# The Manitoba Prostate Cancer Support Group NEWSLETTER



Vol. 236 - February 2011



## Medical Advisors to The Manitoba Prostate Cancer Support Group

=> Paul Daeninck M.D. Pain Management

=> Darryl Drachenberg M.D. Urologist

=> Graham Glezerson M.D. Urologist

=> Ross MacMahon M.D. Urologist

=> John Milner M.D. Urologist

=> Jeff Sisler M.D. Family Practitioner

Thanks!



The Manitoba Prostate Cancer Support Group encourages wives, loved ones, and friends to attend all meetings.

Feel free to ask basic or personal questions without fear of embarrassment. You need not give out your name or other personal information.

The Manitoba Prostate Cancer Support Group does not recommend treatment modalities, medications, or physicians. All information is however freely shared.

#### **NEXT MEETING:**

THURSDAY. FEBRUARY 17, 2011

BUNTY ANDERSON: PSYCHOSOCIAL ONCOLOGY

"RIDING THE EMOTIONAL ROLLERCOASTER"

Location: AUDITORIUM of the Seven Oaks General Hospital - Leila & McPhillips

THOUGHT FOR THE DAY

#### What Cancer Cannot Do

Cancer is so limited . . .

It cannot cripple love,

It cannot shatter hope,

It cannot corrode faith,

It cannot destroy peace,

It cannot kill friendship,

It cannot suppress memories,

It cannot silence courage,

It cannot invade the soul,

It cannot steal eternal life,

It cannot conquer the spirit.

The Manitoba Prostate Cancer Support Group operates on your donations. Have you used any of Newsletter - General Meetings - Hospital visits - One-on-one visits - Speakers ?

#### WE REALLY APPRECIATE YOUR SUPPORT

Address:		
Postal Code:	Card to be signed from:	
This gift is IN MEMORY		
Please notify the follo	wing person of this gift:	
Name:		
Address:		Postal Code:
£\$25 £\$50 £\$100 £	\$250 \squares\$500 \squares\$1000 \squares\$1000+	Make cheque or money order payable to:
	Manitoba Prostate Cancer S	
	# 705 - 776 Corydon Ave.	
Charity n	umber: 88907 1882 RR001 *a ta	x deductible receipt will be issued

#### **ACRI Cancer Researchers Patent Promising New Prostate Cancer Test**

November 22, 2010

The Atlantic Cancer Research Institute (ACRI) with long-

time collaborator, the National Research Council's Institute for Information Technology (NRC-ITT) recently moved another step closer to bringing their research discoveries to the clinical setting as the U.S. Patent and Trademark Office recently issued the patent on their findings entitled, "Molecular method for diagnosis of prostate cancer".

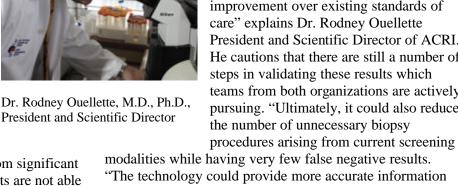
This patent describes the discovery of eight gene biomarkers that can identify prostate cancer from normal tissue with over 90% sensitivity and specificity, a higher accuracy level than current detection tools. The current methods for detecting prostate cancer, including the benchmark screening

test prostate-specific antigen (PSA), suffer from significant accuracy limitations. Additionally, current tests are not able to discern the severity or aggressiveness of tumours and therefore are not always able to identify best course of action in patient management. The molecular method developed by ACRI and NRC-IIT monitors the levels of gene activity and in the future may identify more indolent or aggressive forms of the disease and therefore possible to adapt treatment strategies accordingly.

in the December issue of Biomarkers, an international, peerreviewed journal dedicated to the rapidly growing field of biomarker research, encompassing their various uses and applications relating to disease and treatment. Prostate cancer has evolved as a major health problem in the male population of the Western world. It is currently the most commonly diagnosed malignancy

The key findings of this breakthrough will also be published

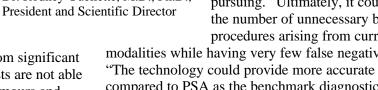
and the second leading cause of cancer death, representing nearly 29% of all cancer deaths. "We believe that the application of this biomarker panel may lead to new technology for prostate cancer detection that represents a significant improvement over existing standards of care" explains Dr. Rodney Ouellette President and Scientific Director of ACRI. He cautions that there are still a number of steps in validating these results which teams from both organizations are actively pursuing. "Ultimately, it could also reduce the number of unnecessary biopsy



compared to PSA as the benchmark diagnostic tool for prostate diagnosis" says Dr. Ouellette.

