



Lung Cancer Update

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PILOT STUDY TO ASSESS PATIENT
PREFERENCES FOR ADJUVANT
CHEMOTHERAPY IN EARLY STAGE
NSCLC

MICROARRAYS & NSCLC –
AN UPDATE FOR CLINICIANS

QUIT MEDIA RELEASES – BANNING
SMOKING IN CARS WITH KIDS,
SMOKING RATES IN ADULTS &
YOUTH

CANCER IN VICTORIA, 2004

Produced by the Lung Cancer Committee
of the Victorian Cooperative Oncology Group
Centre for Clinical Research in Cancer



LUNG CANCER UPDATE

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This newsletter is produced by The Cancer Council Victoria's Lung Cancer Committee and sent to health professionals interested in management of lung cancer(s). The Victorian Cooperative Oncology Group's advisory committees on breast, gastrointestinal, gynaecological, skin and urological cancers also produce twice yearly cancer updates.

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***** Last Issue – No. 20 – August 2006 *****

The articles in the Lung Cancer Update have been published to contribute to professional debate and exchange. The opinions expressed are not necessarily those of The Cancer Council Victoria.

Editorial

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Ho, Ho, Ho! Welcome to Christmas ... Sadly 'tis the season for water restrictions ... I will lash out nevertheless and have some water with my wee dram. It is close to Christmas Eve, and my tasks include the traditional last minute shop for presents for my wonderful and long-suffering wife. Must get something also for Duncan Fletcher, the bumbling English cricket coach ... his stocking will be full of presents from thankful Australian cricket fans.

Another Christmas task is my VCOG editorial ... and what a big year it has been for the treatment of lung cancer (nod to Eddie McGuire). For me, the highlight was the inaugural Australian Multi-Disciplinary Lung Cancer held in Palm Cove in July. It was a fantastic opportunity to network with colleagues and to discuss the challenges facing our lung cancer MDTs.

Some excellent posters were also shown and the St Vincent's and Austin units were well represented. The data from Andrew Cheng et al in this issue were first shown at this meeting. It is heartening to see tremendous efforts made by local institutions to develop investigator-driven studies, to answer questions of local and international importance.

There are good data already in early breast cancer patients emphasising the value they put on seemingly small benefits derived from adjuvant chemotherapy. It will be interesting to see whether the same principles hold for lung cancer patients, who have potential health and demographics differences to the breast cancer patient population. The data from this pilot study are provocative, and it is hoped that Victorian institutions can make a significant contribution to the planned ALTG study directed by St Vincent's.

Genni Newnham has provided an elegant summary of the complex area of micro-array analysis. This is certainly a brave new world for

clinicians and patients, and opportunities exist with this technology for a greater ability to prognosticate, and also to predict who will derive benefit from which particular class of chemotherapy / biological agent.

A cheery bit of Christmas news comes from Quit: the prevalence of smoking continues to fall and as of 2005, less than 1/5 Victorians smoke. It is hoped that the predominance of non-smoking adults in Victoria will continue to foster a culture that discourages smoking as an acceptable social habit, and provides positive support for existing smokers to join the non-smoking masses. Happily, the incidence and mortality of lung cancer continues to fall slowly (page 16), more so in males.

On a concerning note, 140,000 school-aged children in Australia are current smokers. Community and school education is an urgent issue here to prevent the next new generation of victims of smoking-related diseases.

Happy 30th birthday to VCOG! Outlined in this edition is the speech by David Allen, our VCOG Chair and also a description by Susan Fitzpatrick of some of the valuable work and collaborations carried out by VCOG.

Please also diarise the IASLC 12th World Conference on Lung Cancer which is to be held in Seoul, 2-6 September next year. Previous attendees can confirm the high quality of the meeting content and the wonderful opportunities to network and socialise with Victorian and interstate colleagues.

Farewell friends, Happy Christmas to you and yours ... I'll regale you again in mid-2007 with more penmanship from the Editor. Cheers!

A pilot study to assess patient preferences for adjuvant chemotherapy in early stage non-small cell lung cancer (NSCLC)

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Introduction

Non-small cell lung cancer (NSCLC) comprises 80–85% of all primary lung cancers. Surgery is the mainstay of curative treatment for early stage NSCLC. Based on the St. Vincent's Hospital Melbourne (SVHM) and East Melbourne Heart and Lung database, the 5-year survival rate ranges from 77% for stage IA to 25% for Stage III (overall 5-year survival: 52%).

Distant relapses occur 2–3 times more frequently than local recurrences and are often fatal, indicating a lack of systemic control and the need for effective adjuvant therapy. Several trials have recently shown a survival benefit for cisplatin-based adjuvant chemotherapy in patients with resected NSCLC. The magnitude of this reported benefit is modest with 5-year survival improvements of 4–15%.^{1–6} These results have changed clinical practice. Adjuvant cisplatin-based chemotherapy is considered an option for all patients with early stage NSCLC after surgical resection.

The benefit of improved survival and reduced risk of recurrence must be balanced against the side effects and inconvenience of adjuvant chemotherapy. Therefore, it is important to elicit patient preferences to determine how much benefit patients need to justify the side effects and inconveniences.

Objectives

To our knowledge, this is the first patient preference study conducted for early-stage NSCLC. Our primary objective for this study is to assess the feasibility of conducting a larger multi-centered trial evaluating patient preferences for adjuvant chemotherapy in

patients with resected NSCLC. We also aim to assess the minimum benefit patients believe is necessary to justify adjuvant chemotherapy when side effects and inconveniences are taken into account.

Hypothesis

We hypothesise, based on evidence from preference studies in early-stage breast cancer that we can successfully train an observer not involved in the patients' care to conduct scripted and structured interviews in a one-on-one, face-to-face setting. We also hypothesise that benefits required to justify side effects and inconveniences of adjuvant chemotherapy will be small.

Patients and Methods

Patients who have completed at least 2 cycles of platinum-based adjuvant chemotherapy for histologically confirmed early-stage NSCLC (stage I–IIIA) diagnosed 3 and 24 months earlier were invited to participate. Participants needed to provide informed consent, be over 18 years, have adequate English literacy skills (unless an interpreter was available), no cognitive impairment, and have no history of metastatic disease.

An observer not involved in the patients' care underwent two, hour-long, training sessions conducted by senior researchers to familiarise the interviewer with the script and format, to ensure consistent and reproducible interviews.

We elicited demographic information plus details of patients' wellbeing and side effects on average during patients' chemotherapy treatment using 3 study specific self-reporting questionnaires. In the structured and scripted

interview, we asked participants a series of questions based on hypothetical clinical scenarios. There were two different types of question: one based on adding time to a given life expectancy ('life expectancy'), the other based on adding to the chance of surviving a fixed length of time ('survival rate'). In the life expectancy questions, we asked participants to imagine that they knew they would have a given life expectancy without chemotherapy (5 years), and a longer life expectancy with chemotherapy. We then asked a series of questions, with visual aids, to determine the minimum amount of extra time (beyond 5 years) that would be sufficient to make chemotherapy worthwhile. In the survival rate questions, we asked participants to imagine that they knew their chance of surviving 5 years without chemotherapy was 50%, and a higher chance with chemotherapy. We then asked a series of questions, also with visual aids, to determine the minimum extra chance of surviving 5 years (beyond 50%) that would be sufficient to make their chemotherapy worthwhile. The one-on-one, face-to-face interview have been shown to be a reliable and valid technique in previous studies.⁷⁻¹⁴

Results

An interviewer not involved in the patients' care was successfully trained to conduct structured and scripted interview in a consistent and reproducible manner.

Seventeen patients were invited to participate and 16 completed the interview. Median interview time was 20 minutes (range: 10-44). More than 90% had an excellent understanding of the interview. Only one patient had obvious difficulty in grasping the concepts.

The median age of participants was 64 years (range: 46-76). Seventy percent were males and 75% were married. Half had at least one dependant living with them. Over 80% completed at least high school equivalent or higher education. Eleven patients were retired or were on a pension. Fourteen had social support from relatives and friends as often as required. Ten patients had a friend / relative who has died from cancer and 13 were ex-smokers. All patients completed at least 2 cycles of adjuvant chemotherapy at the time of interview.

Results show great inter-individual variability for the wellbeing and side effects experienced during chemotherapy. Median scores for well-being on average during chemotherapy treatment were at least 5 out of 10 (10 being best), with mood, mobility and overall well-being scoring highest (Figure 1). Energy, appetite, and physical health generally scored lowest. The worst side effect experienced during chemotherapy was fatigue (Figure 2). Patients also experienced an altered sense of taste and trouble sleeping to a significant degree. Nausea, anxiety, and problems with needles / injections were of least concern.

