

AUSTRALIAN PROSTATE CANCER FAMILY STUDY



2005 NEWS

The *Prostate Cancer Family Study* is continuing to grow in size as about 100 new families join each year. We now have over 500 families and are well on our way to our target of 1,000 families. This newsletter is intended to update you about our progress and scientific findings.

At the end of this newsletter is a list of the scientific publications the *Prostate Cancer Family Study* or its predecessor the *Risk Factors for Prostate Cancer Study*.

The *Prostate Cancer Family Study* would not be possible without the generous participation of men and their families affected by prostate cancer – our thanks go to all of you and your family members for joining in.

We would also like to thank the *E.J. Whitten Foundation* for their continued financial support of this important research.



Prof. John Hopper, University of Melbourne
 Prof. Graham Giles, The Cancer Council Victoria
 Dr. Dallas English, The Cancer Council Victoria
 Charmaine Smith, The Cancer Council Victoria
 Dr. Gianluca Severi, The Cancer Council Victoria
 Beverley Pitruzzello, The Cancer Council Victoria

families in which prostate cancer genes might be operating. Altogether, 2931 men participated (1497 men who had prostate cancer and 1434 men who were not affected). A family history of prostate cancer was reported more often by men with prostate cancer (19.2%) than men who didn't (7.5%). At that time, 168 men who reported having a family history of prostate cancer agreed to become part of the *Prostate Cancer Family Study* along with 823 of their relatives.

Each participant in the *Prostate Cancer Family Study* is asked for a small blood sample and to complete a short questionnaire and a dietary assessment. We have collected information and blood samples from 795 men diagnosed with prostate cancer and 1,192 of their relatives in the past five years (refer to figures below). Combining both studies we have collected information and blood samples from 1904 men with prostate cancer, and 2080 relatives (616 families). Of the 1904 men with prostate cancer, 446 reported having a family history of prostate cancer.

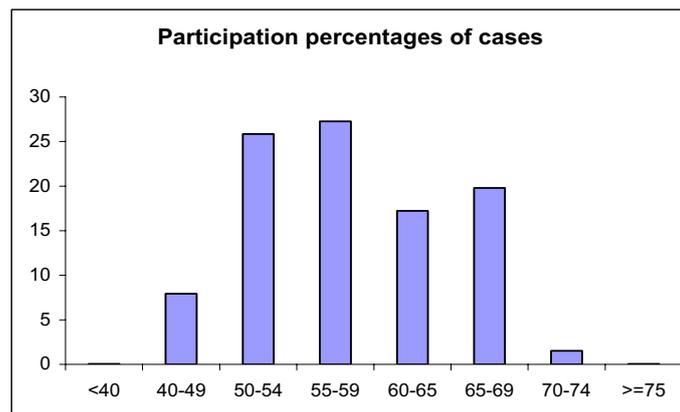
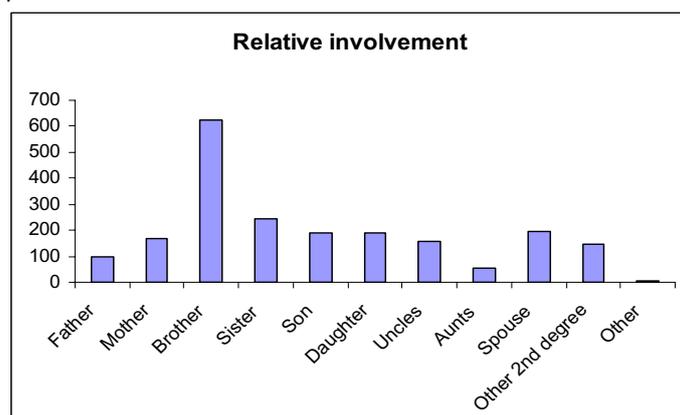
WHAT THE STUDY IS ABOUT

You may remember that the aim of the *Prostate Cancer Family Study* is to find out why prostate cancer is more common in some families than others. One of the strongest risk factors for prostate cancer is having another man in the family who has had prostate cancer.

All over the world, scientists are recruiting men and their families into research projects like ours to find genes that are associated with an increased risk of prostate cancer. When these genes are identified, the possible benefits from this discovery will be a better ability to identify men at high risk of prostate cancer and a better understanding of prostate cancer biology that might increase the possibility of prevention and improve treatment.

OVERVIEW OF THE PROSTATE CANCER FAMILY STUDY

The *Prostate Cancer Family Study* began in 1998 and was built upon a five-year study called *Risk Factors for Prostate Cancer*. Coordinated by the Cancer Council Victoria, it recruited men diagnosed with prostate cancer in Melbourne, Sydney and Perth. The aims were to compare the lifestyles of men with and without prostate cancer, to assess the role of lifestyle on the risk of prostate cancer, to estimate how much prostate cancer clustered in families and to identify



INTERNATIONAL CONSORTIUM FOR PROSTATE CANCER GENETICS

The search for prostate cancer genes requires international collaboration as the number of families likely to carry such genes is very small - (families with many men affected and at an early age). We have joined a collaboration so that we can contribute significantly to this research. DNA from families that have two or more men affected with prostate cancer and from which we have obtained DNA from at least two affected family members has been sent to the ACTANE (Anglo, Canada, Texas, Australia Norway EU Biomed) prostate cancer genetics consortium based at the Royal Marsden Hospital in the UK. This research group performs 'genetic linkage analysis' based on gene scans of DNA from families that contain several men with prostate cancer, usually with early age at diagnosis. So far, 100 Australian prostate cancer families have met the eligibility criteria and their DNA analysis has been included in this consortium's search for prostate cancer genes. The DNAs sent to ACTANE are only identified by code numbers, as no personally identifiable information ever leaves our database without the individual's written consent.

