June is going to be a very busy month for our cancer support group PROSTAI
d CALGARY.

- On June Friday June 6th and Saturday June 7th, we will hold a casino at Cow-
boys Casino. This is our most im-
portant fund raiser. Some original vol-
unteers have had to withdraw. So, I
am looking for 2 volunteers to fill spe-
cific positions and 4 volunteers to serve
as alternates. Please phone me at 403
932 2372 if you are able to help.

- At our General Meeting on Tuesday,
June 10th, Wellness Calgary
will talk about A Lifeline to Cancer Support.
Their programs complement our work
and we are really very pleased to have
them speak to us.

- On Father’s Day Sunday, June 15th,
PCCN Calgary will participate in the
“Do it for Dads Walk Run”. To donate, go to www.pccncalgay.org
for a link to our PCCN Calgary Warriors
team. Our team proceeds will be split
50:50 with Prostate Cancer Canada.

- On Sunday, July 29th, we will hold our
6th Annual Show ‘n Shine with the
theme “Fun in the 50s”. There are always ‘lots of prostates’ and their
families, young and old, who exhibit
and attend our annual Show ‘n Shine.

“Fun in the 50s” is our own signature
event and attracts a large Calgary and
area crowd for us to promote aware-
ness about PSA testing and early detec-
tion of prostate cancer. The Man Van
from Prostate Cancer Centre will be
on-site for PSA testing of men > 40 yrs.

Ron Gorham’s team have put a tre-
 mendous program together. We need
15 volunteers for this event. Please
phone Ron at 403 730 6534 to volun-
tee. It will be a fun day for all ages.

Our journeys continue …….

Stewart Campbell
Executive Director

Tuesday, June 10th, 2014
Meeting Schedule

6:30 PM: Newly Diagnosed & Active
Surveillance Group
Room 331 at Kerby Centre,
Ron Singer, Facilitator

6:30 PM: Warrior Group
Board Room at Kerby Centre,
Jim Swaile, Facilitator

7:30 PM: General Meeting. Kerby
Centre Lecture Theatre
A Lifeline to Cancer Support
Wellspring Calgary

Our General Meetings are open to the
public and free. Cookies, fruit and
refreshments will be served.

Come join us Tuesday, May 13th at the
Kerby Centre. Ladies, family members
and caregivers are always welcome.

Active Surveillance
for Prostate Cancer

Active surveillance (AS) has become a
more viable option for men with low-risk
prostate cancer who decide not to under-
go active treatment right away.

During AS, prostate cancer is carefully
monitored for signs of progression
through regular PSAs (blood tests for
prostate-specific antigen), prostate ex-
ams, imaging and sometimes repeat biop-
sies. If symptoms develop, or if tests indi-
cate the cancer is more aggressive, active
treatment might be warranted.

Studies evaluating the outcomes, benefits,
concerns and quality of life of men
undergoing AS for prostate cancer were
presented during the May 2014 Scientific
Meeting of the American Urological
Association in Orlando, FL. Highlights of
articles prepared by medical writers for
URO TODAY follow.
Dr. Laurence Klotz from Sunnybrook Health Sciences Centre in Toronto presented data of nearly 20 years on a single center active surveillance study which included 840 men with low- or intermediate-risk PCa. The study was initiated in 1995 and consisted primarily of patients with Gleason 3+3=6 disease with PSA < 10. Patients with Gleason 3+4=7 and/or PSA 10-15 were included if they were over age 70.

These men were followed with PSA checks every 3 months for 2 years, then every 6 months. A prostate biopsy was repeated 1 year after initial diagnosis, and then every 3-5 years until age 80. Treatments were offered if:

- Repeat biopsy showed an increase in Gleason score,
- PSA doubling time was less than 3 years (until 2009), or
- A significant lesion was seen on MRI (since 2010).

Dr. Klotz reported the rate of disease upgrading was 20% at the start and then ~1% per year afterwards, which he attributed to the natural biologic progression of disease.

At a median follow up of 8.1 years, results show:

- Of the 840 men enrolled, 693 are still alive.
- At 5, 10, 15 and 20 years after diagnosis, 77.1%, 63.4%, 52.3% and 52.3% of patients, respectively, remain on active surveillance.
- Only 15 men (1.5%) had died from PCa and 7 men (1.2%) are living with metastatic disease.

Dr. Klotz stated that these rates of metastatic disease and mortality were in line with patients undergoing immediate definitive therapy for favourable-risk disease. Actuarial prostate cancer specific mortality at 10 and 15 years was 1.9% and 5.7%, respectively. He reported that the odds of men dying of other causes were nearly 10 times higher than the odds of dying from prostate cancer!

Overall, 208 of 840 patients were treated for PCa, and post-treatment biochemical recurrence was experienced by only 6.3%. The most common trigger for treatment was PSA doubling time < 3 years (43.5%), which Dr. Klotz emphasized would change going forward as the use of PSA doubling time has been replaced by the use of MRI imaging criteria.

