

the

LIFEBUOY

St Vincent's Hospital
Prostate Cancer Support Group



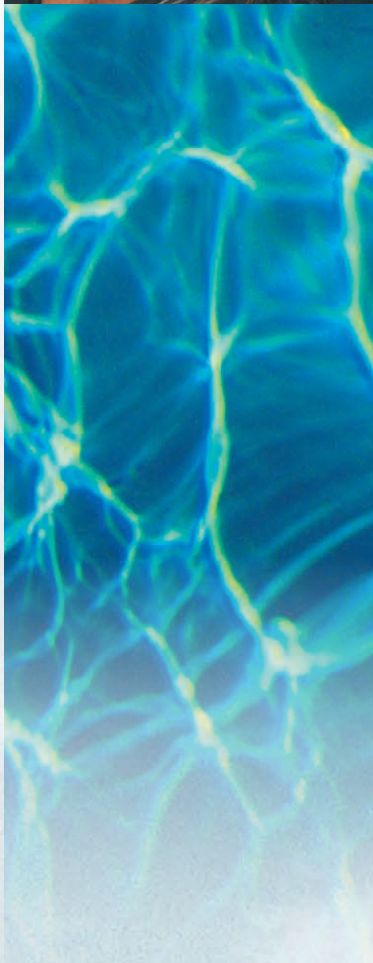
affiliated with the
Prostate Cancer Foundation of Australia

P STRICKER^{1,4}
South Wales

is of prostate ca
is compares favo
tion via the tram

all tumours well to
2005) and Lu (2
% and 1.5%
resection rate

only one septic pa
quiring admission
with retention ris
is by Eiche
or sepsis
ing



Dear Readers

Welcome to the first newsletter for 2009. I apologise for the lateness of the newsletter, however what a busy six months it has been! This issue of "Lifebuoy" is bigger so hopefully this will go towards making amends.

Our first two meetings for the year have been well attended. Dr's Michael Lowy and Rob King kicked off the year speaking on sexual function following treatment for prostate cancer. Lectures on sexual function seem to always draw a crowd! A/Prof. Phillip Stricker was our speaker in April and as always delivered an interesting talk on prostate cancer and what's new clinically. This will be followed by what's new in clinical and basic science research projects here at St Vincent's and the Garvan Institute of Medical research. Please note the dates of our final two meetings for the year as advertised in this newsletter. I do hope to see a good turnout.

The annual Australasian Brachytherapy Group Conference was held on the Gold Coast in March. St Vincent's Prostate Cancer Centre & Garvan Institute presented several papers and posters. It was a proud moment to see Dr Avi Raman from St Vincent's Hospital win the award for the best scientific paper at the conference. He presented, "Biochemical relapse free survival and quality of life analysis in localised prostate cancer following low dose iodine-125 brachytherapy". Well done Avi and all those involved.

In late April I travelled to Chicago to the annual American Urological Association (AUA) conference. The size of the meeting alone was quite overwhelming with approximately 16,000 delegates which is five times bigger than the town I grew up in! I also found out one has to be extremely organised and plan topics of interest ahead of time since lectures, poster presentations and panel discussions all happen simultaneously. It was nice to see many Australian Urologists and nurses attend the conference, staying abreast with world wide standards and trends.

On the 27th of May the prostate cancer DVD "So, How Do You Choose" was launched at Parliament House Canberra by the Treasurer the Hon. Wayne Swan. The DVD was produced by A/Prof Phillip Stricker and the St Vincent's Prostate Cancer Centre. It was a very successful launch and photos of the event are inside the newsletter.

The Paint a Rainbow Foundation is holding its annual fundraising dinner on Saturday August 1st with monies raised from the evening going to prostate cancer research here at St Vincent's. Details of the event are to be found on page 7 of this newsletter. Grab your friends for what looks like a fun and enjoyable evening and help a good cause.

I hope you find the newsletter an interesting read!

Jayne Matthews - Coordinator
St Vincent's Prostate Cancer Centre



St Vincent's
prostate cancer
centre

Disorders of Male Sexual Function

Dr Michael Lowy MBBS MPM FACHSHM
Sexual Health Physician
Sydney Men's Health
www.sydneyemenshealth.com.au
mlowy@sydneyemenshealth.com.au



Male sexual function has three components

- + **Libido or sexual desire**
- + **Erectile function or arousal**
- + **Orgasm/ejaculation**

Libido

Libido in men and women is driven by testosterone. Desire disorders may present as hypoactive desire disorder (often life long), inhibited desire (may be situational) and desire discrepancy (an increasingly common disorder in couples)

Desire problems in younger men mostly have a psychological basis (often around commitment issues). Older men experience a slow decline in testosterone levels about 1% a year from the age of 40 years which may not only reduce libido but may also result in a controversial condition called partial androgen deficiency in the ageing male (PADAM).

