



Influencing best practice in breast cancer



Key appropriate and inappropriate
breast cancer practices

Cancer Australia Statement - Influencing best practice in breast cancer was prepared and produced by:

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About the Cancer Australia Statement

Cancer Australia, the Government's national cancer control agency, aims to reduce the impact of cancer, address disparities and improve outcomes for people affected by cancer, by leading and coordinating national, evidence-based interventions across the continuum of care.

In line with Cancer Australia's Strategic Plan 2014-2019, the *Cancer Australia Statement – Influencing best practice in breast cancer* has been developed to improve cancer outcomes and inform effective and sustainable cancer care.

Multidisciplinary cancer care is considered a cornerstone of best practice. The Statement supports patient-centred, multidisciplinary cancer care, and is intended to complement the nationally endorsed *Optimal care pathway for women with breast cancer* and relevant clinical practice guidelines.

The Statement highlights key appropriate and inappropriate breast cancer practices across the cancer care continuum. It provides health providers, patients and policymakers with the evidence supporting effective and best practice care, to deliver value to the patient and the health system.

The identification of the breast cancer practices in the Statement was achieved through a systematic approach to assessment, underpinned by a process of collaboration, participation and engagement of key clinical groups, including medical colleges and consumers. The Statement is based on best available evidence and supported by expert clinical and consumer advice.

The Statement represents agreed priority areas which, if implemented, would support appropriate breast cancer care and reduce unwarranted variations in practice.* As such, the value of the Statement will be realised in informing and influencing wise decision-making at the health system, clinician and individual patient levels.

* The practices comprising the Statement should be considered in the context of clinical judgement for each patient.

How this list was developed

The *Cancer Australia Statement – Influencing best practice in breast cancer* was developed through an evidence-informed, collaborative process, outlined below.

Cancer Australia established a Steering Group to provide expert advice on the approach to developing the Statement, informed by key learnings from similar healthcare improvement initiatives, both nationally and internationally.

It was agreed that the following definitions would be applied:

- ▶ an appropriate practice is one that provides patient benefit; is effective (based on valid evidence, including evidence of benefit); efficient (cost-effective); equitable and consistent with the ethical principles and preferences of the individual patient;
- ▶ an inappropriate practice is one that may cause harm or provides little benefit to patients and may be frequently misused in clinical practice. It is a practice that does not meet the requirements for an appropriate practice.

A Breast Cancer Expert Group was convened to provide specialist input and advice on the selection of appropriate and inappropriate breast cancer practices for the Statement. The membership consisted of representatives from the Medical Oncology Group of Australia, the Royal College of Pathologists of Australasia, the Royal Australian and New Zealand College of Radiologists, Breast Surgeons of Australia and New Zealand, the Clinical Oncology Society of Australia, the Australian College of Rural and Remote Medicine, Cancer Australia's Breast Cancer Advisory Group and Breast Cancer Network Australia.

Cancer Australia sourced relevant national and international clinical guidelines, publications and position statements to develop a list of potential breast cancer practices, with additional practices nominated by the Breast Cancer Expert Group. Criteria for inclusion of practices on the list were developed in consultation with the Steering Group and included:

- ▶ evidence to support the appropriateness or inappropriateness of the practice;
- ▶ evidence of unwarranted variation in the use of the practice;
- ▶ the practice is measurable, or could be measured; and
- ▶ the practice is inconsistent with clinical guidelines, clinical college position statements or recommendations.

In consultation with the Steering Group, criteria for prioritising the selection of key candidate breast cancer practices were established and included the following considerations:

- ▶ the practice is equitable/inequitable across patient populations;
- ▶ the practice is highly valued, but underused or not consistently used;
- ▶ there is evidence/no evidence of clear and meaningful benefit to specific patient populations;
- ▶ the practice allows for consideration of patient preferences and personal values;
- ▶ the practice does/does not enhance safety and minimise harm;
- ▶ the practice has a high potential positive/negative impact on health/costs/equity of access;
- ▶ the existence of a cost-effective alternative; and
- ▶ the practice concerns conditions with a high/low impact on patients.

