Hello PROSTAID Calgary members and friends.

We hope you can attend the August General Meeting. Saif Lalani is the guest speaker and his presentation will focus on recent advances in prostate cancer treatment.

On the horizon, John Lewis joins us in September to speak about the ground-breaking discovery he and his team have identified regarding previously-unknown therapeutic targets that could be key to preventing the spread of cancer.

Tarek Bismar is our November guest speaker. Prostate Cancer Canada and the Movember Foundation recently announced $4 million in funding to three Canadian researchers to predict how well prostate cancer will respond to treatment, based on men's biological markers, specifically in their tumour cells and blood – opening a path to more personalized care with fewer side effects and a better chance of survival. The grants were awarded to Dr. Tarek Bismar from the University of Calgary, Dr. Hansen from University Health Network and Dr. Kim Chi from BC Cancer.

Dr. Tarek Bismar will study low-risk prostate cancer that has not spread outside the prostate and is likely to be slow growing. Active surveillance can allow men to delay or avoid aggressive treatments like radiation and surgery and their subsequent side effects. However, many men choose these invasive treatments because they fear their cancer will become aggressive. Dr. Bismar's goal is to see if individual biological factors tested at diagnosis can determine which men will develop aggressive prostate cancer, giving men on active surveillance clear information with which to make their treatment choice.

PROSTAID Calgary is supported by the community and exists for the community. Click here to reach our On Line Donation Page on Canada Helps. If a donation is meaningful to you, it’s meaningful to us.

Warm wishes,

Kelly Fedorowich
Executive Director, 403-455-1916
Alzheimer's disease may be a risk for older prostate cancer patients given hormone-blocking treatment, a large, U.S. government-funded analysis found. Previous evidence has been mixed on whether the treatment might be linked with mental decline. But experts say the new results stand out because they're from a respected national cancer database and the men were tracked for a long time -- eight years on average.

Among 154,000 older patients, 13% who received hormone-blocking treatment developed Alzheimer's, compared with 9% who had other treatment or chose no therapy, the study found. The risk for dementia from strokes or other causes was higher: It was diagnosed in 22% of those who got hormone-blocking treatment, versus 16% of the other patients.

The results, using perhaps one of the largest and most reliable databases, suggests there truly may be a connection, said Dr. Sumanta Pal, a prostate cancer expert with the American Society of Clinical Oncology. The results aren't proof but experts say they underscore the importance of discussing potential risks and benefits when choosing cancer treatment.

The researchers analyzed data from a National Cancer Institute database of cancer cases and treatment and covers almost 30% of the U.S. population. The study focused on men in their 70s, on average, with local or advanced prostate cancer diagnosed between 1996 and 2003. They were followed until 2013. Medicare records indicated dementia or Alzheimer's diagnosis.

Hormone-blocking treatment can include testes removal to reduce levels of testosterone, which fuels prostate cancer growth. But it more typically involves periodic drug injections or implants that achieve the same result.

Most U.S. men who receive this treatment are in their 70s or older. It's sometimes used in men who might not be healthy enough to tolerate other cancer treatments including surgery to remove the prostate and radiation.

It's unclear how the treatment might be linked with mental decline. The researchers noted that it can lead to diabetes, which also has been linked with dementia -- perhaps because blood vessel damage from diabetes can restrict blood flow to the brain. Hormone treatment also raises risks for heart disease and depression, which both have been linked with dementia.

Researcher Grace Lu-Yao of the Sidney Kimmel Cancer Center in Philadelphia, said the potential dementia risks from hormone-blocking treatment may outweigh any benefit for younger, healthier patients with longer expected life spans.

While the study doesn't prove that the treatment causes dementia, she said, it is important to tell patients "because of the potential impact of Alzheimer's disease or dementia on the quality of life of patients and their family."

"This new Australian data gives hope to men living with metastatic prostate cancer," Icon Cancer Centre in Melbourne's radiation oncologist Dr. Pat Bowden said. The treatment uses radiation in high doses to target small areas of cancer while sparing healthy tissue.

Up to 50% of patients were free from treatment escalation for two years and no patient experienced any severe long term side effects, results published in the International Journal of Cancer show.

"Unfortunately this is an incurable condition with life expectancy of about five years. It is extremely promising to see precision radiation therapy delay treatment progression for more than two years. The results showed the precision radiation therapy in cancer care can improve quality and duration and life," Dr. Bowden said.

Up to 18,000 men receive a prostate cancer diagnosis each year and 15,000 men are currently living with metastatic prostate cancer.
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Recent research has revealed that a new urine test can detect aggressive prostate cancer cases that need treatment up to 5 years sooner than other diagnostic methods. Researchers from the University of East Anglia (UEA) in Norwich, United Kingdom, and the Norfolk and Norwich University Hospital (NNUH) carried out the study that revealed an experimental urine test, called Prostate Urine Risk (PUR), can distinguish who will and who will not require treatment within the first 5 years of diagnosis.

The findings now appear in the journal BJU International.

Looking at biomarkers
To develop this unique test, the researchers looked at gene expression in the urine samples of 535 men and determined the cell-free expression of 167 different genes. They then established a combination of 36 different genes that the scientists considered risk signatures, or biomarkers, that the PUR test could look for.

What this test means in a clinical setting
There are many ways to help identify prostate cancer. Although a prostate biopsy is the only way to definitely diagnose the condition, there are a few screening tests that can indicate if a biopsy is necessary. For example, the prostate-specific antigen (PSA) blood test can help detect the possible presence of prostate cancer. Doctors tend to use these results, or a series of results, to determine if someone needs a biopsy. Doctors might also perform a digital rectal exam to see if there are areas on the prostate that could be cancer. Although it is less effective than a PSA test, it can sometimes find cancers in people with normal PSA levels.