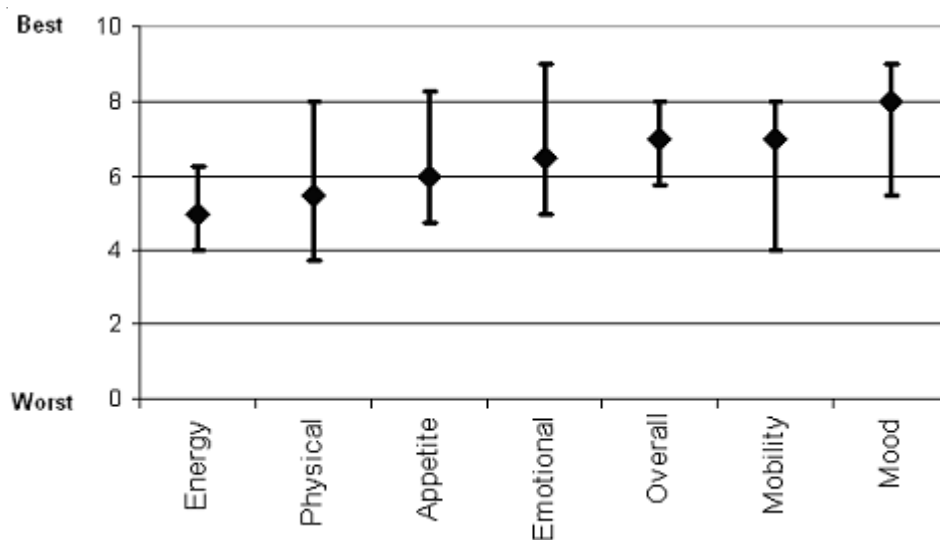


Figure 1. How you would have rated yourself on that aspect on average during your NSCLC chemotherapy? (ranked from most impaired to least impaired)

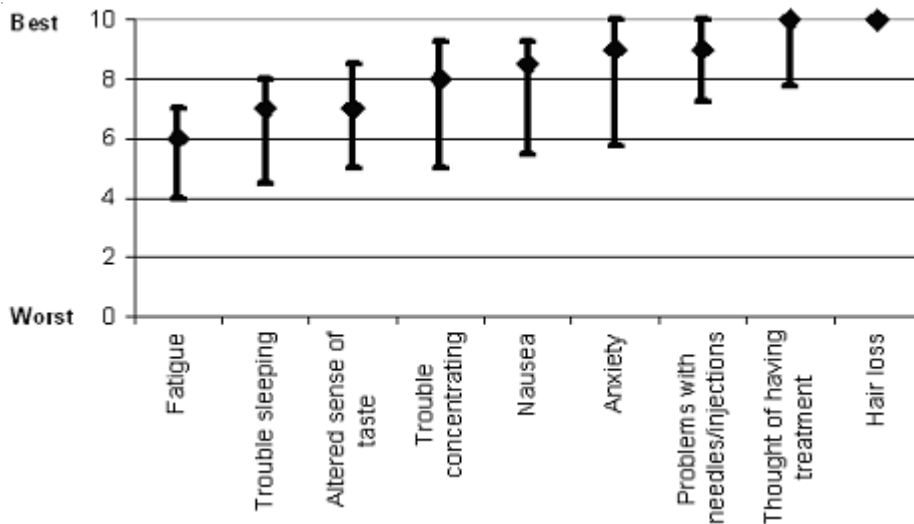


Figure 2. How much that aspect troubled you on average during your NSCLC chemotherapy? (ranked from most troublesome to least troublesome)

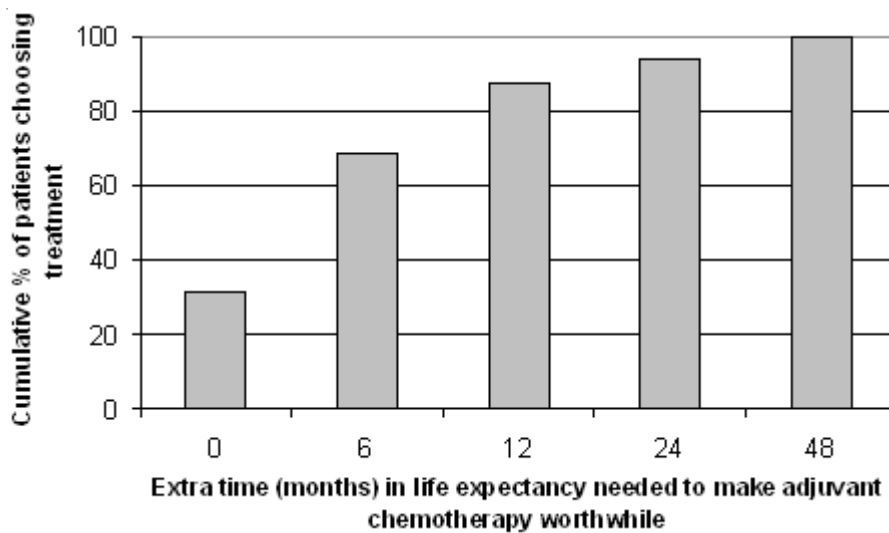


Figure 3. Cumulative proportions of patients considering whether adjuvant chemotherapy would be worthwhile for various improvements in 5-year life expectancy.

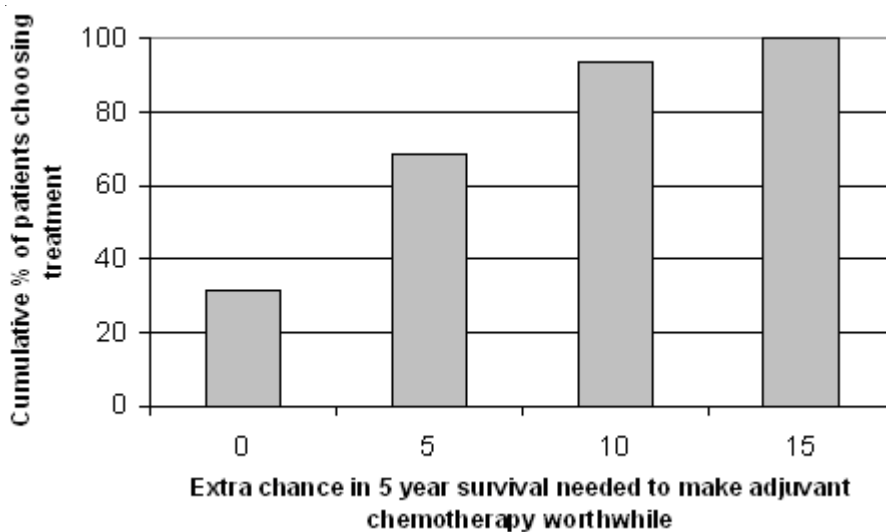


Figure 4. Cumulative proportions of patients considering whether adjuvant chemotherapy would be worthwhile for various improvements in 50% chance of 5-year survival.

The interview revealed that patients generally considered small improvements in survival sufficient for adjuvant chemotherapy to be worthwhile, taking into account side effects and inconveniences. Fifty percent of patients thought a 3-month increase in life expectancy (Figure 3) beyond 5 years or a 3% increase in 5-year survival rate (Figure 4) above 50% was sufficient to justify adjuvant chemotherapy. An extra year in life expectancy and 10% improvement in survival rate were required by 25% of patients. More interestingly, 5 patients would have adjuvant chemotherapy for no survival benefit.

Discussion

Adjuvant chemotherapy is an option considered for all patients with early stage NSCLC. Its aims are to prevent recurrence and improve survival. Modest benefits need to be balanced against side effects and inconveniences. Furthermore, adverse effects of adjuvant chemotherapy usually occur early and are more obvious to patients where as benefits of treatment may be delayed and less evident. In this setting, preferences of individual patients on the relative importance of these factors may be crucial to optimal decision making in offering treatment.

Several studies have investigated patient preferences for adjuvant chemotherapy in women with early stage breast cancer. With remarkable consistency, most women expressed that small improvements in 5-year survival were sufficient to justify chemotherapy. For example an additional 6 months in life expectancy or a 1% increase in 5-year survival rate was judged an adequate benefit by ~50% of the patients¹¹⁻¹⁴. Similarly, a 5% increase in 5-year survival rate and 12 extra months was sufficient for 72% and 74% of patients respectively. To our knowledge, similar studies in early stage lung cancer have not been conducted. Lung cancer patients, as a group, have different characteristics. More than half are male and they commonly have more co-morbidities. Recovery from lung cancer surgery is also longer. Patient preferences in early stage NSCLC may therefore be different and hence important to elicit.