A man with a testosterone below 8nmol/l is said to be hypogonadal and may present with decreased libido, ED, depression, fatigue, decreased muscle mass, decreased bone density and increased visceral fat. Testosterone replacement medications are available in the form of tablets, gel, injections or implanted pellets.

Testosterone is a requirement for nocturnal erections but also appears to play a role in the quality of sexually induced erections. Treatment with testosterone when indicated may increase libido and provides an improved sense of wellbeing. It used to be considered that men with a history of prostate cancer were not allowed to take testosterone replacement medication after successful prostate cancer treatment. This idea is now considered no longer valid as long as there is no evidence of remnant prostate cancer

Erectile Function/Dysfunction

Erectile dysfunction (ED) is defined as the inability to achieve and maintain an erection sufficient to permit satisfactory sexual intercourse. ED is a systemic condition often associated with other potentially serious medical conditions such as coronary artery disease and peripheral arterial disease.

Until late 1980s ED was suspected to be mainly psychological in origin. ED is now regarded as a mainly physiological disorder as penile erection is a neurovascular event. The most common pathological factor for ED is vascular disease, such as that caused by diabetes, hypertension, smoking and hyperlipidaemia. ED is highly associated with metabolic syndrome. The present worldwide prevalence of over 150 million men with ED is likely to double in the next 20 years, exceeding 300 million men by year 2025, particularly due to the increasing incidence of obesity and diabetes. The incidence of ED increases with age, smoking, alcohol use, obesity and metabolic syndrome, diabetes, hypertension, hyperlipidaemia and depression.

Some medications contribute to ED, examples being beta blockers, thiazide diuretics and psychotropic medication. Asking proactively about ED may expose unknown hypertension, diabetes and ischaemic heart disease as between 39 and 64% of male patients with cardio-vascular disease suffer from ED.

Psychological problems can be a cause of ED. Anxiety, stress, depression and relationship problems can be associated with ED at any age. However psychological causes tend to predominate in younger men and vascular causes predominate in older men. Performance anxiety is associated with loss of confidence and fear of failure in a sexual situation, it can be a primary cause based on social and psychological factors. Secondary performance anxiety often aggravates the problems of chronic erectile dysfunction and premature ejaculation.

Older men require reassurance that changes in their erectile function is a natural process and does not necessarily require treatment other than adjustments to sexual technique. Older men require more stimulation to achieve an erection, have less intense orgasm and reduced ejaculatory volume. Use of condoms can be a problem because of the difficulty maintaining the erection. Repeating sexual activity (refractory period) may require days rather than hours.

Treatment

Initial treatment should be focused on lifestyle changes and management of current medical conditions. Psychological problems are treated by addressing depression, problems with intimacy and communication and relationship issues.

Oral medication

The introduction of sildenafil (Viagra™) in 1998 heralded a revolution as the first oral medication for ED. Tadalafil (Cialis™) and vardenafil (Levitra™) have since followed. These medications belong to the class of selective PDE5 inhibitors which relax corpus cavernosal smooth muscle. They have proved safe and effective for most causes of ED except severe vasculogenic and neurogenic ED. They are contra-indicated in men who use nitrate medication or the recreational drug amyl nitrate.

PDE5 inhibitors also have a role in the treatment of psychogenic ED. Each of the 3 types has the potential for side effects which include headache, facial flushing, blocked nose and gastric reflux. These medications can be taken 1 to 2 hours before planned sexual activity (as required) or in lower doses on a daily basis, which may suit some men where lack of spontaneity is an issue.

Penile injection

Prostaglandin E1 (PGE1) also known as alprostadil is the medication with the least risk of fibrosis or priapism. PGE1 is prescribed for men where oral medication does not work or is contra-indicated. It is marketed in Australia as Caverject Impulse™, a neat package where the powder is mixed with water and the dose dialed all within the barrel syringe.

Combination mixes available through compounding pharmacies use PGE1 and phentolamine (Bimix) or PGE1, phentolamine and papaverine (Trimix). These mixes may have a higher risk of fibrosis and priapism. The treatment of priapism initially involves taking two 60mg pseudoephedrine tablets if the erection remains after 2 hours.

