

NEWSLETTER

ISSUE 10

DECEMBER 2010

The Breast Cancer Treatment Group

This year, my first as the Chair of the ACT and SE NSW Breast Cancer Treatment Group, has been an eventful one! It has been my pleasure to oversee the completion of the projects of our previous chair Dr Carolyn Cho who has done a stellar job in this position.

Under Carolyn's expert management and with great anticipation, the ACT and SE NSW Breast Cancer Treatment Group 10 year Report was officially launched by our Health Minister, Katy Gallagher on 3rd September. The launch was met with great interest from the local media. The report is a comprehensive summary of the treatment and outcomes of people diagnosed with breast cancer in the region. It is re-assuring to read that people with breast cancer in our area receive treatment according to evidence-based guidelines and that our results are comparable, if not better than outcomes reported in other parts of Australia. As this data is maturing, I feel a deep personal gratitude to the clinicians who initiated this project in 1997 – as a clinician treating breast cancer in this region, I am proud to be working with such dedicated colleagues. Not only does this report reassure us of the quality of treatment delivery, the maturing data is more and more meaningful for investigators of breast cancer. We hope that this valuable prospective data will be an important resource that will assist us in the management of breast cancer in the future.

The BCTG has collaborated with the Westmead Millennium Institute in establishing a Breast Cancer Tissue Bank (BCTB) in the ACT. As a result, newly diagnosed individuals with breast cancer are being asked at

several surgical practices in the ACT to participate in both the BCTG Quality Assurance Project and the Breast Cancer Tissue Bank (BCTB).

In giving their consent to participate in the BC Tissue Bank, blood and tissue specimens are retrieved for storage so that this data can be matched with clinical data and used for translational research. This is an exciting project for our group and will make all the hard work of collecting clinical data even more worthwhile! It should be stressed that the information stored is de-identified and remains strictly confidential. Patient confidentiality remains paramount for our treatment group and one of the key concerns of ethics committees that have approved this project in the region.

This year we have enjoyed excellent presentations from our guest speakers, Prof Thomas Brussel, A/Prof Steve Robson, Prof Robin Stuart-Harris and Dr David Littlejohn. Once again, Carolyn Cho should be congratulated for organising these speakers. Thanks also to our sponsors Roche, Astra Zeneca and Novartis.

With 200 new cases of breast cancer diagnosed annually in this region, the importance of the data and the workload for Breast Cancer Treatment Group Quality Assurance Project Office is ever-increasing! ▶

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► The project continues to be funded by ACT Health and has received generous donations from Bosom Buddies and the John James Memorial Hospital Trust. The Bosom Buddies' donation will be used to hire Anita Hutchison to assist in the audit of the data forms.

The John James Foundation donation will be used to hire a suitable medical professional for a period of time to assist in the completion and audit of the data collection forms. The dedicated hard work done by the Project Office team, Yanping Zhang and Robyn Manda Bradley continues, as do the tireless efforts of

contributing clinicians, their assistants and contributing nurses.

Thankfully, women are surviving breast cancer – and therefore this Project will also continue to grow leading to greater demands on the contributors. The Breast Cancer Treatment Group looks forward to meeting the challenge of our expanding database and together with our patients hope to further our understanding of this disease.

Dr Angela Rezo
Chair,
Breast Cancer Treatment Group

Data Management Sub-Committee Report



As has been outlined elsewhere in the newsletter, the Group completed a monograph summarising the patterns of care and treatment outcomes for breast cancer within the region over a ten-year period. As one of the Groups enduring activities,

the audit of breast cancer treatment and outcome now spans 13 years. Although labour intensive for our long suffering surgeons and staff, the true worth of the data collection is now becoming apparent. It is clear that the primary aim of the project, to improve and maintain quality treatment for breast cancer on a regional basis, has been met. In addition, the data have become useful for research, and projects have been completed using the information contained in the data-base examining the effect of multifocal cancers on prognosis, outcomes from bilateral breast cancer, and the effect of distance from the treatment centre on care and outcomes. That the data have been

so useful is due to the ongoing support of all of the members of the Group, and to the meticulous work of our two staff members, Yanping Zhang and Manda Bradley.

