Australian Government
Cancer Australia

Guidance for the management of early breast cancer

Recommendations and practice points

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1 Overarching principles for the management of early breast cancer in Australia

a. **Multidisciplinary care**. Cancer care is increasingly managed within a multidisciplinary team (MDT) setting as there is evidence to show this type of care improves patient outcomes (cf. *Optimal care pathway for women with breast cancer* 2016). Members of an MDT may include surgeons, radiation and medical oncologists, haematologists, palliative care physicians, radiologists, pathologists, general practitioners, nurses and allied health professionals. Cancer care coordinators also play an important role in the provision of coordinated care. For pregnant patients the involvement of an obstetrician and a perinatologist should be considered. For older patients the involvement of a geriatrician is encouraged.

b. **Access to relevant health professionals**. Allied health professionals can be accessed through a variety of arrangements in the public and private sectors, and cancer care coordinators are encouraged to be aware of the opportunities available to them locally for accessing such care. Some examples are specific Medicare Benefit Schedule (MBS) items that enable General Practitioners (GPs) to plan and coordinate the health care of patients with chronic or terminal medical conditions, or for patients to access psychological services.

c. **Ratio of benefits to harms**. Regardless of the relevant therapy options, patients should be fully informed of the possible benefits and harms associated with each therapy under consideration or being offered to them. Topics for discussion include short- and long-term side effects, frequency of administration, length of course, and risk of second malignancies. All therapies should be individualised based on a holistic assessment of patient and cancer characteristics.

d. **Cost of investigations and treatment**. Patient-informed consent includes financial consent. When referring a patient for any type of investigation such as imaging or pathology tests or prescribing any course of treatment, a health professional should be aware of the likely full cost of that treatment. Prior to the commencement of the treatment, patients should be made aware of any out-of-pocket expenses they might incur.

e. **Role of carers**. Whenever possible, it is important to recognise the role of carers and to consider the needs of carers as part of breast cancer treatment and survivorship care.

2 Treatment planning, information and support

No	R or PP	Guidance	Background	Links
2.1 Multidisciplinary care and care coordination				
1	R	**All patients with a potential or known diagnosis of breast cancer should have access to information and support at every stage of diagnosis, treatment and follow-up. A key contact person, ideally a breast care nurse, should be agreed as soon as possible (within 7 days is optimal) to support communication and coordination of patient-centred care. In regional or remote areas, consultations may be via telephone and/or video conferencing calls.**	This recommendation was adapted from the KCE 2013 guideline (Belgium). The source recommendation is based on a systematic review of the evidence conducted in January 2010 and was graded 'strong' (using GRADE methods) by the source guideline authors. The recommendation was expanded to cover all patients. In addition, no evidence-based source recommendation was identified for the care of patients in regional and remote areas, which was considered an important aspect of care in Australia. This additional element of the adapted recommendation was developed using an expert consensus process.	
2	PP	**Discuss all cases of breast cancer within a multidisciplinary team (MDT) meeting at least once, and ideally before any treatment is initiated so that a treatment plan can be recommended that takes account of patient co-morbidities and includes consideration for neoadjuvant systemic therapy. If possible, results of all relevant tests and imaging should be available for the MDT discussion. Consider a follow-up discussion if there is significant change in the course of the disease after commencement of therapy.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. The practice point was developed by using an expert consensus process. The practice was informed by a source recommendation in the KCE 2013 guidelines (Belgium) that was designated as 'Expert Opinion' by the source guideline authors.	Victorian MDT quality framework: https://www2.health.vic.gov.au/Api/downloadmedia/%7BE601B340-4C00-43D0-AC9C-F187B9C11714%7D
3	PP	**Treatment of patients with breast cancer during pregnancy should be individualised within an expert multidisciplinary team, expanded to include obstetricians and perinatologists. Particular attention should be paid to each woman's preferences and psychosocial needs due to the higher likelihood of distress.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process. The practice point was informed by a source recommendation in the ESO-ESMO 2017 (Europe) that was designated as 'Expert Opinion' by the source guideline authors.	
2.2 Patient education and psychosocial support at diagnosis and during treatment				
4	R	**For each patient, assess their information needs related to breast cancer and its treatment, side effects and other health concerns, and provide culturally-appropriate resources and referral to available support services to meet these needs.**	This recommendation was adapted from the ASCO 2016 guidelines (US). The source recommendation is based on a systematic review of the evidence conducted in April 2015 and was not graded by the source guideline authors. The source recommendation was adapted to use language applicable to the Australian health care context. The term 'culturally-appropriate' was added to the	My Journey Online tool: https://www.bcna.org.au/understanding-breast-cancer/resources/my-journey-online-tool/ *Optimal care pathway for Aboriginal and Torres Strait Islander people with cancer*: https://www.cancer.org.au/content/ocp/Optimal_care_pathways_ATS

