### KPC S&AG SUPPORT & AWARENESS GROUP

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#### VOLUME 27 – ISSUE 3– (NUMBER 297) – NOVEMBER 2024

e had an extremely interesting speaker at our Kelowna Prostate Cancer Support & Awareness Group meeting in October. Julia Campbell one of our many Radiation Therapists at BC Cancer Kelowna took time out of her busy schedule to come out and give everyone a very interesting and education presentation of the work of a Radiation Therapist.

Julia took her training as a Radiation Therapist in Sudbury and Thunder Bay before coming out to Kelowna 5 years ago. Julia has also completed training on Cancer Coaching at York University as well as Adult Education certification from UBC. She works clinically as well as spending much of her time in patient education.

Julia really enjoys her time spent in patient education as it helps take the fear out of the process of radiation therapy.

She took her time at our meeting to explain the process of the radiation treatment process. Her presentation was enjoyed by all of those present. I know she spent time following the meeting to speak one on one with some of our attendees.

If you wish me to remove your name from this contact list, please let me know and I will remove your information.

#### Prostate Cancer is Not an old age disease:

The following information was obtained from the internet and was written by mid-day online correspondent Ainie Rizvi

hile considered as a disease of older men aged 65 and above, there has been a concerning uptick in prostate cancer cases among young men over 40.

Currently there is a surge in the incidence of prostate cancer among men over 65. However, even men in their 40s are increasingly getting diagnosed with this form of cancer. According to a new *Lancet* study, the number of men diagnosed with prostate cancer is predicted to double by 2040. The data suggest that annual prostate cancer cases are projected to rise from 1.4 million in 2020 to 2.9 million in 2040.

Just like people take care of their heart, lung, liver and kidney health prompt attention is required when it "While comes to the prostate. considered a disease of older men aged 65 and above, there has been a concerning uptick in prostate cancer cases among young men over 40. The causes are genetic predisposition, family history, old age, smoking habits, poor diet lacking in fruits and vegetables, lack of exercise, obesity and exposure to harmful chemicals. In the initial stages of prostate cancer, individuals may not exhibit any symptoms.

As the cancer advances, men may notice signs like mild discomfort in the lower pelvic area, difficulties with urination such as pain or burning sensation or reduced urine flow, blood in the urine (hematuria) and painful ejaculation accompanied by bone pain. These symptoms need immediate attention to improve the quality of life.

Also very important is the timely screening for prostate cancer through Prostate-Specific Antigen (PSA) tests and the Digital Rectal Exam (DRE), enabling prompt initiation of treatment.

Detecting prostate cancer early greatly enhances the chances of survival and quality of life for patients. Screening through testing of prostate-specific antigen (PSA) levels in the blood is one of the most effective methods for early detection, along with the digital rectal exam (DRE).

# WITT'S WIT (ON THE LIGHTER SIDE) -

Dogs are welcome in this hotel. We never had a dog that smoked in bed and set fire to the blankets. We never had a dog that stole our towels and played the T.V. too loud, or had a noisy fight with his traveling companion. We never had a dog that got drunk and broke up the furniture....So if your dog can vouch for you, you're welcome too. *The Management* 

#### Important New Study in B.C.

The following is an excerpt of information obtained from the BC Cancer website. And originated with *Vancouver Coastal Health Research Institute* 

n important new study led by BC Cancer scientist *Dr. Alexander Wyatt* is the first to indicate that cancer complexity within the prostate may be driving tumour proliferation in this patient population more than previously understood. Published in the journal *Nature Cancer*, this finding paves the way for new inroads in the development of precision treatments for *de novo* (meaning literally 'of new' is a Latin expression used in English to mean 'from the beginning') metastatic prostate cancer, as well as other aggressive cancers.

"Because the danger from the spread of tumours in de novo metastatic prostate cancer is so pressing, treatment has often been directed more to targeting the metastatic cancer throughout the body than on the origins of the cancer within the prostate," notes Dr. Wyatt, an associate professor in the department of urologic sciences at he University of British Columbia and Vancouver Coastal Health Research Institute researcher, a senior research scientist with the Vancouver Prostate Centre and with BC Cancer. "However, we found that the diverse pool of cancer cells found within the prostate could be associated with multiple waves of cancer spread throughout the body, along with sources of treatment resistance."