We conducted a pilot study to examine the feasibility of eliciting patient preferences for adjuvant chemotherapy in early stage NSCLC. We found that it is feasible to recruit eligible

patients and administer a structured and scripted interview by a trained interviewer, to assess patient preferences. Patients generally had very good understanding of the concepts. Overall patients believed a relatively small survival benefit was sufficient to make chemotherapy worthwhile. This suggests that for this group of patients, the adverse effects of treatment may be of secondary importance.

As this is a pilot study, it has a number of limitations. The small sample size does not allow strong conclusions to be drawn about patient preferences; however, results do correspond closely to breast cancer studies. The study did not take into account psychological benefits of treatment that might be gained by a sense of taking charge and feeling in control of future events.

It is noteworthy that 5 patients would accept chemotherapy for no survival benefit, which may reflect patients' desire to take charge of their situation. Alternatively, it may relate to poor understanding of the preference task or the hypothetical concept, but the consistency of our results with breast cancer studies suggests this is less likely.

The patient sample we studied may not be representative of all patients with early stage NSCLC. We excluded patients who could not speak English. Patients generally had relatively high levels of education and were treated in a tertiary centre. A further limitation is that the survival rate question was specifically aimed at 5-year survival. Events beyond 5 years were not addressed.

Conclusion

We conclude that, it is feasible to elicit patient preferences for adjuvant chemotherapy in patients with early stage NSCLC. We are preparing to conduct a larger study using the same methodology in a sample of 100-200 patients across several centres in Australia, with external funding and support from the Australian Lung Trials Group (AL TG). We believe that patient preferences about the value of adjuvant chemotherapy are a key element in clinical decision-making in the management of lung cancer.

References

1. Chemotherapy in non-small cell lung cancer: a meta-analysis using updated data on individual patients from 52 randomized clinical trials. Non-small Cell Lung Cancer Collaborative Group. *BMJ* 1995; 311:899–909.
2. Winton T, Livingston R, Johnson D, et al. Vinorelbine plus cisplatin vs. observation in resected non-small-cell lung cancer. *The New England Journal of Medicine* 2005; 352:2589–2597.
3. Belani CP. The ANITA trial seals the deal for adjuvant therapy in non-small-cell lung cancer. *Clinical Lung Cancer* 2005; 6:331–332.
4. Arriagada R, Bergman B, Dunant A, et al. Cisplatin-based adjuvant chemotherapy in patients with completely resected non-small-cell lung cancer. *The New England Journal of Medicine* 2004; 350:351–360.
5. Douillard J, Rosell R, Delena M, et al. ANITA: phase III adjuvant vinorelbine (N) and cisplatin (P) versus observation (OBS) in completely resected (stage I–III) non-small-cell lung cancer (NSCLC) patients (pts): final results after 70-month median follow-up. *Clinical Journal of Oncology* 2005; 23:624s.
6. Strauss G, Herndon J, Maddaus M, et al. Randomized clinical trial of adjuvant chemotherapy with paclitaxel and carboplatin following resection in state IB non-small cell lung cancer (NSCLC): report of Cancer and Leukemia Group B (CALGB) Protocol 9633. *Journal of Clinical Oncology* 2004; 22:621S.
7. Duric V, Stockler M. Patients' preferences for adjuvant chemotherapy in early breast cancer: a review of what makes it worthwhile? [Review]. *The Lancet: Oncology* 2001; 2:691–697.
8. Duric VM, Stockler MR, Heritier S, et al. Patients' preferences for adjuvant chemotherapy in early breast cancer: what makes AC and CMF worthwhile now? *Annals of Oncology* 2005; 16:1786–1794.
9. Hayman J, Fairclough D, Harris J, et al. Patient preferences concerning the trade-off between the risks and benefits of routine radiation therapy after conservative surgery for early-stage breast cancer. *Journal of Clinical Oncology* 1997; 15:1252–1260.
10. McQuellon R, Muss H, Hoffman S, et al. Patient preference for treatment of metastatic breast cancer: A study of women with early-stage breast cancer. *Journal of Clinical Oncology* 1995; 13:858–868.
11. Simes RJ, Coates AS. Patient preferences for adjuvant chemotherapy of early breast cancer: how much benefit is needed? *Journal of the National Cancer Institute. Monographs* 2001; 30:146–152.
12. Ravdin P, Siminoff I, Harvey J. Survey of breast cancer patients concerning their knowledge and expectations of adjuvant therapy. *Journal of Clinical Oncology* 1998; 16:515–521.
13. Zimmermann C, Baldo C, Molino A. framing of outcome and probability of recurrence: breast cancer patients' choice of adjuvant chemotherapy (ACT) in hypothetical patient scenario. *Breast Cancer Research and Treatment* 2000; 60:9–14.
14. Lindley C, Vasa S, Sawyer W, et al. Quality of life and preferences for treatment following systemic adjuvant therapy for early-stage breast cancer. *Journal of Clinical Oncology* 1998; 16:1380–1387.

Microarrays and non-small cell lung cancer – An update for clinicians

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Background

Lung cancer is the most common cause of cancer death in our society¹ and non-small cell lung cancer (NSCLC) accounts for approximately 80% of lung cancer diagnoses.² The prognosis for patients with NSCLC has

altered little over the last 20 years. Recent advances including the use of adjuvant chemotherapy^{3–6} and tyrosine kinase inhibitors targeted towards the epidermal growth factor receptor (EGFR)^{7–9} have shown promise, but there remain a large number of patients with NSCLC who will not benefit from either of these

treatments. Obviously there is still significant room for improvement in the treatment of NSCLC. A better understanding of the molecular pathogenesis of NSCLC will assist in the development of more effective methods of treatment.

The purpose of this article is to provide a brief description of the rationale and methods of microarray technology with particular reference to NSCLC.

General principles of microarrays

Genetic information in human cells is stored within the double helix of DNA. In normal cells the DNA content is remarkably well preserved within and between individuals. Depending on cellular environment and function, DNA is selectively transcribed to single stranded messenger RNA (mRNA), and then translated into proteins. Thus, cells from different organs, or cells from the same organ in differing environments, will demonstrate marked differences in the genes they express. Under normal conditions transcription of RNA from DNA is tightly regulated, with only 3-5% of genes being active in a cell at any one time. During carcinogenesis, alterations in DNA sequence (mutations) or chemical composition (epigenetic effects) result in inactivation of tumour suppressor genes or activation of oncogenes. The step-wise accumulation of such genetic abnormalities is thought to underlie cancer development. A variety of mutation types exist with important differences. These range from gross events affecting large regions of DNA (amplifications, deletions and translocations), to pinpoint changes in individual base pairs that subtly affect the function of the encoded protein. Current microarray technologies are suited to detection of large-scale amplifications or deletions, although in the future it may be possible to identify mutations down to the single base level.

Sequencing of the human genome suggests that the maximum number of human genes is 30,000-40,000.¹⁰ Where the task of analysing such a large number of genes with older techniques would be over-whelming, microarray technology allows the investigation of tens of thousands of genes in a single experiment.

The utility of microarray lies in the principle that nucleic acids in DNA and RNA hybridise in a

predictable and reproducible fashion, adenine with thymine, and cytosine with guanine. Nucleic acid sequences immobilised on a solid surface can be used as probes to detect DNA or RNA of complementary sequence in experimental tissue. In this way, differences in DNA or RNA content of cells compared to a control can be identified.

Microarray experiments can be performed using DNA or RNA as a substrate. Using RNA (gene expression / transcriptional profiling [GEP]), results indicate the expression level of genes within the selected sample, often relative to a control sample. When using DNA as a substrate (array CGH [aCGH]), results are representative of gene copy number. For the reasons described above, it is common to find variability in GEP, whereas alterations in genomic profile are uncommon and more likely to be of biological importance.

A standard microarray experiment can be divided into 7 steps.

- a) Generation of array matrix with nucleic acid probes corresponding to specific genes.
- b) Extraction of nuclear material from cells under investigation +/- amplification of genetic material.
- c) Labelling of genetic material with either fluorescent or radioactive compound.
- d) Hybridisation of labelled material to array matrix.
- e) Detection of relative intensities of fluorescence or radiation at matrix points.
- f) Computer generation of quantitative information from fluorescence or radiation intensities.
- g) Statistical analysis.