Vacuum erection devices create an erection by extraction of air from a cylinder placed over the penis. The vacuum created causes increased blood flow into the penis that is held by a rubber constriction ring. The technique requires practice and preferably the assistance of a partner

Penile implants – surgically implantable penile prostheses have been in use for 30 years. These days implants are inserted less frequently due to the effectiveness of the other ED treatments. A three piece inflatable device (penile rods, scrotal pump and fluid reservoir) gives the best cosmetic and functional result. There are low rates of mechanical failure and infection.

A note about ED post Radical Prostatectomy

Surgery for prostate cancer often involves changes to the neuro-vascular bundle. If the neuro-vascular bundle on each side of the prostate cannot be saved, then ED will inevitably follow. Treatment with oral PDE5 inhibitors is ineffective without intact nerves due to the lack of neurotransmitters. Even with intact neurovascular bundles, the return of erectile function may take from 6 to 36 months to occur. The quality of erections also depends on the pre-surgery erectile function. Initial treatment is either PGE1 injection therapy or daily low dose oral medication. These treatments are also effective for men who have had treatment for prostate cancer other than surgery.

Orgasm/ejaculation

Male ejaculation disorders are premature or rapid ejaculation, inhibited or delayed ejaculation and retrograde ejaculation.

Premature ejaculation (PE) is the commonest disorder though can be misdiagnosed due to a common male misconception of how long the intra-vaginal ejaculation latency time (IELT) should be. There is some consensus that ejaculation less than 60 to 90 seconds after penetration represents true PE. Ejaculation just before or on penetration can be an extremely distressing condition.

PE can be primary or secondary. Primary PE arises in the ejaculation centre in the medial pre-optic nucleus of the hypothalamus and is no longer regarded as a purely psychological problem. However it can be complicated by a secondary performance anxiety often complicates the situation. Secondary PE may be caused by stress and anxiety, relationship problems or ED.

Men with PE are often reassured with explanation of normal IELT. The traditional behavioural techniques such as the stop-start and squeeze techniques remain popular treatments. The ejaculation inhibiting effect of some of the SSRI anti-depressant medication can be a successful treatment in severe cases. Inhibited ejaculation is usually an issue with sexual intercourse rather than with

masturbation. It can arise where arousal from penetrative intercourse does not match the arousal obtained from masturbation. This condition may be related to relationship or psychological issues and is mostly seen in younger men. It is normal as men age that they experience a slowly increasing delay in their ability to ejaculate due to nerve changes.

Retrograde ejaculation often occurs after surgery for a tight bladder neck or benign prostate hypertrophy. Neurological conditions and diabetes may decrease bladder neck tightness where the sensation of orgasm is intact but the semen is directed into the bladder.

Prostate Cancer DVD launched at Parliament House

The Treasurer, the Hon. Wayne Swan launched the prostate cancer DVD “So How Do You Choose” at a cocktail function held at Parliament House Canberra on Wednesday May 27th 2009. The DVD was produced by A/Prof. Phillip Stricker & the St Vincent’s Prostate Cancer Centre through the financial support of Lang & Sue Walker and the Walker Foundation.

The DVD is a resource to enable the 18,000 men who are diagnosed annually with prostate cancer in Australia to understand their treatment options and choose the best treatment for them. It aims to empower men to make the difficult decision between the various treatments currently available in a clear and personal way to achieve the best possible outcome in the treatment of their prostate cancer.

Mr Alan Jones AO was MC for the event and elaborated on his personal experience of being diagnosed with prostate cancer and subsequent treatment at St Vincent’s. Other speakers included Mr Steve Rubic CEO St Vincent’s & Mater Health Campus, Mr Paul Ramsay AO Chairman Ramsay Healthcare Ltd, A/Prof Phillip Stricker Chairman of the Urology Dept. St Vincent’s Clinic and the Treasurer the Hon. Wayne Swan who also told the audience of the impact on himself and his family when diagnosed with the disease. The audience included members of Parliament including the Prime Minister the Hon. Kevin Rudd, many members of the Prostate Cancer Foundation of Australia, National Breast Cancer Foundation representatives, Urologists and members from St Vincent’s Campus & Garvan Institute.

It was a very special launch of this high powered DVD which aims to help newly diagnosed men and their families throughout Australia. Monies raised from the sale of the DVD go towards ongoing research into prostate cancer and continues the St Vincent’s Prostate Cancer Centre commitment to education and raising awareness of this major health problem.

