PROSTATE CANCER ACTION GROUP (S.A.) INC

Affiliated with
Prostate Cancer Foundation of
Australia

ABN 26 499 349 142

NEWSLETTER

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APRIL 2007

Chairman's Report April 2007

March was a very busy period for our Group as can be seen from the following activities:

Awareness Evening Strathalbyn – 20th March 2007

Thanks to the support of the local Pharmacy and District Health Service, the evening was a very successful one. The attendance was of 105. Trev Hunt efficiently ran the evening. The speakers included Dr John Bolt, Nancy Sinclair, Robert Kitto, Coralie Hunt and Malcolm Ellis. Jo Bridges also spoke briefly about his upcoming walk to Melbourne commencing on Easter Sunday.

The venue, the Reg Sissons Memorial Day Care Centre, was a great location for the evening. Not many more would have fitted. Special mention must go to Carolyn Chandler from the Strathalbyn Health Service and local pharmacist David Merry. See report on page5.

Murray Bridge – PCFA Commonwealth Bank Road Show May be Coming to S.A.

This presentation has been put on hold as the PCFA may be involved in an event at Murray Bridge. Jeff Roberts may have more to report on this elsewhere as while in Sydney at the SAC conference he spoke to Andrew Giles about the joint Commonwealth Bank and PCFA awareness evenings planned for SA in the regional centres. From a list of 10 suggested potential sites for an awareness meeting, 5 must be chosen as definite sites. Trevor Hunt has notified Andrew Giles that his order of preference would be Mt. Gambier, Murray Bridge, Victor Harbor, Whyalla,, Pt. Lincoln, Pt. Pirie, Berri, Nuriootpa, Pt. Augusta, Clare. As for towns not on the suggested list, Naracoorte probably should be given serious consideration, followed by Bordertown/Keith, Millicent, Maitland, Lameroo/Pinnaroo, and Jamestown/Gladstone/Peterborough. Remote areas that could come under consideration are Ceduna, Roxby Downs and Coober Pedy.

Adelaide Metro Area - No further developments.

Man Alive 2007, Men's Health & Well- Being Festival Sunday March 18th Semaphore Foreshore

Many members of our group attended at a booth with a display of pamphlets to promote prostate cancer awareness. Members attending included Fred, Trev and Coralie Hunt, John and Phyllis Shields, Robert Kitto, Jeff and Theban Roberts, Malcolm and Beverley Ellis and Ian Fisk. Quite a few people stopped at our booth, chatted to our members and took away information. The documented number was 81. This Group has been represented at every Man Alive! event since it commenced, and we always attract a significant number of enquiries about the disease. This year, we had enquiries from men newly-diagnosed (2 days prior), to those who have been treated but now have recurrent disease. Some men enquired on behalf of their father, and were obviously aware of the family risk. We had men from interstate, and even one resident from Spain.

St Marys Probus Club

On March 19th Ian Fisk gave his first PCFA Ambassador Program presentation. It seemed to go quite well. The attendance was 46 composed of both men and women.

Kapunda Farm Fair 27/28th April 2007

Details in the last month's Newsletter and on page 18.

Karoonda Farm Fair 30/31st March 2007

Another successful event for our group. Members of our group attending included Trev and Coralie Hunt, Bill Toop, John and Phyllis Shields and Malcolm and Beverley Ellis. Numbers accessing information at the stall were many, but only 33 genuine enquiries were recorded. It was the general opinion among stall-holders that crowds were probably down on previous years, and we certainly noticed that we did not have the strong enquiry rate that we experienced last year. Nevertheless, we managed to make a couple of other worthwhile contacts.

Lions Club of Edwardstown

Urologist Dr Kym Horsell will be the key speaker at a Men's Health night to be held on the 18th April. Two members of our group will attend. Lions from several other Clubs will be attending, and a substantial attendance is anticipated. This meeting will be held in the Marion Hotel.

SAC National Conference 2007

The Support & Advocacy Committee annual Conference was held in Sydney on the 2nd & 3rd April. Both Jeff Roberts and Ian Fisk attended.

Jeff went on behalf of the PCAGSA group, and Ian in place of Gary Bowes. Gary was a long way from well enough to attend himself. No one else seemed willing or interested enough to attend so Ian got to go!

We flew over on Sunday evening, returning Tuesday afternoon.

Many topics were covered including Governance (state chapters roles, responsibilities and membership), Policy Guidelines (budget process, bank accounts, fundraising and compliance, insurance, incorporation).The Ambassador Program on the first day.

Tuesday included presentations on "Effective ways to influence Government" an interesting session with much information on the lobbying for Taxotere to be added to the PBS. Sally Crossing AM spoke on the Breast Cancer National Action NSW group and also on Cancer Voices NSW (Sally was also very involved in the publication of the "Directory of Breast Cancer Treatment and Services", this initially covered just NSW but now all of Australia) a version is available on line at http://www.e-strategy.net.au/bci/directory/.)

The general concept was expressed many times that the support groups should concentrate on Support and the PCFA on fund raising. It was also suggested, quite strongly at times, that PCFA should not forget its fundamental purpose to serve Prostate Cancer Patients and their carers. In that line, consumers should have more influence on the boards!

Some of the discussion was very relevant to PCAGSA, especially the issue of Affiliation and Incorporation. Further investigation is necessary to determine the exact status of our group and also that of the Association of Prostate Cancer Support Groups (SA) Inc.

It was a very worthwhile couple of days, interesting and good to meet fellow Support group representatives from most other areas of Australia (Western Australia, Victoria, Queensland and New South Wales).

Full minutes of the proceedings should be available in a few weeks.

Mitcham Prostate Cancer Support Group

There was a disappointing attendance of 12 at the March meeting although several apologies were received. Ian Fisk chaired the meeting and showed a DVD on "Surviving cancer in Rural and Regional Australia".

At the next meeting to be held on Thursday 26th April, urologist Dr Brian Landers will be the guest speaker.

All are welcome to attend this informative presentation.

Ian Fisk, Acting Chairman

PCFA National Men's Health Promotion Forum - Adelaide

Saturday 6th October 2007

Please keep this date free – further details shortly

DISCUSSING A SILENT KILLER

A health campaign and book launched in Newcastle today aim to shed light on a killer disease too often ignored by local men.

"What Women (and Their Men) Need to Know About Prostate Cancer" is a book written by former University of Newcastle nursing Professor Irena Madjar. The Hunter has the state's (N.S.W.) worst death rate for prostate cancer, but Ms. Madjar said it was rarely discussed. *(Daily Telegraph, 16/2, p18)*

COMMENT: *From this report it appears that men are now to blame because they are accused of ignoring the issue of prostate cancer. One would have to wonder where Ms. Madjar has been for the last couple of decades, when Cancer Councils would not recommend PSA testing for prostate cancer, with the consequence that it was not supported by the Government and the medical profession. When a man asked for a test, it was more than likely that he would be talked out of it by his doctor. Now men are being blamed for not talking about it, and ignoring the disease. If it has rarely been discussed, it is because men have never been encouraged to discuss it. Get real, lady, many men have needlessly died of prostate cancer because they were never given the test that could have helped to diagnose the disease at a much earlier (and curable) stage. It is more likely that they were never told about it.*

Breakthrough in early cancer diagnosis

Clara Pirani, Medical reporter
15feb07

AUSTRALIAN researchers have discovered a new way that cancer can be passed down from parents to children that will allow them to diagnose the disease earlier.