Looking to the future, it is our intention to continue the data collection. It remains important to support and document the orderly introduction of new treatments for breast cancer as they become standard. With increasing follow-up, the information we have collected becomes a more useful resource for researchers (with appropriate Ethics Committee oversight). I think I can speak for the Group in stressing the importance of a vibrant clinical research effort, not only to generate new understanding of breast cancer care, but as a general stimulus to improve quality.

Dr Paul Craft
Chair,
Data Management
Sub-committee

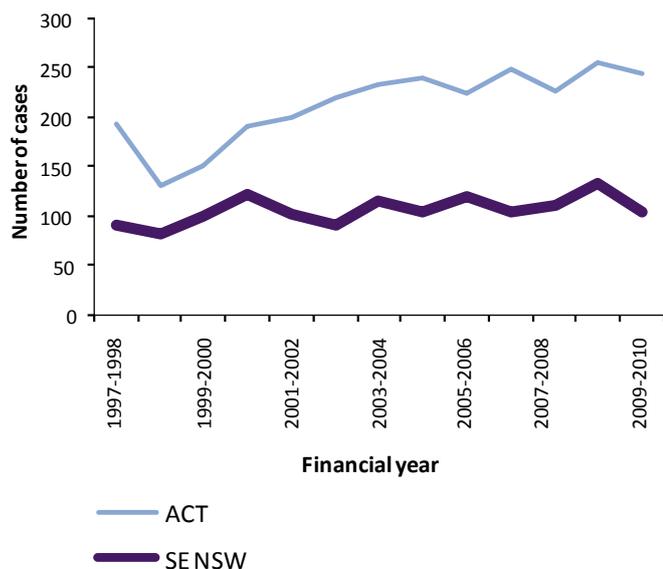
ACT Health Australia Day Achievement Award

Congratulations is extended to Dr Paul Craft who received an ACT Health Australia Day Achievement Award in recognition of his service to health care in the ACT and in particular his contribution in the field of medical oncology at an award celebration ceremony at Regatta Point on Friday 22 January 2010.

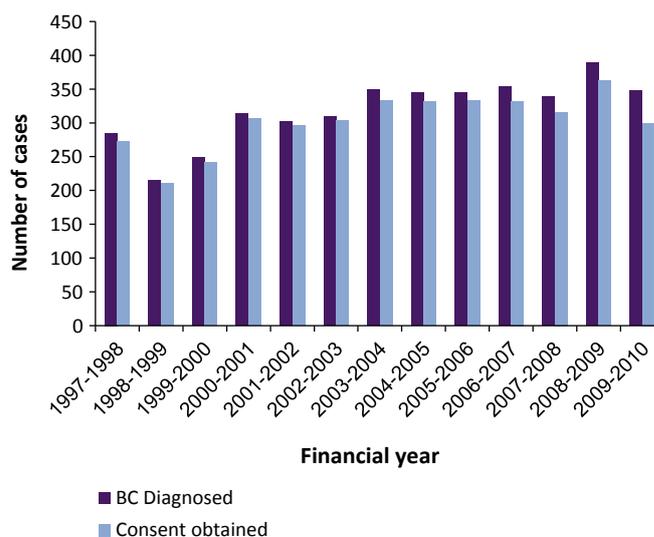
Results from the 13 years of data collection

The Quality Assurance Project has been running successfully for more than 13 years now. There are over four thousand women and men with breast cancer from the ACT and SE NSW (Graph 1) have agreed to include their information in the Project database (Graph 2). More details can be obtained from Yanping Zhang, ph: 02 6205 0967 or email: yanping.zhang@act.gov.au

Breast cancer cases in ACT and SE NSW notified in the Quality Assurance Project (n=4200) July 1997 – June 2010



Patients participation from 13 years of data collection July 1997 – June 2010



From the GP's desk

It has been a good year for breast cancer in my practice. I have spent more time talking about routine post-treatment review schedules and breast reconstruction options than I have spent time breaking the bad news to an unsuspecting woman of a frightening diagnosis that she never thought she would have to deal with. Sadly I know this won't always be the case.

Whether we report good news or bad to the Breast Cancer Treatment Group, I feel that as general practitioners we have an obligation to contribute to the monitoring of this disease in our community. By doing this we are

better able to provide our patients, who are unfortunate enough to be starting their path with breast cancer, the best possible evidence for treatment options to help them survive this journey.