Meetings for 2009 – Mark these in your diary!

- **Wednesday August 26th - Dr Deepinder Miller, Psychiatrist**
“The psychological impacts of a prostate cancer diagnosis and treatment.”
- **Wednesday November 4th - Dr Joe Enis, prostate cancer survivor**
“Metastatic prostate cancer - a brighter future. A look at hormone therapy, diet and supplements.”

Check www.prostate.com.au for details



The Treasurer, the Hon. Wayne Swan, Prime Minister, the Hon. Kevin Rudd, Mr Alan Jones AO



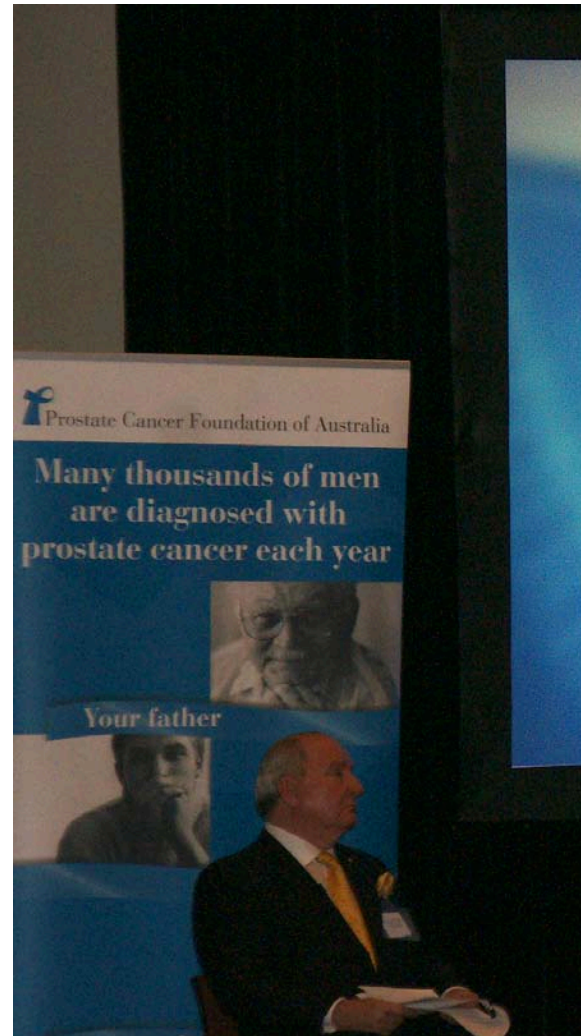
Mr David Sandoe OAM - Deputy Chairman PCFA, Dr Raj Jagavkar - Radiation Oncologist SVH, Mrs Jenni Stricker, Mr Darren Rudd - NSW Board Member, PCFA



Mrs Mita Westbrook, Prof. Sue Henschall - Garvan Institute, Ms Sue Carrick - National Breast Cancer Foundation



Mr Alan Jones AO, MC for the DVD launch, welcomes the crowd.



Prof. Dexter Dunphy AM, Mr and Mrs Bruce Fisher



Mr Paul Ramsay AO



Mr Steve Rubic - Chief Executive Officer SV&MHS, Prof. Rob Sutherland - Garvan Institute, Ms Vanessa Marven - National Breast Cancer Foundation



Ms Jayne Matthews, Dr Peter Sutherland - Adelaide Urologist, A/Prof. Phillip Stricker



Mr Alan Jones AO, The Treasurer, Mr Graeme Johnson - Chairman PCFA, Mr Paul Ramsay AO, Mrs Pam Sandoe OAM, A/Prof. Phillip Stricker, Dr David Malouf - President Urological Society, Mr David Sandoe OAM



Senator Bill Heffernan, A/Prof. Phillip Stricker with the Prime Minister



Drs Hodo Haxhimolla and Les Yeaman - Canberra Urologists

PSA Debate : New Studies

Associate Professor Phillip Stricker

So what do these new studies and the interpretation bring to the table on PSA debate. Does it tell us that PSA is useless as some people are advocating or does it tell us that it has a role but not as perfect as we had hoped or does it tell us PSA is a stepping stone in the struggle against eliminating the suffering from prostate cancer and we simply have to use it wisely and there is much more work to be done. I strongly favour the latter.

What these two studies show us is firstly with the PLCO study it is not useful that it is published way too early and there has been massive contamination of the control arm. One needs to seriously ask why this study was published at all at this incredibly early stage.

