Editor’s Notes

Each year, Cancer Council Queensland awards The William Rudder Travelling Fellowship to a person working in the field of cancer research, detection, treatment or control. This year the CCQ Board of Councillors decided that prostate cancer would be targeted for the Rudder Fellowship and have appointed Brisbane Urologist, Dr John Yaxley M.B.B.S. F.R.A.C.S.(UROL) as the 2008 William Rudder Travelling Fellow.

Dr Yaxley specialises in the treatment of prostate and urological cancers and will travel to the U.S.A. in November to participate in conferences and study groups dealing with this disease.

At 6pm on Monday 1st December, 2008, Dr Yaxley will give the William Rudder Memorial Lecture, hosted by Cancer Council Queensland, at CCQ’s head office, 553 Gregory Terrace, Fortitude Valley, Brisbane (William Rudder House). He will speak about current and future therapies for dealing with prostate cancer.

John Yaxley is well known to many within the Prostate Cancer Support Groups. He has been a willing and informative speaker over the years. Members of groups, particularly those in S.E. Queensland, and others with an interest in prostate cancer, are welcome to attend what will be a very interesting and informative talk.

Wishing you low PSA’s and good health,

Editor: John Stead.

CALENDAR 2008

Run for a Cure – Clip for Cancer – Dress Down Day – any time during the year

Relay for Life is to be held in 41 locations across Queensland in 2008.

Phone 1300 65 65 85 or visit www.cancerqld.org.au to register

| Oct | 3  Breast Cancer Awareness Month
     | 3-5  Challenge for Cancer – State Finals
     | 5-11 Mental Health Week
     | 14-19 Long Ride for Prostate Weekend
     | 24  Touched by Cancer, Coomera
     | 27  Pink Ribbon Day
| Nov | 7  Nurse of the Year, Gala Ball
     | 15-17 Inaugural PCFA National Conference
         “Supporting Quality of Life”, Gold Coast
     | 16-21 Aust Health & Medical Research Congress, Brisbane
     | 16-22 National Skin Cancer Awareness Week
     | 19-21 COSA Scientific Meeting, Sydney
| Dec | 1  William Rudder Memorial Lecture – Dr John Yaxley

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The views expressed in this newsletter are not necessarily those of

Cancer Council Queensland.
Resources

Cancer Council Queensland
www.cancerqld.org.au

The Cancer Council Helpline
Ph 13 11 20 8am-8pm Mon-Fri
Research to beat cancer and comprehensive community support services.

Lions Australian Prostate Cancer
www.prostatehealth.org.au
The first stop for newly diagnosed men seeking information on the disease.

Andrology Australia
www.andrologyaustralia.org
Andrology Australia is the Australian Centre of Excellence in Male Reproductive Health.

HealthInsite www.healthinsite.gov.au
Your gateway to a range of reliable, up-to-date information on important health topics.

Cochrane Library www.cochrane.org
Australians now have free access to the best available evidence to aid decision-making.

Prostate Cancer Foundation of Australia
www.prostate.org.au
A consumer’s view of the experience of diagnosis and treatment for prostate cancer.

Queensland Chapter www.pcfa.org.au
Information, patient support materials, and contacts for advice on living with prostate cancer in Queensland.

APCC Bio-Resource
www.apccbioresource.org.au
The national tissue resource underpinning continuing research into prostate cancer.

Mater Prostate Cancer Research Centre
www.mmri.mater.org.au
Comprehensive information for those affected by prostate cancer, including the latest research news.

Prostate Cancer Support Groups in the Queensland Chapter
There are 18 PCSGs in the Chapter with a total membership of approximately 3,100 men.

<table>
<thead>
<tr>
<th>Peer Support Group</th>
<th>Contact</th>
<th>Phone</th>
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</thead>
<tbody>
<tr>
<td>Brisbane</td>
<td>Peter Dornan</td>
<td>07 3371 9155</td>
</tr>
<tr>
<td>Bundaberg</td>
<td>Trevor Tuesley</td>
<td>07 4152 5524</td>
</tr>
<tr>
<td>Central Qld. (Rockhampton)</td>
<td>Bill Forday</td>
<td>07 4922 3745</td>
</tr>
<tr>
<td>Darwin</td>
<td>Peter Harvey</td>
<td>08 8932 1923</td>
</tr>
<tr>
<td>Far North Qld. (Cairns)</td>
<td>Jim Hope</td>
<td>07 4039 0335</td>
</tr>
<tr>
<td>Gladstone</td>
<td>Geoff Lester</td>
<td>07 4979 2725</td>
</tr>
<tr>
<td>Gold Coast</td>
<td>James Stanfield</td>
<td>07 5545 4235</td>
</tr>
<tr>
<td>Gympie &amp; District</td>
<td>Norm Morris</td>
<td>07-5482 6196</td>
</tr>
<tr>
<td>Hervey Bay (Pialba)</td>
<td>Brian Henderson</td>
<td>07 4128 3328</td>
</tr>
<tr>
<td>Ipswich</td>
<td>Len Lamplecht</td>
<td>07 3281 3656</td>
</tr>
<tr>
<td>Mackay</td>
<td>Ted Oliver</td>
<td>07 4942 7916</td>
</tr>
<tr>
<td>Maryborough</td>
<td>Leoll Barron</td>
<td>07 4123 1190</td>
</tr>
<tr>
<td>Northern Rivers (Alstonville)</td>
<td>Pat Coughlan</td>
<td>02 6622 1545</td>
</tr>
<tr>
<td>Sunshine Coast (Maroochydore)</td>
<td>Rob Tonge</td>
<td>07 5446 1318</td>
</tr>
<tr>
<td>Toowoomba</td>
<td>Len Walker</td>
<td>07 4636 3739</td>
</tr>
<tr>
<td>North Queensland (Townsville)</td>
<td>Merv Albion</td>
<td>07 4778 1137</td>
</tr>
<tr>
<td>Twin Towns &amp; Tweed Coast</td>
<td>Ross Davis</td>
<td>07 5599 7576</td>
</tr>
<tr>
<td>Whitsunday (Proserpine)</td>
<td>Dave Roberts</td>
<td>07 4945 4886</td>
</tr>
</tbody>
</table>

The news-sheet for any group should have the meeting details for its neighbouring groups.