The PUR test goes one step further; it not only identifies the presence of cancer earlier than other tests, it can also help put people into different risk groups so that doctors can more accurately determine the course of care and whether to watch and wait, take a biopsy, or start treatment immediately.

Written by Monica Beyer, Medical News Today

Testing for genetic weaknesses in repairing DNA could pick out men who may benefit from a new type of targeted nuclear medicine, a new study reports.

An emerging class of drugs are made up of a radioactive particle that can kill cells attached to a 'homing device' to seek out cancers by detecting the presence of a target molecule on their surface. These new 'search-and-destroy' treatments are starting to show promise even in men with prostate cancer for whom targeted treatments and chemotherapies have stopped working - but not all patients respond.

In the new study, scientists at The Institute of Cancer Research, London, found that testing men for faults in DNA repair genes in their tumours could identify those most likely to respond to the new type of treatment.

The researchers analyzed tumour samples from men with advanced prostate cancer who had been treated at The Royal Marsden NHS Foundation Trust, in order to try to understand why the response to search-and-destroy treatment varied. They found that the target for these new treatments - a protein molecule called prostate-specific membrane antigen, or PSMA - was present at higher levels on the surface of cancer cells in some patients than others. PSMA levels even varied substantially between different cancer sites in the same patient.

But crucially, the amount of PSMA on the surface of cancer cells was more than four times higher in tumours where there were also faults in DNA repair genes. That means that testing for genetic faults in DNA repair genes could be used as a first-stage screen to select patients for PSMA-targeted treatment - followed by having tumours scanned using PSMA imaging technology.

The researchers believe that PSMA plays a key role in keeping the genome in cells stable - and could be produced by tumours as a survival mechanism where they are defective in repairing their DNA. This could explain the link between DNA repair faults and high levels of PSMA. These findings also suggest that combination therapy with other drugs that increase genetic instability could make prostate tumours more likely to respond to PSMA-targeting treatments.

Next, the researchers aim to assess whether testing for DNA repair faults can effectively target search-and-destroy treatment as part of clinical trials, and to explore combination strategies to see if the response to these treatments could be heightened.

Gene Test Identifies Prostate Cancer Patients Most Likely to Respond to New Treatment

Urine test can help diagnose aggressive prostate cancer

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Click on the following link to access the study published in the journal European Urology. Article has been abridged. Click here to read in its entirety.

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Prostate Cancer Canada presents:

*Eat Well*

Tips for Men with Prostate Cancer

Prostate Cancer Canada would like to share an update on a new prostate cancer-related resource aimed at helping readers make ideal food choices when facing prostate cancer or undergoing treatment to reduce their risk of heart disease, diabetes or becoming under or overweight. The information is very practical to help men improve healthy eating habits.

You can access digital versions or learn more about this series on the nourish website at [www.nourishonline.ca](http://www.nourishonline.ca).

Prostate Cancer Canada (PCC) presents:

Expert Angle Webinars

Interested in learning more about prostate cancer care from various healthcare professionals and researchers? Register for PCC’s Expert Angle webinars now and start watching right away! [Click here to Tune In](#).

The new Expert Angle Webinar Series has been reformatted to provide viewers with short, educational, webinars highlighting key information on the many varied and complex questions that come with a prostate cancer diagnosis. PCC is committed to offering a full range of prostate cancer-related topics across the cancer journey including screening, diagnosis, treatment and follow-up care.

The webinars are hosted on an online platform that allows viewers to hear from leading experts in prostate cancer – making them accessible to anyone, regardless of their location, within Canada. To learn more from experts in the field and access related resources, stay tuned for an upcoming webinar.

[Click here to access all webinars.](#)

Latest On-Demand Webinar

**Title:** I am interested in participating in a clinical trial – what’s next?

**Webinar Length:** 13 mins

**Overview:** Dr. Paul Toren discusses the clinical trial process from beginning to end. This includes how eligibility is decided, what it means to provide consent to participate, the benefits and risks of participation, and a discussion of the most common types of clinical trials. Dr. Toren also explains what types of healthcare professionals are involved in clinical trials and what their roles are in your care. [Click here to register.](#)

Wild Wednesday - Volunteer Call Out

*Showcasing Calgary’s Finest Wheels*

Volunteers are needed to help sell tickets for the 50/50 Raffle, hand out PROSTAID Calgary brochures and promotional material, and help raise awareness to prostate cancer and the programs and initiatives offered by PROSTAID Calgary. No experience needed.

Please contact Kelly if you’d like to be part of the Volunteer Team: info@prostaidcalgary.org

**Location:** A & W Restaurant, 80 Crowfoot Way NW.

**Time:** 6pm - 9pm

50/50 Raffle Draw Time: 8:30pm

Reminder that Wild Wednesday’s are outdoor events. Please wear comfortable shoes and dress for the weather.

PROSTAID Calgary volunteers will be on location every Wednesday night (weather permitting) hosting a 50/50 Raffle. It’s the friendliest cruise night in town with room for 200 vehicles. Join us!

PROSTAID Calgary is honoured to partner again with Wild Wednesday Cruise Nights. This year, Wild Wednesday is being hosted at the A&W Restaurant located at 80 Crowfoot Way NW in Crowfoot Crossing. There’s easy access from Stoney Trail, Crowchild Trail, Nose Hill Drive and John Laurie.

Thank you to our Sponsors and Community Partners

[Click here to view all sponsors.](#)