No	R or PP	Guidance	Background	Links
			description of resources to align with the *Optimal care pathway for Aboriginal and Torres Strait Islander people with cancer* and to ensure relevance for people from culturally and linguistically diverse backgrounds.	l_Report_August_2018.PDF
5	PP	**Pay attention to the emotional needs of the person diagnosed with breast cancer and undertake psychosocial screening as soon as possible after breast cancer diagnosis and at the commencement of any new treatment. Use a valid and reliable measure that features reportable scores that are clinically meaningful, with established cut-offs.**	This practice point was developed using an expert consensus process. A potentially relevant 'strong' (GRADE) source recommendation was identified from the KCE 2013 guidelines (Belgium) that recommended psychological support. However, this KCE recommendation was not adopted or adapted as it was considered too narrow in scope and did not account for the timing or approach to psychosocial screening.	*Optimal care pathway for women with breast cancer* (Cancer Council): https://www.cancervic.org.au/downloads/health-professionals/optimal-care-pathways/Optimal_care_pathway_for_women_with_breast_cancer.pdf NCCN distress thermometer: https://www.nccn.org/about/permissions/thermometer.aspx ESAS tool: http://www.npcrc.org/files/news/edmonton_symptom_assessment_scale.pdf
6	R	**A detailed assessment should be undertaken for patients at a higher risk of depression (e.g. patients with a history of mental health issues, patients with caring responsibilities, patients under financial stress, and young patients)**	This recommendation was adapted from the ASCO 2016 guidelines (US). The source recommendation was based on a systematic review of the evidence conducted in April 2015 and was not graded by the source guideline authors. The source recommendation was simplified, and language used that is applicable to the Australian health care context.	*Optimal care pathway for Aboriginal and Torres Strait Islander people with cancer*: https://www.cancer.org.au/content/ocp/Optimal_care_pathways_ATSI_Report_August_2018.PDF
7	PP	**If signs of distress, depression, or anxiety are present, consider offering patients referral to counselling and/or appropriate psycho-oncology and mental health resources as clinically indicated.**	This practice point was developed using an expert consensus process. A potentially relevant source recommendation was identified from the ASCO 2016 guidelines that recommended psychological support, which was based on a systematic review of the evidence conducted in April 2015 but was not graded by the source guideline authors. The ASCO recommendation was not adopted or adapted as it was considered too narrow in scope and did not account for Mental Health Care plans.	

No	R or PP	Guidance	Background	Links
8	PP	**Consider patient-clinician communication training for all clinicians involved in the care of patients with breast cancer. It is essential that training is based on sound educational principles with a focus on ongoing acquisition and enhancement of skills.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	ASCO guideline on Patient-Clinician Communication. https://ascopubs.org/doi/full/10.1200/JCO.2017.75.2311?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub%3Dpubmed *Optimal care pathway for women with breast cancer (see section* 2.4.2 'Communication with the patient, carer and family'): https://www.cancervic.org.au/downloads/health-professionals/optimal-care-pathways/Optimal_care_pathway_for_women_with_breast_cancer.pdf
2.3	**Genetic assessment and counselling**			
9	R	**All patients with breast cancer should be assessed at or around the time of diagnosis for the familial and genetic risk factors as indicated in current eviQ guidelines, which include knowledge of the individual's gender, ancestry, breast cancer characteristics, and personal and family cancer history.**	This recommendation was adapted from two source guidelines: the ASCO 2013(US) and the ASCO 2016 guidelines (US). The ASCO (2016) source recommendation is based on a systematic review of the evidence conducted in April 2015 and the ASCO (2013) source recommendation is based on a systematic review of the evidence conducted in June 2012. Neither were graded by the source guideline authors. The source recommendations were merged and then separated (see recommendation 10). Reference to the eviQ guidelines was added as they are current and relevant to the Australian context. Details about the timing of risk assessment were specifically added.	Referral guidelines for breast cancer risk assessment and consideration of genetic testing: https://www.eviq.org.au/cancer-genetics/adult/referral-guidelines/1620-referral-guidelines-for-breast-cancer-risk-as
10	R	**If a patient is suspected of having high familial or genetic cancer risk, in accordance with eviQ guidelines, they should be referred to a family cancer clinic for genetic counselling and genetic testing as appropriate.**	This recommendation was adapted from two source guidelines: the ASCO 2013(US) and the ASCO 2016 guidelines (US). The ASCO (2016) source recommendation is based on a systematic review of the evidence conducted in April 2015 and the ASCO (2013) source recommendation is based on a systematic review of the evidence conducted in June 2012. Neither were graded by the source guideline authors. The source recommendations were merged and then separated (see recommendation 9). Reference to genetic counselling and testing was included, and the term 'family cancer clinics' was used to improve applicability to the Australian health care context.	Referral guidelines for breast cancer risk assessment and consideration of genetic testing: https://www.eviq.org.au/cancer-genetics/adult/referral-guidelines/1620-referral-guidelines-for-breast-cancer-risk-as