Once the validation step has been completed, the group hopes to transfer this groundbreaking technology into the hands of companies that can take it to market.

http://www.atlanticcancer.ca/news.cfm?news\_id=100



#### Age No Barrier to Prostate Cancer Tx

By Todd Neale, Staff Writer, MedPage Today

Published: December 28, 2010

Reviewed by Robert Jasmer, MD; Associate Clinical Professor of Medicine, University of California, San Francisco and Dorothy Caputo, MA, RN, BC-ADM, CDE, Nurse Planner

Decisions about prostate cancer treatment may rely too heavily on age, research suggests.

In a study of nearly 12,000 men, older patients were less likely to get local therapy, regardless of disease risk, Matthew Cooperberg, MD, MPH, of the University of California San Francisco, and colleagues reported online in the Journal of Clinical Oncology.

Compared with men 55 and younger, for example, those older than 75 had a substantially reduced likelihood of receiving local treatment after adjustment for risk (OR 0.04, 95% CI 0.03 to 0.06).

And although older men had lower overall survival, as expected, they did not have higher prostate cancer-specific mortality rates (P=0.56) after controlling for treatment type and baseline risk.

The findings suggest that undertreatment of prostate cancer in older patients is a problem equally as important as overtreatment of lower-risk prostate cancer.

"Under-use of potentially curative local therapy among older men with high-risk disease may in part explain higher cancer-specific mortality rates observed with increasing age," the researchers wrote.

"These findings support treatment decision-making based on disease risk and life expectancy rather than chronologic age."

Previous studies have shown that older men are more likely to present with high-risk prostate cancer and to have lower overall survival. For that reason, they are less likely to get potentially curative treatments.

However, according to Cooperberg and his colleagues, the relationships between age, disease risk, and prostate cancerspecific survival have not been well established. So they analyzed data from the Cancer of the Prostate Strategic Urologic Research Endeavour (CaPSURE)

database, which includes information on men receiving treatment at community and academic urology practices across the U.S.

The current analysis included 11,790 men with localized disease with a median age of 66; 14.5% were older than 75. High-risk patients were defined as those with a Cancer of the Prostate Risk Assessment (CAPRA) score of 6 to 10. Treatments included local therapies like radical prostatectomy, cryotherapy, electron beam radiation therapy, and brachytherapy, and other therapies like primary androgen deprivation therapy and watchful waiting.

The treatments varied widely with age across all risk groups. For instance, older men were more likely to receive androgen deprivation monotherapy than younger men and less likely to receive local treatment, regardless of risk. Cooperberg and his colleagues noted that "the benefit of hormonal therapy in localized cancer is unclear and primary androgen deprivation therapy is associated with potential adverse musculoskeletal, cardiovascular, and other effects."

Lower use of local therapy in older patients appeared to be unfounded, as age was not an independent predictor of cancer-specific survival after controlling for treatment type and risk.

Indeed, after controlling for age, comorbidity, and risk, men 70 and older who had high-risk tumors had a 46% reduction in mortality with local therapy compared with more conservative treatment (OR 0.54, 95% CI 0.41 to 0.72).

Older men with an overall life expectancy of more than 10 years should be considered for surgery and radiation therapy, the researchers wrote.

"Recent studies have shown that with careful patient selection, gains in life expectancy in men aged over 70 years following radical or laparoscopic prostatectomy are comparable to those in younger men," they wrote.

They noted some limitations, including the use of self-reported comorbidity data, the use of death certificates to determine cause of death, and the inability to evaluate the effect of prior screening on disease risk at diagnosis.