Guided and informed by these prioritisation criteria, the Breast Cancer Expert Group reached a consensus on an initial short-list of 20 candidate practices. The clinical colleges and organisations represented on the Breast Cancer Expert Group, as well as the Consumers Health Forum and the Royal Australian College of General Practitioners reviewed and provided feedback on the short-list of candidate breast cancer practices.

Cancer Australia performed an extensive search of national and international research publications to identify supporting evidence for each short-listed practice. This included high-level evidence, where available, such as existing systematic reviews, meta-analyses, audits and registry data; other evidence such as patient outcomes, current use in Australia, unwarranted variations in practice and cost-effectiveness data; and existing Health Technology Assessment reports and other technical reviews, as available.

Cancer Australia performed a rigorous assessment of each practice against the detailed summaries of evidence and the prioritisation criteria, with expert input where necessary. The summaries of supporting evidence, together with the assessment against the prioritisation criteria and feedback from key stakeholders informed the Breast Cancer Expert Group's final selection of 12 key appropriate and inappropriate breast cancer practices.

The Breast Cancer Expert Group and Cancer Australia's Intercollegiate Advisory Group, including representatives from the Royal Australian College of General Practitioners, the Royal Australasian College of Surgeons, the Royal Australasian College of Physicians, the Royal Australian and New Zealand College of Obstetricians and Gynaecologists, the Royal Australian and New Zealand College of Psychiatrists, Medical Oncology Group of Australia, Clinical Oncology Society of Australia, Cancer Nurses Society of Australia, the Australian Cancer Consumer Network and Cancer Voices Australia reviewed and had input into the agreed final wording of the practices and supporting materials. The Statement was endorsed by Cancer Australia's Advisory Council.

1

Appropriate to offer genetic counselling to women with a high familial risk at or around the time that they are diagnosed with breast cancer, with a view to genetic testing to inform decision-making about treatment.

CONTEXT

Around 5% of all breast cancer diagnoses in Australia (or an estimated 796 new cases in 2016) are associated with the inheritance of a mutated gene. Women are considered to be at potentially high familial risk of breast cancer if they have a number of blood relatives on the same side of the family diagnosed with breast or ovarian cancer, especially if these relatives were diagnosed at a young age.

Genetic counselling and, if appropriate, genetic testing, aims to assess if a breast cancer diagnosis is due to an inherited mutation. Implications of test results for the individual patient, including decision-making about breast cancer treatment, and their family are also then able to be discussed.

VALUE TO PATIENTS

The identification of women at potentially high familial risk at or around the time of their breast cancer diagnosis is important to help them to make informed decisions about their breast cancer treatment, as well as surgical options for reducing their risk of further developing breast or ovarian cancers.

SUPPORTING EVIDENCE

Cancer Australia. Recommendations for the management of early breast cancer in women with an identified BRCA1 or BRCA2 gene mutation or at high risk of a gene mutation. 2014 Surry Hills, NSW.

Meiser B, Gleeson M, Watts K et al. Getting to the point: what women newly diagnosed with breast cancer want to know about treatment-focused genetic testing. *Oncology Nurses Forum*. 2012;39(2):E101-11.

Meiser B, Tucker K, Friedlander M, et al. Genetic counselling and testing for inherited gene mutations in newly diagnosed patients with breast cancer: a review of the existing literature and a proposed research agenda. *Breast Cancer Research*. 2008;10(6):216.

Trainer AH, Lewis CR, Tucker K, et al. The role of BRCA mutation testing in determining breast cancer therapy. *Nature Reviews Clinical Oncology*. 2010;7(12):708-17.

2

Appropriate to ensure optimal fixation of breast cancer specimens for accurate pathological examination and biomarker assessment.

CONTEXT

Pathological assessment of a breast cancer surgical specimen is a critical step in the diagnosis and management of breast cancer. Pathological assessment provides information on the type of breast cancer and its biological features to guide the multidisciplinary team's consideration of appropriate treatment for the individual patient.

The Royal College of Pathologists of Australasia has produced detailed guidelines on optimal procedures for tissue fixation. Several studies have shown that suboptimal fixation of breast cancer specimens can result in inaccurate and inconsistent assessment of diagnostic biomarkers such as receptors for oestrogen, progesterone and human epidermal growth factor 2 (HER2), increasing the risks of misdiagnosis.