Knowledge of breast cancer continues to grow in our community. Less and less often do I have to remind a woman to attend to her routine mammogram or convince a young woman to have a breast check performed at the Pap smear visit. I also find myself talking more about general health measures that we can take to assist in the primary prevention of this disease.

I hope that in the future I will be able to discuss these things with increasing frequency and rates of success.

Although the ACT may have the highest age standardised incidence of breast cancer in Australia, I am pleased to see that over 80% of our patients are alive and disease free at the nine year mark. I hope that this is a situation that we will see improving even more into the future.

Dr Emily Nicoll
General Practitioner
Gungahlin General Practice

Clinical Quality Register

An editorial in the *Medical Journal of Australia* (John J McNeil et al MJA: Vol 192, no.5, 1 March 2010) highlighted the value of Clinical – Quality Registries in monitoring and bench marking quality of care. The role of registries is to systematically collect data on patients undergoing treatment.

The 10 year report of our Quality Assurance Project highlights the value of ongoing data collection and measurement of outcomes. We have demonstrated in the ACT our results are equivalent or better than national averages. We also have highlighted different outcomes for patients treated rurally compared to metropolitan residents. These results have been used by the National Breast and Ovarian Cancer Centre (NBOCC) to lobby for more rural funding.

Another result of our Quality Assurance Project is that we have shown our practitioners met all benchmarks of best practices. These results have been accepted for publication in the international peer reviewed journal “The Breast” (*Variation in the management of Early Breast Cancer in Rural and Metropolitan Centres: Implications for the organisation of Rural Cancer Services*, March 2010. doi 10.1016), evidence of the value of our work.

Release of Breast Cancer Treatment Group Quality Assurance Project 10 year report

Friday 3 September 2010 the BCTG Ten Year Report is formally released by the Minister for Health, Katy Gallagher.



The editorial highlighted that in Sweden, 70 Clinical Quality Registers have been established across that country. The success of our 10 year Project highlights that such collection of data should be supported by government funding and expanded into such a Clinical – Quality Register. Individual clinicians who have supported the BCTG Quality Assurance Project cannot be expected to provide the long term data entry and follow-up required of projects to measure outcomes.

Registries under the leadership of Custodians who are assisted by properly equipped data entry staff are needed if we want to benchmark best practices, measure long term outcomes to demonstrate appropriateness of management, and improve overall standards of health care. Our 10 year Quality Assurance Project demonstrates the value of long term data collection, and we in the ACT should establish such a registry to continue to monitor breast cancer outcomes. It could be expanded to cover other health areas as well. Such projects involving implementation of best practice and measurements of outcome are the best way to reduce health costs and improve patient safety.

Dr John Buckingham
Breast Surgeon

Journal articles and reports

- *Breast cancer treatment group: Quality Assurance Project Ten-year report*. Cho C, Buckingham J, Craft P, Clark I, Dahlstrom J, Jacob G, Price J, Rezo, A, Stuart-Harris R, and Zhang Y. ACT & SE NSW Breast Cancer Treatment Group, ACT Health, October 2009, Canberra, Australia.
- *Variation in management of early breast cancer in rural and metropolitan centres: Implications for the organisation of rural cancer services*. Craft P, Buckingham J, Dahlstrom J, Beckmann K, Zhang Y, Stuart-Harris R, Jacob G, Roder D, Tait N in conjunction with ACT & SENSW Breast Cancer Treatment Group. *The Breast*, March 2010; doi:10.1016/j.breast.2010.03.032
- *Clinical characteristics and outcomes of bilateral breast cancer in an Australian cohort*, Beckmann K R, Buckingham J, Craft P, Dahlstrom J, Zhang Y, Roder D, Stuart-Harris R. *The Breast* (2010), doi:10.1016/j.breast.2010.10.004

John James Memorial Foundation Donation



In mid-2009 the John James Memorial Foundation (JJMF) was approached by the Chair of the BCTG and a request for a charitable donation was made.

The JJMF is a not-for-profit foundation and allocates a proportion of its expenditure to charities and not for profit organisations. In particular it has an interest in supporting local groups in the areas of Health and Medicine.

The JJMF subsequently approved a donation of

\$10,000 to the BCTG. This literally “big cheque” was presented to the Chair of the BCTG, Dr Angela Rezo by the JJMF CEO, Mr Phil Greenwood, and board directors Mr Brian Acworth AM and Professor David Hardman at the most recent meeting of the BCTG.