Primary source: Journal of Clinical Oncology Source reference:

Bechis S, et al "The impact of age at diagnosis on prostate cancer treatment and survival" J Clin Oncol 2010; DOI: 10.1200/JCO.2010.30.2075.

#### **Blood Test To Spot Cancer Gets Big Boost**

By MARILYNN MARCHIONE, The Associated Press, Updated: January 3, 2011 12:01 AM

BOSTON - A blood test so sensitive that it can spot a single cancer cell lurking among a billion healthy ones is moving one step closer to being available at your doctor's office.

Boston scientists who invented the test and health care

giant Johnson & Johnson will announce Monday that they are joining forces to bring it to market. Four big cancer centers also will start studies using the experimental test this year.

Stray cancer cells in the blood mean that a tumour has spread or is likely to, many doctors believe. A test that can capture such cells has the potential to transform care for many types of cancer, especially breast, prostate, colon and lung.

Initially, doctors want to use the test to try to

predict what treatments would be best for each patient's tumour and find out quickly if they are working.

"This is like a liquid biopsy" that avoids painful tissue sampling and may give a better way to monitor patients than periodic imaging scans, said Dr. Daniel Haber, chief of Massachusetts General Hospital's cancer center and one of the test's inventors.

Ultimately, the test may offer a way to screen for cancer besides the mammograms, colonoscopies and other lessthan-ideal methods used now.

"There's a lot of potential here, and that's why there's a lot of excitement," said Dr. Mark Kris, lung cancer chief at Memorial Sloan-Kettering Cancer Center in New York. He had no role in developing the test, but Sloan-Kettering is one of the sites that will study it this year.

Many people have their cancers diagnosed through needle biopsies. These often do not provide enough of a sample to determine what genes or pathways control a tumour's growth. Or the sample may no longer be available by the time the patient gets sent to a specialist to decide what treatment to prescribe.

Doctors typically give a drug or radiation treatment and then do a CT scan two months later to look for tumour shrinkage.

Some patients only live long enough to try one or two treatments, so a test that can gauge success sooner, by looking at cancer cells in the blood, could give patients more options.

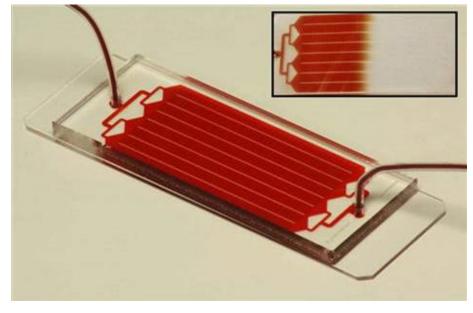
"If you could find out quickly, 'this drug is working, stay on it,' or 'this drug is not working, try something else,' that would be huge," Haber said.

The only test on the market now to find tumour cells in blood — CellSearch, made

by J&J's Veridex unit — just gives a cell count. It doesn't capture whole cells that doctors can analyze to choose treatments.

Interest in trying to collect these cells soared in 2007, after Haber and his colleagues published a study of Mass General's test. It is far more powerful than CellSearch and traps cells intact. It requires only a couple of teaspoons of blood and can be done repeatedly to monitor treatment or determine why a drug has stopped working and what to try next.

"That's what got the scientific community's interest," Kris said. Doctors can give a drug one day and sample blood the (Continued on page 5)



The herringbone pattern of interior surfaces in the HB-Chip brings more circulating tumor cells into contact with the antibody-coated capture surfaces. The inset shows the uniform blood flow through the device. The blood test so sensitive that it can spot a single cancer cell lurking among a billion healthy ones is moving one step closer to being available at your doctor's office.

(Continued from page 4)

next day to see if the circulating tumour cells are gone, he explained.

The test uses a microchip that resembles a lab slide covered in 78,000 tiny posts, like bristles on a hairbrush. The posts are coated with antibodies that bind to tumour cells. When blood is forced across the chip, cells ping off the posts like balls in a pinball machine. The cancer cells stick, and stains make them glow so researchers can count and capture them for study.

The test can find one cancer cell in a billion or more healthy cells, said Mehmet Toner, a Harvard University bioengineer who helped design it. Researchers know this

because they spiked blood samples with cancer cells and then searched for them with the chip.