As with most techniques limitations exist. The selection of non-contaminated target genetic material is complicated by the mixture of cell types found in resected tissue, as well as the standard practice of formalin fixing tissues where microarray requires the use of fresh tissue. In addition, many laboratories performing microarray analyses do so using custom-made matrices, making comparison of results more

difficult. However, several meta-analyses have documented high degrees of reproducibility of array data in NSCLC, even when comparing data created on different platforms.^{11,12}

Perhaps the greatest difficulty is the statistical analysis of array data. A single microarray experiment can generate information about tens of thousands of genes. The analysis of this information is much more complex than that used in other methods of gene discovery, given the sheer volume of information. Computer algorithms have been designed to perform bio-informatic analysis of array data – using two primary methods. Unsupervised analysis clusters samples according to the degree of similarity in expression or genomic profiles, without any regard for other information concerning the samples. This is an inherently unbiased method of analysing array data, but its use may be limited in situations where the predominant pattern identified by clustering does not reflect clinical or biologic distinctions of interest. Supervised analysis uses already known facts regarding samples in an attempt to identify patterns that may predict for that behaviour (for example gene expression profiles that predict for poor survival).

Microarrays in NSCLC

It is hoped that microarray classification of cancer will add to current histologic diagnosis and anatomic staging procedures, by linking specific patterns of gene expression to clinically important aspects of disease. Examples include propensity for metastasis, response to chemotherapy, and the presence of targetable mutations.

Diagnosis – Both genomic and transcriptional profiling studies in NSCLC have identified profiles predictive of histotype.¹³⁻¹⁵ Transcriptional studies have also revealed previously unrecognised subtypes of adenocarcinoma (AC).^{13, 16, 17} Importantly some overlap between the AC profiles has been seen, supporting the reproducibility of microarray data. Currently, histologic subtype of NSCLC is not incorporated into clinical management strategies, other than for triaging patients who may benefit from screening for EGFR mutations.

Outcome prediction – Transcriptional studies have been performed which identify profiles representative of high metastatic potential^{13,18} as

well as profiles predictive of relapse in early stage NSCLC.^{13, 17, 19, 20} These profiles accurately classified some stage I NSCLC as high risk, suggesting that microarray may offer improved prognostication as compared to standard TNM staging. In the new era of adjuvant chemotherapy for NSCLC the ability to accurately predict risk of relapse is invaluable.

Information from microarray studies can also assist in predicting response or resistance to cytotoxic chemotherapy. Transcriptional studies in NSCLC have identified profiles predictive of sensitivity to a variety of cytotoxic agents,²¹⁻²⁴ most being performed on small numbers of cell lines. Extensive literature exists regarding the role of EGFR mutations and sensitivity to EGFR TKI's in adenocarcinoma. The identification of molecular profiles predictive of such mutations may allow the development of immuno-histochemical markers to be used in the clinic, providing a relatively inexpensive method of determining mutation status. Conceivably, oncologists of the future will have the ability to use molecular studies to predict both risk of recurrence and likely response to treatment allowing truly individualised cancer treatment.

Drug development – It has been said that oncology has entered the 'era of targeted therapies'. A detailed understanding of mutations involved in the induction and maintenance of malignancy is crucial in developing such therapies for NSCLC. Information from genomic profiling studies has implicated regions on chromosomes 1, 3 and 5, containing the genes WNT4, PIK3CA and p63, and GDNF respectively, in the development and progression of NSCLC.^{25, 26, 27, 15, 28} It is possible that these genes may represent targets for future novel therapies.

Conclusions

Whilst recent advances in the management of NSCLC are promising, it is important that we continue to strive for better outcomes for our patients. The richness of microarray datasets will become apparent as this data is linked to existing clinical and pathologic classifications. The process of integrating these datasets will take considerable time and effort. In addition to refining classification systems, microarray approaches can provide vast information about the molecular basis of NSCLC, creating

opportunities for the identification of targets for novel therapies. Unlike some other malignancies, it appears that NSCLC can arise from a variety of genetic aberrations. However, studies to date have identified changes in both gene expression and copy number that correlate with clinical parameters. In addition, several regions of potential pathogenic importance have been identified and warrant further research.

References

1. The Cancer Council Victoria. *Canstat: Lung Cancer* 2002; 36.
2. Murren J, Glatstein E & Pass H. Small cell lung cancer, in *Cancer – Principles and practice of oncology*. V DeVita, S Hellman & S Rosenberg, Editors. 2001; Lippincott, Williams & Wilkins. 983–1018.
3. Douillard J, Rossell R & Delena M. Phase III adjuvant vinorelbine and cisplatin versus observation in completely resected (stage I-III) non-small-cell lung cancer patients: Final results after 70-month median follow-up. On behalf of the Adjuvant Navelbine International Trialist Association. *J Clin Oncol* 2005; 23(suppl): A-7013 (abstract).
4. Strauss G, Herndon J & Maddaus M. Randomized clinical trial of adjuvant chemotherapy with paclitaxel and carboplatin following resection in stage IB non-small cell lung cancer (NSCLC). Report of Cancer and Leukaemia Group B (CALGB) Protocol 9633. Abstract 7019 in ASCO 2004. New Orleans.
5. The International Adjuvant Lung Cancer Trial Collaborative Group. Cisplatin-based adjuvant chemotherapy in patients with completely resected non-small-cell lung cancer. *N Engl J Med* 2004; 350: 351–360.
6. Winton T, et al. A prospective randomised trial of adjuvant vinorelbine and cisplatin in completely resected stage IB and II non small cell lung cancer (NSCLC) Intergroup JBR 10. Abstract 7018 in ASCO 2004. New Orleans.
7. Fukuoka M, et al. Multi-institutional randomized phase II trial of gefitinib for previously treated patients with advanced non-small-cell lung cancer. *Journal of Clinical Oncology* 2003; 21(12): 2237–2246.
8. Kris M, et al. Efficacy of gefitinib, an inhibitor of the epidermal growth factor receptor tyrosine kinase, in symptomatic patients with non-small cell lung cancer: a randomized trial. *JAMA* 2003; 290(16): 2149–2158.
9. Shepherd F, et al. A randomised placebo-controlled trial of erlotinib in patients with advanced non-small cell lung cancer (NSCLC) following failure of 1st line or 2nd line chemotherapy. A National Institute of Canada Clinical Trials Group (NCIC CTG) trial. *Proceedings of the American Society of Clinical Oncology* 2004; 23: Abstract 7022.
10. Pusztai L, et al. Clinical application of cDNA microarrays in oncology. *The Oncologist* 2003; 8: 252–258.
11. Jiang H, Deng Y & Chen H. Joint analysis of two microarray gene-expression data sets to select lung adenocarcinoma marker genes. *BMC Bioinformatics* 2004; 5: 81.
12. Parmigiani G, Garrett-Mayer E & Anbazhagan R. A cross-study comparison of gene expression studies for the molecular classification of lung cancer. *Clin Cancer Res* 2004; 10: 2922–2927.
13. Garber M, Troyanskaya O & Schluens K. Diversity of gene expression in adenocarcinoma of the lung. *Proceedings of the National Academy of Sciences of the United States of America* 2001; 98: 13784–13789.
14. Battacharjee A, Richards W, & Staunton J. Classification of human lung adenocarcinomas by mRNA expression profiling reveals distinct adenocarcinoma subclasses. *Proceedings of the National Academy of Sciences of the United States of America* 2001; 98: 13790–13795.
15. Garnis C, et al. High resolution analysis of non-small cell lung cancer cell lines by whole genome tiling path array CGH. *Int J Cancer* 2006; 118: 1556–1564.
16. Bhattacharjee A, Richards W & Staunton J. Classification of human lung adenocarcinomas by mRNA expression profiling reveals distinct adenocarcinoma subclasses. *Proceedings of the National Academy of Sciences of the United States of America* 2001; 98: 13790–13795.
17. Beer D, et al. Gene-expression profiles predict survival of patients with lung adenocarcinoma. *Nature Medicine* 2002; 8(8): 816–824.
18. Ramaswamy S, et al. A molecular signature of metastasis in primary solid tumours. *Nature Genetics* 2003; 33: 49–54.
19. Wigle D, et al. Molecular profiling of non-small cell lung cancer and correlation with disease-free survival. *Cancer Research* 2002; 62: 3005–3008.
20. Potti, A, et al. A genomic strategy to refine prognosis in early-stage non-small cell lung cancer. *J Clin Oncol* 2006; 355: 570–580.
21. Kikuchi T, Daigo Y & Katagiri T. Expression profiles of non-small cell lung cancers on cDNA microarrays: identification of genes for prediction of lymph node metastasis and sensitivity to anticancer drugs. *Oncogene* 2003; 22: 2192–2205.
22. Dan S, Tsunoda T & Tanaka T. An integrated database of chemosensitivity to 55 anticancer drugs and gene expression profiles of 39 human cancer cell lines. *Cancer Research* 2002; 62: 1139–1147.
23. Staunton J, Slonim D & Collier H. Chemosensitivity prediction by transcriptional profiling. *Proc Natl Acad Sci USA* 2001; 98: 10787–10792.