Associated Support Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Contact</th>
<th>Phone</th>
<th>Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alice Springs</td>
<td>Murray Neck</td>
<td>08 8952 3550</td>
<td>Darwin</td>
</tr>
<tr>
<td>Beaudesert</td>
<td>Carmel O’Neill, RN</td>
<td>07 5541 9231</td>
<td>Beaudesert Health/Gold Coast</td>
</tr>
<tr>
<td>Capricorn Coast (Yeppoon)</td>
<td>Jack Dallachy</td>
<td>07 4933 6466</td>
<td>Central Qld. (Rockhampton)</td>
</tr>
<tr>
<td>Kingaroy</td>
<td>Robert Horn</td>
<td>07 4162 5552</td>
<td>Toowoomba/Sunshine Coast</td>
</tr>
</tbody>
</table>
SPOTLIGHT ON North Queensland (Townsville)

This year Townsville City Council and Thuringowa City Council amalgamated into one regional council, now the New Townsville City Council with a combined population of about 170,000.

Due to the council amalgamations we had a name change to reflect the new local government district and also embrace our surrounding regional centres. Formerly our group was the Townsville & Thuringowa Prostate Cancer Support and Awareness Group. We are now Prostate Cancer Support Group of North Queensland (Townsville Branch). This covers other regional centres such as Hinchinbrook (Ingham), Charters Towers and the Burdekin (Ayr/Home Hill) who are currently supported from Townsville, but may start their own Groups in the future.

During the year we travelled to the Burdekin and Hinchinbrook to promote prostate cancer awareness. We also offered assistance to anyone interested in starting up a local support group.

Our group participated for the fifth time in the annual Townsville Relay for Life in May. Approximately 164 teams were involved across the community. This is a great event for members of our group to get together in a relaxed and convivial environment, and an opportunity for others impacted by prostate cancer to talk about how it has affected their lives. Even though there have been tough times, people get through with good support and a sense of humour. Our team raised over $3,000 for Cancer Council Queensland.

This year one of our members passed away from advanced prostate cancer after enduring three years of various treatments. He spent 10 weeks in the oncology ward of the Townsville Hospital with five other patients. His death was slow and traumatic for his family who spent many hours at his bedside. Group members who visited were shocked at the lack of privacy and support facilities.

Cancer Council Queensland is building the Townsville Hospice, adjacent to the oncology ward at the Townsville hospital. A sum of $6.5 million has been raised locally for the project. Construction began at the end of August 2008 and the complex will be ready for occupation in approximately 12 months time. This will be a state of the art facility, catering for palliative care patients in the final stages of their life with family involvement.

At the request of our member’s wife we set about raising money for this cause. Our group sees this project as a priority. We have been able to make two substantial donations specifically for the hospice and will continue to contribute whenever possible. These donations have been in addition to our contribution to Relay for Life. Our group would like to see all regional hospitals with this type of facility. Cancer Council in Townsville is to be congratulated on identifying this community need and raising the required funds without government assistance.

In September last year we hosted the Commonwealth Bank Men’s Rural Health Initiative with a seminar at the Townsville Hospital. This year our group decided to join with Cancer Council Queensland in hosting a similar event which was held on Wednesday, 3 September 2008, again at the Townsville Hospital. Local specialists kindly donated their time to participate and support our cause. We were also supported by the pharmaceutical company Hospira, who assisted us with catering. This was an evening event and was aimed at men who have been diagnosed with prostate cancer and awaiting treatment, or have been treated. Speakers provided information about the very latest in radiotherapy and post-treatment problems. Sylvia Milner from Cancer Council Queensland in Brisbane spoke about results of the Proscan study.

On Tuesday, 19 August 2008, we hosted the Queensland Chapter Council of the Prostate Cancer Foundation of Australia for its first ever meeting in regional Queensland. The committee was able to attend our regular monthly meeting and held its Council meeting at the local Cancer Council conference room that night. Our Convenor Merv Albion and founding member Les Payne were in attendance and Les was commended for his efforts in setting up what appears to be the longest running Prostate Cancer Support Group in Australia.
I would like to thank Graeme Higgs and the Queensland Chapter Council for visiting Townsville, and for their valued support. After our recent Convenors’ Conference in Cairns, it was announced that the Chapter Council planned to meet in other regional centres in 2009.

This year’s Convenors’ Workshop in Cairns (instead of Brisbane) was innovative and surprising and I would like to congratulate the organisers on their wonderful program, outstanding hospitality and selection of venue. I wonder if we will be able to duplicate this in the future?

Our monthly meetings continue to attract on average 30 to 40 men and women which, for a morning meeting, is quite pleasing. We have been fortunate to have local health professionals address our monthly meetings and our group is appreciative of their support.

We are currently looking at re-establishing night time meetings in addition to our daytime sessions, aimed at prostate health and possible prostate problems in later life. This will increase awareness and encourage those who attend to seek early advice and testing.

I would like to thank Cancer Council Queensland here in Townsville for its ongoing assistance and my fellow Committee Members, Les Payne, Fred Thompson, John Evans and Ray Young and their partners for their contribution. This strong support is invaluable in assisting our group to support those diagnosed with prostate cancer and promote awareness within the community.

Merv Albion
Convenor
PCA3 - Prostate Cancer Gene 3

PCA3 (or DD3) was identified in 1999 by Dr Marion Bussemakers who found that its messenger RNA (mRNA, which transfers DNA “instructions” from the PCA3 gene) is greatly over-expressed in a high percentage of prostate cancer (CaP) tissue compared to normal or benign prostate tissue of the same patients. In contrast to serum PSA, PCA3 is not only prostate-specific, but also CaP-specific (no other human tissues have been shown to produce PCA3). The ‘uPM3’ test, introduced in 2004 by Bostwick Laboratories, assayed for the PCA3 mRNA from prostatic cells in urine captured immediately following a digital rectal examination (DRE). Independent studies reported that uPM3 made a significant improvement in the detection of CaP compared with the use of PSA alone.