VALUE TO PATIENTS

Appropriate handling and preparation of a breast cancer specimen for pathology assessment will help to ensure that patients receive an accurate diagnosis of breast cancer, including the cancer subtype which is essential to informing appropriate treatment options.

SUPPORTING EVIDENCE

Francis GD, Dimech M, Giles L, et al. Frequency and reliability of oestrogen receptor, progesterone receptor and HER2 in breast carcinoma determined by immunohistochemistry in Australasia: results of the RCPA Quality Assurance Program. *Journal of Clinical Pathology*. 2007;60(11):1277-83.

Mann GB, Fahey VD, Feleppa F, Buchanan MR. Reliance on hormone receptor assays of surgical specimens may compromise outcome in patients with breast cancer. *Journal of Clinical Oncology*. 2005;23(22):5148-54.

Nkoy FL, Hammond ME, Rees W, et al. Variable specimen handling affects hormone receptor test results in women with breast cancer: a large multihospital retrospective study. *Archives of Pathology and Laboratory Medicine*. 2010;134(4):606-12.

Royal College of Pathologists of Australasia. <http://www.rcpa.edu.au/Library/Practising-Pathology/Macroscopic-Cut-Up/general-information/fixation>. Viewed 22 February, 2016.

Wolff AC, Hammond ME, Hicks DG, et al. Recommendations for human epidermal growth factor receptor 2 testing in breast cancer: American Society of Clinical Oncology/College of American Pathologists clinical practice guideline update. *Archives of Pathology and Laboratory Medicine*. 2014;138(2):241-56.

3

Appropriate to consider and discuss fertility and family planning with premenopausal women before they undergo breast cancer treatment.

CONTEXT

A substantial proportion of women in Australia are diagnosed with breast cancer prior to menopause. In 2016, it is estimated that there will be 5,035 new cases (32%) of breast cancer in women aged 20-54 years.

Some treatments for breast cancer, including chemotherapy and hormone therapy, may induce premature menopause and lead to impaired fertility. This can impact on a woman's chance of having children in the future.

VALUE TO PATIENTS

Before the commencement of treatment, it is important to discuss the potential impacts on fertility, as well as the options for preserving fertility to increase the likelihood of future childbearing. This will provide women with an opportunity to consider their fertility preservation options as part of their breast cancer treatment considerations.

SUPPORTING EVIDENCE

Australian Institute of Health and Welfare 2012. Cancer incidence projections, Australia 2011 to 2020. Cancer series no. 66. Cat. no. CAN 62. Canberra: AIHW.

Deshpande NA, Braun IM, Meyer FL. Impact of fertility preservation counseling and treatment on psychological outcomes among women with cancer: A systematic review. *Cancer*. 2015;121(22):3938-47.

Letourneau JM, Ebbel EE, Katz PP, et al. Pretreatment fertility counseling and fertility preservation improve quality of life in reproductive age women with cancer. *Cancer*. 2012;118(6):1710-7.

Peate M, Meiser B, Cheah BC, et al. Making hard choices easier: a prospective, multicentre study to assess the efficacy of a fertility-related decision aid in young women with early-stage breast cancer. *British Journal of Cancer* 2012;106(6):1053-61.

Ruddy KJ, Gelber SI, Tamimi RM, et al. Prospective study of fertility concerns and preservation strategies in young women with breast cancer. *Journal of Clinical Oncology*. 2014;32(11):1151-6.

4

Appropriate to offer a choice of either breast conserving surgery followed by radiotherapy, or a mastectomy to patients diagnosed with early breast cancer, as these treatments are equally effective in terms of survival.

CONTEXT

Strong evidence from large international trials has shown that breast conserving surgery followed by radiotherapy is as effective as mastectomy for most women with early breast cancer (defined as invasive cancer that is contained in the breast, or has spread to lymph nodes in the breast or armpit, but not to other parts of the body). This means that for most women, the overall survival rate is the same after either treatment.

Mastectomy rates vary across demographic and geographic groups in Australia with higher rates of mastectomy in non-metropolitan areas, especially outer regional and more remote locations, and in lower socio-economic areas.

VALUE TO PATIENTS

Discussing the different surgical options for women with early breast cancer and offering a choice of either breast conserving surgery followed by radiotherapy, or mastectomy is important to support informed decision-making.

