



The Digital Examiner

www.ProstaidCalgary.org

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Hello PROSTAID Calgary members and friends.



September is Prostate Cancer Awareness Month. Prostate Cancer Awareness month is observed every September in North America by health experts, health advocates, and individuals concerned with men's prostate health and prostate cancer.

Designating a month for the issue serves the purpose of:

- Increasing public awareness of the importance of prostate health and prostate cancer awareness
- Providing easily accessible prostate health screenings and prostate cancer screenings
- Educating about risk factors and symptoms of prostate health and prostate cancer
- Advocating for further research on prostate health issues and prostate cancer

It's a time for Canadians to spread the word about the most common cancer in Canadian men. There is still a tremendous need for more awareness and education.

Raising awareness through story: Earlier this year my friends at Prostate Cancer Canada reached out and asked if I would share some of my story. I was honoured to be featured in a piece they were doing in honour of International Women's Day called "The Women Behind Prostate Cancer." Click on the following link to read "From supportive partner to fastest woman in Canada." <http://www.prostatecancer.ca/Prostate-Cancer-Canada-Blog/Mars-2019/From-supportive-partner-to-fastest-woman-in-Canada>

While there, be sure to explore the [Prostate Cancer Canada](#) website. It's an incredible resource.

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

Meeting Schedule

Tuesday September 10, 2019

Monthly meetings are hosted at The Kerby Centre, 1133 7th Ave SW.

7:30-9:00PM

**General Meeting
Room 205 (Lecture Room)
Guest Presenter:
Dr. Desmond Pink**



Topic: Dr. Pink joins us to speak about previously-unknown therapeutic targets that could be key to preventing the spread of cancer. Desmond is a Research Associate with John Lewis. The Lewis lab is known for the ...
*See Pink Bio on page 2.

Support Group Meetings

6:30-7:20pm

Warriors
Advanced & Recurrent Disease
Everyone is welcome.
Facilitator: Frank Altin
Room 208 (2nd Floor)

6:30-7:20pm

Wives, Partners & Caregivers
Room 205 (Lecture Room)
No facilitator this month.

The Kerby Centre is located at 1133 7th Ave SW. Parking is FREE in lots on both sides of 7th Ave. The WEST LRT conveniently stops at the front doors of the Kerby Centre. General Meetings are open to the public and free to attend. A light snack is served. Ladies, family members, and caregivers are always welcome!

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**Support Group
Facilitators**

Warriors

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**Wives, Partners &
Caregivers**

Volunteer Facilitator Needed

Newly Diagnosed

Volunteer Facilitator Needed

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PROSTAID Calgary

Proud member of the
Prostate Cancer Canada
Network of support groups



Desmond Pink, Guest Speaker Bio

development and use of the ex ovo (outside of the eggshell) chicken embryo model, also known as the chorioallantoic membrane or CAM model. This model system is used for investigating angiogenesis, metastasis, tumor biology, tumor vascular permeability, and nanoparticle imaging agent, and drug delivery. This model has permitted his team to investigate and develop many imaging agents, biomarkers, antibodies, small molecule drugs with real time, and quantitative analyses under in vivo conditions.

Dr. Pink's main work areas include (1) preclinical development of novel biomarkers for prostate cancer screening and diagnosis, (2) small molecule library screening for various cancer therapeutic applications and (3) preclinical development of a liposomal / nanoparticle drug delivery platform.

Desmond's main focus is the development of prostate cancer microparticle biomarkers. He has identified new markers which are used in a "liquid biopsy" to detect and enumerate microparticles which are not only prostate cancer specific, but also indicative of disease status (e.g. normal, benign, or metastatic). His team is currently working on both retrospective and prospective sample analyses to further validate this assay but also and in collaboration with others, to identify and develop new prostate cancer specific biomarkers using proteomics, metabolomics and genetics.

Docetaxel Following Prostate Cancer Radiotherapy Not Beneficial

Adjuvant docetaxel without prednisone does not decrease the likelihood of biochemical progression of disease among men who have undergone radiation therapy (RT) intermediate- or high-risk prostate cancer (PCa) and are receiving androgen deprivation therapy, according to investigators.