Studies of the chip have been published in the journals Nature, the New England Journal of Medicine and Science Translational Medicine. It is the most promising of several dozen that companies and universities are rushing to develop to capture circulating tumour cells, said Bob McCormack, technology chief for Veridex.

The agreement announced Monday will have Veridex and J&J's Ortho Biotech Oncology unit work to improve the microchip, including trying a cheaper plastic to make it practical for mass production. No price goal has been set, a company official said, but the current

CellSearch test costs several hundred dollars.

The companies will start a research center at Mass General and will have rights to license the test from the hospital,

which holds the patents.

In a separate effort, Mass General, Sloan-Kettering, University of Texas M.D. Anderson Cancer Center in Houston and Dana-Farber Cancer Institute in Boston will start using the test this year. They are one of the "dream teams" sharing a \$15 million grant from the Stand Up to Cancer telethon, run by the American Association for Cancer Research.

Already, scientists have been surprised to find that more cancer patients harbour these stray cells than has been

believed. In one study, the test was used on men thought to have cancer confined to the prostate, "but we found these cells in two-thirds of patients," Toner said.

This might mean that cancer cells enter the blood soon after a tumour starts, or that more cancers have already spread but are unseen by doctors.

Or it could mean something else entirely, because researchers have much to learn about these cells, said Dr. Minetta Liu, a breast cancer specialist at Georgetown University's Lombardi Comprehensive Cancer Center. She led a session on them at the recent San Antonio Breast Cancer Symposium and has been a paid speaker for Veridex. She hopes the cells will someday aid cancer

screening.

"The dream is, a woman comes in for her mammogram and gets a tube of blood drawn," so doctors can look for cancer cells in her blood as well as tumours on the imaging exam, she said.

That's still far off, but Mass General's test already is letting doctors monitor patients without painful biopsies. Like Greg Vrettos, who suffered a collapsed lung from a biopsy in 2004, when he was diagnosed with lung cancer.

"It had spread to both lungs and they couldn't operate," said Vrettos, 63, a non-smoker and retired electrical engineer from Durham, N.H. Tests from the biopsy showed that he was a good candidate for the drug Iressa,

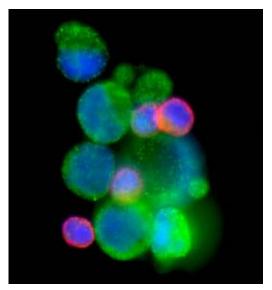
which he has taken ever since. He goes to Boston every three months for CT scans and the blood test.

"They could look at the number of cancer cells and see that it dropped over time. It corresponded with what the scans were showing," Vrettos said of doctors looking at his blood tests

The test also showed when he had a setback last January and needed to have his treatment adjusted.

"I think it's going to be revolutionary," he said of the test.

http://hosted2.ap.org/APDEFAULT/index/Article\_2011-01-03-Cancer%20Blood %20Test/id-4991a73ffd124be1acd0deadfa90dff6



This undated image provided by PNAS Early Edition shows a circulating tumor cell cluster isolated using the HB-Chip from the blood of a patient with metastatic prostate cancer.

• • •

#### Test That Predicts Prostate Cancer: UK Scientists' Landmark Discovery Is Cheap, Accurate - And Offers Hope To Thousands

By Fiona Macrae October 13th, 2010

The first reliable test of whether men are at a high risk of prostate cancer has been developed by British scientists. The breakthrough raises the prospect of millions being screened for the disease in the same way as women are for breast cancer. An accurate test for prostate cancer is the 'holy grail' of research into the disease – but has eluded scientists.

The test has so far proven to be twice as precise as the current method. It focuses on urine rather than blood, meaning it is cheaper and also has the advantage of dispensing with needles.

The £5.50 kit could be in widespread use in GPs' surgeries in as little as four years.

Prostate is the most common cancer in British men, affecting 35,000 a year and killing more than 10,000. Professor David Neal, a prostate cancer specialist at the Cambridge Research Institute, said: 'This is a vital piece of research that could go a long way to find a long-awaited and much-needed reliable and easy test to identify those men most at risk of developing prostate cancer. If further studies show this can be used in theclinic, this will be a landmark discovery.'