The BCTG would like to express its great appreciation of the generous donation. This will enable the BCTG to continue its work to collate and maintain the rapidly expanding database of the Breast Cancer Quality Assurance Project.

Dr Carolyn Cho
Breast Surgeon

Breast Cancer Treatment Group— A Consumer Representative’s Perspective

Every time there is a meeting I look around the table at the twenty or so people sitting there. It is 6pm and everyone has come from work—diagnosing, treating and caring for those with breast cancer. It will have been a long day—and for some the sandwiches provided are in lieu of lunch. Surprisingly few chose a glass of wine. They should be tired. Yet everyone appears to have energy to listen and learn. We hear about progress with new proposals—such as the Tissue Bank— and the data collection and analysis of the group’s Quality Assurance Project and its 10 Year Report.

At meetings there is a speaker who is at the forefront of some new development in the treatment of breast cancer. This provides ‘professional development’ for everyone and for me is especially valuable in my role as consumer representative on this and other ‘committees’. I report back to BCNA so these ideas are passed on to the policy officers for their ‘data bank’. Every talk is interesting and informative. It seems unfair to mention just a few!

- One was the talk last year by Dr George Hazan, radiologist, who spoke about *Breast Imaging and the use of MRI in the diagnosis of breast cancer* – how it increases the chance of detection but that radiologists need lots of practice to diagnose accurately.
- Another where A/Professor Steve Robson, Obstetrician and Gynaecologist made obvious the poor fertility outcomes following treatment for breast cancer in young, pre-menopausal women,

in his talk on *Fertility Preservation in Young Patients with Breast Cancer*.

- I remember my report to BCNA commented on another reason for women having babies sooner rather than later.
- Professor Thomas Brussel discussed “*Alternative Methods of Anaesthesia for breast surgery*” using epidural and regional anaesthesia instead of a general anaesthetic as the latter can result in endocrine and neurological changes that promote cancer cell growth (*as does pain* and use of *opioids*)—a new, but exciting research area, with clinical trials being set up in several countries.

The knowledge I gain from the BCTG and its members helps me in my other consumer advocacy activities. I sit on three National Breast and Ovarian Cancer Council (soon to be called Cancer Australia) Working Groups: Sentinel Node Biopsy, Hypofractionated Radiotherapy and Bisphosphonates. Their *Clinical Guidelines* are under review. I am also a consumer rep on Nehta’s e-Health Diagnostic Services Reference Group that aims to enable a nationally endorsed exchange of pathology and imaging information. DSRG is currently working with the public *BreastScreen Australia Service* to develop standards around equipment purchase and the archiving of images and reports and the requesting, reporting and sharing of all diagnostic images and patient information. I have just been ►

► appointed to DOHA's Diagnostic Imaging Quality Committee. It is also valuable to get to know committee members as I am sure I will need to seek their opinions and advice occasionally.

I feel very privileged to have been invited to represent Breast Cancer Network Australia as their consumer representative on this working group of dedicated

professionals. The outcomes from the 10 Year Quality Assurance Project confirm how much ACT and SE NSW breast cancer patients owe their medical 'team' for such positive results.

You deserve medals! Thank you for your care.

Geraldine Robertson
September 2010

Guest speakers this year

- *Surgical stress, immune function and tumour growth – alternative methods of anaesthesia for breast surgery* Professor Thomas Brussel
- *IVF and fertility issues in breast cancer patients* Dr Steve Robson
- *Neo-adjuvant chemotherapy* Prof Robin Stuart-Harris
- *Volume Displacement surgery for breast reconstruction* Dr Littlejohn

The Breast Cancer Tissue Bank

The Breast Cancer Tissue Bank Project has now been operational for one year in Canberra.