Previously researchers believed young cancer sufferers inherited a parent's gene mutation.
However doctors were at a loss to explain why tests showed no sign of genetic mutation in some people with cancer.

Now researchers from St Vincent's Hospital in Sydney and the University of New South Wales have discovered that a chemical which paralyses part of the body's DNA can also be passed down from parents to children and cause cancer.

The breakthrough proves that the chemical - which wraps itself around part of the DNA and renders it useless - rather than a mutation of genetic code, causes some cancers. It was previously thought that this chemical defect could not be inherited.

"There are a lot of young people who have cancer and we really don't know what causes it and this may be the explanation," said Robyn Ward, an oncologist from St Vincent's Hospital who led the study.

Professor Ward said the research, published in the New England Journal of Medicine, would allow doctors to re-test people who previously showed no signs of cancer.

"If we know that someone has a risk of the cancer, we can intervene early and treat it."

The team made the discovery after studying three boys whose mother had bowel cancer.

Traditional tests showed the boys had not inherited their mother's faulty gene and therefore were not at risk of developing cancer. However one son was found to have inherited the same chemical defect, indicating a predisposition to bowel cancer.

"Even though his gene sequence appears to be absolutely normal, his gene has nevertheless been paralysed by this coating wrapped around it," said co-researcher and geneticist Megan Hitchins.

"That leaves us with an entirely new pattern of inheritance."

CANCER IN OTHER JOURNALS (For those members who wish to research other items)

Reader's Digest – February 2007 – "Sparks of Genius" - Radio-frequency experiments on tumours

Nexus – February-March edition - Dandelion Root – A cure for Cancer?

Nexus – April-May edition – Health Secrets of the Pomegranate

NEW RESEARCH CALLS FOR RECLASSIFICATION OF ZOLADEX AS CURATIVE

Monday, 13 November 2006

MACCLESFIELD, UK (Press Release) - Findings Challenge Historical Assumptions & Current Guidelines For Treating Non-Metastatic Poor Prognosis Prostate Cancer with Adjuvant LHRHas New research presented today at the 28th Congress of the Societe Internationale d'Urologie (SIU), Cape Town, South Africa demonstrates that adjuvant androgen-deprivation therapy with ZOLADEX (goserelin) can consistently control prostate cancer, allowing men to out-live their disease. The researchers conclude that adjuvant goserelin should be reclassified as a treatment of 'curative' intent for men with poor prognosis, non-metastatic prostate cancer and call for current clinical guidelines to reflect this.

The research highlights other cancer treatments that have been reclassified as 'curative', including cisplatinum-based chemotherapies that revolutionised testicular cancer treatment so that the *disease* is eradicated in a substantial proportion of men, and long-term results with tamoxifen used after surgery in women with breast cancer, which led to the drug being reclassified as a treatment of curative intent.

Dr Neil FIeshner, Division of Urology, Princess Margaret Hospital, Toronto, Canada, who presented the research, commented: "Our analysis of four long-term studies clearly shows that treatment with adjuvant goserelin provides long-term control of non-metastatic, poor prognosis prostate cancer such that a significant number of men are out-living their disease. Historically, LHRHas were a treatment for palliation of metastatic prostate cancer, and physicians today still consider adjuvant hormonal therapy as a palliative treatment option, despite the number of trials showing positive survival results for men with non-metastatic, poor prognosis cancer. The findings fundamentally challenge this notion, which is an important message for clinicians and men alike as it means the current way we view and use this drug is outmoded, meaning some men may not be receiving the best chance of cure."

Concept of 'cure' in cancer

The concept of 'cure' in oncology is emotive and fraught with complications: currently the diagnostic technology that allows physicians to determine whether all cancer cells are eradicated does not exist. Because of this, oncologists are reluctant to use the term 'cure'. A definition of cure for cancer was first established in the 1970s, which proposed that cure exists for disease-free survivors whose overall survival rate is similar to that of an age - and sex- related matched population [ii]. This concept first led to the five-year survival rates becoming widely accepted as an indication of the success of a cancer treatment

However, advances in treatments, earlier detection, and increasing international collaboration and data sharing have made the five-year survival concept obsolete for many cancers. A review of other genitourinary cancers (bladder cancer, testicular cancer, and renal cancer) by the researchers indicates that cure varies with tumour type and disease stage. They found, for example, a five-year follow-up of patients with transitional cell muscle-invasive bladder cancer treated with a combination of chemotherapy and radiation or surgery was insufficient as the survival curve has not yet flattened, and a follow-up period greater than five years to evaluate cure was needed due to the progression of invasive bladder cancer [iii].

Is it possible to 'cure' patients with poor-prognosis non-metastatic prostate cancer?

The researchers reviewed survival data from four long-term, randomised, controlled clinical studies in men with non-metastatic, poor prognosis prostate cancer who received adjuvant hormonal therapy with goserelin following their primary treatment (radical prostatectomy or radiation therapy) [iv},[v] (vii) The researchers reviewed goserelin as it is the most widely researched LHRHa and is unique amongst LHRHas as it has been studied as an adjuvant therapy in a number of randomised, controlled survival studies with a follow-up of more than five years. From these findings, the researchers assessed whether the potential for cure was achieved using an amended definition of cure specific to prostate cancer, defined as 1) when the disease-free survival curve flattens out after 10-15 years following treatment and 2) when the overall survival rate approaches that of an age-related healthy male population. Their findings showed that:

- Across all four trials, long-term disease control was achieved in a sizeable proportion of men with non-metastatic prostate cancer and a poor prognosis (poor prognosis is defined as having PSA level >20ng/nL and high Gleason scores >8 amongst other criteria) who received adjuvant goserelin.
- The disease-free survival (Kaplan-Meier) curves flattened during long-term follow up, indicating that many men are not relapsing.
- Importantly, the overall survival curves indicate that patients were not experiencing significant additional mortality associated with the side-effects of long-term goserelin use

Guidelines outmoded

In moving forward, Dr Fleshner commented: "The European Association of Urology and the American Society of Clinical Oncology treatment guidelines do not currently classify adjuvant hormonal therapy as being a potentially curative treatment. It is worth noting that generally similar long-term results with tamoxifen adjuvant to surgery in women with breast cancer led to this drug being classified as a treatment of curative intent. We believe that adjuvant goserelin should be reclassified as a treatment of curative intent for patients with poor prognosis, non- metastatic prostate cancer."

For more information: www.astrazenecapressoffice.com. *www.astrazeneca.com*. www.zoladex.com. www.prostateline.com

Capacity crowd attends Prostate Cancer Awareness Evening

One hundred and five enthusiastic people attended the Prostate Cancer Awareness evening on the 20th March 2007 at the Reg Sissions Memorial Day Care, High Street Strathalbyn.