Despite its terrible toll, prostate cancer is often described as a 'Cinderella cancer', losing out in resources to higher-profile conditions such as breast cancer.

The current blood test measures levels of a protein made by the prostate, and crucially is only used to diagnose the disease rather than predict its onset.

The unreliability of the PSA test also means that older men are not routinely screened for the disease.

False positive and false negative results means it is wrong more often that it is right.

Three in four men with a raised levels of the prostate specific antigen protein are found not to have any cancerous cells when they undergo a biopsy, while one in five with prostate cancer has normal PSA readings As a result, many are subjected to the worry of unnecessary tests, while in other cases, fledgling cancers are missed until they have spread to other parts of the body and are much harder to treat.

In developing the new test, scientists from the Cancer Research UK Cambridge Research Institute and the Institute of Cancer Research used results of genetic studies to link low levels of the microseminoprotein-beta protein (MSMB) with signs of the disease.

Low levels of MSMB foretell cancerous changes in the prostate, the journal PLoS ONE reported yesterday. Researcher Dr Hayley Whitaker said that Initial studies suggest that the test is twice as accurate as the current one. And at around £5.50 a kit, it is two-thirds of the price. It would be taken at a GP's surgery and the results would be back within hours.

A trial on 1,200 men is under way and is expected to be finished by Christmas. Further, large-scale trials will also have to be carried out. Men found to have low levels of MSMB could then be closely monitored, with the aim of detecting the disease, if it does indeed develop, as early as possible.

The test could also help in diagnosis by reducing the number of unnecessary biopsies.

In addition, it may also help doctors more accurately distinguish between the more common, slow-growing forms of the disease from the more dangerous, fastergrowing varieties.

Dr Whitaker, the study's lead author, said: 'We looked in the tissue and urine of over 350 men with and without prostate cancer to find out how much MSMB they had. The protein is easy to detect because it is found in urine and would potentially be a very simple test to carry out on men to identify those most at risk of developing the disease.' Dr Kate Holmes, of the Prostate Cancer Charity, said: 'Given the known limitations of the PSA blood test, finding a technique to accurately diagnose prostate cancer is the holy grail of research into the disease, which is why these results are potentially exciting.

'However, further research is needed to determine how effective the detection of MSMB in the urine is for predicting the risk of, and potentially even diagnosing, prostate cancer.'

Prostate cancer receives a fraction of the funding and attention given to breast cancer.

Around £40 million a year is ploughed into breast cancer research – four times the funding for prostate cancer studies.

(Continued on page 7)

(Continued from page 6)

And the NHS spends £75 million annually on the national breast cancer screening programme for women.

No such programme exists for prostate cancer. The technique is one of several potential successors to the PSA test being developed around the world.

Scientists at Leicester University and Durham University are among those working on alternative methods.

#### **Earlier Hospice Care Urged** for Terminal Prostate Cancer

TUESDAY, Oct. 12 (HealthDay News) - Most American men who are dying of prostate cancer are slow to take advantage of the end-of-life services available through hospice care, new research suggests.

Although about half of such patients do turn to hospice care eventually, the study team found that most wait until the

very end - often just a week or two before their death - before enrolling in a hospice program. Health care professionals, meanwhile, advise that such symptom management care begin several weeks before a patient's final days.

"It's important that we maximize quality of life when quantity of life cannot be changed," study lead author Dr. Mark Litwin, a professor of urology and public health at the University of California, Los Angeles' Jonsson Cancer Center, said in a university news release.

"Most men are being referred to hospice too late and that timing hasn't changed in the last 20 years, which is unfortunate," he added. "As cancer specialists, we should offer these patients the best quality of life that we can, and that often means offering them the best quality of death that we can give them."

Litwin and his colleagues published their observations in the Oct. 11 online edition of the Archives of Internal Medicine.

The authors noted that most prostate cancer patients actually end up dying from other causes, as a fatal prostate cancer diagnosis can be a slowly unfolding process. Nonetheless, about 30,000 American men do succumb to the disease each year.