SUPPORTING EVIDENCE

Australian Institute of Health and Welfare 2015. Breast cancer in young women: key facts about breast cancer in women in their 20s and 30s. Cancer series no. 96. Cat. no. CAN 94. Canberra: AIHW.

Hamelinck VC, Bastiaannet E, Pieterse AH, et al. Patients' preferences for surgical and adjuvant systemic treatment in early breast cancer: a systematic review. *Cancer Treatment Reviews*. 2014;40(8):1005-18.

Litière S, Werutsky G, Fentiman IS, et al. Breast conserving therapy versus mastectomy for stage I-II breast cancer: 20 year follow-up of the EORTC 10801 phase 3 randomised trial. *Lancet Oncology*. 2012;13(4):412-9.

Roder D, Zorbas H, Kollias J, et al. Factors predictive of treatment by Australian breast surgeons of invasive female breast cancer by mastectomy rather than breast conserving surgery. *Asian Pacific Journal of Cancer Prevention*. 2013;14(1):539-45.

Vila J, Gandini S, Gentilini O. Overall survival according to type of surgery in young (≤ 40 years) early breast cancer patients: A systematic meta-analysis comparing breast-conserving surgery versus mastectomy. *Breast*. 2015;24(3):175-81.

5

Appropriate to offer a shorter, more intense course of radiotherapy (hypofractionated radiotherapy) as an alternative to conventional radiotherapy for patients with early breast cancer who:

- ▶ are aged 50 years and over;
- ▶ have a cancer at an early pathological stage (T1-2, N0, M0); and
- ▶ have undergone breast conserving surgery with clear surgical margins.

CONTEXT

External beam radiotherapy to the whole breast after breast conserving surgery is effective in reducing the risk of local recurrence and improving the survival of appropriately selected patients with early breast cancer.

External beam radiotherapy uses high-energy X-rays to destroy breast cancer cells, and is traditionally delivered by repeated small, daily doses of radiation to the breast over several weeks. Several clinical trials have shown that, in selected patients, higher daily doses of radiation over a shorter time period (known as hypofractionated radiotherapy) is equally as effective as the conventional approach in terms of local and distant recurrence, cosmetic outcomes and overall survival.

For women outside the above criteria with early breast cancer who require post-operative, whole breast radiotherapy, hypofractionated radiotherapy could be considered as an alternative to conventionally fractionated radiotherapy.

VALUE TO PATIENTS

Because there are fewer days of treatment, hypofractionated radiotherapy may be more convenient for patients, and may influence their choice of surgical management. Consideration of hypofractionated radiotherapy and discussion of this approach with eligible patients will help ensure that patients can make an informed decision about their management.

SUPPORTING EVIDENCE

Budach W, Bölke E, Matuschek C. Hypofractionated radiotherapy as adjuvant treatment in early breast cancer. A review and meta-analysis of randomized controlled trials. *Breast Care (Basel)*. 2015;10(4):240-5.

Early Breast Cancer Trialists' Collaborative Group (EBCTCG), Darby S, McGale P, et al. Effect of radiotherapy after breast-conserving surgery on 10-year recurrence and 15-year breast cancer death: meta-analysis of individual patient data for 10,801 women in 17 randomised trials. *Lancet*. 2011;378(9804):1707-16.

Hoopes DJ, Kaziska D, Chapin P, et al. Patient preferences and physician practice patterns regarding breast radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*. 2012;82(2):674-81.

Linares I, Tovar MI, Zurita M, et al. Hypofractionated breast radiation: Shorter scheme, lower toxicity. *Clinical Breast Cancer*. 2015 Sep 25. pii: S1526-8209(15)00223-2.

6

Appropriate to offer patients with early breast cancer the opportunity for their follow-up care to be shared between a primary care physician and a specialist, to provide more accessible, whole-person care.

CONTEXT

Patients who have been treated for early breast cancer are at an increased risk of cancer recurrence or the development of a new primary breast cancer. Follow-up care is essential following completion of active treatment to check whether the breast cancer has recurred, to monitor side effects of treatment and to provide practical and emotional support.