No	R or PP	Guidance	Background	Links
2.4		**Pathology and imaging for treatment planning**		
11	PP	**(a) Report breast pathology findings according to the Structured Reporting Protocols of the Royal College of Pathology Australia (RCPA);** **(b) Report breast imaging findings according to the standards of the Royal Australian and New Zealand College of Radiologists (RANZCR), Faculty of Clinical Radiology.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	Royal College of Pathologists of Australia Structured Reporting Protocols: https://www.rcpa.edu.au/Library/Practising-Pathology/Structured-Pathology-Reporting-of-Cancer/Cancer-Protocols RANZCR Breast Imaging Grading Comparison and Lesion Classification: https://www.ranzcr.com/college/document-library/breast-imaging-grading-comparison-and-lesion-classification
12	PP	**For patients with a breast lesion where the results of conventional imaging (mammography/ tomosynthesis and ultrasound) are inconclusive but suspicious for the presence of breast cancer and biopsy has not been possible, consider the use of contrast mammography or magnetic resonance imaging (MRI).**	This practice point was developed using an expert consensus process. Development of this guidance was informed by the introduction of MBS items for MRI for this indication. The MBS items refer to 'conventional imaging' which has been clarified as 'mammography or tomosynthesis plus ultrasound'.	MBS items for breast MRI: http://www.mbsonline.gov.au/internet/mbsonline/publishing.nsf/Content/Factsheet-MRIBreastCa
13	PP	**For patients with breast cancer where a discrepancy exists between clinical assessment and conventional imaging, or there is a discrepancy in conventional imaging, consider the use of magnetic resonance imaging (MRI) if the results from this imaging are expected to alter treatment planning.**	This practice point was developed using an expert consensus process. Development of this guidance was informed by the introduction of MBS items for MRI for this indication.	MBS items for breast MRI: http://www.mbsonline.gov.au/internet/mbsonline/publishing.nsf/Content/Factsheet-MRIBreastCa
14	PP	**For patients in whom distant staging is required due to a high index of suspicion, and who are considered suitable for active treatment, consider the use of 18F-FDG positron emission tomography (PET) for cancer staging.**	This practice point was developed using an expert consensus process. Development of this guidance was informed by the introduction of MBS for PET which is restricted to patients with a high index of suspicion.	MBS items for FDG positron emission tomography (PET) for the evaluation of breast cancer: http://www.mbsonline.gov.au/internet/mbsonline/publishing.nsf/Content/Factsheet-PETBreast
15	PP	**If considering the use of gene expression profiling tests to inform decisions about the use of adjuvant chemotherapy for patients with breast cancer, be aware that the clinical utility of these tests has not yet been established. Discuss with the patient the potential benefits (reduced adverse events due to avoiding chemotherapy) and potential harm (breast cancer recurrence that might have been prevented) of using these tests to inform decision-making.**	Although international recommendations regarding the use of gene expression profiling tests were identified, these were considered less relevant to the Australian health care context than the findings of multiple recent systematic reviews of the clinical evidence undertaken by the Australian government using GRADE methods. This practice point was developed based on eight recent systematic reviews: one for Mammaprint, six for OncotypeDx and one for Prosigna. Importantly, these systematic reviews focused on the impact of using gene expression	Information about the MammaPrint® test for early breast cancer (Cancer Australia): https://breast-cancer.canceraustralia.gov.au/treatment/mammaprint-70-gene-signature-test/questions-health-professionals-about-mammaprint MSAC public summary document Feb 2020 – Oncotype DX: http://www.msac.gov.au/interne

No	R or PP	Guidance	Background	Links
			profiling tests for those women in whom the benefit of adding chemotherapy to endocrine therapy is unclear. These systematic reviews found: RCT evidence (the MINDACT trial) that the use of Mammaprint is associated with poorer overall survival outcomes for women who avoid the use of chemotherapy on the basis of the Mammaprint test results; inconclusive RCT evidence (the TAILORx trial) that the use of OncotypeDx is non-inferior or superior to current clinical practice (consideration of clinical and histopathological information); and insufficient evidence (no RCT) to determine the relative performance of Prosigna.	t/msac/publishing.nsf/Content/F110B75361D91B5DCA2583CF00166434/$File/1342.5%20-%20Final%20PSD.pdf
2.5		**Older patients**		
16	R	**Generally, age alone should not dictate treatment decisions, however all management decisions for an older individual with breast cancer should consider life expectancy; potential risks versus absolute benefits; treatment tolerance; patient preference; potential barriers to treatment; polypharmacy; and multi-morbidity. Where patients experience co-morbidities or multi-morbidity, consider additional monitoring and support.**	This recommendation was adapted from the SIOG/EUSOMA 2012 guideline (Europe) for the management of older patients with breast cancer. Two source recommendations were merged and adapted by simplifying the recommendations and adding 'age alone should not dictate treatment decisions'. Both source recommendations were based on a systematic review conducted in June 2010 and were not graded by the source guideline authors.	
17	PP	**In older patients, the Eastern Cooperative Oncology Group (ECOG) performance status may be used to assess general health and functional status.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	ECOG Performance Status: https://ecog-acrin.org/resources/ecog-performance-status eviQ Rapid Assessment & Access Toolkit: https://www.eviq.org.au/clinical-resources/telephone-triage-toolkit/3639-rapid-assessment-access-toolkit
2.6		**Fertility and ovarian function**		
18	PP	**Discuss fertility issues and the implications of premature menopause with all women of childbearing age. Arrange early referral to a fertility specialist to maximise the opportunity for consideration of fertility preservation if appropriate and feasible.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed by using an expert consensus process. Development of this guidance was informed by a source recommendation in the EUSOMA 2012 guidelines (Europe) that was not graded by the source guideline authors.	Breast Cancer Network Australia (BCNA) fertility resource: https://www.bcna.org.au/news/2019/12/fertility-resource/