24. Zembutsu H, Ohnishi Y & Tsunoda T. Genome-wide cDNA microarray screening to correlate gene expression profiles with sensitivity of 85 human cancer xenografts to anticancer drugs. *Cancer Research* 2002; 62: 518–527.
25. Garnis C, et al. Chromosome 5p aberrations are early events in lung cancer: implication of glial cell line-derived neurotrophic factor in disease progression. *Oncogene* 2005; 24(30): 4806–4812.
26. Massion P, et al. Significance of p63 amplification and overexpression in lung cancer development and prognosis. *Cancer Research* 2003; 63(21): 7113–7121.
27. Massion P, et al. Genomic copy number analysis of non-small cell lung cancer using array comparative genomic hybridisation: implications of the phosphatidylinositol 3-kinase pathway. *Cancer Research* 2002; 62(13): 3636–3640.
28. Garnis C, et al. Involvement of multiple developmental genes on chromosome 1p in lung tumorigenesis. *Human Molecular Genetics* 2005; 14(4): 475–482.

New data shows less than one in five Victorians adults smoke

Quit Media Release, 4 December 2006

Less than one in five Victorian adults are regular smokers, and over half have never smoked, according to figures released today.

The data, from The Cancer Council Victoria, indicates an overall reduction in regular smoking prevalence for Victorian adults since 1998, decreasing to 18.5% in 2005.

Latest figures show smoking rates remain lowest amongst Victorians over 50, where 11.5% are regular smokers, compared to 21.1% of Victorians aged 30–49 and 26% of Victorians aged between 18–29 years.

Professor Melanie Wakefield, from The Cancer Council Victoria, said there were several contributing factors to the continuing decrease in the number of Victorians smoking since 1998, when the proportion of Victorians smoking regularly was 21.7%

“In this time, Victoria experienced a rise in smokefree environments, including shopping centres, enclosed restaurants and cafes, and we have also been exposed to a raft of quit smoking advertising campaigns. Price increases also play an important role in a person’s decision to quit smoking.”

The data released also shows the proportion of heavy smokers (25 or more cigarettes per day) dropped over 10% to 16% in 2005. There was also a significant increase in the proportion of light smokers, with over half of the regular

smokers in Victoria smoking less than 15 cigarettes per day.

Professor Wakefield said although it is encouraging to see fewer cigarettes smoked, it underlines the need to emphasise to smokers that there is no such thing as a safe level of tobacco consumption.

“The only way to stop and reverse the damage done by cigarettes is to quit smoking completely.”

Executive Director of Quit Victoria, Mr Todd Harper said despite the gradual decline in smoking rates there was no room for complacency in tobacco control.

“Although data suggests that smoking prevalence is on a downward trend, we cannot afford to become cavalier about the devastating human toll of tobacco. Tobacco control must remain a major public health priority to ensure smoking rates continue to come down.”

“Smoking-caused deaths in Victoria outstrip deaths caused by illicit drugs, alcohol, and road deaths combined, so every effort and investment to prevent Victorians from taking up this deadly habit should be made.”

“Tobacco kills almost 4000 Victorians every year, and the fact is that most of these deaths will occur in people who started smoking before the age of 18 years.”

Mr Harper said he expected tobacco marketing at point-of-sale and the use of cigarette

packaging to be the new battlegrounds in tobacco control.

“With bans on both traditional and buzz marketing, the tobacco industry is becoming increasingly reliant on the point-of-sale retail area and cigarette packaging to market its product.”

“Banning tobacco product displays at point-of-sale and moving to plain packaging on cigarettes is vital in reducing exposure to tobacco marketing.”

According to Mr Harper the introduction of new graphic pack warnings on cigarette packaging this year and the implementation of state-based tobacco reforms including smoking bans in pubs and clubs in July 2007 offers a once in a lifetime opportunity to get smoking rates lower than ever before in Victoria.

“The introduction of graphic health warnings earlier this year means that every time someone buys a pack of cigarettes they will be exposed explicitly to the harms of smoking, and then once again, each time they reach for a cigarette.”

“We hope these important changes, combined with the graphic campaigns highlighting the dangers of smoking and providing smokers with encouragement to call the Quitline, will ease the burden of tobacco within the next five years,” said Mr Harper.

Other findings from research released today include:

- 18.5% of Victorians adults surveyed are regular smokers
- Regular smoking tended to be higher among males (20.2%) than females (16.9%)
- Over half of Victorians surveyed (52.2%) have never smoked
- 27.9% of Victorians surveyed are former smokers
- Smoking rates are significantly lower among Victorians with a tertiary education (12.9%) compared to those who have completed Year 12 or some tertiary study (21.2%) and those with a Year 11 or less education (22.3%).

Latest national youth smoking rates released

Quit Media Release, 24 November 2006

The proportion of Australian school students involved in smoking has taken a substantial dive according to latest figures released by the Commonwealth Department of Health and Aging.

Just over 140,000 Australian school students aged 12-17 are current smokers, according to new research released today.

The study of smoking behaviors of school students has been conducted nationally every three years since 1984. The study is a collaboration between State Cancer Councils, State Health Departments and the Commonwealth Department of Health and Aging and is co-ordinated by The Cancer Council Victoria's Centre for Behavioural Research in Cancer. Results released today are the findings of the most recent survey, conducted in 2005.

The 2005 study is based on data collected from 21 805 male and female students aged 12-17 years surveyed in 376 secondary schools.

The research reveals that in 2005, 7% of 12- to 15-year-old students smoked in the week before the survey, less than half the percentage reported in 1999.

The proportion of 16- and 17-year-old students smoking in the week before the survey has also dropped from 30% in 1999 to 17% in 2005.

Professor Melanie Wakefield from The Cancer Council Victoria said despite the promising fall in youth smoking rates, there was no room for complacency in tackling the issue.

“It is estimated that just over 140,000 students smoked on average over 3,450,000 cigarettes between them in the week before the survey.”

“These figures indicate that many Australian adolescents are still smoking cigarettes and that their level of consumption represents substantial revenue for the tobacco industry.”

“Young smokers represent an exceedingly important market for the tobacco industry, so our efforts to starve the tobacco industry of a new generation of smokers should be a top public health priority.”

Other key findings from the study released today include:

- Around 84% of 12-year olds had no experience with smoking
- The percentage of students who were current smokers increased from 2% among 12-year-olds to 18% among 17-year-olds.
- The proportion of students smoking in the previous week doubled between the ages of 13 (5%) and 15 (11%)
- The proportion of students who had smoked in the seven days prior to the survey in 2005 had decreased from the 1999 proportion by about half among the younger students (from

15% to 7%) and by around 40% among the older students (from 30% to 17%).

Executive Director of Quit, Mr Todd Harper, said the results of the study suggest that the strategy of promoting quit smoking messages through graphic advertisements that target the whole population in well funded mass media campaigns, increasing restrictions on smoking in public spaces and venues, further restricting the promotion of cigarette products and increasing the price of cigarettes has been effective at reducing smoking among Australian adolescents.

“The findings from this study suggest that the Federal government needs to invest heavily in tobacco control to ensure that another generation of Australians do not grow up addicted to a substance that if used regularly and for a long enough period, will kill at least half of them prematurely.”

Clinical Practice Guidelines for the Prevention, Diagnosis & Management of Lung Cancer

Copies of the Assessment and Management of Lung Cancer Evidence-based Guidelines: A guide for general practitioners and Clinical Practice Guidelines for the Prevention, Diagnosis and Management of

Lung Cancer are still available from ACN, e-mail acn@cancer.org.au for further copies or view / download PDFs from the website www.cancer.org.au/clinical_guidelines.

Reprinted from Wongi Yabber Nov 2006; 13(4): 3.

Cancer Australia Ready to Tackle National Priorities

Appointment of a Chief Executive Officer to Cancer Australia has paved the way for the organisation to become operational and address a growing list of national cancer priorities, according to The Cancer Council Australia.

The Cancer Council Australia's Chief Executive Officer, Professor Ian Olver, welcomed the appointment in August of Professor David Currow as CEO of the new agency and said he would be taking on a challenging role with big expectations from the health sector.

“The establishment of Cancer Australia is a significant development and Professor Currow's

expertise and experience will help the organisation quickly come to grips with national priorities and issues in cancer control,” Professor Olver said.

“There is a real need in Australia for a central agency to coordinate and facilitate the considerable but fragmented research efforts into cancer at the national level. We also need more resourcing to develop and implement national guidelines and to accredit and credential cancer professionals and treatment centres.”