The keynote speaker was Urologist Dr John Bolt who discussed the statistics relating to Prostate cancer.
Participants heard that Prostate Cancer, is the second most common cancer in Australian men after skin cancer and the second highest cause of male cancer deaths.
Each year there are approximately 12,000 new cases of prostate cancer diagnosed in Australia, with 2,700 deaths.
Assessments including the Prostate Specific Antigen blood test, rectal examination and biopsy were also discussed. As were current treatments pertaining to Prostate Cancer including prostatectomy and chemotherapy.
Nancy Sinclair from the Repatriation General Hospital spoke on "Nutrition and prostate cancer".
Nancy gave information about healthy diet and general wellbeing and also discussed the importance in eating a well balanced diet taking foods from all the food groups including leafy green vegetables.
Two survivors of prostate cancer and a support person shared their personal experiences of diagnosis and treatment and how Prostate Cancer had affected their lives.

The evening was sponsored by Strathalbyn Pharmacies, supported by the Strathalbyn & District Health Service and conducted by the Prostate Cancer Action Group {SA} Inc.,{PCAG} with assistance from The Cancer Council SA.
The Prostate Cancer Awareness evening was successful in giving men and their 'partners' information about prostate cancer symptoms, diagnosis, treatment and post treatment in a relaxed and supportive local environment.

Dr John Bolt, Urologist, Nancy Sinclair, Dietition Repatriation General Hospital, Robert Kitto, Prostate Cancer Action Group, Carolyn Chandler, Health Promotion Officer, Strathalbyn and District Health Service, Coralie Hunt and. Malcolm Ellis. Prostate Cancer Action Group.

photo courtesy of I. Fisk.
Report from "The Southern Argus", 29/3, p13

It is always interesting to see how others see us in action, as reported above. Attendance at the meeting came from Milang, Mt. Barker, Goolwa, Clayton, and Wellington as well as Strathalbyn. A quick perusal of the evaluation forms showed a significant number of them to be only partially completed. Of those attending, 9 were aged over 80 years. There must have been one trencherman, because he commented "Supper was excellent", and I could not disagree with that sentiment. Well done Carolyn – you deserve a huge credit for your hard work, and the attendance was a true reflection of that, and it was a pleasure to work with you. We hope the injured arm is coming good.

SELENIUM MIGHT CUT PROSTATE CANCER RISK IN SMALL GROUPS OF MEN

High levels of selenium are linked to a reduced prostate cancer risk in smokers and in men who take vitamin E or multivitamins

MONDAY, February 5 (Reuters Health) - Despite widespread interest in selenium for warding off prostate cancer, a new study shows that a high blood level of selenium is not in itself generally associated with reduced prostate cancer risk.

However, the findings reported in the *American Journal of Clinical Nutrition* do indicate that high selenium levels may be protective in certain subgroups of men.

Dr. Ulrike Peters, of the Fred Hutchinson Cancer Research Center, Seattle, and colleagues conducted a study with subjects who were screened for the Prostate, Lung, Colorectal, and Ovarian Cancer

Screening Trial.

The team compared selenium in blood samples collected before diagnosis from 724 subjects who developed prostate cancer and from a comparison group of 879 similar men who remained free of the disease.

All participants completed a questionnaire at enrollment regarding age, ethnicity, education, occupation, smoking history, history of cancer and other diseases, use of selected drugs, and prostate related health factors.

A 137-item food-frequency questionnaire was used to assess usual dietary intake over the 12 months before enrollment. The men were followed for up to 8 years.

Overall, the researchers found no association between serum selenium and prostate cancer risk. However, higher serum selenium correlated with a lower likelihood of prostate cancer in men who reported a high vitamin E intake (more than the average of 28 IU per day) and those taking multivitamins.

Also, for smokers, high selenium levels appeared to reduce their prostate cancer risk.
SOURCE: American Journal of Clinical Nutrition, January 2007.

SURGERY AND RADIATION SEEN AS BEST FOR LOCALISED PROSTATE CANCER

TUESDAY, January 23 (Reuters Health) - Both surgery (radical prostatectomy) and radiation therapy result in significantly higher survival rates in men with prostate cancer that hasn't spread beyond the gland, compared with less definitive approaches, according to the results of a large study conducted at the Henry Ford Health System in Detroit.

Dr. Ashutosh Tewari, of New York-Presbyterian Hospital-Weill Cornell Medical Center in New York City, and colleagues studied 3,159 men, 75 years of age or younger, with biopsy-confirmed, localized prostate cancer, treated between 1980 and 1997.

"A patient was considered to have undergone radiotherapy or prostatectomy if he received that treatment within 6 months of diagnosis; otherwise, he was assigned to 'conservative management'," the researchers explain in the medical journal *Urology*.

The overall survival rate at 15 years after treatment was 35 percent with conservative management, 50 percent with radiation treatment and 65 percent with radical prostatectomy, the team reports.

> Compared with less definitive approaches, radical prostatectomy and radiation therapy result in significantly higher survival rates in men with prostate cancer that hasn't spread beyond the gland

When deaths due specifically to prostate cancer were considered, survival rates were 79 percent, 87 percent and 92 percent with conservative management, radiation and surgery, respectively.

Looked at another way, men who had radiation treatment lived an average of 4.6 years longer with radiotherapy, and 8.6 years longer with radical prostatectomy, than those managed conservatively.

Because this was a look-back study, Tewari and colleagues caution that forward-looking clinical trials are still needed to compare the survival benefits of each of these three treatment approaches. SOURCE: *Urology*, December 2006.

(1) Cancer **patients** turn to rat drug

KIM WHEATLEY ("The Advertiser", 4/4, p9)

AUSTRALIAN cancer patients are ordering an unlicensed and untested drug on the internet in a desperate bid to survive.

The drug, dichloracetic acid (DCA), was found to shrink 75 per cent of cancerous tumours in laboratory rats within weeks.

While the drug is not approved for humans, *The Advertiser* understands at least seven Australians have ordered DCA from a U.S. website, which sells it to treat animals.

"There are definitely people in Australia who have (ordered it) and I presume are starting to use DCA," Jim Tassano, who founded the site, said in an email.

"Most have responded since the publication in (scientific) magazines."

Mr Tassano said the Australians who had ordered the drug came from NSW (Darlinghurst and Cherrybrook), Victoria (Mitchum, Somers, Warragul), the ACT and Scarborough in WA. None was from SA.

The news has prompted Australian doctors to join colleagues in the U.S. and United Kingdom to warn about potentially dangerous side effects. They said it was risky to extrapolate animal tests to humans.

"I'm very concerned that people may be using it," Australian Medical Association. (SA) president, Dr Chris Cain said.

"Although I can understand why individuals might try and do anything they possibly can to try and overcome disease like this, it's a very dangerous process."

Science Journal, *New Scientist,* wrote about the trials in January, sparking reader interest in the findings of researchers from the University of Alberta, Canada. Their research found DCA reactivated the mitochondria, the energy source in cells which also prompt the self-destruction of abnormal cells.

Mitochondria were "switched off'" when cancer invades. When that was reversed by DCA, the cancer cells withered and died. A website dedicated to DCA became active on February 5. Its chatroom has 167 active members.