Dr. Klotz concluded that active surveillance was feasible and safe for patients with low- or intermediate-risk prostate cancer in a 15-year time frame. Improvements could be made to decrease the mortality rate in this low-risk cohort, and focusing on better ways to risk stratify men may further improve the safety of active surveillance.

During the Q&A, Dr. Klotz stated that when looking at outcomes for Gleason 3+3 versus Gleason 3+4 patients, Gleason 3+4 disease was not predictive of disease progression or mortality. He noted that none of the patients in this study with Gleason 3+3 disease, confirmed on radical prostatectomy, ultimately developed metastatic disease. Dr. Klotz’s research highlights the relatively indolent nature of those who truly have Gleason 6 disease.

**Multiparametric prostate MRI and MRI/ultrasound fusion biopsy in the follow-up of prostate cancer progression for men on active surveillance**

Men with low-risk PCAs are increasingly offered active surveillance, involving serial prostate biopsy in order to assess for progression of disease. While the definition of “low-risk” disease remains controversial, all of the established criteria for active surveillance eligibility are based on a template 12-core biopsy of the prostate. This approach is widely adopted, but may be problematic as nearly 1/3 of all men on active surveillance harbour more aggressive disease, as found on final pathology, than predicted by a 12-core biopsy.

Multiparametric MRI-ultrasound fusion-targeted biopsy has been shown to detect higher grade cancer than a 12-core biopsy in multiple studies, but has not been studied in the context of active surveillance. In order to evaluate the performance of targeted biopsy and MP-MRI in monitoring for disease progression, Dr. Annerleim Walton-Diaz et al at the US National Cancer Institute conducted a study of men with very low-risk disease who underwent serial imaging and biopsy, representing the largest series of its type to date.

Patients qualifying for active surveillance underwent an initial MP-MRI with fusion biopsy and a 12-core biopsy, and thereafter were followed with a yearly MP-MRI and biopsy session. The study endpoint was progression to a Gleason sum of 3+4 in any core of a targeted or 12-core biopsy. A change in MP-MRI findings, including an increase in lesion diameter, number of lesions, or lesion suspicion score was used as a metric to assess the predictive power of MRI for increase in tumour grade.

Over a median follow-up of 18 months, 10 of the 53 patients progressed to Gleason 3+4 disease. The majority of this pathologic progression was detected by targeted biopsy. While the positive predictive value of MRI for an increase in Gleason score was 50%, the negative predictive value was high at 84%. Sensitivity and specificity were comparable at 70% and 72% respectively.
These findings demonstrate that patients with very low-risk PCa can be safely followed with serial MP-MRI if imaging findings remain stable. Where biopsy is indicated, MRI-targeted biopsy detects a majority of progression. As such, MP-MRI and fusion biopsy may be useful adjuncts or replacements for template 12-core biopsy, specifically in the follow-up of men on active surveillance. The researchers noted that further studies are necessary to delineate the indications, eligibility criteria, and interval of follow-up for introducing these modalities into clinical practice.

In men suspected of having PCa, the current standard is ultrasound-guided template 12-core biopsy to determine the grade and relative burden of disease. However, this procedure has its pitfalls: up to 1/3 of men have higher grade disease found at radical prostatectomy. Multiple studies have demonstrated that MRI-ultrasound fusion-guided biopsy, which layers previously obtained MRI data over a real-time ultrasound image, allows for targeting of lesions in the prostate and is more accurate than 12-core biopsy.

While an eventual aim might be for targeted biopsy to supplement or replace template biopsy, the major limitation is a lack of comparison of the targeted biopsy results to final pathology. The accuracy of preoperative histology is an essential component of treatment planning – specifically in patients who are candidates for active surveillance.

In a six-year analysis of men who underwent radical prostatectomy at the US National Cancer Institute, Dr. Arvin George et al sought to evaluate the performance of targeted biopsy and standard 12-core biopsy as compared to the definitive pathology obtained after surgery.

The authors prospectively collected data on patients who underwent MR-ultrasound fusion and standard 12-core biopsies in the same session, and who subsequently went on to have radical prostatectomy. Cancers detected by either biopsy method and on final surgical pathology were compared in terms of Gleason sum. Nearly 50% of template 12-core biopsies under-graded cancer compared to 32% of MRI-ultrasound fusion biopsies. This difference was more pronounced when accounting for high-grade disease, with 53% of 12-core biopsies being upgraded to Gleason ≥ 8, almost double the rate of targeted biopsy.

These findings show that MRI-ultrasound fusion biopsy is more representative of the Gleason grade. Though upgrading occurred from targeted biopsy to final pathology, this study may herald further acceptance of targeted prostate biopsy as an adjunct or successor to the 12-core biopsy.

### Health-Related Quality of Life in Men Undergoing Active Surveillance versus Radical Prostatectomy for Low Risk Prostate Cancer

In men with low-risk prostate cancer, researchers from Virginia Mason Medical Center in Seattle, WA and Center for Prostate Disease Research in Rockville, MD set out to determine if active surveillance would result in better health-related quality of life outcomes than more aggressive therapies such as surgery. The researchers examined the results of 278 men enrolled in the Center for Prostate Disease Research national database between January 2007 and December 2011. Baseline, one- and two-year data on health-related quality of life were collected from men who selected either active surveillance or radical prostatectomy.