With regard to the European study, it has already shown a 27% drop in the death rate after only nine years of follow-up and was indeed published two years before it was expected to show this difference so why all the controversy.

The reason for the controversy is the number of men that would have to be tested to lead to one life saved. It was estimated in the study that to save one life within that ten year period, one would need to test 1400 men - a number not dissimilar to breast cancer statistics. Of more concern however is that 48 men would need to be treated to save one man in the nine year period. BUT WAIT there is evidence that as time goes by and they report the 10 and 15 year results that the number of lives saved would be greater. Furthermore the technique of screening in these studies is old fashioned. They used one test with one PSA level every four years if they were lucky. So what might have happened had they have used the test more frequently thus picking up more aggressive cancers earlier and used the rate of change of PSA which is a more modern technique of using PSA testing. Furthermore, if we were to concentrate on those men with a greater than 15 year life expectancy, that is to say a younger group of men, the benefit would surely be greater than focusing than men over 65 and certainly over 70 who stand to benefit the least. How else can we be smarter. Well, we can avoid treating those cancers which appear not to

If you would like to receive future newsletters and are not currently on our mailing list please complete and return the form below:

Name

Address

E-mail address

Please return to:

St Vincent's Prostate Cancer Centre
St Vincent's Clinic
Suite 508 - 438 Darlinghurst Street
Darlinghurst NSW 2010
or email: jmatthews@stvincents.com.au

be the dangerous ones. These are small well differentiated cancers particularly in older men. Some parts of the world are monitoring these cancers and not offering treatment in over 50% of men newly diagnosed. This more modern attitude would surely minimise the downside of over treatment.

So how else can we be smarter using this test? We could target groups more likely to develop the cancer. So who are they? Anyone who has had a family history of prostate cancer in a father or brother certainly would constitute one group. A second group, particularly in America, would be Afro-American males and finally the third group are those men whose PSA is elevated at age 40 before the prostate begins its natural growth. These three groups of men are at increased risk and at no doubt in the future would have genetic tests to be able to predict more accurately who is at risk.

So then what message can we take from these two new studies? Firstly, the European study has now shown that the death rate from prostate cancer is LESS in populations screened with PSA even at a short follow-up of nine years.

Secondly, we need to concentrate on men with preferably a 15 year or more life expectancy before we even consider testing to maximise the benefit of testing. This means recommending against testing in unhealthy or older men.

We need to get smarter in the use of PSA testing by:

- **Targeting high risk groups such as those with a family history or an elevated PSA at age 40**
- **Following high risk patients very carefully and using the change in PSA rather than one single reading every 4 years**
- **Not treating every cancer that is diagnosed, particularly those low grade ones**
- **Actively research other markers that can distinguish between the good and bad cancers**
- **Tailor therapy and PSA testing to the individual as this is the era of personalised medicine**

Therefore, although PSA test detects prostate cancer at a more curable stage and does result in a decreased death rate, it cannot be used indiscriminately but rather used selectively. Furthermore, it always needs to be emphasised that a digital rectal examination picks up some dangerous cancers even though the PSA test is normal. Therefore both must be used in conjunction.

In conclusion it needs to be stated as with all new developments that the progress is often incremental but the wisdom is knowing how to use that progress discriminately and wisely to maximise gain and minimise regret. I believe the European Study gives further hope at diagnosing prostate cancer at an earlier and curable stage and decreasing the death rate from prostate cancer. It is clearly not the final answer and will have to be used discriminately and wisely to maximise the benefit and minimise harm. PSA is not the Holy Grail but it is a further step towards controlling the suffering from prostate cancer.

So PSA is only part of the puzzle. Careful individualisation and personalised care completes the picture.



the **blue** *dinner*

Raising Funds for St Vincent's Prostate Cancer Centre.

master of ceremonies

Karl Stefanovic ~ Host of Channel 9 Today Show

auctioneer

Glenn Wheeler ~ Entertainer

special guests

Paula Duncan ~ Actress

Vic Lorusso ~ Radio Personality

Brett Murray ~ Dare Ops

Nikki Webster ~ Performer

Cameron Williams ~ Channel 9

Maria Venutti ~ Television Personality

Gorgi Quill ~ Television Personality

Eliza Campagna ~ Ballroom Dancer

Elka Graham ~ Olympian

Mark & Kim Waugh ~ Australian Cricketer &
Group One Horse Trainer

entertainment

"Celebrity Singing Bee"

