier to stomach. It carries two chemical groups that keep it inert until it reaches the tumour's neighborhood. There, enzymes that normally loiter around tumours remove these molecular handcuffs, unleashing the drug on the cancerous cells. With this approach, "the vast majority of the active drug is where we want," Powell says.

To test their new compound, he and colleagues injected four types of cancer cells into mice, inducing tumours. They then dosed some of the animals with their next-generation DON. The drug worked against all four kinds of tumours, the scientists report today in *Science*. In untreated mice, for example, colon cancer tumours had grown more than five times larger after about 3 weeks. But in rodents that received DON, the tumours shrank and almost disappeared. The researchers found that the drug wasn't just throttling glutamine metabolism. It was also disrupting other aspects of the cells' biochemistry, such as their ability to use the sugar glucose.

One concern about drugs that target cancer cell metabolism is that they will also poison normal cells, including the immune cells that battle tumours. But Powell and colleagues found that their version of DON revved up T cells to destroy cancer cells. The scientists discovered that T cells deprived of glutamine by DON could switch to an alternative source of the raw materials needed to synthesize DNA and other key molecules, whereas tumour cells couldn't.

With the new DON version, "we disable the ability of the tumour to proliferate and to evade the immune system," Powell says.

The study's findings are a surprise—but a good one, says tumor biologist Ji Zhang of the Indiana University School of Medicine in Indianapolis. "This paper is the first to show that the response to glutamine inhibition in T cells and cancer cells is different."

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Could this immuno-oncology combo treat metastatic prostate cancer?

Immuno-oncology therapies like checkpoint-inhibiting drugs have been largely ineffective in prostate cancer. Researchers at the University of Texas MD Anderson Cancer Centre want to change that—and they believe they've found a drug combination strategy that could work.

The challenge in treating prostate cancer is that when the tumours spread to bone, they destroy tissue, and in so doing they block the development of immune-boosting T cells that are critical to the success of checkpoint inhibitors. The MD Anderson team scrutinized that process in the hopes of finding a therapy that would prevent it.

They discovered that when tumours destroy bone, massive amounts of a protein called transformational growth factor-beta (TFG-beta) are produced. That prevents helper T cells from transforming into the Th1 CD4 effector cells that would normally prompt the immune system to recognize and attack cancer in response to treatment with checkpoint inhibitors. Combining an anti-TGF-beta drug with a checkpoint inhibitor could be the answer, they suggested in a study published in the journal Cell.

The project was headed by Padmanee Sharma, M.D., Ph.D., professor of genitourinary medical oncology and immunology at MD Anderson. Sharma had previously led research combining two checkpoint inhibitors—the anti-CTLA-4 drug Yervoy and the anti-PD-1 Opdivo, both from Bristol-Myers Squibb—in men with prostate cancer. The team discovered that the combo was ineffective against prostate tumors that had spread to bone.
To try to understand the problem, the researchers studied tissue samples from prostate cancer patients. They found that men who had been treated with Yervoy had ample Th1 CD4 effector cells in their soft tissues, but virtually none in their bones.

Then they developed mouse models of prostate cancer that had spread, either to the bone or to soft tissues. When they tested the Yervoy-Opdivo combo in those animals, the results mirrored those in people: Mice with soft-tissue metastases did well, while those with bone tumors did not. And again, the researchers found no Th1 effector cells in the bones.
But they did find high levels of TGF-beta in prostate bone metastases. The researchers confirmed that the same phenomenon happens in human prostate cancer by comparing TGF-beta levels in healthy people to those in prostate cancer patients with or without bone metastases. Those with prostate cancer that spread to the bone had higher levels of TGF-beta than the other two groups did.
The MD Anderson researchers went on to test a combination of an anti-TGF-beta drug with Yervoy and Opdivo in mouse models of prostate cancer that had spread to the bone. That combo halted tumor growth, they reported. Combining Yervoy just with the anti-TGF-beta drug was also effective.

The next step for the MD Anderson team is to design a clinical trial of a CTLA-4 inhibitor combined with an anti-TGF-beta drug in metastatic prostate cancer

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The AGM will take place at the next meeting Tuesday 19th November 2019 at 10:00am

The Steering Committee is elected annually at the Annual General Meeting and shall consists of a:

- Chairperson
- Facilitator
- Secretary,
  - *who communicates with any bodies outside the Group*
- Treasurer,
  - *who maintains the books of account and presents the Financial Report to the Annual General Meeting*
- Newsletter Editor,
  - *who prepares and circulates the Group's newsletter*
- Librarian
  - *Other persons who provide support in Group operations.*

Correspondence

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Steering Committee

Max Shub,	Facilitator 0413 777342
Mike Waller,	Treasurer
Spiros Haldas,	Library
David Bellair,	Web site
Christine Dudley,	Newsletter
Michael Meszaros,	Committee Member
Sue Lawes,	Secretary

2019 Meetings: 10:00am -12:30pm

Tues 19 Nov

Tues 17 Dec (Including Xmas Lunch)
A/Prof Renae Taylor – "Hallmarks of Cancer"

Tues 18 Feb 2020
A/Prof Joseph Ischia – "Testosterone and the Endocrine System"
Meetings include a general discussion and round robin. New members in particular are invited to introduce themselves and share their journeys with the Group.

Internet Resources

Use the internet to find questions to ask your specialist. It should not be trusted to find answers for your personal case. The web is general. Your specialist specifically knows you. Our members have found the following **websites** to be useful.

Prostate Cancer Foundation of Australia www.PCFA.org.au
For guides and help.
Australian Cancer Trials www.australiancancertrials.gov.au/
Information on the latest clinical trials in cancer care, including trials that are currently recruiting new participants.
USA Prostate Cancer Foundation (Guide) www.PCF.org/guide/
PDF guide for men newly diagnosed with prostate cancer
Us TOO International PCa Education (USA) www.UsToo.org
USA Prostate Cancer support groups information and newsletter.
Cancer Council Victoria www.CancerVic.org.au
For general help and to understand services supporting men with cancer.
Ex MED Cancer program http://www.EXMedCancer.org.au/
A Melbourne-based best-practice exercise medicine program for people with cancer.
ProstMate (PCFA) www.ProstMate.org,au
The companion for those impacted by prostate cancer, particularly to record all your results.
Beyond Blue www.BeyondBlue.org.au
HELPLINE – 1300 22 4636; f*or help with depression or anxiety.*
Continence Foundation of Australia www.Continence.org.au/
HELPLINE – 1800 33 0066. *For assistance with incontinence and for aids (such as pads).*
Australian Advanced Prostate Cancer Support Group www.JimJimJimJim.com
For men diagnosed with advanced metastatic prostate cancer.
PCRI Prostate Digest (USA) https://pcri.org/insights/
Prostate Cancer Research Institute supports research and disseminates information that educates and empowers patients, families, and the medical community
PAACT Newsletter (USA) http://paact.help/newsletter/
Patient Advocates for advanced Cancer Treatments.