Shared follow-up care is an innovative model of care that provides patients with early breast cancer the opportunity of having their follow-up care shared between their primary care physician and specialist. Several randomised controlled trials have shown that primary care-led follow-up is a safe and effective alternative to specialist follow-up with no differences in survival outcomes, breast cancer recurrences or serious clinical events.

VALUE TO PATIENTS

Providing patients with the option for their follow-up care to be shared between their GP and a specialist has the potential to promote and support continuity of care and whole-person care, as the patient's GP has oversight of all their health issues. Follow-up provided by a GP may improve access to care and be more convenient for the patient, reducing the need to travel to specialist services.

SUPPORTING EVIDENCE

Emery JD, Shaw K, Williams B et al. The role of primary care in early detection and follow-up of cancer. *Nature Reviews Clinical Oncology*. 2014;11(1): 38-48.

Grunfeld E, Levine MN, Julian JA, et al. Randomized trial of long-term follow-up for early-stage breast cancer: A comparison of family physician versus specialist care. *Journal of Clinical Oncology* 2006;24: 848-55

Lewis RA, Neal RD, Williams NH, et al. Follow-up of cancer in primary care versus secondary care: systematic review. *British Journal of General Practice* 2009;59: 234-7

Ngune I, Jiwa M, McManus A, Hughes J. Do patients with long-term side effects of cancer treatment benefit from general practitioner support? A literature review. *International Journal of Integrated Care*. 2015;15: e023.

Taggart F, Donnelly P, Dunn J. Options for early breast cancer follow-up in primary and secondary care - a systematic review. *BioMed Central Cancer*. 2012;12: 238.

7

Appropriate to offer palliative care early in the management of patients with symptomatic, metastatic breast cancer to improve symptom control and quality of life.

CONTEXT

Palliative care includes more than care for people who are dying or nearing the end of their life. It focuses on relieving symptoms and improving quality of life for patients with life-threatening illness. This includes not only helping to control physical symptoms such as pain, but also focuses on emotional wellbeing, relationships with others and spiritual needs.

A proportion of women with early breast cancer will experience progression of their disease, while some women have metastatic (also known as secondary or advanced) disease at diagnosis. These women may live with metastatic breast cancer for a number of years, and receive treatment which, while no longer curative, is aimed at delaying the progression of the cancer, relieving cancer-related symptoms, and improving quality of life.

Studies have shown that the early initiation of palliative care for patients with metastatic cancer can lead to improved pain control and symptom management, improved patient satisfaction and quality of life, reduced anxiety and delivery of care that better matches patients' preferences.

VALUE TO PATIENTS

Discussing the options for palliative care with patients with metastatic breast cancer will assist them to address their physical and emotional needs and to make informed decisions about their cancer care.

SUPPORTING EVIDENCE

Davis MP, Temel JS, Balboni T, Glare P. A review of the trials which examine early integration of outpatient and home palliative care for patients with serious illnesses. *Annals of Palliative Medicine*. 2015;4(3):99-121.

Howie L, Peppercorn J. Early palliative care in cancer treatment: rationale, evidence and clinical implications. *Therapeutic Advances in Medical Oncology*. 2013;5(6):318-23.

Parikh RB1, Kirch RA, Smith TJ, Temel JS. Early specialty palliative care - translating data in oncology into practice. *New England Journal of Medicine*. 2013;369(24):2347-51.

Smith TJ, Temin S, Alesi ER, et al. American Society of Clinical Oncology provisional clinical opinion: the integration of palliative care into standard oncology care. *Journal of Clinical Oncology*. 2012;30(8):880-7.

Zimmermann C, Swami N, Krzyzanowska M, et al. Early palliative care for patients with advanced cancer: a cluster-randomised controlled trial. *Lancet*. 2014;383(9930):1721-30.

8

Appropriate to consider the pre-operative use of chemotherapy or hormonal therapy (systemic, neoadjuvant therapy) informed by hormone and HER2 receptor status, for all patients where these therapies are clinically indicated.

CONTEXT

National and international guidelines recommend that all patients with early breast cancer be tested for hormone and HER2 receptor status. For many patients with operable breast cancer whose hormone and HER2 receptor status is known, chemotherapy or hormone/endocrine therapy given before surgery (neoadjuvant) has a number of benefits compared to surgery as the first treatment.