By 2006 investigators were evaluating the PCA3 test in men with treated cancer (post RP), BPH, untreated CaP, and normal prostates (based on transurethral ultrasound biopsies), and finding near-complete separation of the groups on the basis of PCA3 results alone. Bostwick then introduced ‘PCA3Plus’, the next generation genetic test for risk of CaP, using technology that provided greater reproducibility than ‘uPM3’.

PCA3 tests are licensed from the Canadian company DiagnoCure, which holds worldwide patent rights for the diagnostic and therapeutic application of the PCA3 gene. The PCA3 test in now available across the European Union, from one Canadian laboratory, and from five laboratories in the USA (certified to perform high-complexity clinical testing, but not approved by the FDA). The PCA3 test available in the UK is ‘Progensa’, which costs about £200 compared with about £10 for a PSA test. For this reason it is unlikely to be used as routinely as the PSA test, but it could theoretically reduce the cost of biopsies at £500 each.

PCA3 is now recognised as the best CaP-specific marker. An online resource, the Prostate Cancer Gene 3 website, http://www.PCA3.org, is provided by Ismar Healthcare, a Belgian company which aims to bridge “the gap between science and clinical practice.”

**PCA3 Test and Characteristics** – For patients who receive the test, their prostate is massaged three times on each side during a DRE by a urologist. This exam causes cells from the patient’s prostate to be shed into the urine (urinary sediments) and about 25 mL of first-catch urine are collected. The urine sample is tested for the genetic marker PCA3 mRNA, the concentration of which is used to calculate a PCA3 score, defined as the ratio of PCA3 mRNA/PSA mRNA ×103.

The higher the PCA3 score, the more likely it is that cancer is present. The percentage of men with a positive biopsy increases with the PCA3 Score. A PCA3 Score cut-point of 35 provides the greatest diagnostic accuracy, ie. balance between sensitivity (57 per cent) and specificity (73 per cent)\(^1\). A study has found that men with a PCA3 Score ≥ 35 had two and a half times the risk of a positive biopsy compared to those with a PCA3 Score < 35, and almost one in two men with a PCA3 Score ≥ 35 were found to have CaP.

Diagnostic studies have also found that in men who have previously had a negative biopsy, the PCA3 test can more accurately predict which men are likely to have a positive follow-up biopsy than the per cent free PSA test alone. PCA3 is independent of age, prostate volume, total PSA serum level and the number of prior biopsies. A recent prospective, multicentre study in patients having a repeat biopsy found that the PCA3 score (cut-point at 35) had a greater diagnostic accuracy than percent free PSA (cut-point at 25 per cent).

In prognostic studies, low PCA3 levels correlate strongly with smaller tumour size and a lower Gleason Score (GS). There are differing reports on whether the PCA3 score correlates with either CaP volume or pathological stage in prostatectomy (RP) specimens, but the PCA3 score was significantly different when comparing significant cancer and low volume/low grade cancer (CaP < 0.5 mL, GS 6). No significant associations have been found with the expression of biological aggressiveness markers (eg. E-cadherin, alpha-catenin, and EZH2). In a recent study, the comparative PCA3 score was significantly higher in men with: (a) high-grade prostatic intraepithelial neoplasia (HGPIN) vs those without HGPIN; (b) clinical stage T2 vs T1; (c) GS ≥7 vs GS <7; and (d) clinically “significant” vs “indolent” CaP (T1c, GS ≤ 6, positive cores ≤ 33 per cent).

**Application** – PCA3 does have some things going for it. PCA3 is highly specific to CaP and, therefore, in contrast to serum PSA, it is not affected by conditions such as BPH or prostatitis. It’s possible that the PCA3 score could be incorporated into a nomogram for improved prediction of biopsy outcome. It’s encouraging that there is a consistent association between known higher as opposed to lower risk factors, but larger studies with adequate follow-up are needed to assess the prognostic value of the PCA3 test.

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1 *Sensitivity* is a measure of the reliability of a screening test based on the proportion of people with the disease who react positively to the test (ie. the higher the sensitivity the fewer the false negatives). This contrasts with

*Specificity*, which is the proportion of people free from the disease who react negatively to the test (ie. the higher the specificity the fewer the false positives).
The available evidence supports the use of the PCA3 test when a man’s first biopsy is negative but his PSA level remains high. If the PCA3 test indicates it is unlikely that the man has CaP this reassures both the man and his doctor, and biopsies are carried out only when absolutely necessary. The PCA3 test may have a role in other circumstances but these are speculative until there is evidence of what they might be. For example, researchers are investigating whether PCA3 will improve our ability to identify aggressive cancers. If proven in definitive trials, PCA3 testing could become an important tool to help us decide not only who should undergo biopsy, but also who should undergo treatment. For example, the PCA3 test may be clinically useful in identifying men with low-grade or low-volume cancer for whom watchful waiting would be more appropriate than aggressive treatment.

Thus, in the UK, the PCA3 test is not part of a routine health service and cannot be done on request by a GP for a man who fears he may have CaP. Its potential, or otherwise, as a screening test, is unknown. The PCA3 test is used in specialist consultations where the doctors already know there is a prostate problem.

**Multiplex Tests** — It has become clear that with a better understanding of gene and protein expression in cancerous and normal or benign tissue, new molecular assays will be developed to aid in CaP detection. And it’s happening here - see QPCN April 2008 for the awards Professor ‘Frank’ Gardiner has received for his research into “PCA3 and Claudin-4 in Prostate Tissue and Prostatic Fluid” and “Improved Markers for Prostate Cancer Detection”. His team pioneered the use of prostatic fluid in the early diagnosis of CaP and, having noted that neither PCA3 nor any other single marker is over-expressed in all CaP cells, they aimed to develop an accurate diagnostic test for CaP from a panel of molecular markers using prostatic fluid. They evaluated alone and in combination the RNA markers PCA3, PSMA, hepsin, and claudin-4 in post-DRE urinary sediments, seminal fluid, and urethral washings immediately following ejaculation. They were very pleased with the outcome:

<table>
<thead>
<tr>
<th>Best results</th>
<th>A. PCA3 Ejaculate</th>
<th>B. Hepsin Post Ejaculate Urine</th>
<th>C. Combination A + B + PSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitivity</td>
<td>82%</td>
<td>100%</td>
<td>85%</td>
</tr>
<tr>
<td>Specificity</td>
<td>78%</td>
<td>56%</td>
<td>100%</td>
</tr>
</tbody>
</table>

They concluded that multiple markers enhance PCA3 results; that seminal fluid and post-ejaculate urine give better results than post DRE and prostatic massage urine; and that hepsin is emerging as a useful second diagnostic marker.