The centre joined Royal Prince Alfred Hospital, Westmead Hospital, Royal North Shore Hospital, St Vincent's Hospital, John Hunter Hospital and Port Macquarie Hospital in this collaboration coordinated by the Westmead Millennium Institute. As of September 2010, 184 participants in our region have agreed for their breast tissue to be banked along with a blood sample and clinical information on their risk factors, treatment and outcomes. In total the Breast Cancer Tissue Bank now has about 3500 donors. Elaine Bean is the local Breast Tissue Bank Officer based at ACT Pathology responsible for coordinating the collection, processing and storage of the specimens from donors consenting to this project. She is also responsible for gathering and entering the matching clinical data onto the Breast Cancer Tissue

Bank database. This involves collating information from a number of sources including the surgeons, oncologists, Breast Care Nurses and the Breast Cancer Treatment Group. Recently Dr AJ Collins and Jenny Garner the McGrath Foundation Breast Care Nurse in Bega have joined the Canberra breast surgeons in enrolling patients. Blood samples from these participants are either taken by the Capital Pathology collection centre in Bega or when patients come to Canberra for oncology appointments. A number of research projects have already made use of the Tissue Bank specimens and data in an attempt to address important questions in breast cancer causation and outcome. These are listed on the BCTB site: www.abctb.org.au

Dr Desmond Yip – Principal Investigator, Breast Cancer Tissue Bank, ACT Collection Centre

Events of 2010

Media release of Breast Cancer Treatment Group 10 year report. Media coverage WINTV, The Canberra Times

Friday 3 September 2010, the Breast Cancer Treatment Group Quality Assurance Project Ten Year Report is formally released by the Minister for Health, Katy Gallagher.

John Buckingham was guest speaker at the ACT Seniors Week Chief Minister's Breakfast on *Early Breast Cancer and Sentinel Node Biopsy*.

Generous donation from the John James Memorial Foundation of \$10,000 to assist in data collection form completion.

Thankyou to Roche (Xeloda), Astrazeneca (Arimidex), and Novartis for meeting sponsorship.

BCTG meeting dates for 2011– March 7, May 16, September 5, November 14.

Sincere thanks to Bosom Buddies for their generous and continued support of the Breast Cancer Treatment Group Quality Assurance Project.

What's new in breast cancer – the Radiation Oncology Perspective

Breast cancer treatment is in the process of undergoing significant changes in the way we treat patients. Current information regarding partial breast irradiation is very exciting and is the most practice changing development since the original NSABP B06 study for radiation oncology.

We now have 10 year follow-up for some of these patients, however the tales are somewhat cautionary. The data is confounded in that there are now 3 different ways to treat a partial breast patient, each technique with its own quirks, indications and contraindications for patient selection, and also technical constraints meaning that it is not always easy to compare these groups side by side. Overall it seems that for small tumours without DCIS, in older patients and complete excision that the results are probably comparable to a wide local excision and external beam radiation treatment in terms of local disease control. This cannot be regarded as standard of care as a randomised controlled trial result is not yet available, however randomised controlled trials are underway. Because of the long natural history of this disease, these trials are likely to take at least another 5 years before a result is obtained. Not all techniques are medicare reimbursed and the patient may be significantly out of pocket for some techniques.

At ESTRO recently a number of advances were announced in breast cancer treatment. In an update of the UK hypofractionated breast radiotherapy trials (START-A, START-B) John Yarnold reported that the shorter regimens showed equivalent control to the longer fractionation. The study arms in these two studies are Start A (50Gy in 25 fractions vs 41.6Gy vs 39Gy in 13 fractions) and START-B (50Gy in 25 fractions vs 40Gy in 15 fractions)

Taking the hypofractionation theme even further the UK FAST 3 arm study of 30Gy in 5 fractions given once a week vs 50Gy in 25 fractions vs 28.5Gy in 5 fractions as adjuvant treatment in early invasive breast cancer (<3cm, age>50, complete resection, node negative). This study excluded axillary radiotherapy, chemotherapy, breast boost radiation and all patients were planned using 3D conformal radiotherapy-this is common in Australia but not in the UK where the very large numbers of patients have meant that breast radiotherapy is often planned very expediently using techniques abandoned in Australia over 10 years ago.

Early 2 and 3 year results of this trial have shown good local control with no significant difference between the 28.5 and 30Gy arm in terms of late normal tissue effects but with poorer cosmetic outcome for the 28.5 and 30Gy arms when compared to 50Gy.

In terms of total radiation dose the EORTC update of the boost vs no boost trial has been updated. This study showed an increased local recurrence rate for young (<50yrs) patients with breast cancer when treated to 50Gy in 25 fractions without a 10-16 Gy boost (28.5Gy vs 13.5%). Further analysis of this was presented showing that boost dose was important for high grade tumours in all patients (>50yr 13.8 vs 23% local recurrence), but for patients >50years of age with intermediate and low grade tumours that there was minimal benefit for a boost (6.5%-4.4% NS vs 13.8-2.3% for young patients).