Neoadjuvant therapy can shrink the cancer, improving the chance of achieving breast conserving surgery rather than mastectomy. It also allows for an early evaluation of the response of the cancer to therapy, enabling ineffective treatment to be discontinued, and alternate treatments to be considered.

Studies have shown that giving systemic treatment either before or after surgery is equally as effective, in terms of overall survival and disease progression.

VALUE TO PATIENTS

Consideration of systemic neoadjuvant therapy in eligible patients based on hormone and HER2 receptor status, with consideration of tumour size, grade and nodal involvement, by the multidisciplinary team and discussion with patients will enable patients to realise the potential benefits of this approach.

SUPPORTING EVIDENCE

Coates AS, Winer EP, Goldhirsch A, et al. Tailoring therapies-improving the management of early breast cancer: St Gallen International Expert Consensus on the Primary Therapy of Early Breast Cancer 2015. *Annals of Oncology*. 2015;26(8):1533-46.

Kaufmann M, von Minckwitz G, Mamounas EP, et al. Recommendations from an international consensus conference on the current status and future of neoadjuvant systemic therapy in primary breast cancer. *Annals of Surgical Oncology*. 2012;19(5):1508-16.

Leal F, Liutti VT, Antunes dos Santos VC, et al. Neoadjuvant endocrine therapy for resectable breast cancer: A systematic review and meta-analysis. *Breast*. 2015;24(4):406-12.

Mieog JS, van der Hage JA, van de Velde CJ. Neoadjuvant chemotherapy for operable breast cancer. *British Journal of Surgery*. 2007;94(10):1189-200.

Wolff AC, Hammond ME, Hicks DG, et al. Recommendations for human epidermal growth factor receptor 2 testing in breast cancer: American Society of Clinical Oncology/College of American Pathologists clinical practice guideline update. *Journal of Clinical Oncology*. 2013;31(31):3997-4013.

9

Not appropriate to confirm or exclude a diagnosis of breast cancer without undertaking the triple test, which involves:

- ▶ taking a patient history and clinical breast examination;
- ▶ imaging tests (mammogram and/or ultrasound); and
- ▶ biopsy to remove cells or tissue for examination.

CONTEXT

In 2016, it is estimated that there will be 15,930 new cases of breast cancer in Australia. More than half of these will be diagnosed as a result of the investigation of a breast change. Studies have shown that the most effective and accurate way to diagnose breast cancer in women with breast symptoms is to use the triple test.

The triple test refers to three diagnostic components used to investigate new breast symptoms that could be due to breast cancer: (i) patient history and clinical examination; (ii) diagnostic imaging; (iii) non-surgical biopsy. The correct sequencing of tests and correlation of results with the breast symptom is important to the overall interpretation of the results.

The triple test is positive if any component is indeterminate, suspicious or malignant. Any positive result requires further investigation or specialist referral, with the likelihood of cancer increasing if more than one component is positive. A positive triple test is found in 99.6% of breast cancers.

VALUE TO PATIENTS

Providing patients with a confirmed diagnosis of breast cancer is important to enable informed discussions and decision-making around treatment options and to potentially reduce the number of surgical procedures.

SUPPORTING EVIDENCE

National Breast and Ovarian Cancer Centre. Investigation of a new breast symptom, a guide for general practitioners. 2006 Surry Hills, NSW.

Morris KT, Pommier RF, Morris A, et al. Usefulness of the triple test score for palpable breast masses; discussion 1012-3. Archives of Surgery. 2001;136(9):1008-12.

Senkus E, Kyriakides S, Ohno S, et al. Primary breast cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. Annals of Oncology. 2015;26 Suppl 5:v8-30.

10

Not appropriate to offer a sentinel node biopsy to patients diagnosed with DCIS (ductal carcinoma in situ) having breast conserving surgery, unless clinically indicated.

CONTEXT

DCIS (ductal carcinoma in situ) is a non-invasive breast cancer where the abnormal cells are contained within the milk ducts of the breast. In 2016, it is estimated that there will be approximately 2,090 new cases of DCIS in Australia.

Evidence from several studies has shown that the risk of someone diagnosed with DCIS having spread of their disease to other parts of the breast or other parts of the body, is very low. This means that for most patients diagnosed with DCIS, procedures aimed at determining if breast cancer has spread beyond the breast, such as sentinel node biopsy, are unnecessary.