Using the analogy of a tree Dr. Wyatt explains the original prostate cancer can be thought of as the tree trunk. Cancers that can spread from the prostate to other areas of the body – such as the lymph nodes, bones and lungs – are its branches. So long as the trunk exists, the tree can continue to produce new branches. However, destroy the trunk, i.e., through the removal or destruction of the prostate itself, and a primary cancer driver could be cut off.

A key to Dr. Wyatt's research was having rare access to a pool of over 600 biological samples from 43 patients diagnosed with *de novo* metastatic prostate cancer. In collaboration with a team of Belgian researchers, Dr. Wyatt and his team at the Vancouver Prostate Centre were able to analyze the whole prostates along with pelvic lymph nodes and blood samples, of patients from a Belgian study. Due to the severity of the disease, *de novo* metastatic prostate cancer patients often do not undergo surgery to remove the prostate, instead immediately receive hormone therapy and sometimes radiation to treat the presence of tumours throughout the body. However, the Belgian study involved the removal of the whole prostate and pelvic lymph nodes prior to subsequent treatments, giving Dr. Wyatt's team a glimpse of these tissues soon after diagnosis.

Access to the whole prostate was a crucial piece of the puzzle to understanding the development and spread of the disease. Dr Wyatt and his team discovered that biopsies of several different regions [of the prostate gland] were required to see the full breadth of cancer variation within a single prostate, as different areas contained divergent cancer mutations.

"One of the unique aspects of our study is that colleagues in Belgium made available to us a rare library of tissue and blood samples from *de novo* metastatic prostate cancer patients," noted Dr. Wyatt.

Thanks to these tissue and blood samples, Dr. Wyatt and his team developed a roadmap of the spreading branches of cancer from the prostate.

#### "While we developed this roadmap for prostate cancer, it may well have applications in other forms of cancer," he said.

"We expect these findings will heighten the attention given to cancer variation as a driver of metastatic prostate cancer," added Dr. Wyatt. "In addition, it is anticipated that downstream changes to clinical best practices may include the collection and analysis of additional prostate biopsies from each patient to better inform treatment decision-making." "These insights will help to further advances in the development of individualized prostate cancer care,"

The team is now applying their roadmap to study blood and tissue samples from approximately 500 *de novo* metastatic prostate cancer patients in British Columbia. With greater access to two to eight biopsy cores from the prostate of each patient, the team will have greater than average biological source material to study cancer mutations and heterogeneity.

#### More on Dr. Alexander Wyatt –

Dr. Wyatt has a DPhil in genetics from the University of Oxford. His research goals are to dissect the clinical relevance of genomic alterations in metastatic genitourinary cancers and develop minimally-invasive biomarkers for guiding therapy selection.

Dr. Wyatt's lab has established a variety of custom sequencing techniques and bioinformation approaches novel to interrogate tissue and liquid biopsies from patients enrolled in a series of ongoing clinical trials and biobanks. His lab works very closely with Dr. Kim Chi and other senior oncologists and urologists, and together have demonstrated that plasma circulation tumour DNA (ctDNA) is highly representative of metastatic lesions in prostate and bladder cancer, and that somatic alterations detected in ctDNA can help predict therapy and resistance or response.

It was announced in September that Dr. Wyatt, a senior research scientist at Vancouver Prostate Centre, is now the scientific director for the Clinical Cancer Genomics Program at BC Cancer. The Kelowna Prostate Cancer Support & Awareness group does not recommend treatment modalities or physicians: However, all information is fully shared and is confidential. The information contained in this newsletter is not intended to replace the services of your health professionals regarding matters of your personal health.

The Kelowna Prostate Cancer Support & Awareness Group would like to thank Janssen - and TerSera for their support and educational grants that go towards our newsletters and our support group.



## UP COMING MEETING DATES FOR 2024 – 2025

NOTE: - Dec. 14 – Jan. 11/25 – Feb. 8 – March 8 – April 12 – May 10

#### Meeting Location:

Our meetings take place in the Harvest Room at Trinity Church located at the corner of Springfield Road and Spall Road. Please enter through the South Entrance off the main parking lot and follow the signs upstairs to the Harvest Room. Our meetings begin at 9:00 A.M. and the doors open at 8:30 A.M. There is elevator access if needed.

**NOTE:** Many of our past newsletters are available for viewing and printing through our website. – www.kelownaprostate.com

- A big Thank You to Doris at Affordable Web Design for all her work on our website