Other research teams are employing multiple markers, adding different genes to PCA3 in assays of post-prostatic massage fluid. For example, adding a ‘fusion gene’ (TMPRSS2:ERG) to PCA3, lifted one group’s PCA3 detection rate from 62 per cent sensitivity to 73 per cent. Recently, multiplexing PCA3 with three other genes (TMPRSS2:ERG, GOLPH2 and SPINK1) in urine after digital pressure to the prostate, provided a sensitivity of 66 per cent and a specificity of 76 per cent. The researchers claim this is the best test so far, more accurately detecting CaP than any other screening method currently in use.

**References**

- Detailed analysis of histopathological parameters in radical prostatectomy specimens and PCA3 urine test results
- Martijn P.M.O. van Gils et al, The Prostate, 27-Jun-08: 68 (11), 1215 - 1222
- Clinical Utility of the PCA3 Urine Assay in European Men Scheduled for Repeat Biopsy
- Alexander Haese et al, European Urology (online 26-Jun-08, ahead of print)
- PCA3 Molecular Urine Assay Correlates With Prostate Cancer Tumor Volume: Implication in Selecting Candidates for Active Surveillance
- Predicting Prostate Cancer Behavior—What is a Urologist to Do?
- PCA3: A Molecular Urine Assay for Predicting Prostate Cancer Outcome
- PCA3 molecular urine assay correlates with prostate cancer tumour volume: implication in selecting candidates for active surveillance.
- editorial: Leonard Marks, Adam Kibel
- Novel Progensa PCA3 Assay May be More Specific Than Traditional Testing Methods
- PCA3 and Claudin 4 in Prostate Tissue & Prostatic Fluid
- L Teng et al, the best scientific podium presentation, 24-28 February 2008, 61st Annual Scientific Meeting, Urological Society of Australia and New Zealand, Hong Kong
- First-Generation Multiplex Biomarker Analysis of Urine for the Early Detection of Prostate Cancer
- Identification of PCA3 (DD3) in prostatic carcinoma by in situ hybridization
- Ion Popa et al, Modern Pathology, 2007; 20: 1121–1127; published online 14-Sep-07
- The Identification of Novel Therapeutic Targets for Prostate Cancer
- Kelly Anne Landers, Australian Digital Theses Program, University of Queensland, 2007
- PCA3 and its use as a diagnostic test in prostate cancer.
- Interview with Jack Schalken by Christine McKillop. European Urology, 2006; 50(1):153-154
- Screening for Prostate Cancer
- Mitchell Sokoloff MD: 2006 AUA Highlights (CME), Medscape Today


The PCA3 links page by DiagnoCure, including the role of Gen-Probe in the test’s development, http://www.PCA3.org

The Prostate Cancer Gene 3 website, maintained by Ismar Healthcare
Letter to the Editor

I note in the September issue of Queensland Prostate Cancer News an article on Hyperbaric Oxygen Therapy for Delayed Radiation Injury, and I thought I might share my experience.

I had radiotherapy some years ago in Melbourne and sustained “radiation necrosis.” I had been advised that I might suffer some burning at the radiation site, but no worse than a mild case of sunburn. Some sunburn! I had a continually suppurating wound that required daily dressings at the hospital and this was after four weeks of radiotherapy for five days per week. The radiation had irradiated the cancer in my lymph nodes but also the surrounding flesh, destroying any possibility of curing the necrosis.

My choice was two to three weeks in hospital for plastic surgery/skin grafts in an awkward spot, or hyperbaric oxygen therapy. I chose to try the latter.

It involved sitting in a hyperbaric chamber (much smaller than the one pictured in the QPCN article) for up to three hours per day, five days per week for three weeks. Very time consuming, but the good news is that it cured the necrosis without any other treatment.

I see in the Northern Territory News that there is a new hyperbaric oxygen unit in Darwin. Anyone suffering from necrosis similar to mine should try it before undertaking any surgical treatment.

The radiation and follow up took seven to eight weeks and I was able to continue working. Unfortunately it didn’t eliminate the cancer. Such is life!

Cheers,
Tim Matheson (Darwin Prosper Prostate Cancer Support Group)

Queensland Cancer Chief Honoured

Cancer Council Queensland CEO, Professor Jeff Dunn has been named as a member of the Lance Armstrong Foundation advisory committee. Professor Dunn, a behavioural scientist, is one of only two non-Americans on the nine-member committee that aims to take the not-for-profit charity to the world.

The Foundation, named after cycling great Lance Armstrong who was a seven times winner of the Tour de France after a successful battle with testicular cancer, was established in 1997. In the U.S.A. it runs cancer call-in centres and survivors’ programs and is looking to expand its role internationally.

Jeff Dunn has been at the helm of Cancer Council Queensland for six years and during that time its annual funding for cancer research has quadrupled and revenue has more than doubled. Apart from his CEO role and position on the Lance Armstrong committee, he is on the Strategic Coordinating Committee and Taskforce running the “Needs Assessment of Cancer Patient Groups in Eastern Europe” pilot project, he is on the editorial advisory boards of Bloom (the Reach to Recovery International newsletter) and Global News Alert (the monthly newsletter of the Global Cancer Control Community) and is currently organising the Reach to Recovery International Breast Cancer Support Conference to be held in Brisbane 13-15 May 2009.