RESEARCH HIGHLIGHTS

We have published the following observations:

- Men with vertex baldness are at twice the risk of developing prostate cancer
- Men who start their adolescent growth spurt earlier than their friends have an increased risk of prostate cancer
- Men who ejaculate more frequently (particularly in their twenties) have a reduced risk of prostate cancer
- Men who eat a diet rich in foods based on tomatoes, onions and olive oil are at a reduced risk of prostate cancer
- Increasing waist circumference increases the risk of aggressive prostate cancer
- Men with a family history of prostate are at 2 to 3 times the average risk of prostate cancer and that this risk increases the earlier the age at diagnosis of the family members with prostate cancer
- Men who smoke are not at increased risk of prostate cancer
- To date, we have not been able to confirm any genetic change or mutation as being important to the risk of prostate cancer.

MORE INFORMATION ABOUT THIS STUDY

Any enquiries or further information can be directed to Charmaine Smith on (03) 9635 5417, fax (03) 9635 5330 or email at charmaine.smith@cancervic.org.au.

MORE INFORMATION ABOUT PROSTATE CANCER OR CANCER

- Cancer Help Line. – A telephone service providing advice, support and information on cancer to cancer patients, survivors, family and friends. Telephone 131120.

- Cancer connect – A peer support service that puts cancer patients in telephone contact with specially trained volunteers who have been through similar cancer and treatment experiences. Telephone 131120.
- www.prostatehealth.org.au. A Prostate Health website designed to give access to a variety of information in a variety of ways.

RESEARCH REPORT

Risk Factors for Prostate Cancer Study

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Prostate Cancer Family Study

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Many new areas of interest have emerged in recent years as discussed in the research highlights section of this news. As a result, we would like to learn a little more about you. Would you mind completing the questions below and returning this page in the reply paid envelope provided. THANK YOU

1. Have you ever had a PSA test (a blood test for prostate cancer)?

- No (Go to Q3)
- Don't know (Go to Q3)
- Yes → How old were you the first time you had this test?
..... Age in years
What was the PSA level at this time?
..... OR Don't know

2. How many times would you have had a PSA test altogether?

3. Has a doctor ever told you that you had prostate cancer?

- No (Go to Q9)
- Yes → How old were you?
..... Age in years

4. What was the PSA level at the time of your prostate cancer diagnosis?

..... OR Don't know

5. What symptoms did you have that led to your diagnosis of prostate cancer?

- None (Go to Q6)
- Urinary problem (Go to Q7)
- Pain (Go to Q7)
- Blood in urine (Go to Q7)
- Other (please specify) (Go to Q7)

6. If you had no symptoms, what led to your diagnosis of prostate cancer? (Tick as many as apply)

- The GP gave me a routine physical check-up
- The GP suggested a PSA test
- I asked for a PSA test because I was concerned about my prostate, even though I hadn't experienced any particular symptoms.
- I have a close relative diagnosed with prostate cancer
- Other..... (please specify)

7. Have you received any of the following treatments for prostate cancer?

- Radiation Therapy (including Brachytherapy)
- Hormone Therapy Watchful waiting
- Radical Prostatectomy Other

8. When was the last time you had a PSA test and what was the level?

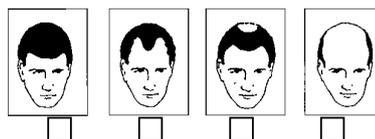
Date:/...../.....
Level:

9. Has a doctor ever told you that you had any other kind of cancer?

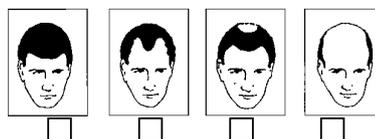
- No
- Yes → For each cancer, what was the type and how old were you when diagnosed?

Cancer type	Years
.....
.....
.....

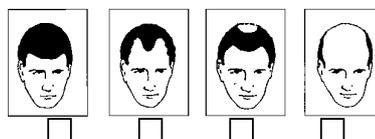
10. Please tick which diagram best describes your hair pattern now



11. Please tick which diagram best describes your hair pattern when you were 40 years of age



12. Please tick which diagram best describes your hair pattern when you were 20 years of age



13. Have any of your parents, brothers, sisters, children, uncles and aunts developed cancer recently that you have not already told us about?

- No
- Yes (We will contact you again to obtain details)
- Don't know (We will contact you again to obtain details)

14. Would you be willing to participate in further research projects?

- Yes
- No