*Reprinted from Wongi Yabber Nov 2006; 13(4): 4,
The Cancer Council Australia Report.*

Cancer in Victoria 2004

Victorian Cancer Registry

The Victorian Cancer Registry has been a population-based registry since 1982. This was enabled by amendments to the Cancer Act in 1981, which made it mandatory for all hospitals and pathology laboratories to notify the cancer registry of the presence of cancer in patients or human tissues.

All malignant neoplasms are registered, as are in situ carcinoma of breast and cervix and in situ melanoma. Basal and squamous cell carcinomas of the skin are not registered except for those occurring in genital and perianal skin and the vermilion border of lip.

Non-melanocytic skin cancers are not registered by the Victorian Cancer Registry (or most other registries) as many are treated in doctors' surgeries using destructive techniques which preclude histological confirmation and also as they vastly outnumber all other forms of cancer.

Currently, about 250 hospitals and 50 pathology laboratories notify cancer to the registry, increasingly via electronic media. In preparing the 2004 incidence data, around 100,000 notifications were processed. In addition, death certificates are obtained from the Registrar of Births, Deaths and Marriages in computerised format on a regular basis.

The minimum data set collected for each cancer consists of:

- registry identification number
- name(s)
- residential address
- date of birth
- country of birth
- sex
- vital status
- date of last contact
- number of primary tumours
- date of diagnosis
- site of cancer
- cancer histology
- method of diagnosis.

Overview of 2004 statistics

Numbers

Nearly 24,000 Victorians develop cancer, other than non-melanocytic skin cancer (NMSC), each year and over 9,000 deaths are caused by it. In 2004, 13,019 men and 10,791 women presented with new cancers and 5,283 men and 4,266 women died from cancer.

Age and sex

Cancer was very age-dependent with less than 1% of tumours occurring before age 15 and 59% in persons over 65 years. More men than women developed cancer: 121 for every 100 females. The male excess was largely due to tobacco-related cancers.

Incidence

The standardised incidence rates were 346 per 100,000 males and 265 per 100,000 females. The cumulative rates percent to age 75 were 40.7% for males and 29.5% for females. These represented risks of over 1 in 3 for men and almost 1 in 4 for women. At least one in three Victorians will develop a cancer other than non-melanocytic skin cancer by age 75.

Mortality

In 2004, more Victorians died from cancer (9,613 29.6% of all deaths) than from all heart disease (7,771, 23.9%). Cancer and heart disease caused more than half of all deaths in Victoria.

Age-standardised mortality rates for cancer were 125.8 per 100,000 males and 83.5 per 100,000 females. These rates are higher than those for both ischaemic heart disease (66.6 and 32.5 per 100,000 men and women respectively) and all heart disease (85.0 and 46.9 men and women respectively).

Cancer death rates for men and women continue to decrease at about 1.2% and 0.9% per year respectively.

More detailed statistics are available at www.cancervic.org.au/cancer1/facts/vic.htm.

Figure 1. Leading Cancer Sites in Victoria, 2004.

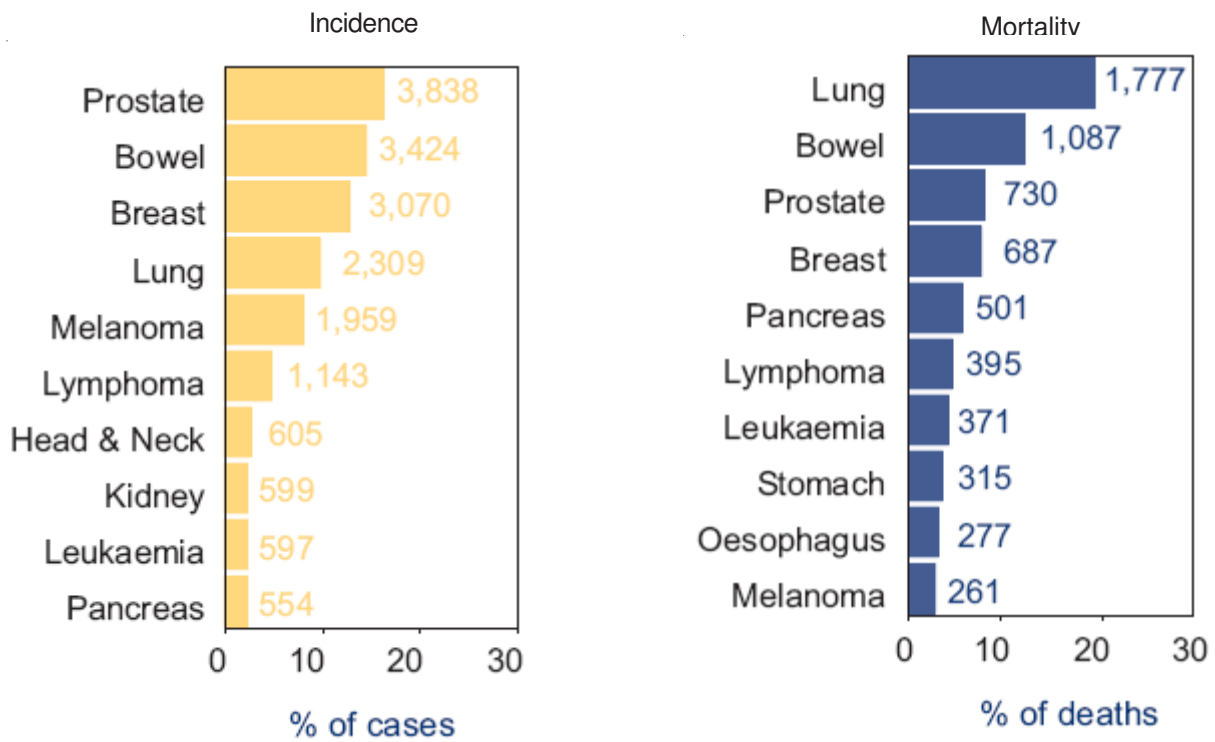
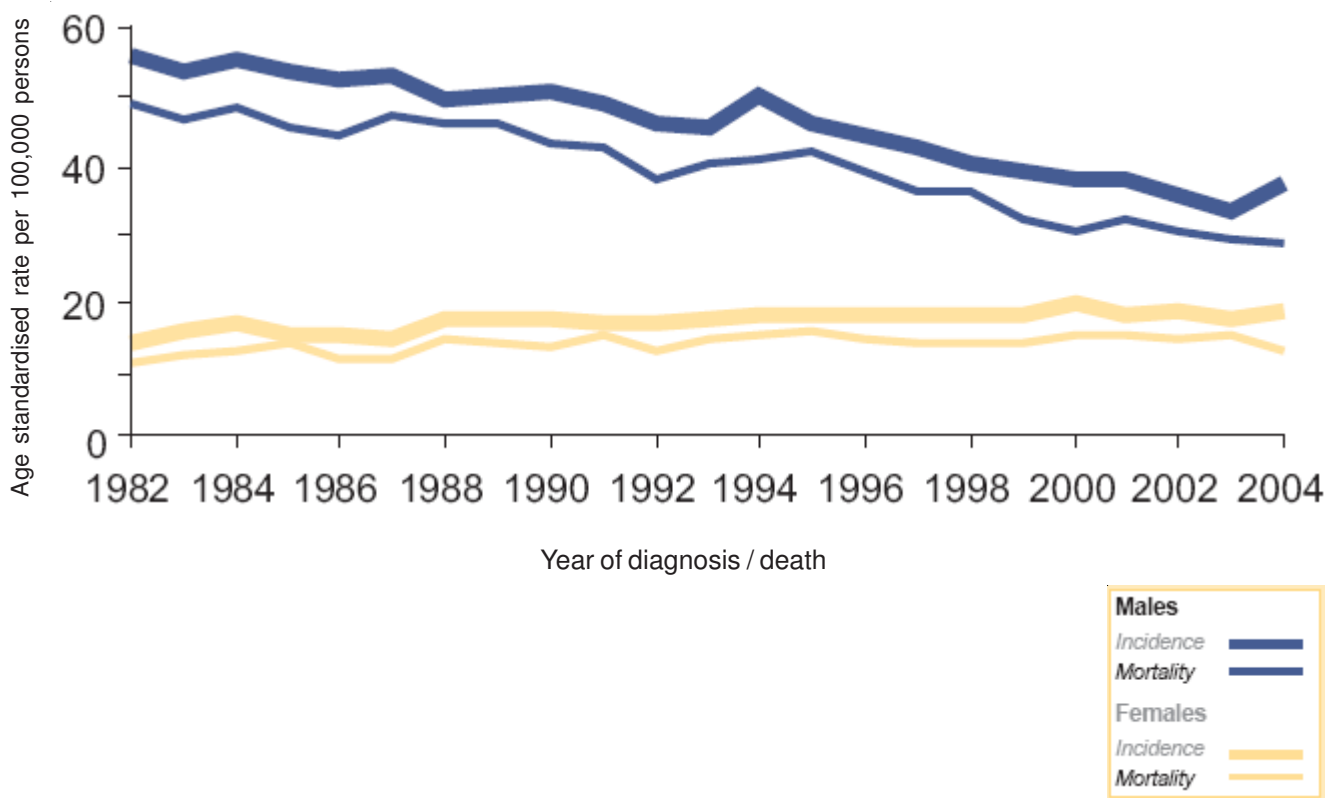


Figure 2. Lung Cancer Trends in Victoria, 1982–2004.