No	R or PP	Guidance	Background	Links
19	R	**Offer temporary ovarian suppression with a luteinising hormone releasing hormone analogue (LHRHa) during chemotherapy to all premenopausal breast cancer patients undergoing chemotherapy who are interested in ovarian function and/or fertility preservation**	This recommendation was adopted from the AOIM 2017 guidelines (Italy). The source recommendation was based on a systematic review of the evidence conducted in January 2016 and was graded 'strong' (using GRADE methods) by the source guideline authors. The source recommendation was adapted with minor stylistic changes, but with no changes to the meaning or tone.	Breast Cancer Network Australia (BCNA) fertility resource: https://www.bcna.org.au/news/2019/12/fertility-resource/
20	PP	**In premenopausal women with breast cancer who wish to preserve fertility, consider treatment with the gonadotropin-releasing hormone (GnRH) agonist goserelin during chemotherapy, to reduce the risk of chemotherapy-induced premature ovarian insufficiency.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	
2.7		**Reproductive and sexual health prior to, during or after treatment**		
21	R	**Premenopausal women should be counselled regarding the risk of becoming pregnant while on chemotherapy, endocrine therapy, anti-HER2 therapy, or during radiation therapy, even in the presence of amenorrhoea.**	This recommendation was adopted from the ESO-ESMO 2017 consensus guidelines for breast cancer in young women (Europe). The source recommendation is based on a non-systematic review of the evidence review (the date of the review was not reported) discussed by the source guideline authors in November 2016 and graded IA ('strong' using ACCP methods). The source recommendation was adapted to include 'radiation treatment' as a risk factor and minor stylistic changes were made.	
22	R	**Discuss and offer barrier contraceptive options (condoms or diaphragms, a copper intrauterine device, or surgical options) for premenopausal women with a history of breast cancer, noting that systemic hormonal contraception is contraindicated.**	This recommendation was adapted from the ACOG 2012 guidelines (US). The source recommendation was based on a non-systematic review of the evidence conducted in November 2011 and graded B ('based on limited or inconsistent scientific evidence' using USPSTF methods'). Applicability to premenopausal women only was included.	
23	PP	**Premenopausal women treated with tamoxifen may be treated with a levonorgestrel intrauterine device without increased risk of breast cancer recurrence.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process. Based on a non-systematic review of recent evidence, the use of an intrauterine levonorgestrel device for contraception was considered appropriate as it also reduces the endometrial effects of tamoxifen.	

No	R or PP	Guidance	Background	Links
2.8		**Lymphoedema**		
24	R	**Inform all patients with breast cancer about the risk of developing lymphoedema and provide relevant information before treatment with surgery or radiation therapy.**	This recommendation was adopted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in July 2008 and was graded 'conditional' (using SIGN methods) by the source guideline authors. The source recommendation was accepted with minor changes to the language to make it more applicable to the Australian health care context but no changes to meaning or tone were made.	Cancer Australia: https://canceraustralia.gov.au/publications-and-resources/cancer-australia-publications/lymphoedema-what-you-need-know Australasia Lymphology Association: https://www.lymphoedema.org.au/about-lymphoedema/what-is-lymphoedema/
25	PP	**Patients at higher risk of lymphoedema (e.g. those in whom axillary clearance or axillary radiation therapy is planned, or patients with lymphatic insufficiency) should be referred to a lymphoedema therapist for assessment prior to breast cancer treatment, and for regular monitoring after breast cancer treatment to enable early detection and treatment of lymphoedema. Bioimpedance measurements may be part of the clinical assessment.**	This practice point was developed using an expert consensus process. A potentially relevant 'strong' (GRADE) source recommendation was identified from the KCE 2013 guidelines (Belgium) that recommended physiotherapy after axillary clearance. The KCE recommendation was not adopted or adapted because it was considered too narrow in scope and did not account for axillary radiation therapy, lymphoedema, or the preference for appropriate allied health referrals prior to treatment. The practice point was informed by the principles of lymphoedema identification and management from the NSW Health, Agency for Clinical Innovation (2018).	
2.9		**Lifestyle and physical activity**		
26	R	**Advise all patients with breast cancer that a healthy lifestyle is associated with a lower risk of recurrence and improved survival. Discuss how a healthy lifestyle includes achieving and maintaining a healthy weight, limiting alcohol intake, and regular physical activity.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation is based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional' (using GRADE methods) by the source guideline authors. The source recommendation was adapted by removal of much of the detailed advice in relation to the various lifestyle factors and instead providing links to relevant Australian guidelines for this detail.	Cancer Australia position statement: https://canceraustralia.gov.au/sites/default/files/position-statements/lifestyle_risk_factors_and_the_primary_prevention_of_cancer.pdf COSA Position Statement: https://www.cosa.org.au/media/332488/cosa-position-statement-v4-web-final.pdf ESSA exercise and cancer eBook: https://exerciseright.com.au/wp-content/uploads/2019/10/Cancer-eBook_2019_FINAL_web.pdf American College of Sports Medicine International Multidisciplinary Roundtable: https://onlinelibrary.wiley.com/doi/10.3322/caac.21579