Results showed:
- At 2 years after diagnosis of PCa, sexual function declined for both groups, but larger declines were seen in the radical prostatectomy group (-25.4, 95 percent CI: -30.3,-20.5) versus the active surveillance group [-7.5, 95 percent CI: -12.8,-2.2 (p<0.001)].
- At 2 years, urinary function declined for both groups; however, larger declines were seen in the radical prostatectomy group (-14.0, 95 percent CI: -17.5,-10.6) versus the active surveillance group [-4.6, 95 percent CI: -9.1,-0.1 (p<0.001)].
- No statistically significant differences were found for bowel function, physical health or mental health between the two groups.

### Thirteen Years of Experience in Active Surveillance: Malcompliance a Major Concern in the Long-Term

Long-term follow-up of men with PCa shows that active surveillance, as a treatment option, may not be as safe as thought, due to men not following up with their physician.

Researchers from Cantonal Hospital in Baden, Switzerland conducted a prospective study starting in 1999 that followed 157 patients on active surveillance over a 13-year period.

Results showed that after 13 years:
- 28% of patients required definitive treatment. Almost all of these men were cured of prostate cancer.
• Loss to follow-up is considerable: 27% of all patients did not show up to the recommended appointments.
• 50% remained on active surveillance group, 11% were lost to follow-up and the overall drop-out rate was 36%.

**Does Active Surveillance Miss the Window for Cure?**

Active surveillance prior to radical prostatectomy is a viable strategy to reduce the chances of over treatment while ensuring the window of opportunity for cure is not missed, according to a study by researchers from New York University and the National Prostate Cancer Register of Sweden. They compared 634 men who had delayed prostatectomy after surveillance to 634 matched patients who had immediate radical prostatectomy.

These data show that, although men who underwent delayed radical prostatectomy had more high-grade disease compared to those who had immediate radical prostatectomy, there were no significant differences in prostate cancer recurrence or death. Specific results showed:

• The 634 men who underwent radical prostatectomy after a period of active surveillance were more likely to have higher grade disease at the time of surgery.
• On multivariable analysis controlling for other factors, delayed radical prostatectomy was associated with a greater risk of an increased Gleason score (above seven) at time of surgery.
• There were no significant differences in biochemical recurrence, secondary treatment, or death from PCa between the two groups at a median follow-up of 7 years.

“No not all prostate cancers require immediate radical treatment, which makes active surveillance a very viable option for some men,” said Dr. Loeb. “These data suggest active surveillance with selective delayed therapy, such as radical prostatectomy, is a viable strategy for reducing the risk of over treatment and is an important consideration for physicians to discuss with their patients.”

**As always, PROST AID CALGARY recommends that men consult their doctors before starting any therapies or approaches discussed in The Digital Examiner.**

**Prostate Cancer Research Institute Conference**

The Prostate Cancer Research Institute’s 2014 Conference for Prostate Cancer Patients and Caregivers will be held from Friday-Sunday, Sept 5-7, 2014 in Los Angeles, CA. PCCN-Calgary will reimburse 10 members for their early registration fee and Saturday evening dinner. Early registration ends on June 30. For info about the conference, see www.prostate-cancer.org. If you are thinking about attending, please contact Stewart Campbell.

**Calgary’s Finest Automotive Exhibition**

**“Fun in The 50’s” Festival**

Sunday, June 29, 2014 at Grey Eagle Resort & Casino

Our 6th Annual 2014 Show ‘n Shine will be held on Sunday, June 29th at the Grey Eagles Casino. The event will feature:

• Parking for 500 exhibitors
• Music by “Blue Brothers Too” from Kelowna
• A new “Men’s Health Challenge”
• The MAN VAN™ for free PSA testing
• Silent Auction
• Prizes, raffles, 50:50 draw and much more ....

**Donations for Silent Auction**

We are looking for donations of valuable items from individuals and companies for our Show ‘n Shine Silent Auction. We will issue an income tax receipt based on the estimated value of the item. Do consider making a donation or approaching a company on our behalf. Contact Ron Gorham or Stewart Campbell for more information.

**Recent Donations to PROST AID CALGARY**

We are extremely fortunate to have a very rare Hertz Shelby GT 350H neon sign donated to us. Ron Gorham is developing a North American marketing plan for this unique collector’s item.

In May, we received a donation from Spruce Meadows after applying to its “Horses Jump to Give a LEG UP” program to help charities whose donations were impacted by last year’s flood. We are very grateful to Spruce Meadows for their donation.

Members receiving this issue of The Digital Examiner by email will find attached a voucher for two to attend the Spruce Meadows National from June 4—8, 2004.

We are extremely pleased to have received a donation from Astellas Pharma and will apply their funds to assist in the delivery of our programs to our Warriors.

**Prostate Cancer Research Institute Conference**

2014 Prostate Cancer Conference

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