The above item, published in "The Advertiser" on 4th April, caught my attention, and I wondered what could be so good about it. An internet search via Google brought up a ridiculous number of items. In a sample of these items, it appeared that, yes, this drug has been known for some time, and there were numerous warnings about its use, especially in unsupervised self-medication, or even just handling the drug. But, why was there not much about its use as an anti-cancer treatment? But then the answer came in the report that appears to have prompted the renewal of interest in this drug – it has no patent, and could, therefore, be manufactured relatively cheaply. Oh dear, that means that the big pharmaceutical companies could not charge the usual exorbitant prices, and get away with it. That original report is published below.

The remarkable thing about this report is that it was first published in the "New Scientist on 17th January, but not printed in "The Advertiser" until 4th April. Since 17th January, the "New Scientist" has published 5 other articles about DCA.

(2) CHEAP, "SAFE" DRUG KILLS MOST CANCERS

* Updated 16:33 21 February 2007
* From New Scientist Print Edition.
* Andy Coghlan

__New Scientist__ has received an unprecedented amount of interest in this story from readers. If you would like up-to-date information on any plans for clinical trials of DCA in patients with cancer, or would like to donate towards a fund for such trials, please visit the site set up by the University of Alberta and the Alberta Cancer Board < http://www.depmed.ualberta.ca/dca>. We will also follow events closely and will report any progress as it happens.

It sounds almost too good to be true: a cheap and simple drug that kills almost all cancers by switching off their "immortality". The drug, dichloroacetate (DCA), has already been used for years to treat rare metabolic disorders and so is known to be relatively safe.

It also has no patent, meaning it could be manufactured for a fraction of the cost of newly developed drugs.

Evangelos Michelakis of the University of Alberta in Edmonton, Canada, and his colleagues tested DCA on human cells cultured outside the body and found that it killed lung, breast and brain cancer cells, but not healthy cells. Tumours in rats deliberately infected with human cancer also shrank drastically when they were fed DCA-laced water for several weeks.

DCA attacks a unique feature of cancer cells: the fact that they make their energy throughout the main body of the cell, rather than in distinct organelles called mitochondria. This process, called glycolysis, is inefficient and uses up vast amounts of sugar.

Until now it had been assumed that cancer cells used glycolysis because their mitochondria were irreparably damaged. However, Michelakis's experiments prove this is not the case, because DCA reawakened the mitochondria in cancer cells. The cells then withered and died (Cancer Cell, DOI: 10.1016/j.ccr.2006.10.020).

Michelakis suggests that the switch to glycolysis as an energy source occurs when cells in the middle of an abnormal but benign lump don't get enough oxygen for their mitochondria to work properly (see diagram). In order to survive, they switch off their mitochondria and start producing energy through glycolysis.

Crucially, though, mitochondria do another job in cells: they activate apoptosis, the process by which abnormal cells self-destruct. When cells switch mitochondria off, they become "immortal", outliving other cells in the tumour and so becoming dominant. Once reawakened by DCA, mitochondria reactivate apoptosis and order the abnormal cells to die.

"The results are intriguing because they point to a critical role that mitochondria play: they impart a unique trait to cancer cells that can be exploited for cancer therapy," says Dario Altieri, director of the University of Massachusetts Cancer Center in Worcester.

The phenomenon might also explain how secondary cancers form. Glycolysis generates lactic acid, which can break down the collagen matrix holding cells together. This means abnormal cells can be released and float to other parts of the body, where they seed new tumours.

DCA can cause pain, numbness and gait disturbances in some patients, but this may be a price worth paying if it turns out to be effective against all cancers. The next step is to run clinical trials of DCA in people with cancer. These may have to be funded by charities, universities and governments: pharmaceutical companies are unlikely to pay because they can't make money on unpatented medicines. The pay-off is that if DCA does work, it will be easy to manufacture and dirt cheap.

Paul Clarke, a cancer cell biologist at the University of Dundee in the UK, says the findings challenge the current assumption that mutations, not metabolism, spark off cancers. "The question is: which comes first?" he says.

(3) NO PATENT? NO CANCER DRUG DEVELOPMENT

There's a drug out there with enormous potential, but no backers.

Some new cancer drugs emerge through better understanding of how the disease develops. Others work in ways we do not understand, and so give us fresh insight. It is rare to find a drug that sweeps away decades of assumptions and reveals a radical approach to treating all forms of the disease.

The drug is a simple, small molecule called dichloroacetate (DCA). Research in Canada led by Evangelos Michelakis of the University of Alberta has shown that it has promising anti-cancer properties. That's not all. The drug's mode of action is also generating excitement.

In 1930, biochemist Otto Warburg proposed that cells turn cancerous by changing the way they generate energy, Normally, cells rely on specialized organelles called mitochondria to supply their energy, Cancer cells switch to a process called glycolysis, which takes place in the body of the cell. It is an inefficient process, used by many bacteria. (New Scientist.com opinion, published 20/1)

(4) NO WONDER DRUG

It is indeed scandalous that promising anti-cancer agents such as dichloroacetate (DCA) go begging for support simply because they are cheap and unpatentable. You have done a great service in bringing this information and perspective before the public.

However, after you published online your first article on this proposed anti-cancer treatment (17 Jan.), my medical information service was deluged with demands from desperate patients for what you call a "too good to be true" wonder drug. We had to inform them that DCA had never been tested in humans, only in cell lines and experimental animals, and that it was totally unavailable to today's patients.

You did not explain that it is too early to draw therapeutic conclusions, despite the promising lab work. But the magazine headline "Cheap safe drug kills most cancers" implies that DCA is known to destroy actual tumours in humans. This continues to generate waves of unwarranted expectation among many patients, and has already resulted in severe disappointment for people seeking a solution to life-threatening cancers.

It should also be pointed out that DCA is a by-product of the water chlorination process and a well-known environmental pollutant. It has been shown to be carcinogenic in rodent models and is also genotoxic, hepatotoxic and teratogenic in animals, all at doses well below what would seemingly be necessary to achieve a therapeutic effect in cancer patients. There are worthwhile anti-cancer drugs that are carcinogenic. But it would have been good to inform readers of this. *(Ralph Moss, Lemont, Pennsylvania, US, in issue 2589 of New Scientist magazine 3/2, p20)*

(5) WAIT FOR CLINICAL TRIALS

Ralph Moss of cancerdecisions.com states that dichloroacetate (DCA) has "never been tested in humans, only in cell lines and experimental animals" (3 Feb., p20). But according to *Environmental Health Perspectives* (vol. 106, supplement 4) "DCA toxicity is predicated mainly on data obtained in inbred rodent strains administered DCA at doses thousands of times higher than those to which humans are usually exposed. In these animals, chronic administration of DCA induces hepatotoxicity and neoplasia. Ironically, the DCA doses used in animal toxicology experiments are very similar to those used clinically for the chronic or acute treatment of several acquired or hereditary metabolic or cardiovascular diseases. As a medicinal, DCA is generally well tolerated…. It remains to be determined whether important differences in its metabolism and toxicology exist in humans between environmentally and clinically relevant doses."

I think we have to wait for clinical trials of DCA in people with cancer and not exaggerate a possible negative outcome beforehand. *(Mike Martin, London UK, issue 2592 of New Scientist magazine, 24 Feb., p22)*

(6) CANCER THERAPY: WHEN ALL ELSE FAILS

28 March 2007

Exclusive from New Scientist Print Edition.