International guidelines recommend that patients with DCIS having breast conserving surgery should only undergo a sentinel node biopsy if they are considered to have a high risk of invasive disease. Clinical indications of high risk include high grade DCIS, extensive disease, or a palpable mass.

VALUE TO PATIENTS

Unnecessary invasive procedures, such as sentinel node biopsy can lead to harm through over-treatment, risk of post-surgical complications, side effects and unnecessary anxiety.

SUPPORTING EVIDENCE

Australian Institute of Health and Welfare 2015. Breast cancer in young women: key facts about breast cancer in women in their 20s and 30s. Cancer series no. 96. Cat. no. CAN 94. Canberra: AIHW.

Francis AM, Haugen CE, Grimes LM et al. Is sentinel lymph node dissection warranted for patients with a diagnosis of ductal carcinoma in situ? *Annals of Surgical Oncology*. 2015;22(13):4270-9.

Intra M, Rotmensch N, Veronesi P, et al. Sentinel node biopsy is not a standard procedure in ductal carcinoma in situ of the breast: the experience of the European Institute of Oncology on 854 patients in 10 years. *Annals of Surgery*. 2008;247(2):315–319.

Lyman GH, Temin S, Edge SB et al. Sentinel lymph node biopsy for patients with early-stage breast cancer: American Society of Clinical Oncology clinical practice guideline update. *Journal of Clinical Oncology*. 2014;32(13):1365-83.

Senkus E, Kyriakides S, Ohno S et al. Primary breast cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. *Annals of Oncology*. 2015;26 Suppl 5:v8-30.

11

Not appropriate to perform a mastectomy without first discussing with the patient the options of immediate or delayed breast reconstruction.

CONTEXT

In Australia, approximately 40% of women diagnosed with breast cancer undergo a mastectomy. Undergoing a breast reconstruction at any time following a mastectomy has no negative impact on the chances of the breast cancer returning, or overall survival. Studies have shown that a breast reconstruction can have positive benefits on patients' psychological health, including their body image, and emotional and social wellbeing.

VALUE TO PATIENTS

The opportunity to discuss breast reconstruction options prior to mastectomy, including timing and potential reconstruction techniques, will assist women to make an informed decision about their surgical management.

SUPPORTING EVIDENCE

Australian Institute of Health and Welfare 2015. Breast cancer in young women: key facts about breast cancer in women in their 20s and 30s. Cancer series no. 96. Cat. no. CAN 94. Canberra: AIHW.

Bezuhly M, Wang Y, Williams JG, et al. Timing of postmastectomy reconstruction does not impair breast cancer-specific survival: A population-based study. *Clinical Breast Cancer*. 2015;15(6):519-26.

Somogyi RB, Webb A, Baghdikian N, et al. Understanding the factors that influence breast reconstruction decision making in Australian women. *Breast*. 2015;24(2):124-30.

Wong A, Snook K, Brennan M, et al. Increasing breast reconstruction rates by offering more women a choice. *ANZ Journal of Surgery*. 2014;84(1-2):31-6.

Yang X, Zhu C, Gu Y. The prognosis of breast cancer patients after mastectomy and immediate breast reconstruction: a meta-analysis. *PLoS One*. 2015;10(5):e0125655.

12

Not appropriate to perform intensive testing (full blood count, biochemistry or tumour markers) or imaging (chest X-ray, PET, CT & radionuclide bone scans) as part of standard follow-up of patients who have been treated for early breast cancer and who are not experiencing symptoms.

CONTEXT

Following completion of active treatment, the long term follow-up of patients with early breast cancer is recommended, a key aim of which is to enable the early detection of any cancer recurrence or new primary breast cancer.

National and international guidelines for the standard follow-up of patients with early breast cancer recommend a standard follow-up schedule of tests and timings, including taking a patient history, clinical examination and annual imaging by mammography and/or ultrasound, with additional tests only if clinically indicated.

Several studies and clinical trials have shown that more intensive follow-up involving chest X-rays, bone scans, CT or PET scans, and/or blood tests including full blood count, biochemistry or tumour markers, does not confer any survival benefit or increase the quality of life of asymptomatic patients treated for early breast cancer compared to a standard follow-up schedule.