The finding is from a phase 3 study in which Pirkko-Liisa Kellokumpu-Lehtinen, MD, of Tampere University Hospital in Tampere, Finland, and colleagues that included 376 patients who completed RT for intermediate- or high-risk PCa. They randomly assigned 188 patients to receive 6 cycles of adjuvant docetaxel without continuous

prednisone and 188 to undergo surveillance. Neoadjuvant or adjuvant androgen deprivation therapy was mandatory for all patients. Of the 188 men in the docetaxel arm, 147 (78%) completed all 6 cycles of the drug.

Results showed that 58 patients in the docetaxel arm and 57 in the surveillance arm experienced the study's primary end point of a 2 ng/mL or greater rise in PSA above lowest point values, Dr Kellokumpu-Lehtinen's team reported.

"In conclusion, based on our current results, there is no evidence that adjuvant docetaxel with ADT after RT would provide a benefit for intermediate- or high-risk PCa patients in general clinical practice," the authors concluded.

[*Renal & Urology News*](#)

[*Written by Jody A. Charnow*](#)

Active surveillance for intermediate-risk prostate cancer: *Yes, but for whom?*

Active surveillance is becoming more widely accepted as an initial management option for carefully selected men with favorable intermediate-risk prostate cancer (PCa). As prospective active surveillance cohorts mature sufficiently to begin evaluating longer-term outcomes, consensus on more precise evidence-based guidelines is needed to identify the patient cohorts who may be safely managed with active surveillance and what the ideal surveillance protocol entails.

Long-term outcomes updates have suggested a trend toward worse 15-year survival outcomes for intermediate-risk patients on active surveillance compared with definitive treatment, but 'intermediate-risk' is a broad category and there is a subset of favorable intermediate-risk patients for whom survival outcomes remain equivalent. Promising updates to current risk stratification include consideration of genomic classifiers, advanced imaging and more nuanced interpretation of biopsy results.

Despite widespread acknowledgement of the pitfalls of overtreatment in clinically localized PCa, utilization of active surveillance in the intermediate-risk population remains marginal, in part due to the absence of easily interpretable consensus recommendations. As more long-term outcomes data become available for this subgroup, the field is now poised to refine the definition of favorable

intermediate-risk patients for whom active surveillance is a safe, evidence-based first-line management option.

[Uro-Today, Department of Urology](#)
[Click here to read article in PubMed](#)

FDA grants priority review to Xtandi for metastatic hormone-sensitive prostate cancer

The FDA has granted priority review to enzalutamide for the treatment of men with metastatic hormone-sensitive prostate cancer, according to a press release from the drug's manufacturer.

Enzalutamide (Xtandi; Astellas Pharma, Pfizer), an androgen receptor inhibitor, is currently approved for men with castration-resistant prostate cancer. The FDA granted a supplemental new drug application for the additional indication priority review based on results from two phase 3 trials.

[The ARCHES trial](#), results of which were presented at this year's Genitourinary Cancers Symposium and published in *Journal of Clinical Oncology*, demonstrated that the addition of enzalutamide to androgen deprivation therapy significantly improved radiographic PFS (Progression Free Survival) among men with metastatic hormone-sensitive prostate cancer.

[Results of the ENZAMET trial](#), presented during the plenary session at this year's Annual Meeting and published in *The New England Journal of Medicine*, showed that enzalutamide in combination with standard therapy significantly improved OS (overall survival) compared with other nonsteroidal antiandrogen (NSAA) drugs for men with metastatic hormone-sensitive prostate cancer.

Results showed that at 3 years, 80% of men who received enzalutamide remained alive compared with 72% of men who received one of the other three NSAAs. Overall, men who received enzalutamide had a 33% decreased risk for death compared with men who received other NSAAs.

"The complementary data from the ARCHES and ENZAMET trials in men with [metastatic hormone-sensitive prostate cancer] take us another step closer to understanding Xtandi's full potential in helping address unmet needs in

Prostate cancer," Andrew Krivoschik, MD, PhD, senior vice president and oncology therapeutic area head at Astellas Pharma.

[Article has been abridged. Click here to read in its entirety.](#)
[Healio, HemOncToday, FDA News](#)

Quest for new cancer treatment crosses milestone

A cancer therapy invented at Rice University has crossed a milestone in clinical trials, a major development in a decades-long quest to develop a treatment that destroys tumors without the debilitating side effects of chemotherapy, invasive surgery and radiation.