No	R or PP	Guidance	Background	Links
				Exercise and Sports Science Australia (ESSA) position statement: https://www.jsams.org/article/S1440-2440(18)31270-2/fulltext Exercise Guidelines for Cancer Survivors: https://journals.lww.com/acsm-msse/FullText/2019/11000/Exercise_Guidelines_for_Cancer_Survivors_.23.aspx#pdf-link
27	R	**All patients with breast cancer should be advised to avoid inactivity and continue normal daily activities after diagnosis, and during and after breast cancer treatment.**	This recommendation was adapted from the ASCO 2016 guidelines (United States). The source recommendation was based on a systematic review of the evidence conducted in April 2015 and was not graded by the source guideline authors. The source recommendation was adapted to remove US-specific language and detail.	
28	R	**Advise all patients to undertake regular aerobic exercise and resistance exercise (strength training) during and after breast cancer treatment.**	This recommendation was adapted from the ASCO 2016 guidelines (United States). The source recommendation was based on a systematic review of the evidence conducted in April 2015 and was not graded by the source guideline authors. The EWG adapted the source recommendation by including information on GP management plans and removing information on women with breast cancer treated with adjuvant chemotherapy or endocrine therapy (the latter aspect of care is covered in separate recommendation).	Exercise and Sports Science Australia (ESSA) guidelines on Exercise and cancer: https://exerciseright.com.au/wp-content/uploads/2019/10/Cancer-eBook_2019_FINAL_web.pdf COSA guidelines on exercise: https://www.cosa.org.au/media/332583/cosa-position-statement-oct2019-web-final.pdf
29	R	**Strongly encourage all patients with breast cancer to stop smoking. Advise patients that smoking compromises treatment, increases the risk of breast cancer recurrence, and worsens vasomotor symptoms.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 1' (using GRADE methods) by the source guideline authors. The EWG adapted the source recommendation by including information on the risks of smoking and removing the link to the NICE guidelines.	Smoking cessation guidelines: https://www.racgp.org.au/FSDEDEV/media/documents/Clinical%20Resources/Guidelines/Supporting-smoking-cessation.pdf Quitline Program: https://quitlinesa.org.au Tackling Indigenous smoking: https://tacklingsmoking.org.au/ Cancer Institute, NSW: https://www.cancer.nsw.gov.au/how-we-help/cancer-prevention/stopping-smoking/support-to-quit

3 Treatment

No.	R or PP	Guidance	How this guidance was developed	Links
3.1		**Complementary and alternative therapies**		
30	PP	**Encourage open disclosure and non-judgmental dialogue with patients regarding existing or planned use of complementary or alternative therapies.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	Cancer Australia definition and evidence-base for alternative therapies: https://canceraustralia.gov.au/publications-and-resources/position-statements/complementary-and-lternative-therapies
31	PP	**Advise all patients with breast cancer that alternative therapies should not be used instead of standard therapies for the purpose of improving breast cancer survival.**	This practice point was developed using an expert consensus process. Development of the practice point was informed by a source recommendation in the JBCS 2016 guidelines (Japan) that was not graded by the source guideline authors and which was based on a non-systematic review of the evidence (the date of the review was not reported).	Memorial Sloan Kettering Cancer Center (MSKCC) information 'about herbs': https://www.mskcc.org/cancer-care/diagnosis-treatment/symptom-management/integrative-medicine/herbs
32	PP	**Offer information regarding effective evidence-based complementary therapies (such as yoga, acupuncture, and meditation) for symptom control in patients with breast cancer.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	Complementary Therapies for Managing Cancer Symptoms (Memorial Sloan Kettering Cancer Centre- MSKCC): https://www.mskcc.org/cancer-care/diagnosis-treatment/symptom-management/integrative-medicine
3.2		**Neoadjuvant systemic therapy**		
33	R	**Consider neoadjuvant chemotherapy for suitable patients with breast cancer whose disease type is likely to show rapid response to chemotherapy and whose disease burden as assessed pre-operatively indicates a need for chemotherapy. Suitable patients may include those with triple negative breast cancer with high proliferation; HER2-positive breast cancer; or luminal B hormonal cancer.**	This recommendation was adapted from three source recommendations in the NICE 2018 guidelines (UK). The source recommendations were based on a systematic review of the evidence conducted in September 2017. Two of the source recommendations were graded 'conditional 1' and one was graded 'conditional 2' (using GRADE methods) by the source guideline authors. The source recommendations were merged, and the guidance was made less directive by replacing 'offer' with 'consider'.	Neoadjuvant Patient Decision Aid by Breast Cancer Trials: https://www.breastcancertrials.org.au/brochures