NATIONAL PROSTATE CANCER CONFERENCE
SUPPORTING QUALITY OF LIFE
Crowne Plaza Hotel, Royal Pines Resort, Gold Coast.
Phone 1800 66 81 37, or visit www.prostate.org.au for details.
Management of Advanced Prostate Cancer

Prostate cancer is a disease of older men. This is borne out by statistics showing that approximately 90 per cent of men over the age of 80 have histological evidence of prostate cancer and leads to the old saw that “more men die with rather than die of prostate cancer.”

Unfortunately many men take statements such as these at face value and become apathetic when it comes to regular prostate cancer checks. Statistics from the U.S.A. for prostate cancer diagnoses from 2000 to 2004 show that 0.5 per cent were diagnosed between ages 35 – 44, 8.4 per cent between 45 – 54, 27.3 per cent between 55 – 64, 36.7 per cent between 65 – 74 and 27.1 per cent in men 75 or older. Of those diagnosed, 87 per cent survived in excess of five years from the time of diagnosis.

The statistics bear out the “older men” adage, but there are still many diagnoses in “young” men. Regular testing from age 50 onwards, or age 40 if there's a family history of prostate cancer, is the sensible recommendation.

Like all cancers, the maxim “the earlier the detection, the more chance of a cure,” applies to prostate cancer. Those who seek help and are diagnosed only after symptoms appear are more likely to have advanced disease and even if they finally succumb to a morbidity other than the prostate cancer, it’s possible that their quality of life may be severely compromised in their final years by the side-effects of therapies used to keep the prostate cancer in check.

Oncologist, Dr David Grimes has worked with prostate cancer patients for many years and is currently based at the Wesley, Greenslopes and North-West Hospitals in Brisbane. At the Brisbane Group’s August meeting, Dr Grimes gave an update on the management of advanced prostate cancer which can vary greatly from the treatment of localised disease.

“Advanced” is used to describe a tumour that has spread beyond the prostate (no longer localised). It may have spread into the immediate tissue and/or organs surrounding the gland (locally advanced) or may have spread further afield into the lymph nodes and be higher up in the pelvis or have spread into the bones (metastatic disease).

The slide below shows the stages of local prostate cancer growth. “Staging” is an important part of diagnosis and will have a bearing on treatment options. In Stages T1 and T2 the tumour is confined to the prostate gland, in T3 it has spread to the surrounding tissue and perhaps the seminal vesicles, and in T4 it has gone further and may be in the wall of the bowel and/or bladder.

While there is much debate about treatment for Stages T3 and T4, there is the potential for a cure in these cases using surgery or radiotherapy or a combination of both. Watchful waiting may also be applicable depending on the patient’s age and general health. However once the cancer has spread into the lymph nodes and other abdominal areas, or there is metastatic disease present, the cancer cannot be cured but it can usually be controlled.
Control involves systemic or total body treatments that can include hormonal therapies, cytotoxic (chemotherapy) medication, biologic drugs, the use of radio-isotopes, localised anti-cancer treatments, adjunctive therapies and general symptom management. The use of these should be planned for long-term management to deliver both quality and quantity of life. Usually the least aggressive methods are tried initially to give less toxicity and keep options open for the future.

The dominant hormonal growth stimulus of prostate cancer is testosterone. Hormonal therapies are aimed at depriving the tumour of testosterone to inhibit its growth. This can be done at several levels and with several therapeutic modes. Androgens, a term encompassing male sex hormones of which testosterone is the most prolific, are produced by the testicles and adrenal glands. Elimination of testicular androgens can be via either removal of the testicles (orchiectomy or castration) or by the use of luteinising hormone releasing hormone analogues (LHRH-A), preventing the testicles from producing testosterone. The action of testosterone can be blocked with the use of drugs called anti-androgens that inhibit the uptake of testosterone by the prostate and tumour cells. LHRH-A and anti-androgen treatments are known as androgen deprivation therapy or hormone therapy and can be given by either tablet or injection.

Often a “flare” reaction, or worsening of symptoms, can occur in the first couple of weeks following the start of LHRH-A therapy as there may be an initial increase in the tumour growth, but this can be offset by the use of anti-androgen drugs taken orally during this period.

There are also agents that inhibit the production of androgens in other parts of the body and are known as c-P450 inhibitors. While 95 per cent of the body’s testosterone is produced by the testes, it is also produced by the adrenal glands and this small amount can be enough to fire up the tumour.

A trend in past years has been to use a combination of hormone therapies, or hormone blockade. This has gone out of vogue because the accumulated data from many thousands of patients suggests that there’s only a marginal benefit and it is offset by higher toxicity. It is better to begin with testicular control and add other treatments when, and if, necessary.

The toxicities of hormonal therapies will vary from individual to individual and initial reactions may settle down with extended use. Generally there is a loss of libido that will affect potency and sexual function. The relatively sudden withdrawal of testosterone can cause hot flushes or flashes (not unlike women going through menopause where oestrogen production ceases). The incidence of osteoporosis and risk of fractures increase (although bisphosphonate drugs may reduce the risk) and this can be accompanied by joint aches and pains. There can be a reduction in cognitive function and depression may be an issue.

A problem with hormonal control, and indeed other treatments used to control rather than cure prostate cancer, is when to start the therapy. When looking at a regime to cure, generally speaking, the sooner treatment gets underway the better. With a control regime this is not so clear-cut. Current lifestyle and future prognosis need to be weighed against possible benefits and long-term side effects of treatment.
In these cases a watchful waiting program may be entirely appropriate, or it may be that intermittent use of androgen ablation agents could be used. In this latter case, hormone therapy is used in cycles. When PSA rises to a certain level, the treatment is implemented and continued until the PSA drops to an acceptable figure. The cycle then re-starts and the therapy is discontinued until the PSA level is up again. This gives temporary relief from side effects and it is also possible that it will lessen the chances of the tumour cells becoming resistant to the therapy and the cancer becoming hormone refractory, or unresponsive to the hormone treatment.

Unfortunately with many malignancies there will always be a few cells that are, or will become resistant to the treatment, and as time goes by these mutations will slowly overtake the hormone suppressed cells and dominate the tumour, giving rise to hormone refractory prostate cancer. Even though the cancer is considered to be hormone refractory it is important that the hormonal control therapy is continued to keep the non-resistant cells in check.