Thirteen of the first 15 prostate cancer patients treated in a clinical trial of the nanoparticle-based, focal therapy showed no detectable signs of cancer a year after treatment, according to a study published this week in the *Proceedings of the National Academy of Sciences (PNAS)*.

The paper presents the results from 16 patients who were treated at the Icahn School of Medicine at Mount Sinai in New York. It is believed to be the first published clinical study of a photothermal cancer therapy -- one that uses illuminated nanoparticles to heat and destroy tumors -- in a refereed scientific journal, said the study's authors.

In the study, 16 men ages 58 to 79 with low- to intermediate-risk localized prostate cancer agreed to participate in a trial of AuroLase Therapy, a focal ablation treatment that uses gold nanoparticles to heat and destroy tumors. Fifteen of the 16 patients underwent the two-day treatment, receiving an intravenous infusion of nanoparticles on day one and undergoing an image-guided ablation treatment on day two. All of the patients went home on the day of the treatment and returned for follow-up tests at three months, six months and one year after treatment. Of the 15 who completed treatment, only two showed detectable signs of cancer in follow-up biopsies and MRIs one year later.

"Gold-silica nanoshell infusion allows for a focused therapy that treats the cancer while sparing the rest of the prostate, thus preserving a patient's quality of life by reducing unwanted side effects, which could include erectile dysfunction and/or the leakage of urine," said study lead



author and trial principal investigator Dr. Ardeshir Rastinehad, associate professor of urology and radiology at the Icahn School of Medicine at Mount Sinai.

The trial, which is ongoing and has treated 44 patients at Mount Sinai and two other clinical sites in Michigan and Texas, is the culmination of a 20-year quest by Rice University engineer and nanoscientist Naomi Halas and Duke University bioengineer Jennifer West. Halas and West, co-authors of the new study, first envisioned the nanoparticle-based therapy around 2000 while working together in Rice's Brown School of Engineering.

The particles, tiny silica spheres with a thin outer layer of gold, are called nanoshells. They are about 50 times smaller than a red blood cell, and Halas invented them at Rice in 1997. By varying the thickness of the gold shell, Halas had shown she could tune nanoshells to interact with specific wavelengths of light. Around 2000, she and West invented a method of destroying cancer cells by heating nanoshells with a low-power, near-infrared laser that could pass harmlessly through healthy tissue. The work garnered national awards and press coverage, and by the early 2000s Halas and West had co-founded a Houston-based startup, Nanospectra Biosciences, to develop the technology for clinical use.

From the outset, West and Halas had imagined a treatment that would destroy cancer without the debilitating side effects often associated with chemotherapy, invasive surgery and radiation. And that had been borne out in their early studies in cell cultures and mice. But getting clinical trials approved by the Food and Drug Administration was not easy, in part because the technology was groundbreaking.

In the end, the FDA opted to regulate the treatment, which Nanospectra branded as AuroLase Therapy, as a medical device. Clinical trials focused on safety began almost 10 years ago with a study in late-stage head and neck cancer. Halas said Nanospectra learned valuable lessons at every step, but she said it was another big advance -- this one in medical imaging -- that set the stage for the success in prostate cancer.

In 2011, researchers from the National Institutes of Health published results of a new technique that combined ultrasound and MRI imaging to resolve prostate tumors with millimetre-scale precision, Halas said. Clinicians began adoption of the technique for

"fusion biopsies," a procedure for targeting needle biopsies to the specific site of suspected tumors.

One of the lead researchers working to develop fusion biopsy technology was Rastinehad, who joined Mount Sinai in 2015 and was an early proponent of using the fusion imaging platform for "focal therapy," minimally invasive treatment that could target tumors without the risks of incontinence and impotency that were associated with whole-gland treatments like surgical removal of the prostate or radiation.

"There's a bigger picture here," she said. "This (study) is 16 men, but when does it get to be 16,000? Sixteen million? Because 1 in 9 men are going to have to deal with this in their lifetime. The thought that this treatment could alleviate the side effects, and the misery, that my dad experienced is truly heartwarming."

West said the results show what is possible when physicians and engineers work together to solve problems.

"This work demonstrates the power of collaboration across engineering and medicine," she said. "It shows how collaboration can enable the translation of exciting new technologies into clinical medicine to improve the lives of patients."

[Article has been abridged. Click here to read in its entirety.](#)

Original written by Jade Boyd.

Source: Rice University, Science Daily

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