Linda Geddes

Lawrence Burgh has a sober outlook on life. A48-year-old physician whose career has centred on treating seriously ill patients, Burgh was diagnosed with cancer in December 2006. Yet despite his clinical experience, he has taken an extraordinary step to try to rid himself of his illness, a step many would consider to be a medical heresy.

Burgh is one of a growing number of patients who have been dosing themselves with a simple laboratory chemical that has never before been used to treat cancer in people. Most are doing so without the help of doctors, and none is enrolled in any systematic clinical trial of the substance. Instead, they are buying it over the internet, and sharing their experiences of it in online chatrooms. For them, the unlicensed, untested drug represents their last best chance of survival.

That's not the way cancer specialists see it. For them, the activities of Burgh and those like him are indicative of what could become a dangerous new trend, in which groups of seriously ill people get together online to discuss, source and try untested

drugs whose safety and efficacy is uncertain.

The drug in this case, known as DCA, is a widely available chemical that cannot be patented. In basic laboratory tests and experiments in rats it has shown promise as an anti-cancer agent, but in people it may yet show side effects that could further damage the lives of people who take it. Scientists investigating the potential of DCA as a cancer treatment fear that any deaths or injury caused by its premature, unregulated use could damage their work - and the welfare of patients far into the future.

Burgh's quest to cure himself began last month, shortly after he was told the cancer in his thigh had spread to his lungs. "My prognosis is very poor," he says. "Standard chemotherapy would give me only a slim chance of survival at five years," So he turned to DCA, after reading about the promising lab experiments in *New Scientist* (20 Januarv, p 13).

"' DCA, or dichloroacetic acid, is an analogue of acetic acid in which chlorine atoms replace two of the three hydrogen atoms on the methyl group. Because it is a corrosive acid, it must be "buffered" to damp down the acidity, and it is usually administered as sodium dichloroacetate.

In January, a study by Evangelos Michelakis and his colleagues at the department of medicine at the University of Alberta in Edmonton, Canada, suggested that DCA could shrink several types of tumour in rats, by exploiting a previously ignored metabolic pathway in the cell (see "How DCA could affect cancer", below). "I was intrigued by the proposed mechanism," says Burgh (not his real name; this article uses a pseudonym to protect his privacy). "The biochemistry made sense to me. I subsequently read dozens of articles and abstracts on DCA before I decided I wanted to try it."

On 27 February, he self-administered his first dose, and for the next month took DCA twice a day, monitoring his blood and urine for signs of any problems, and visiting his oncologist, who was aware of what he was doing, once a week.

Because DCA is not an approved drug in the US, the UK or anywhere else, Burgh had to find his own supply. Using his contacts he obtained raw DCA, then asked a chemist friend to buffer it and check its purity.

Burgh is not alone in his attempts to procure the drug. Already, within weeks of Michelakis's paper being published, a substantial online community has grown up, largely centred on the website www.thedcasite,com which declares itself to be a gateway for information on DCA. At least eight of the individuals who have posted contributions on the site's chatroom, including Burgh, claimed to be taking DCA or giving it to a close relative. By 21 March, the chatroom had 135 active members - most of them from the US, Canada, the UK and Australia - plus posts from numerous unregistered users, many swapping tips on how to get hold of DCA, how to prepare the chemical for human consumption, and what supplements they should be taking to minimise side effects.

"This is pretty much a new phenomenon," says Kate Law, director of clinical trials at research charity Cancer Research UK. "There has always been an industry for vulnerable people, but the magnitude of it has multiplied exponentially. The intemet has changed the world for people who are looking for miracles. "

Michelakis himself warns that people taking DCA could do themselves serious harm. The chemical is known to increase the risk of nerve damage in people who have been given it in clinical trials for other reasons. It may also cause liver damage and interact with existing anti-cancer drugs in unexpected ways. "Since many anti-cancer drugs are neurotoxic, these interactions could be fatal," Michelakis says. Worst of all, he says, if patients are taking DCA outside clinical trials, such damaging side effects may go unrecorded.

Desperate measures

Yet there are many desperate patients prepared to take this risk. Michelakis says his department gets thousands of emails from people saying they have nothing to lose, but that's not how he sees it. "Of course you've got something to, lose," he says. "There are many cases of people being told 'you've only got a month to live', and a month later they're still alive. If you take DCA, it may not work, you could still have the cancer, and you'll be paralysed."

Despite such warnings, people are continuing to hunt down details of potential suppliers of DCA. "I have been getting three to four calls a day," says Steve Grossman, manager of J. E. Pierce Apothecary in Brookline, Massachusetts. "I've had calls from pretty much the whole of the northern hemisphere now, plus Africa, the Middle East and south-east Asia. Mostly it is people with end-stage cancer, who have already gone through everything medicine had for them." Grossman says he will not dispense DCA to anyone unless he sees a prescription from a doctor - and no one has yet provided one.

Because DCA has never been approved as a drug for human use, the sale of pharmaceutical-grade DCA, which has been sterilised, purified and had its pH adjusted, is tightly controlled. In the US, a doctor can only prescribe it if they have already applied for an Investigational New Drug (IND) number from the Food and Drug Administration for its compassionate use in a seriously ill patient, or in a clinical trial. Doctors in Canada must gain permission from their provincial college of physicians and surgeons, while companies who supply it to doctors in the UK must inform a national regulatory agency.

As word gets around that people are buying DCA to use as a drug, suppliers of the chemical are clamping down for fear of breaking the law. However, despite these restrictions, people are still acquiring it. .

Thedcasite.com shows at least 34 people have got hold of DCA - either through doctors, or by obtaining raw laboratory-grade DCA from chemical supply companies, for example - and are either taking it, or plan to start taking it soon. At least another 50 are actively searching for a supply. One person claims to have got theirs from chemical giant Sigma-Aldrich

based in St Louis, Missouri. Michael Hogan, the company's chief administrative officer, says it will not dispatch any chemical to individuals or residential addresses, and after being alerted to the problem he says Sigma will now tighten up surveillance on DCA orders. He points out, however, that if a legitimate company places an order, Sigma has no control over who that company sells it on to.

In a further twist, thedcasite.com has a sister site that sells DCA as a treatment for cancer in animals, offering a further way for people to get hold of the drug (see "An online community is born", below). The FDA says it is investigating the websites, after being alerted to their existence by New *Scientist.* Yet ultimately there may be very little it can do, as DCA is already a widely used laboratory chemical that can be ordered from thousands of companies worldwide.

Hogan is clear that his company considers taking DCA to be unsafe. 'We would no more encourage someone to self-medicate with DCA than to drink poison," he says. As well as the inherent health risks, there is the possibility of contamination in laboratory-grade DCA, and not buffering it correctly could result in severe burns.