VCOG 30th Anniversary

*Speech by Assoc Professor David Allen, VCOG Chair
on 1 November 2006 during VCOG 30th Anniversary Reception*

Over the last 30 years, the Victorian Cooperative Oncology Group has developed into a body with a broad multidisciplinary and cross-institutional representation.

The aim of the group has been to prevent cancer and optimise patient treatments and care through collaboration and research. VCOG is now a forum that is of value to clinicians and of importance for patient outcomes.

The VCOG and its subcommittees have developed into an authoritative body of enthusiastic experts who work across disciplines, outside of institutional boundaries, providing clinical and research advice to the Cancer Council. The approximately 450 members of the VCOG committees make an enormous contribution to clinical research and the development of patient care protocols in Victoria.

These committees provide a necessary neutral territory for discussion and will certainly continue to grow into the future. Just last week we held the inaugural meeting of the 20th committee – the sarcoma advisory committee.

As the committees expand and strengthen further, so too will the influence and relevance of this unique forum grow in its present spirit of co-operation.

Of course the work of these committees doesn't just happen – they need to be organised, agendas prepared and circulated etc. The VCOG Secretariat, consisting of the Executive Officer Susan Fitzpatrick and her team, really is the glue that binds us together, and for all their essential – and increasing – work, we thank them.

Every two years the Victorian Cooperative Oncology Group elects an Executive Committee that in turn elects a Chair. I am very proud to be the current chair of VCOG and the Executive Committee and I thank the members for their work and support – and in doing this I would also like to acknowledge the work of all past and present subcommittee chairs and members. And whilst I am thanking people, I would also like to mention David Hill for his constant support, and my deputy chair Ingrid Winship for her valuable contribution.

The achievements of VCOG over the past 30 years are enormous but the future looks even brighter with the new opportunities and directions that are constantly emerging. Working with the newly formed Integrated Cancer Services in Victoria is one such opportunity. And we look forward to other potential collaborations and synergies with the Department of Human Services and other relevant government departments and agencies in the future.

However, to remain relevant into the future we must always ensure that our efforts are of benefit to the Victorian community as a whole and that we keep our focus firmly on the fight against cancer.

I thank you all.

Supporting Oncology Professional Collaboration in Cancer Control, 1976–2006

Mrs Susan A Fitzpatrick, Executive Officer

Centre for Clinical Research in Cancer, The Cancer Council Victoria

Poster presentation at UICC World Cancer Congress, 8–12 July 2006, Washington DC, USA

The Victorian Cooperative Oncology Group

The Cancer Council Victoria's infrastructure support within a "neutral" environment for the Victorian Cooperative Oncology Group has enabled Victoria's cancer specialists to meet in a conducive, non-partisan environment to develop multi-disciplinary clinical management protocols and policy advice for 30 years.

The Victorian Cooperative Oncology Group is an excellent forum for communication of new cancer treatment knowledge, promoting development and implementation of evidence-based clinical management guidelines and for the collaborative design of and participation in clinical trials. It has also enabled the coordinated lobbying of governments for improved services for cancer patients and cancer clinical research funding.

Comment from the Chair, Assoc Professor David Allen

Developing a unique oncology professional group

In 1975, the Cancer Council's Medical & Scientific Committee expressed concern about inconsistency in the management of solid tumours requiring chemotherapy and the then lack of suitable medical training. It formed a working group to explore all aspects of chemotherapy in Victoria.

In 1976 it was resolved to invite clinical representation from all hospitals in Victoria providing cancer therapy.

The Cancer Council Victoria provided a non-partisan environment and administrative support for the gathering.

The Victorian Cooperative Oncology Group was constituted in 1976 to:

- Advise the Cancer Council Victoria on all clinical aspects of cancer.
- Promote a range of cooperative measures to optimise cancer management.
- Contribute to the design and conduct of collaborative clinical research.
- Promote development and implementation of evidence-based treatment guidelines.

- Advocate for improved cancer services
- Contribute to the education of the medical profession.
- Establish cancer advisory and research groups.

In 2006, the VCOG structure includes a primary committee, an executive committee, 9 cancer and 4 clinical advisory committees and 3 research groups. The Cancer Council supports the VCOG activities through a dedicated Clinical Research Centre providing administration and cancer trial coordination.

A group with extensive cancer expertise

- 450 honorary / volunteer health professionals – medical, scientific and community.
- Inclusive, with the power to co-opt members with specialist expertise.
- Represents medicine, radiotherapy, surgery, gastroenterology, gynaecology, dermatology, ENT, genetics, haematology, neurology, palliation, pathology, psychology, respiratory / thoracic, nursing social work, etc.

- Includes 16 consumer / community representatives
- Represents 30 public and private metropolitan and regional cancer treatments centres

An influential role in improving cancer care

- Supports evidence-based treatment, clinical research, equity and access to best cancer care
- Assists the Cancer Council in cancer registration (standard data items / site specific registers), knowledge dissemination (professional forums / newsletters), community education (patient information material), support (Cancer Call-In), media responses, and fundraising activities (Relay for Life, Daffodil Day etc)
- Has capacity to influence clinical practice and service provision
- Highly respected by oncology professionals in Victoria and Australia
- Has unique linkages between public and private health care professionals, institutions, government and NGOs

Providing authoritative advice on cancer control

Advocacy / Support for

- Cancer Service Infrastructure, Bone Marrow Transplantation, Palliative Care Services, Cancer Therapies, Pain Therapies, Clinical Research Infrastructure, Standard Cancer Data Set, Professional Education, Cancer Genetics Services, Patient Resources and Support Services

Submissions to Government Inquiries on

- Cancer Services in Victoria / Australia, Alternative / Unproven Therapies, Mammographic Screening, Prostate Cancer Screening, Protection of Cancer Genetic Information

Statements / Guidelines on

- Screening for breast, bowel, prostate cancer, Handling of cytotoxic drugs, Techniques for cervical smear, Management of gynaecological, cancer, familial ovarian

cancer, non-melanocytic skin cancer, Synoptic reporting for melanoma, gynaecological and head and neck cancer, IHC testing for CRC, Gynaecological surveillance for HNPCC

Information for patients and families

- Expert medical advice on contact of Cancer Council information brochures.

Collaborating in clinical research

Clinical Trials

- Initiated – Endometrial (international), Ovarian (national), Rectal (state), Breast (international, state), Pain (state), Prostate (international)
- 7% cancer patients registered in trials in Victoria
- 12% breast cancer patients in international trials

Treatment Surveys and Audits

- Breast (1986, 1990, 1995, 1999)
- Colorectal (1988, 1998, 1994)
- Lung (1993), Prostate (1993)
- Testes (1988–1993)
- Cervical (1982, 1986, 1987, 1992), Ovarian (1993–1995), Endometrium (1995)
- Renal Cell (2000), Bladder – Superficial (1990, 1995), Bladder – Invasive (1990–95)
- Glioma (1998–2000)
- Melanoma (2000)

Outcome Registers

- Insitu & Small Breast (1988–1998), Radical Prostatectomy (1997–2002)

Achievements

- NHMRC Silver Volunteer Award for Health Organisation, Victoria, 2001.
- Peak oncology health professional advisory body – *Victoria's Cancer Parliament*.
- Maintained cohesive oncology health professional community for 30 years.
- Structure modelled in three other Australian states.

Key Published Articles Listing—Lung Cancer

Title	Author & Journal
Stage is not a reliable indicator of tumor volume in non-small cell lung cancer: A preliminary analysis of the Trans-Tasman Radiation Oncology Group 99-05 database	Ball DL, Fisher R, Burmeister B et al. Journal of Thoracic Oncology Sep 2006; 1(7): 667–672.