For such patients, the physical and psychosocial support offered by hospice care is designed to ease the experience of dying, rather than to prolong life.

The current look into when patients are actually accessing such assistance focused on records that covered more than 14,500 prostate cancer patients aged 66 years or older, all of whom had died from the disease between 1992 and 2005.

Of these, 53 percent had signed up for hospice services, often delivered at home, for a median of 24 days. More than one-fifth, however, had enrolled in the last week of life.

> "Hospice stays shorter than seven days are too brief to maximize the benefit of enrollment, and individuals making shorter stays receive fewer services and benefit less from the input of the full interdisciplinary team," the study team noted in the news release. "Increasing appropriate hospice use may improve the quality of death for men at the end of life while rationalizing health care expenditures during this high-cost period."

The reason for the delay in hospice referrals, the study authors suggested, could be that physicians are not generally trained to place anything before

the aim of prolonging life, and are not always good at judging how much time a patient has left.

"As doctors, we often don't want to give up. We've sworn to help our patients and a death is a failure to us," Litwin said. "But the optimization of life should be our goal. Sometimes survival is of such poor quality that it should not be our primary goal."

The authors additionally found that men who have a spouse or partner are generally more likely to enroll in hospice care. By contrast, black men are 20 percent less likely to do so.

More information For more on hospice care, visit the American Cancer Society.

SOURCE: University of California Los Angeles, news release, Oct. 11,

Johns Hopkins Health Alert

### What Can We Learn by Looking at the Percentage Free PSA or Bound PSA?

Posted December 30, 2010

Prostate-specific antigen (PSA) is an enzyme produced by the glandular cells of the prostate and secreted in the seminal fluid released during ejaculation. High blood levels



may indicate prostate cancer but can also be caused by benign prostatic hyperplasia (BPH) and infection. By looking at the percentage of free PSA or complexed (bound) PSA, doctors can determine the cause of elevated PSA levels. Here's how ...

PSA in the blood is either bound (attached to proteins) or unbound (free). PSA assays usually measure the total PSA (both free and complexed). Other assays measure the percentage of free PSA or the percentage of complexed PSA. Compared with men with BPH, men with prostate

cancer have a higher percentage of bound PSA and a lower percentage of free PSA. Research suggests that determining the ratio of free to total PSA in the blood helps distinguish between PSA elevations due to cancer and those caused by BPH. Using the percent free PSA result to help determine the need for biopsy might help reduce the number of unnecessary biopsies.

Researchers estimate that in men whose PSA levels are between 4 ng/mL and 10 ng/mL, performing a prostate biopsy only when the percent free PSA is 24% or below would detect more than 90% of prostate cancers while reducing the number of unnecessary biopsies by 20%. In addition, some investigators are enthusiastic about using complexed PSA measurements to detect cancer, believing that this provides the same information as free PSA and total PSA.

http://www.johnshopkinshealthalerts.com/alerts/prostate\_disorders/free\_and\_bound\_PSA\_tests\_3717-1.html

• • •

Email - manpros@mts.net

Answering Machine - (204) 989-3433

#### 2011 SPEAKERS:

January 20, 2011 To be announced

February 17, 2011

Bunty Anderson; Psychosocial Oncology "Riding the Emotional Rollercoaster"

March 17, 2011

Dr. Ellen Lee; Department of Physical Therapy, University of Manitoba

April 21, 2011

Dr Ross MacMahon; Urologist "Understanding Hormone Therapy"

#### M.P.C.S.G. Executive

Brian Sprott - Chair	
_	
Joseph Courchaine - Treasurer	
Len Bueckert - Newsletter	
Tom Boomer - Recording Sec./ New Member	
June Sprott - Corresponding Sec	
Darlene Hay - Membership	
Kirby Hay - Information Kits	
Liz & Pat Feschuk - Special Projects	654-3898
Jim Leddy - Member at Large	
Laurie Courchaine - Member at Large	257-2602
Pam Boomer - Member at Large	

This newsletter is a



www.misterpete.com

Manitoba Prostate Cancer Support Group 705 - 776 Corydon Ave. Winnipeg, MB. R3M 0Y1