Update on the ATLAS trial (10 vs 5 years of tamoxifen following breast cancer treatment) in 11,607 patient showed reduced ipsilateral and contralateral breast recurrence with 10 years tamoxifen (HR 0.9 (0.82-0.99, p=0.02)). There were no increased deaths from other malignancy which is good given that there has been concern raised regarding increased risk of endometrial cancer. The application of this study is hampered by the poor compliance rate out to 10 years (80%) and that 41% were ER unknown, however this would underestimate the results. Less than 1% of patients switched to an aromatase inhibitor.

Lastly a report from the Stockholm Breast Cancer Trial reported no increased risk of second malignancies with a median of 32 years follow-up in patients receiving radiation treatment. In left vs right sided breast cancers there was no increased risk of death. These are important results as previous studies have suggested that there is a small risk of heart disease as a result of the left sided breast radiotherapy after a significant (>20 year) time delay and concern has been raised regarding the risk of second malignancies in long term survivors of radiation treatment.

**Dr Lyn Austen
Radiation Oncologist
The Canberra Hospital**

Neoadjuvant Chemotherapy For Breast Cancer



Neoadjuvant chemotherapy (or preoperative chemotherapy) was first introduced in the early 1990s.

Initially, neoadjuvant chemotherapy (NAC) was introduced to reduce tumour size to facilitate surgery in patients presenting with large, locally advanced or inflammatory breast cancers. Early experience showed that NAC achieved high clinical response rates and reduced tumour size in the majority of patients, facilitating surgery. Thus, some inoperable tumours became operable and in some cases a patient who would have faced a mastectomy was converted to a local excision. It was hoped that using systemic chemotherapy upfront, prior to surgery, would result in better outcomes such as disease free survival (DFS) and overall survival (OS). However, experience has shown that this is not the case and DFS and OS after NAC and standard postoperative adjuvant chemotherapy are similar. The best long term outcomes are achieved by those patients who achieve a pathological complete remission (pCR). Although somewhere between 60-90% of patients achieve a clinical response, pCR is only obtained in up to 15% of patients. During NAC, tumour size can be monitored by clinical examination, mammography, or by ultrasound. Breast MRI appears particularly useful for monitoring response to NAC.

An optimal NAC regimen and the optimal duration of NAC have not been established. In the future we may tailor a particular NAC regimen to patients with distinct subtypes of breast cancer. For example, in triple negative breast cancers, there is a suggestion that NAC built around platinum containing

combinations may be more effective than non platinum containing combinations. Interestingly, the response rate to NAC in invasive lobular cancer is very low.

Does NAC offer any benefits over postoperative adjuvant chemotherapy? The potential benefits of NAC for the patient are that a tumour that was inoperable at presentation may become operable or one that would have required a mastectomy may be treated by breast conserving surgery, if the disease responds. For the Medical Oncologist, NAC opens up a number of possibilities. Firstly, we are able to see whether the tumour is responding to treatment whereas with postoperative adjuvant chemotherapy we have no idea whether our treatment is effective against the tumour, or not.

NAC offers the opportunity of biopsying the tumour and assessing various markers which may be helpful. Ki-67, a tumour proliferative marker has become established as a useful marker in NAC. A high Ki-67 level prior to treatment suggests that the tumour is proliferating rapidly and a high Ki-67 level is associated with an increased chance of response to NAC. A significant fall in Ki-67 during NAC suggests that the NAC will be effective. Other factors that suggest a good outcome to NAC include: patient age <50 years, small tumour size, high tumour grade, ER negativity, and basal and HER2+ tumour types.

Although NAC poses a number of challenges, it also offers a number of opportunities. I am in the process of devising a protocol for NAC for use in Canberra and I hope that this will be a useful study for our group.

Robin Stuart-Harris
Medical Oncologist

Contact Details

Any clinical questions should be directed to Dr Paul Craft, Canberra Hospital (02) 6244 2220 or contact Yanping Zhang, Project Co-ordinator (02) 6205 0967 or yanping.zhang@act.gov.au or the project officer on (02) 6205 1542 Robyn.Bradley@act.gov.au Fax (02) 6205 2109.

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