Forthcoming Meetings

Date / Place	Meeting / Contact
24–27 January 2007 Dublin, Ireland	5th Annual Meeting of the British Thoracic Oncology Group (BTOG) BTOG, Leicester, United Kingdom Ph: +44 11 6250 2811 Fax: +44 11 6250 2810 E-mail: dawn.mckinley@uhl-tr.nhs.uk Website: www.btog.org
25–28 January 2007 Clearwater Beach, Florida, USA	Molecular Targets in Cancer Therapy: 4th Biennial Meeting – Mechanism & therapeutic reversal of immune suppression in cancer Website: www.moffitt.usf.edu/continuinged/mt2007
29–31 January 2007 San Diego, California, USA	43rd Annual Meeting of the Society of Thoracic Surgeons Contact: The Society of Thoracic Surgeons Ph: +1 312 644 6610 Fax: +1 312 527 6635 Website: www.sts.org/sections/annualmeeting/
1–3 February 2007 San Diego, California, USA	9th International Symposium on Anti-Angiogenic Agents Website: www.antiangio2007.com
6–9 February 2007 Paris, France	18th International Congress on Anti-Cancer Treatment (ICACT) Service d'Oncologie Medicale, Salpetriere Hospital, c/o TCO Medi Holding, Paris, France Ph: +33 1 42 948 732 Fax: +33 1 42 948 733 E-mail: info@icact.com Website: www.icact.com
8–10 February 2007 Lorne, Victoria, Australia	19th Lorne Cancer Conference – The hallmarks of cancer Website: www.lornecancer.org

Date / Place	Meeting / Contact
8–10 February 2007 Hollywood, California, USA	9th National Conference on Cancer Nursing Research Organised by the Oncology Nursing Society (ONS), Pittsburgh, USA Ph: +1 412 859 6100 Fax: +1 412 859 6162 E-mail: customer.service@ons.org Website: www.ons.org
21–24 February 2007 Austin, Texas, USA	13th Annual Meeting of the Society for Research on Nicotine and Tobacco (SRNT) SRNT, Madison, Wisconsin, USA Ph: +1 608 443 2462 Fax: +1 608 443 2474 E-mail: info@srnt.org / meeting@srnt.org Website: www.srnt.org
27–28 February 2007 Sydney, NSW, Australia	3rd Australasian Redesigning Healthcare Summit – <i>Making patient journeys work</i> With Flinders Medical Centre and NSW Health Website: www.changechampions.com.au
1–4 March 2007 Austin, Texas, USA	4th Annual Conference of the American Psychosocial Oncology Society (APOS) – <i>Promoting quality psychosocial cancer care across diverse communities</i> Ph: +1 434 293 5350 Fax: +1 434 977 1856 E-mail: info@apos-society.org Website: www.apos-society.org
1–4 March 2007 Sao Paulo, Brazil	7th Annual Meeting of the International Network for Cancer Treatment & Research Institut Pasteur, Brussels, Belgium Ph: +32 2 373 9314 Fax: +32 2 373 9313 E-mail: cedric@inctr.be Website: www.inctr.org
2–3 March 2007 Seville, Spain	8th European Congress: Perspectives in Lung Cancer Ph: +1 770 751 7332 Fax: +1 770 751 7334 E-mail: meetings@imedex.com Website: www.imedex.com
6–10 March 2007 Florence, Italy	4th International Conference on Tumor Micro-environment – <i>Progression, therapy and prevention</i> Organised by AACR and ICMS Website: www.aacr.org/page5995.aspx

Date / Place	Meeting / Contact
15–18 March 2007 Washington DC, USA	Annual Meeting of the Society of Surgical Oncology (SSO) Website: www.surgonc.org
22–23 March 2007 Cairns, QLD, Australia	Clinical decisions, ethical challenges E-mail: change.champions@bigpond.com Website: www.changechampions.com.au
25–28 March 2007 Auckland, New Zealand	Annual Scientific Meeting of the Thoracic Society of Australia & New Zealand Festival City Conventions, PO Box 949, Kent Town, SA 5071 Ph: (08) 8363 1307 Fax: (08) 8363 1604 E-mail: tsanz@fcconventions.com.au Website: www.thoracic.org.au/asm2007.html
11–14 April 2007 Rotorua, New Zealand	19th Annual Trans Tasman Radiation Oncology Group (TROG) Meeting TROG Conference Secretariat Ph: (02) 9280 0577 Fax: (02) 9280 0533 E-mail: trog@pharmaevents.com.au Website: http://trog.ranzcr.edu.au
14–18 April 2007 Los Angeles, California, USA	98th Annual Meeting of the American Association for Cancer Research (AACR) Website: www.aacr.org
24–27 April 2007 Las Vegas, Nevada, USA	32nd Annual Congress of the Oncology Nursing Society (ONS) Oncology Nursing Society (ONS), Pittsburgh, USA Ph: +1 412 859 6100 Fax: +1 412 859 6162 E-mail: customer.service@ons.org Website: www.ons.org
6–10 May 2007 Melbourne, VIC, Australia	Annual Scientific Meeting of the Royal Australasian College of Physicians (RACP) Website: www.racp.edu.au
7–11 May 2007 Christchurch, New Zealand	Annual Scientific Congress of the Royal Australasian College of Surgeons (RACS) Ms Caroline Handley Ph: +61 3 9249 1273 E-mail: caroline.handley@surgeons.org Website: www.surgeons.org/AM/Template.cfm?Section=Annual_Scientific_Congress

Date / Place	Meeting / Contact
9–11 May 2007 Winnipeg, Canada	2007 Annual Conference of the Canadian Association of Psychosocial Oncology (CAPO) – <i>Communication, Collaboration & Creativity</i> Website: www.capo.ca
1–5 June 2007 Chicago, Illinois, USA	43rd Annual Meeting of the American Society of Clinical Oncology (ASCO) – <i>Translating research into practice</i> American Society of Clinical Oncology, 1900 Duke Street, Suite 200, Alexandria Virginia 22314 USA Ph: +1 703 299 0150 Fax: +1 703 299 1044 E-mail: asco@asco.org Website: www.asco.org
23–29 June 2007 Flims, Switzerland	9th Joint FECS-AACR-ASCO Workshop – Methods in Clinical Cancer Research Federation of European Cancer Societies, Brussels, Belgium Ph: +32 2 775 0306 Fax: +32 2 775 0245 E-mail: workshop@fecs.be Website: www.fecs.be/emc.asp?pageid=1153
28–30 June 2007 St Gallen, Switzerland	Supportive Care in Cancer Website: www.oncoconferences.ch

Contributions Welcome

The Lung Cancer Update welcomes contributions – conference reports, review of an area of interest, reviews of recent journal articles, clinical trial updates.

	Deadline	Issue Date
Mid-year issue	1 June	1 July
Year-end issue	1 November	1 December

Contributions should be forwarded to:

The Editor, Lung Cancer Update
 C/- Centre for Clinical Research in Cancer
 The Cancer Council Victoria
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 CARLTON VIC 3053
Noellyn.Ngo@cancervic.org.au

The Cancer Council Victoria

The Cancer Council Victoria is a public institution set up by an Act of Parliament in 1936. It operates as a charity, relies heavily on volunteer support, and raises and spends \$3-\$4 per head of population annually. It is governed by the Council and Executive and other committees. It's mission is to lead, coordinate and evaluate action to minimise the human cost of cancer for all Victorians. The Cancer Council houses three research divisions (behavioural science, clinical research, epidemiology) and units undertaking public and professional education, cancer registration, cancer information and support services, anti-smoking campaign (QUIT), finance, administration and fund raising. It employs about 300 staff. The Cancer Council also auspices a cooperating network of cancer specialists through the Victorian Cooperative Oncology Group and resources an expert Medical & Scientific Committee to dispense studentships, scholarships, fellowships and research grants to other academic, research and medical institutions.

Centre for Clinical Research in Cancer — Victorian Cooperative Oncology Group

The Centre for Clinical Research in Cancer (CCRC) formed in 1997, provides a coordinated and effective resource for collaborative clinical research and development in Victoria. The Centre provides administrative and research support for the Victorian Cooperative Oncology Group, which brings together Victoria's cancer specialists. The Centre fosters and facilitates the development and promotion of a range of collaborative clinical measures to optimise cancer management.

The Victorian Cooperative Oncology Group (VCOG) established in 1976, provides advice to the Cancer Council Victoria, through the CCRC, on all clinical aspects of cancer control, in particular research, screening, diagnosis, treatment, palliative medicine, cancer genetics and professional education. The strategic role of VCOG is to have a 'parliament' of clinical cancer specialists with a view to promoting a range of cooperative measures to optimise cancer treatment in Victoria. VCOG consists of a primary committee, 10 cancer-site and 3 task-specific advisory committees, and 5 research sub-committees. These committees bring together in regular meetings approximately 450 key specialist health care professionals and scientists, representing the various treatment disciplines and centres in Victoria. VCOG has established unique linkages between public and private health care professionals, institutions and governments.