No.	R or PP	Guidance	How this guidance was developed	Links
34	R	**Discuss the benefits and risks of neoadjuvant chemotherapy, including effect on breast conservation rate, effect on pathological complete response rate, effect on survival, toxicity (with consideration of regulatory status).**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 2' (using GRADE methods) by the source guideline authors. The source recommendation was adapted by making it applicable to all neoadjuvant chemotherapy, not only anthracycline-taxane regimens.	Benefits and risks of adding a platinum to anthracycline-containing neoadjuvant chemotherapy for triple-negative invasive breast cancer (Table 6, NICE-UK 2018 guideline): https://www.nice.org.uk/guidance/ng101/chapter/Recommendations#primary-systemic-therapy
35	PP	**In patients with large tumours (who might not be candidates for breast-conserving surgery), consider the use of neoadjuvant systemic therapies to reduce tumour size and potentially enable breast-conserving surgery instead of mastectomy.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	
36	R	**Suitable neoadjuvant chemotherapy regimens include those used for adjuvant chemotherapy. Consider the addition of a platinum-based agent for patients with triple negative cancer.**	This recommendation was adapted from two source recommendations in the NICE 2018 guidelines (UK). The source recommendations were based on a systematic review of the evidence conducted in September 2017 and each was graded 'conditional 2' (using GRADE methods) by the source guideline authors. The source recommendations were merged and simplified, including removal of the specification of 'anthracycline-taxane regimens' and inclusion, instead, of a link to eviQ.	eviQ neoadjuvant patient decision aids: https://www.eviq.org.au/medical-oncology/breast/neoadjuvant Breast Cancer Trials patient aid: https://www.breastcancertrials.org.au/file/44/Neoadjuvant-Patient-Decision-Aid
37	PP	**In patients with breast cancer who are treated with neoadjuvant systemic therapy, consider the use of imaging prior to the commencement of therapy and at the completion of therapy, to assist with surgical planning. The type of imaging (ultrasound or MRI) will be dependent on the histopathology of the breast lesion. In addition, consider the placement of site markers in the breast lesion and any pathological axillary lymph nodes before therapy is commenced.**	No evidence-based source recommendation relevant to the current Australian healthcare context was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process. Specification of the type of imaging to be used was avoided as this should be individualised to the patient, according to the judgement of the radiologist.	

No.	R or PP	Guidance	How this guidance was developed	Links
3.3		**Neoadjuvant endocrine therapy - indications**		
38	R	**Consider neoadjuvant endocrine therapy for postmenopausal women with ER-positive breast cancer as an option to reduce tumour size if there is no definite indication for chemotherapy.**	This recommendation was adopted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 2' (using GRADE methods) by the source guideline authors. The source recommendation was accepted with no changes.	
3.4		**Breast-conserving surgery vs mastectomy**		
39	R	**Prior to surgery, patients should be made aware that radiation therapy is usually required following breast-conserving surgery and that further surgery may be required if the surgical margins are positive or close.**	This recommendation was adapted from the KCE 2013 guidelines (Belgium) and the NZGG 2009 guidelines (NZ). Two source recommendations (one from each of these guidelines) were merged. The source recommendation from KCE 2013 was based on a systematic review of the evidence conducted in January 2010 and was graded 'strong' (using GRADE methods) by the source guideline authors. The source recommendation from NZGG was based on a systematic review of the evidence (the date of the review was not reported) and was graded 'strong' ('A' using NZGG methods). The source recommendations were further adapted by using language applicable to the Australian health care context.	
40	R	**In patients with breast cancer who are undergoing breast surgery, offer the choice of breast-conserving surgery (if technically possible) followed by radiation therapy, or a mastectomy.**	This recommendation was adapted from the NCCP 2015 guidelines (Ireland). The source recommendation was based on a systematic review of the evidence conducted in September 2014 and was graded 'A' (SIGN methods) by the source guideline authors. The source recommendation by was adapted by expanding the patient population from 'women' to 'all patients'. In addition, "if technically possible" was added to account for instances where breast-conserving surgery may not be possible, such as a large tumour in a small breast.	