Burgh has yet to see DCA make any impact on his cancer. Medical scans on 19 March showed that the primary tumour in his thigh has shrunk, and is less active, but this may be due to the delayed effects of radiotherapy and chemotherapy Burgh had in January. The number of metastatic tumours in his lungs has not changed since last month, and they are larger and more active. "These results are very preliminary," Burgh stresses, "but I was really hoping for better results." On 21 March, he stopped taking the drug after noticing symptoms which by 24 March included a numbness in his hands, which he believes to be a sign of neuropathy, and a hypoglycaemic attack. He advises other people \with cancer not to self-medicate with DCA except under medical supervision. "I am concerned others may try this drug on their own in desperation," he says. "DCA is chemotherapy, a serious drug with potentially serious side effects."

Michelakis opposes any self-medication with DCA, and the websites that facilitate it. Though he says he can understand why people with cancer are motivated to take DCA, he points out that not only are they placing themselves in danger, they may also be jeopardising the chances of finding out whether QCA actually works in treating cancer and of it becoming approved as a therapy. If people become sicker or die while taking QCA unsupervised, he says, funding and willingness to test it may disappear. "We are trying to do this the right way, by putting it into clinical trials, and these websites could destroy all of this."

How DCA could affect cancer

The preliminary discovery that DCA may shrink particular cancers in rats has prompted some to rethink how cancer takes hold in the first place.

One feature of cancer cells is that they produce energy by glycolysis (the breakdown of glucose) in the cytoplasm, rather than in the mitochondria, which shut down. Until recently this switch was thought to be merely a symptom of cancer, rather than anything more fundamental.

Yet DCA seems able to switch the mitochondria back on, and in doing so it turns on their ability to recognise a cell as abnormal and make it self-destruct. When Evangelos Michelakis at the University of Alberta tested DCA on cancer cells in culture, they died. When he gave it to rats with human tumours, the tumours shrank *(Cancer Cell,* DOI 10.1016/j.ccr.2006.10.020).

Earlier findings by two other groups lend support to the mechanism. In normal cells, DCA has long been known to trigger the switch between glycolysis and the production of energy in the mitochondria, by inhibiting an enzyme called pyruvate dehydrogenase kinase (PDK). In doing so, it decreases lactic acid production, which led to it being clinically tested, unsuccessfully, as a treatment for lactic acidosis in children.

In March last year Chi Van Dang at Johns Hopkins University School of Medicine in Baltimore, Maryland, showed that inhibiting PDK also triggers the release of toxic reactive oxygen species by the mitochondria, resulting in cell death. He speculated that PDK might therefore be an important therapeutic target for cancer. "My work, in a sense, confirms Dang's hypothesis," Michelakis says.

Then in June, Philip Leder at Harvard Medical School in Boston and his colleagues found that blocking glycolysis in cancer cells through a different mechanism stimulated their mitochondria and reduced tumour growth in mice, improving their survival *(Cancer Cell,* DOI: 10.1016/j.ccr.2006.04.023).

"These papers strengthen the rationale for trying DCA in patients with cancer, although it doesn't necessarily mean that it will work in humans in the end," Michelakis says.

He is submitting protocols to Health Canada for a clinical trial, and hopes to begin recruiting patients in the coming months. He has also been contacted by groups in the US, the UK and Canada that are interested in running human trials of DCA.

An online community is born

Within weeks of the results from animal trials of DCA being published, two websites were promoting its benefits and facilitating online discussion about its use.

The first, www.thedcasite.com. claims to act as a gateway for information on DCA, while the second, www.buydea..com. offers to sell it for the treatment of cancer in animals. Both sites were founded by Jim Tassano, who operates a pest-control

company in Sonora, California. While both sites state that DCA has not been approved for human use, thedcasite.com has been enthusiastic about cancer patients giving it a go. “Is DCA worth trying? We absolutely think so,” the main site read when created in early February this year. “The risks of a DCA-based therapy are trivial compared to those of accepted cancer therapy.”

The site also suggested that people donate money to the University of Alberta, where Evangelos Michelakis and his team continue to test DCA as a drug, and encouraged people to write to the US Congress and to doctors, urging them to kick-start clinical trials in cancer patients as soon as possible.

Michelakis says that since he published his study, and the appearance of the websites, he has received more than 15,000 emails from people enquiring about DCA. Around 3000 of them ask about it as a veterinary drug, with the implication that they are trying to source it for themselves or another person. He sees a clear link between the pet site and the questions he is being asked. “At first [people enquiring] were quite honest,” he says. “But we’re now getting emails from people asking for dosage information for, say, a 150-pound golden retriever.”

Ron Marcinkoski, a pharmacist in Edmonton, Alberta, has also been contacted by people who he believes have bought DCA from the pet site. “People are asking me if I can test its purity, if I can encapsulate it,” he says. “I think it is a major source.”

Tassano maintains that the primary goal of the pet site is to sell DCA for animal use, although he is aware that people are buying it for themselves. On 5 March, he posted updates on the health of two people he claims to have sold DCA to, saying both were doing well. This post has since been removed. “I can understand why they do it,” he told *New Scientist.* “The information is there so they can go to their doctor with it. Whether they buy their DCA from me is their choice.”
Because DCA has not been approved for human use, it would be illegal for a website to sell it for human consumption in the US, says special agent Phil Walsky of the Food and Drug Administration’s Office of Criminal Investigations. His office is investigating the links between the two sites. Marketing DCA for animal use is also an offence, as it has never been approved for veterinary use, an FDA spokeswoman says.

Tassano says he is now aware of the FDA’s rules, and has amended his postings over the past few weeks to reflect this. For example, earlier postings which stated that he had managed to acquire large quantities of DCA have since been removed, and on 23 February a disclaimer appeared stating “We do not advocate the use of DCA for human cancer at this stage and time.”

Tassano maintains he has not made any profit from the sites, and that they are playing an important role in helping to raise the profile of DCA. “We are only doing what we think is right.”

No time to lose

“I am just a desperate daughter hoping to find a way to gain a few more years with my mother, and hoping that my 10-month-old daughter will grow up knowing her grandmother.” The words of Meg Walker of Ontario, Canada, reflect the hopes and fears of many families affected by cancer, and their desire to have access to therapies to treat the condition.

Through a doctor, Walker (a pseudonym) has obtained a supply of DCA for her mother, who has stage 4 leiomyosarcoma, which has spread to her lungs. They are waiting on the results of her mother’s chemotherapy before deciding whether to try the chemical, but wish that DCA and other experimental treatments were more readily available. Clinical trials take time, and “the public is fed up with waiting on the medical community to get through their red tape”, she says.

Burgh echoes this view. Because DCA has not been approved as a drug, the company that supplies pharmaceutical-grade DCA would not sell it to him without-an IND number - a licence occasionally granted by the US Food and Drug Administration. “I do not have time to wait for an IND number,” Burgh says. “The process takes about six months -I may be dead by then.”

One patient group, The Abigail Alliance based in Fredericksburg, Virginia, is taking the FDA to court to try and force it to open up access to experimental drugs for terminally ill patients, including those with cancer. Its founder, Frank Burroughs, says DCA should not be used in patients until it has undergone safety tests in people with cancer.