Throughout the 1980’s and early 90’s a number of chemotherapy drugs were used to try to control hormone refractory prostate cancer without success. In the mid-90’s a Canadian study found that a drug called Mitoxantrone used with Prednisone gave some control in around a third of 161 men with symptomatic metastatic disease taking part in a randomised trial. Survival times increased to an average of 43-weeks which, while not brilliant, was far better than anything that had been tested previously.

In the late 90’s another drug, docetaxel (Taxotere) was used in a number of trials. Docetaxel showed some promise and further studies were done in Europe and North America using docetaxel with other agents such as prednisone and estramustine. Good results were achieved, particularly when considering that those taking part in the trials had reached the end of the road as far as other treatment regimes were concerned.

In Australia docetaxel was listed on the PBS for use with hormone refractory metastatic prostate cancer late last year, however the PBS funding limits treatment to only ten cycles. Generally treatment will be completed after six cycles, but the limit could cause a problem if there was a recurrence of the cancer.

As with hormonal controls, there is debate over when chemotherapy should be started after taking into account possible benefits, side effects, ongoing quality of life and general health of the individual. Intermittent chemotherapy and other agents used in conjunction with docetaxel are being looked at to reduce the severity of side effects.

Other drugs are being used in conjunction with docetaxel to see if treatment results can be improved and it may be that in the future, chemotherapy could be used for potentially curable localised advanced prostate cancers, either just before or just after surgery, to see if it will prevent the cancer returning in the long-term. This technique is used with some breast and lung cancers with good results.
Other new approaches to controlling advanced disease include the use of an anti-angiogenic agent, *Aflibercept*, which prevents the growth of new blood vessels. If the tumour can be targeted and starved of blood it should stop growing. There are currently a number of trials running to test this theory with *Aflibercept* being used in conjunction with docetaxel and prednisone. Anti-angiogenic drugs can interfere with wound healing, but have little effect on normal tissue.

*Patupilone* is a drug derived from bacteria which has been shown to prevent cell division and is currently undergoing Phase II randomised trials in Brisbane in conjunction with prednisone, comparing it with docetaxel and prednisone in patients with metastatic hormone refractory prostate cancer.

Mentioned earlier were LHRH analogues and antiandrogens, the drugs used for hormone therapy. The LHRH-A prevents the testes from producing testosterone and the antiandrogens prevent the uptake of testosterone by the prostate tumour cells (see box on left), both drugs potentially starving the tumour of its growth mechanism. Unfortunately the adrenal glands also produce testosterone and the prostate produces some androgens so that it stimulates itself. An older drug, cyproterone (*Androcur*) did a reasonable job of blocking the pathways and tumour uptake of testosterone but a new drug, *abiraterone*, seems to do the job much more efficiently. In addition it has the ability to deplete androgens intracellularly in malignant cells.

*Abiraterone* is reasonably toxic but well tolerated when used with prednisone. It is taken orally as a once-a-day capsule. There has been an excellent response in Phase II trials with hormone refractory/docetaxel-refractory patients. The trials have given remarkable falls in PSA levels, a reduction in pain and increased bone densities. A Phase III randomised trial started in Brisbane last month. It’s possible that *abiraterone* will be available for general use by 2011.

Bisphosphonates are another group of drugs used to reduce problems caused by metastatic prostate cancer. Prostate cancer cells are particularly fond of bones. When locally advanced cancer remains unchecked, the first areas it spreads to are the bones in the pelvic region. The malignant cells attack the bone and create an erosion cavity causing a honeycomb-like structure to form. This causes a loss of bone density resulting in osteoporosis, a much higher risk of fractures and painful joints. Calcium leaching out of the damaged bones and into the bloodstream (hypercalcaemia) can cause drowsiness and nausea.

Patients on long-term hormone therapy will often be prescribed bisphosphonates to counter the loss of bone density that these treatments can induce. However, bisphosphonates are useful in the treatment of metastatic bone disease and have the potential to prevent the formation of new metastases. With metastatic disease the tumour cells stimulate osteoblasts (bone lining cells) that, in turn, release compounds that stimulate tumour growth, and so a vicious circle is formed.
Bisphosphonates are an effective treatment for metastatic bone disease and skeletal complications. They synthesise an organic matrix to replace resorbed bone and fill the cavities with new bone. With continuing use of the drugs the new bone will resist further action by the malignant cancer cells and inhibit the spread of bone metastases.

The drugs are administered intravenously and may give a transient worsening pain in the first few days after administration as the bones react to the therapy. Other possible problems are renal toxicity, kidney function needs to be monitored whilst using the drugs, osteonecrosis of the jaw making dental work difficult, and flu-like symptoms which generally subside.

Other treatments for allaying the symptoms of locally advanced and metastatic prostate cancer include injections of Strontium 89, external beam radiation and transurethral resection of the prostate, commonly called a “re-bore” or TURP.

Strontium 89 (a radio isotope) injections emit low range radiation. They are preferentially retained in the metastases and give complete relief of pain and a reduction in the development of new pain sites. They are expensive and need repeating every three months. There can be a transient “flare” in pain and ongoing use can cause a drop in platelet blood count.

External beam radiation is also useful in relieving pain. A short (two to three week) course can continue to give pain reduction for up to a year and bone recalcification occurs in around 80 per cent of cases.

A “re-bore” can relieve discomfort, flow problems and urine retention that arise during bladder voiding. These occur when the tumour causes the prostate gland to “swell” and compress the urethra.

While drugs and other therapies may control the cancer, it’s important that lifestyle challenges be addressed. Treatment side effects could include such things as fatigue, nausea, appetite changes and other upsets and these should be countered by maintaining a healthy and active life. Exercise regularly; walking, swimming, golf, bowls, etc. are all great ways to keep fit. Talk to your partner and/or a close friend about how you’re feeling and, if possible, attend a local support group where you can discuss things with other men in the same situation. Learn to relax, stick to a healthy diet and plan for the future.