No.	R or PP	Guidance	How this guidance was developed	Links
41	R	**In patients with breast cancer with a confirmed germline mutation (e.g. BRCA1/2), that predisposes to an increased risk of breast cancer discuss the options of breast-conserving surgery, mastectomy or bilateral mastectomy, noting that there is a higher risk of a second malignancy if the breast is conserved, but that this risk is reduced by adjuvant systemic therapy.**	This recommendation was adapted from two recommendations in the CA 2014 guidelines (Australia). Each source recommendation was based on a systematic review of the evidence conducted in April 2012 and each was graded 'C' (NHMRC methods) by the source guideline authors. The source recommendations were adapted by merging them, by expanding the patient population from 'women with germline mutations' to 'patients with germline mutations', by removing reference to ipsilateral risk, and by replacing 'inform' with 'discuss'.	
3.5		**Breast-conserving surgery in Paget's disease**		
42	PP	**In patients with Paget's disease, perform breast imaging prior to surgery to exclude underlying breast malignancy.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	
43	R	**In patients with Paget's disease with or without underlying breast cancer, offer breast-conserving surgery with removal of the nipple/areolar complex followed by whole breast radiation therapy, as an alternative to mastectomy.**	This recommendation was adapted from the KCE 2013 guideline (Belgium). The source recommendation was based on a systematic review of the evidence conducted in January 2010 and was graded 'weak' (using GRADE methods) by the source guideline authors. The recommendation was adapted by expanding the patient population to include patients with Paget's disease with underlying breast cancer.	
44	R	**In patients with Paget's disease treated with breast-conserving surgery with removal of the nipple/areolar complex, offer nipple reconstruction.**	This recommendation was adopted from the KCE 2013 guidelines (Belgium). The source recommendation was based on a systematic review of the evidence conducted in January 2010 and was graded 'strong' (using GRADE methods) by the source guideline authors. The source recommendation was accepted with minor stylistic changes, but with no changes to the meaning or tone of the source recommendation.	

No.	R or PP	Guidance	How this guidance was developed	Links
3.6		**Assessment and further treatment based on surgical specimens (incl surgical margins)**		
45	PP	**Ensure optimal fixation (and labelling) of breast cancer specimens for accurate pathological examination and biomarker assessment.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process. Development of the practice point was informed by the *Cancer Australia Statement – Influencing best practice in breast cancer* (2017), which was designated as 'Expert Opinion' by the Statement authors.	
46	R	**Offer further surgery (re-excision or mastectomy, as appropriate) after breast-conserving surgery where invasive cancer and/or DCIS is present at the radial margin ('tumour on ink'; 0 mm).**	This recommendation was adopted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 1' (using GRADE methods) by the source guideline authors. The source recommendation was accepted with minor stylistic changes, but with no changes to the meaning or tone of the source recommendation.	
47	R	**Consider further surgery (re-excision or mastectomy, as appropriate) after breast-conserving surgery where there is DCIS <2mm from the radial margin.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 2' (using GRADE methods) by the source guideline authors. The source recommendation was adapted by making it more directive by replacing 'discuss' with 'consider' and simplifying it by removing the specific points for discussion.	

No.	R or PP	Guidance	How this guidance was developed	Links
3.7		**Breast-reconstruction (incl timing relative to mastectomy and other breast cancer therapies)**		
48	R	**Before a mastectomy is performed, discuss the benefits and risks of all reconstruction options with reference to timing (immediate or delayed), and technique (implant-based or tissue-based reconstruction) as well as symmetrising procedures for the unaffected breast, regardless of whether these procedures are available locally. Be aware that some patients may prefer not to have breast reconstruction surgery, and some may prefer to discuss reconstruction later.**	This recommendation was adapted from the NICE 2018 guidelines (UK). Two source recommendations were merged by the EWG. Both source recommendations were based on a systematic review conducted in September 2017 and both were graded 'conditional 2' (using GRADE methods) by the source guideline authors. The source recommendation was adapted by making it less directive, by replacing 'offer' with 'discuss', and by expanding the population from 'women' to 'all patients'.	Breast reconstruction options for women who choose breast reconstruction (NICE UK 2018 guidelines - Table 1): https://www.nice.org.uk/guidance/ng101/chapter/Recommendations#breast-reconstruction Breast Cancer Network Australia (BCNA) decision aid: https://breconda.bcna.org.au Current alerts for textured implants (Therapeutic Goods Administration- TGA): https://www.tga.gov.au/alert/breast-implants-and-anaplastic-large-cell-lymphoma BCNA advice on breast implants: https://www.bcna.org.au/news/2019/07/allergan-recalls-textured-breast-implant/
49	PP	**For patients who are contemplating delayed breast reconstruction, and who have had chest wall radiation therapy, tissue-based reconstruction is preferred.**	This practice point was developed using an expert consensus process. A potentially relevant ungraded source recommendation was identified from the CCO 2016 guidelines (Canada) that discussed autologous tissue-based versus implant-based reconstruction. The CCO recommendation was not adopted or adapted because tissue-based reconstruction was considered the preferred option in the Australian health care context.	
50	R	**For patients undergoing implant-based breast reconstruction, no recommendations can be made for or against the use of specific collagen-based or non-biological matrices.**	This recommendation was adapted from the CCO 2016 guidelines (Canada). The source recommendation was based on a systematic review of the evidence conducted in September 2013 and was not graded by the source guideline authors. The source recommendation was adapted by broadening the scope to include the use of 'specific collagen-based or non-biological matrices' instead of 'acellular dermal matrix' only.	