However, he says that in general doctors should be allowed to administer any drug that has passed initial human safety tests and has shown promising efficacy. The FDA’s existing policies “block the life, liberty and pursuit of happiness of patients who cannot get into clinical trials”, the alliance claims. A federal appeals court- in Washington DC ruled in the alliance’s favour in May 2006, but is reconsidering its ruling at the request of the Bush administration. A verdict is expected within eight months. The FDA says it is considering regulatory changes that would enable easier access to experimental medicine, regardless of the outcome of the court case. Under the proposed rule, expanded access would be available to individual patients and groups being treated under a systematic plan, provided that there is no satisfactory alternative therapy for the disease or condition. A 9O-day consultation period ended on 20 March, but no date has been set for implementing these changes.

Many charities welcome the proposed clarification, saying it will speed up the decision-making process. Peer-reviewed clinical trials remain the best way for patients to assess new medicines, says Steve Weiss of the American Cancer Society. “Yet we recognise that many patients are not eligible [for clinical trials]. We view this rule as a positive and necessary step toward balancing the individual needs of patients and patient safety while also maintaining the integrity of our system of high-quality, scientifically based and peer- reviewed clinical trials and patient participation in them.”
The Abigail Alliance says the regulations will merely put into law current policies which are too stringent. “We believe that the decision [as to whether to take an experimental drug] should not be the FDA’s, but the patients’ in consultation with their doctor,” says Burroughs.

(7) GAMBLING WITH YOUR LIFE

Taking your chances with an untested cancer drug is unlikely to do anyone any good.

They say that a rumour grows as it goes. So it was when *New Scientist* broke a story in January about a drug called dichloroacetate, or DCA, that showed promise in animal studies of cancer. Within weeks, blogs and web chatrooms were buzzing with discussions touting DCA as a new cure for human cancer, and, in their desperation, some people with cancer begin to locate DCA for themselves and take it (see "When All Else Fails").

The drug may yet live up to its promise as an anti-cancer agent – clinical trials are expected to start soon. It may even spawn an entirely new class of anti-cancer drugs. For now, however, it remains experimental, never yet properly tested in a person with cancer. People who self-administer the drug are taking a very long shot and, likely as it may sound, could even make their health worse. (from an editorial, New Scientist magazine, No. 2597, 31st March)

OBESITY A WARNING SIGN FOR FATAL PROS*TATE CANCER*

Obese prostate cancer patients are at much higher risk of dying from the disease than thinner patients, new research shows.

The US study found prostate cancer patients with a BMI of at least 35 lg/m^2 had twice the risk of fatal prostate cancer compared to patients with a lower BMI, and there was a significant dose-response trend. Adult weight gain from 18 years to baseline was also a predictor of prostate cancer death, but it did not predict the development of the disease. The observation of a positive association between obesity and the risk of fatal prostate cancer suggests that, in this select group of particularly aggressive cancers, the adverse effects of excess body fat outweigh hormonal perturbations that potentially may increase the risk of prostate cancer in obese men, researchers said. (Medical Observer, 23/2, p3)

ADVANCED CANCER AND DEPRESSION

It doesn't take much to imagine what it must be like to have advanced cancer - cancer which has spread to other parts of the body, where the aim of treatment is to extend life and improve its quality rather than achieve a cure.

Some people with this diagnosis develop major depression: depression severe enough to merit treatment and the evidence is that antidepressants help such people.

But in fact most people with advanced cancer don't have major depression. Yet they often do feel anxious, sad, fatigued and don't sleep well and doctors sometime give them antidepressants in the hope they'll help.

But an Australian trial of antidepressants in such people with advanced cancer make people feel better. No differences were found compared to placebo.

It may mean that these psychological problems may actually be a physical response to the cancer and its treatment rather than on a spectrum with depression and alternative ways of helping them need to be found.

These could include exercise, talking therapies and help getting a better night's sleep. (from ABC Health News)

AGGRESSIVE APPROACH DOUBLES HIGH-GRADE PROSTATE CANCER SURVIVAL

David Douglas
NEW YORK (Reuters Health) - Compared with conservative "watchful waiting," which is often recommended for men with high-grade prostate cancer because of the difficulty of treating it, radiation therapy or radical prostatectomy can lead to a significant improvement in survival, New York-based researchers report.

"Patients with the most aggressive non-metastatic prostate cancers—Gleason scores 8-10—if treated with prostatectomy or radiation, can expect to live more than 14 years," lead investigator Dr. Ashutosh Tewari told Reuters Health. "Those treated conservatively will live, on average, less than 7 years."

Dr. Tewari and associates at New York Presbyterian Hospital, Weill Medical College of Cornell University conducted a retrospective study of 453 prostate cancer

patients with a Gleason score of 8 or higher. The findings are reported in the March issue of the Journal of Urology.

Of this group, 197 (44%) were treated conservatively, 137 (30%) received radiation therapy and 119 (26%) underwent radical prostatectomy. Corresponding median overall survival times were 5.2, 6.7 and 9.7 years.

Median cancer-specific survival was 7.8 years for conservative therapy and more than 14 years for radiation therapy and radical prostatectomy. “The risk of cancer-specific death following radical prostatectomy was68% lower than for conservative treatment and 49% lower than for radiation therapy,” Dr. Tewari’s group found.

The researchers conclude that “even high-grade cancers are potentially curable. Retrospectively, there is a significant difference in long-term outcome among patients undergoing conservative treatment, radiation therapy and radical prostatectomy.” *Submitted by JarrahBark <http://www.cancercentral.com.au/index.php/member/1/> on March 21 2007 Last Edited March 20 2007© 2006 Cancer Central (Australia)*

ANTI-CANCER COMPOUND FOUND IN BEANS, NUTS, CEREALS

LONDON (Reuters) - Eating a diet rich in beans, nuts and cereals could help to prevent cancer because the foods contain a natural compound that inhibits the growth of tumors.

Scientists at University College London (UCL) said on Thursday that the substance called inositol pentakisphosphate, which is also found in lentils and peas, could also help researchers develop new therapies against the disease.

“Our study suggests the importance of a diet enriched in foods such as beans, nuts and cereals which could help prevent cancer,” said Dr Marco Falasca, of UCL’s Sackler Institute, who reported the finding in the journal Cancer Research.

He and his team discovered that the compound inhibits an enzyme called Phosphoinositde 3-kinase which promotes tumor growth. Scientists have been trying to develop drugs to inhibit the cancer-promoting enzyme but have had difficulty so far.

When the researchers tested inositol pentakisphosphate in mice and cancer cells in the laboratory, it killed the animal tumors and enhanced the effect of drugs used against ovarian and lung cancer cells.

“Our work will now focus on establishing whether the phosphate inhibitor can be developed into an anti-cancer agent for human therapy,” Falasca said in a statement.

The researchers believe the compound, which was non-toxic even at high concentrations, could also be used to increase the effectiveness of chemotherapy drugs.

OVEREXPRESSION OF COX-2 FOUND IN PROSTATE CANCER METASTASES

by Ed Susman | Doctor's Guide |

PHILADELPHIA, PA -- A retrospective review of tissue samples from prostate cancer patients found an association between overexpression of cyclooxygenase-2 (COX-2) and the presence of distant metastases, researchers said here at the American Society of Therapeutic Radiology and Oncology (ASTRO) 48th annual meeting.