VALUE TO PATIENTS

Unnecessary imaging and testing increases the potential for a false positive result, and can lead to harm through unnecessary invasive procedures, over-treatment, unnecessary radiation exposure, misdiagnosis and unnecessary anxiety.

SUPPORTING EVIDENCE

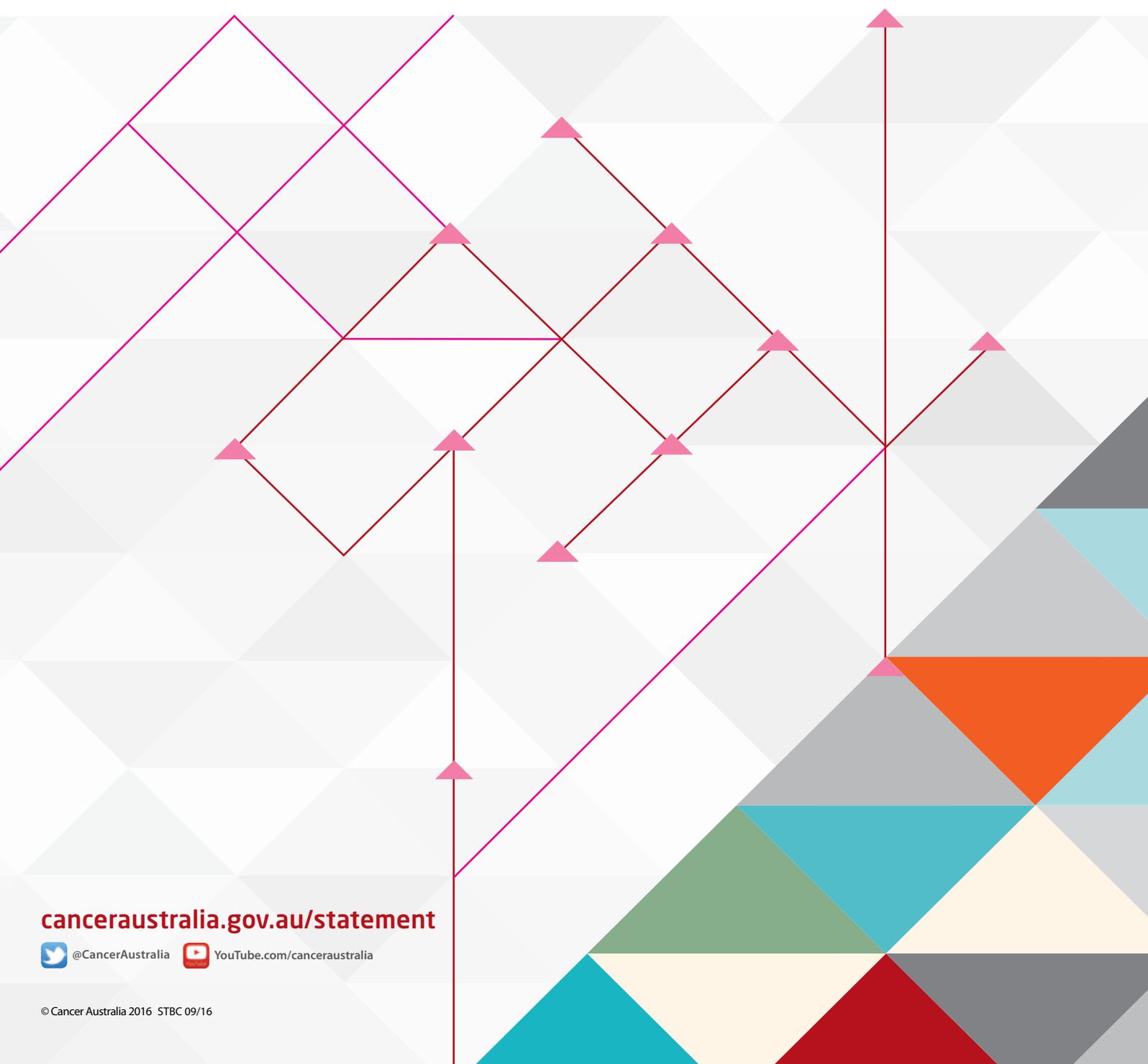
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