Prostate Cancer Treatment Options

A comprehensive document listing and comparing seventeen mainstream prostate cancer treatment options has been published in the U.S.A. by the Dattoli Cancer Centre & Brachytherapy Research Institute in Sarasota, Florida.

“Prostate Cancer Treatment Options – The Facts” document is available on-line and can be downloaded from the website www.dattoli.com.

Cancer Daily News

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Crowne Plaza Hotel, Royal Pines Resort, Gold Coast.
Phone 1800 66 81 37, or visit www.prostate.org.au for details.
Active surveillance a good option for some men with early prostate cancer

July 24, 2008 NEW YORK
(Reuters Health) – Active surveillance appears to be an appropriate choice for the management of low-risk patients with early prostate cancer, according to researchers. As lead investigator Dr. Marc A. Dall’Era told Reuters Health, “Our data suggest that not all men with prostate cancer require immediate radical intervention.” Cancer 2008;112:2664-2670,2631-2634.

One in five young men in US report recent PSA test

August 11, 2008 NEW YORK (Reuters Health) – New research suggests that roughly one in five men in their 40s have undergone PSA screening for prostate cancer within the last year. However, screening rates in black men are still considered suboptimal. The findings appear in the August 11th online issue of Cancer.

Recurrence rare after prostatectomy of organ confined, lower grade cancer

August 11, 2008 NEW YORK (Reuters Health) – Men with organ confined prostate cancer and a Gleason Score of 6 or less very rarely have local or biochemical recurrence of disease five years after prostatectomy, according to study findings appearing in the July issue of Urology 2008;72:172-176.

Call for regional cancer treatment centres

August 25, 2008 ABC NEWS – The Cancer Council is calling for cancer treatment centres to be built across regional Australia, to cut the death rate in rural communities.

Above information sourced from Cancer Daily News

Prostate Cancer Foundation of Australia

Report from Graeme Higgs, Queensland & Northern Territory Manager.

August was a busy month that included two very successful meetings/conferences in Townsville and Cairns. These have been reported elsewhere in this edition of QPCN, so I won’t go into too much detail. Townsville was the first regional meeting of the Queensland Chapter Council of PCFA and included the monthly meeting of Merv Albion’s Prostate Cancer Support and Awareness Group of North Queensland.

A week later The Queensland Chapter held its AGM and Conveners’ Conference in Cairns, followed by a two day developmental workshop hosted by Cancer Council Queensland. Part of the program was a Prostate Cancer Awareness Evening at the Cairns Base Hospital organised by Far North Queensland Convener, Jim Hope, and his Committee. The evening included three excellent speakers covering various aspects of the disease. The workshop was a great learning experience. Special thanks go to Marg Heggarty of CCQ’s Brisbane Office and Mal Fraser from the Cairns’ Office of CCQ for their efforts in organising the program.

ABOVE: Bonds helps out with awareness Down Under.

ABOVE: Delegates at the Cairns Conference.
These two events aside, awareness and fundraising campaigns have been in full swing. Trish Sorbello, the Ambassador from the Mackay Support Group visited Clermont and spoke at the local (Clermont Bush Pigs) rugby club, which raised $5,000 for PCFA activities.

Alan Keetley from the Sunshine Coast Group, along with Queensland PCFA staff, helped to man an awareness booth at the Family Life Expo. We had a new tent that worked well, although the weather on the day consisted of strong winds blowing directly from Antarctica!

John Milne from the Central Queensland (Rockhampton) Group spoke at an Ergon Energy workplace meeting and thanked Ergon staff for raising more than $7,500, and Ross Davis from Twin Towns/Tweed Coast addressed Carbrook Golf Club after an event there raised more than $3,000. Other awareness and fundraising events were held at the Deception Bay Bowls Club ($490 raised) and the Edmonton Lions’ Club ($300).

September was Prostate Cancer Awareness Month and various PCFA national activities were complemented locally by members of the Gold Coast Apex Club riding push bikes to Sydney to raise awareness, the annual Blue Ribbon Rides, the Cooloola 500 and an awareness day sponsored by the Alstonville Group.

### The First National Conference of the Prostate Cancer Foundation of Australia

*In early September, PCFA hosted the official launch of its inaugural conference in Brisbane.*

Graeme Johnson, the National Chairman of PCFA was Master of Ceremonies for the occasion, and Professor Colleen Nelson and Professor Judith Clements spoke at the launch. They gave an insight into the history of prostate cancer, where we’re at now regarding the disease and the way ahead.

In addition they spoke about the role of PCFA in the community; providing public awareness of and education about prostate cancer, funding important research projects, and providing support to men, their partners and families, who are working their way through the prostate cancer journey.

The conference will be a consumer-led forum bringing together representatives of the almost 90 Prostate Cancer Support Groups throughout Australia, along with nurses, doctors, community organisations, allied health professionals and government operatives. The program offers a unique learning experience with two-and-a half days of meetings, workshops and keynote addresses.

It will be an ideal opportunity to meet and exchange ideas, information and experience with colleagues and other like-minded delegates; to learn from international and local cancer experts; hear about the latest prostate cancer research into detection and treatment; enhance skills used in dealing with those touched by prostate cancer; and contribute to the formulation of National Government Men’s Health Agenda.

To be held on the 15th, 16th and 17th November 2008, further details about the conference can be obtained from PCFA’s web-site, www.prostate.org.au or by phoning 1800 668 137.

[left: PCFA National Chairman, Graeme Johnson and speakers Colleen Nelson (left) and Judith Clements in conference launch mode with members of the Adonis Society.]
On 19 August 2008, members of the Queensland Chapter Council held their August meeting in Townsville. The meeting coincided with the North Queensland Group’s monthly Support Group Meeting to enable some face-to-face contact between the council and support group members. There were 50+ attendees at the afternoon support group meeting and Bill McHugh, who chairs the PCFA Support and Advocacy Committee, was guest speaker.

North Queensland Convener, Merv Albion, and his committee did a wonderful job in organising the meeting, laying on refreshments and encouraging plenty of interaction between the local members and visitors.

The Chapter Council meeting was held that evening at Cancer Council Queensland’s Townsville Office with Merv Albion and Les Payne in attendance (refer to SPOTLIGHT ON NORTH QUEENSLAND on Page 3).