The researchers looked at the genetic makeup of the tumors of patients in the Radiation Treatment Oncology Group protocol 92-02 study that considered the duration of androgen deprivation therapy in men with prostate cancer and particularly the possible role of COX-2, a known marker of inflammation and cell proliferation.

"This is the first study to establish the association of COX-2 expression to prostate cancer outcome in radiation-treated patients," said Li-Yan Khor, MD, research associate in radiation oncology, Fox Chase Cancer Center, Philadelphia, Pennsylvania.

In her presentation on November 8th, Dr. Khor reported that higher levels of COX-2 expression were associated with biological failure -- an increasing prostate specific antigen (PSA) level -- and distant metastases.

The study used a COX-2 Intensity Score, an automated scale of the depth of the color related to COX-2 staining on pathological samples. Dr. Khor said that about 10% of patients with scores under 134 on the scale had metastatic disease compared with 14% of patients with scores greater than 134, the level she used to compare outcomes.

Those patients whose tumors had staining scores 134 or greater had 49.9% a greater risk (95% CI, 1.010, 2.227, P = .0448) of developing distant metastases on the basis of a multivariate analysis, Dr. Khor said.

Other risk factors for metastatic disease as developed through the multivariate analysis were a Gleason score of 7-10 -- associated with a2.107-fold increase in the likelihood of distant metastases (P = .0019), and T3 or T4 clinical stage, associated with a 67.4% increased risk of distant metastases (P = .0150).

Dr. Khor also said the analysis showed that using the 134 COX- 2 Intensity Score as a cutoff resulted in a 48.9% increased risk of biological failure (P = .01) in patients were assigned to a short-course of androgen deprivation therapy in addition to radiation treatment.

There did not appear to be any significant risk of biological failure based on COX-2 staining intensity of patients who were assigned to long-term androgen deprivation treatment, she reported.

"These results indicate COX-2 may be more useful as a tool for selecting patients for short-term androgen deprivation rather than for predicting treatment outcome," Dr. Khor said.

However, she said the work holds out the possibility that in high-risk prostate cancer patients the use of COX-2 inhibitors might be potentially beneficial and should be considered for use in future clinical trials.

[Presentation title: Cox-2 Overexpression Predicts Prostate Cancer Outcome: An analysis of RTOG 92-02. Abstract 1124] (Copyright 2006 Doctor's Guide HealthDay News | 03.29.2007

Continence Resource Centre

(Located at the Independent Living Centre)

Who Are We?

The Continence Resource Centre is a statewide continence information and advisory service located at the Independent Living Centre.

The Continence Resource Centre is affiliated with the Continence Foundation of Australia, and funded by the Department for Families and Communities.

What Do We Provide?

Information

Staffed by Registered Nurse/Continence Nurse Advisors, the Continence Resource Centre provides information and advice on bladder and bowel problems.

This information is available to all community members including clients, carers, their families and health professionals.

The services provided include:

. Information and advice on continence management

. Continence services information

. Continence funding schemes information

. Continence product information (including an extensive product display)

. Health promotion activities in both metropolitan and rural areas

. Education sessions and seminars in both metropolitan and rural areas

. Continence information articles.

Displays

Continence literature display include:

. fact sheets

. booklets and brochures

. videos and CDs

. books.

Extensive continence product display includes:

. disposable pads and pants

. reusable pads and pants

. disposable absorbent sheets and chair pads

. reusable absorbent sheets and chair pads

. uridomes (sheaths)

. urinary drainage bags (leg bags and overnight bags)

. waterproof mattress protection

. toileting equipment (e.g., male and female urinals, bed pans, commodes, toilet seat raisers)

. adapted clothing (for easier dressing)

. odour control products

Websites

Continence services and continence product information is available on the Independent Living centre website: www.ilc.asn.au

For Continence Foundation of Australia (CFA) websites visit:

CFA National: www.continence.org.au

SA Continence Resource Centre: www.continencesa.org.au

Email: info@continencesa.org.au

Eligibility and Access

The Continence Resource Centre information and advisory service is open to the public 9am to 5pm Monday to Friday, excluding public holidays.

All community members are welcome to visit the centre, or phone, fax or email enquiries.

An appointment can be made if detailed advice is required. Please phone or email to arrange a time. An interpreter is available by prior arrangement.

Contact us if you would like further information on the services we provide.

Cost

All information and advisory services from the Continence Resource Centre are free of charge.

Location

11 Blacks Road, Gilles Plains .S.A. 5086
Accessible off-street parking is available

Phone 1300 885 886 (S.A. and N.T. callers only) or (08) 8266 5260
Fax (08) 8266 5263

KAPUNDA FARM FAIR

FRIDAY 27th APRIL & SATURDAY 28th APRIL 2007

Members are reminded that that the Kapunda Farm Fair is the site of our next awareness/information stall. Hours of operation are 8.30am to 5.30pm., each day. We have "cut our teeth" on smaller events, and members will notice that this event is the next step up towards the larger events.

At the time of publication, I do not have our entry passes. Also, I attempted to obtain the details of the exhibitors' conditions, only to find that they were not available on the website, at the time (9th April).

All displays must be in place by 8.00am on Friday 27th April, and must not be removed before 5.30pm.on 28th. Exhibitors gate opens 7.00am on Friday and Saturday. This event is conducted on the Kapunda Trotting Track grounds, and is best approached from Hancock Road, which runs off the main road into Kapunda, but if you miss that one, try Coghill Street.

The Stock Journal will be publishing a preview of the event (I am not sure of the publication date).

Catering. A full range of food and beverage will be available, with most outlets manned by various local organizations. Breakfast will be available in the dining room from 7.00am to 8.30am on each day.

Exhibitors are requested to remove cars from the site before 8.30am, and I note that there is a car park for exhibitors. Otherwise, a public car park can be accessed from Hancock Road, opposite the public entrance. Members will be supplied with a site plan.

If there are any other conditions that members should know about, I will email them to you, when available. You should be able to view them on the website www.kapundafarmfair.com.au.

Please remember to wear your **"BE A MAN"** T-shirts and name badges (weather permitting). We have an advantage with this event in that we have an inside site, but if this warm weather continues we might find it quite warm, under an iron roof. We are **NOT** permitted to sell raffle tickets at this event.

ENJOY!

NUTRITION – GREENGROCER THE KEY TO PREVENTING PROSTATE CANCER

The review found that a single, daily serve of lycopene-rich products, such as tomatoes, protected against the DNA damage associated with the development of prostate cancer.

Previous epidemiological research had found an inverse association between the consumption of tomato or tomato products and prostate cancer. However, it was not known whether lycopene, the main antioxidant carotenoid in tomatoes, was solely responsible for this protective effect (Curr Opin Clin Nutr Metab Care 2006;9:722-27).

The German researchers found that the ingestion of tomatoes or tomato products was associated with increased resistance against oxidative stress in biomarker cells. However, studies that administered lycopene alone found no significant reduction in DNA damage.

"Lycopene seems to be one compound that might contribute to DNA protection, but probably only in combination with other compounds ingested with tomatoes and tomato products," they concluded. (*Medical Observer, 17/11, p5; West Australian, 16/11, p6)*

Newsletter compiled by *Trevor Hunt*