The Paint a Rainbow Foundation would like to thank the following sponsors:



THE ESTATE OF
BRIAN MATTHEW KIRBY

where

Le Montage Bayside Event Centre
38-42 Frazer St, Lilyfield

when

Saturday 1st August, 2009

time

6.30pm for 7.00pm start

dress

Suave, stylish & sophisticated

cost

\$200.00 per person

\$1800.00 ~ Table of Ten

\$3,000 ~ VIP Table includes ~ VIP Seating & Full page advertisement in the program

enquiries

Sharon Finnigan Events & PR

e. sharonfinniganeventspr@bigpond.com m. 0419 636 616

bookings

Paint a Rainbow Foundation

PO Box 49, Horsley Park NSW 2175

T. 02 9620 1140

MEDIA RELEASE

13 May, 2009

Garvan St Vincent's Campus Cancer Centre Welcomes \$70 million from Federal Government

The Federal Government has announced a \$70m funding package to enable the development of the Garvan St Vincent's Campus Cancer Centre (GSVCCC). The Centre will integrate the Garvan Institute's internationally acclaimed cancer research with the best practice clinical care of St Vincent's.

In jointly welcoming the funding announced in last night's Federal budget, Professor John Shine AO, Executive Director of the Garvan Institute, and Steven Rubic, Chief Executive of St Vincents & Mater Health said this much needed support by the Commonwealth Government would enable construction of the new \$100 million state-of-the-art facility to commence within the year.

"We are delighted that in these tough economic times the Government has exhibited the foresight to focus on increasing our capacity to better diagnose and treat this increasingly prevalent disease that devastates the lives of around one in three Australians," said Professor Shine. "Coupled with the funds we have already raised from generous private donors and the Australian Cancer Research Foundation as well as the land that has been granted by the Trustees of St Vincent's Hospital; this support will enable us to forge ahead to achieve better outcomes for people with cancer."

Steven Rubic added that the Project would "build on the existing strengths and long history of collaboration between St Vincent's and the Garvan, to ensure cancer research findings move quickly into clinical care and clinical challenges drive laboratory research."

Housing over 350 researchers and clinicians within the St Vincent's Research Precinct in Darlinghurst, the purpose-built Centre will have a major focus on translational research and the development of innovative, personalised medicine approaches to patient care. The GSVCCC will be complementary to other cancer initiatives being developed in Australia. By enabling researchers and clinicians to work side by side in an integrated and collaborative environment, the Centre will facilitate a multidisciplinary effort in the fight against cancer.



WHAT'S NEW IN RESEARCH AT ST VINCENT'S CAMPUS

High Dose Rate Brachytherapy at St Vincent's

St Vincent's Hospital has been offering patients High Dose Rate Brachytherapy (HDR) treatment for localised prostate cancer since 1998. At that time it was one of the first centres in the country to offer the novel approach. Our centre has to date performed over 1000 such procedures for men with varying stages of prostate cancer.

Brachytherapy is a type of radiotherapy. Unlike conventional radiotherapy that uses external x-ray beams directed from outside the body at organs inside the body (External Beam Radiotherapy - EBRT), brachytherapy involves the implantation of radioactive sources directly into the tumour.

HDR is so-called because it delivers radiation to the tumour at a high rate. Research tells us that prostate cancer cells are killed more effectively by radiation delivered at high dose rates. Interestingly, the total radiation dose delivered to the prostate is less than with seeds (permanently implanted radioactive pellets) or with external beam.

HDR involves temporary placement of fine catheters into the prostate through the perineum. A high energy radioactive source, Iridium 192 (¹⁹²Ir), is passed from a machine down the catheters into the prostate. Patients undergo 2-4 treatments in a 36 hour period and can then be discharged from hospital. This is followed by a course of external beam radiotherapy.

St Vincent's Prostate Cancer Centre and the Garvan Institute of Medical Research have a collaborative team of cancer researchers. Our initial figures on 5 year follow-up showed promising results with disease free survival of 81% of patients in the intermediate and high risk groups. We are currently in the process of analysing 10 years of follow-up data on patients who received HDR in the high-risk cancer group.

For those of you who have been involved in our Quality of Life Study, we have now recruited over 500 men with new diagnoses of prostate cancer since May 2007. Many thanks to everyone for their time in completing the questionnaires, you are part of an Australian first in prostate cancer research!

All the best and good health

Richard Savdie
Urology Research Fellow 2009



**GARVAN
INSTITUTE**

Breakthrough Medical Research