The following week the Queensland Chapter Annual Conference was held in Cairns, followed by the two-day Conveners’ Workshop, sponsored and facilitated by Cancer Council Queensland. Around 55 delegates from all the support groups attended.

After a welcome from Jim Hope, Far North Queensland Convener, National Chairman of PCFA, Graeme Johnson, opened the proceedings and spoke about the milestones in PCFA’s development and plans for the future. Other speakers from PCFA included Paul Redman (Support Group Services Manager), Graeme Higgs (Queensland Manager) and Jo Fairbairn (National Community Partnerships & Health Promotion Manager).

The morning’s proceedings finished with a talk by Lloyd Younger from the Central Queensland Group telling of his prostatectomy carried out via robotic surgery, followed by the lunchtime unveiling of the World’s Biggest Undies. Pacific Brands Limited, manufacturers of “BONDS” and a supporter of PCFA, donated the giant-size briefs to promote prostate awareness. Local media attended the unveiling (flashing??) and the knickers appeared on the evening TV news for all to see.

In the afternoon Paul Foote, Managing Director of Strategic Steps, spoke about goal setting and communication and, with group participation, went on to develop objectives for the chapter and identify areas in need of involvement.

As with Townsville, the group was able to participate in the local support group meeting which was an Awareness Evening held at the Cairns Base Hospital. There were around 150 in attendance and they were treated to three excellent presentations from Dr David Schelt of Brisbane’s Wesley Hospital’s Oncology Unit, Dr Donna Goodman, a Clinical Health Psychologist at Cairns Base Hospital, and Dr Darren Russell, Director of Sexual Health and also from the Cairns Base Hospital.

Mal Fraser from Cancer Council Queensland’s Cairns’ Office and Marg Heggarty conducted the Conveners’ Workshop over the next two days which included plenty of interaction between delegates and speakers, and talks on various subjects including:

- **The Role of Cancer Support Groups in Meeting the Needs of Men with Prostate Cancer** (Donna Goodman);
- **Legal and Practical Aspects of Running Support Groups** (Helen Biro);
- **Getting the Word Out – Promoting Groups** (Kerrie Hull);
- **Members With Special Needs** (Maggie Balatti);
- **What About Me? – Caring for Myself** (Caz McIntyre);
- **Building the Future** (Paul Redman).

The objectives of the conference and workshop were to provide delegates with skills to assist them in the effective management of their support groups, both now and in the future. Many felt that the networking and sharing of information with like-minded people and the material presented by the speakers had helped achieve the objectives and rejuvenated their enthusiasm.

Special thanks must go to PCFA’s Queensland staff for the magnificent job they did in arranging travel and accommodation for the delegates.

**Lionel I Foote**  Chair, Queensland Chapter Council, Prostate Cancer Foundation of Australia.
A Tall Story

An article in the September 2008 issue of *Cancer Epidemiology, Biomarkers & Prevention* 2008 17:2325-2336 (Zuccolo L, et al) outlines research indicating that taller men may have an increased risk of contracting prostate cancer. Researchers studied over 9,000 men in the 50-69 age group and found a six per cent increased risk for each additional 10cm in height. While this is a lower risk than those such as ethnicity, age and family history, it suggests that growth factors and hormones leading to increased height could play a part in the development and progression of the cancer.

### Brisbane PCSG – 2008 meeting program

<table>
<thead>
<tr>
<th>Evenings at 7:00pm (even months)</th>
<th>Mornings at 9:30am (odd months)</th>
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<tbody>
<tr>
<td>8-Oct Prostate Cancer Awareness Evening, Dr H.S. Teng – Urologist &amp; Dr Gail Tsang – Radiation Oncologist</td>
<td>12-Nov Exercise &amp; Fitness for Prostate Cancer, Dr Dennis Taaffe &amp; Helen Luery</td>
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<tr>
<td>10-Dec Cameo &amp; Christmas Party</td>
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### Partners Program

22nd October 2008.

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**Important privacy information**

You have received this newsletter because you have provided your contact details to Cancer Council Queensland or to a Prostate Cancer Support Group (PCSG). The primary purpose of collecting your contact details was to enable support, resources and information to be offered to you as a person affected by or interested in prostate cancer. Your contact details are held in the local office of Cancer Council Queensland. Cancer Council Queensland ensures compliance with the Privacy Act, and does not use or disclose your details except as you might reasonably expect. You may access your details and you may request that we correct or amend (ie. update) or delete your details.

If you are a member of an affiliated PCSG you will initially receive by post your local group’s newsletter, the monthly Queensland Prostate Cancer News (QPCN), and the national quarterly Prostate News. You may also receive other communications from time to time such as advice on upcoming symposia, news or surveys from research establishments, details of open clinical trials, and guidelines being reviewed. You may 'opt-out' of any of these services at any time, ie. you will no longer receive any material of that type, by letting us know your wishes. QPCN is available online at http://www.pcfa.org.au/qld/newsletter.htm.

Should you receive multiple copies, please let us know which address(es) to remove from which mailing list(s).

**Contact Details** for both the QLD Chapter of PCFA and Qld Prostate Cancer News

- **Mail**: c/- Cancer Council Queensland, PO Box 201, Spring Hill Qld 4004
- **Email**: qpcn@cancerqld.org.au
- **Phone**: via The Cancer Council Helpline 13 11 20

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The information in this Newsletter is not intended to be a substitute for professional medical advice, diagnosis, or treatment. Always seek the advice of your qualified health provider with any questions you may have regarding a medical condition. Never disregard professional medical advice or delay in seeking it because of something you have read here.

**LAST WORD** (Courtesy Bruce Kynaston)

Tom proudly walks into the kitchen wearing a new pair of boots, but his wife Mabel takes no notice.

Chagrined, he ducks into the bedroom and strips naked except for the boots, then returns to the kitchen.

“Notice anything,” he says?

“It’s droopin’ as usual,” replies Mabel.

“That’s ‘cause it’s lookin’ at me new boots,” says Tom.

Mabel thought for a second, “Should’a bought a hat.”