No.	R or PP	Guidance	How this guidance was developed	Links
51	R	**For patients undergoing breast reconstruction, no recommendations can be made for or against the routine use of autologous fat grafting for aesthetic purposes, noting that its use should be based on clinical need.**	This recommendation was adapted from the CCO 2016 guidelines (Canada). The source recommendation was based on a systematic review of the evidence conducted in September 2013 and was not graded by the source guideline authors. The source recommendation was adapted by adding the note that the use of autologous fat grafting should be based on clinical need.	
52	R	**Skin-sparing mastectomy or nipple-sparing mastectomy with immediate breast reconstruction can be offered to patients undergoing risk-reducing mastectomy.**	This recommendation was adapted from the CCO 2016 guidelines (Canada). The source recommendation was based on a systematic review of the evidence conducted in September 2013 and was not graded by the source guideline authors. The source recommendation was adapted by removing reference to nipple-sparing mastectomy and areola-sparing mastectomy.	
53	PP	**Consider nipple-sparing mastectomy for all patients without clinical or radiological nipple involvement but be cautious for patients with the following clinical features: extensive DCIS, significant ptosis (unless staging procedure considered), invasive cancer close to the nipple, large breasts, or the presence of risk factors for skin flap ischaemia (such as smoking, diabetes, or general poor health).**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	
54	R	**Nipple-sparing mastectomy and areolar-sparing mastectomy are not recommended in inflammatory breast cancer or where the cancer involves the nipple/areolar complex.**	This recommendation was adapted from the CCO 2016 guidelines (Canada). The source recommendation was based on a systematic review of the evidence conducted in September 2013 and was not graded by the source guideline authors. The source recommendation was adapted by removing 'skin-sparing mastectomy' as an intervention and removing 'inflammatory breast cancer or locally advanced breast cancer who will require postoperative radiation therapy' from the description of the patient population.	
55	PP	**Inform patients that chemotherapy may be delayed if complications arise from reconstructive surgery.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	

No.	R or PP	Guidance	How this guidance was developed	Links
3.8		**Sentinel lymph node biopsy – indications**		
56	R	**Patients with breast cancer with no clinical or radiological evidence of axillary lymph node metastases at initial diagnosis should be offered sentinel node biopsy.**	This recommendation was adopted from the NCCP 2015 guidelines (Ireland). The source recommendation was based on a systematic review of the evidence conducted in September 2014 and was graded 'A' (using SIGN methods) by the source guideline authors. The source recommendation was accepted with minor stylistic changes, but with no changes to the meaning or tone of the source recommendation.	
57	PP	**In pregnant women with breast cancer with no clinical or radiological evidence of axillary lymph node metastases at initial diagnosis, consider the use of radioactive tracers but do not use Patent Blue dye if undertaking sentinel node biopsy.**	This practice point was developed using an expert consensus process. A potentially relevant 'weak' (using ASCO methods) source recommendation was identified from the ASCO 2017 guidelines (US) that recommends against sentinel node biopsy (SNB). The ASCO recommendation was not adopted or adapted because it was considered that SNB can be contemplated depending on the technique used. This practice point was developed to address safety concerns about the potential of Patent Blue dye to cause anaphylaxis, which is of particular concern in pregnant women.	
58	PP	**Perform sentinel node biopsy (SNB) in clinically node negative T1 tumours. SNB can be performed in node negative T2/T3 or multicentric/multifocal cancer, noting that SNB is associated with a higher false negative rate in these cancers.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using a consensus process.	
59	PP	**Sentinel node biopsy is not required when performing risk-reducing mastectomy, provided the patient has had adequate pre-operative imaging.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed to address the absence of evidence for this aspect of care. The practice point was developed using an expert consensus process.	

No.	R or PP	Guidance	How this guidance was developed	Links
60	R	**Sentinel node biopsy should not be performed in patients who have inflammatory breast cancer.**	This recommendation was adopted from the ASCO 2017 guidelines (US). The source recommendation was based on a systematic review of the evidence conducted in July 2016 and was graded 'weak' (using SIGN methods) by the source guideline authors. The source recommendation was accepted with minor stylistic changes, but with no changes to the meaning or tone of the source recommendation.	

3.9 Sentinel lymph node biopsy – technical and pathology considerations

61	PP	**Where possible, lymphatic mapping with pre-operative lymphoscintigraphy in combination with intraoperative use of the gamma probe and blue dye should be used to locate the sentinel node(s).**	This practice point was adopted from the CA 2008a guidelines (Australia). The source recommendation was based on a systematic review of the evidence conducted in July 2007 and was not graded by the source guideline authors. The source recommendation was accepted as a practice point, given the time elapsed since the systematic review.	
62	PP	**Where combination technique is not available or suitable, the use of radioisotope alone or Patent Blue dye alone (where no nuclear facilities are available) may be considered, noting that the theatre team and anaesthetist must be aware of the potential for Patent Blue dye to cause anaphylaxis.**	This practice point was adapted from the CA 2008a guidelines (Australia). The source recommendation was based on a systematic review of the evidence conducted in July 2007 and was not graded by the source guideline authors. The source recommendation was adapted by making the recommendation less directive, by highlighting the reason for caution, and by removing the information on audit measures. Importance of awareness of the potential anaphylaxis risk with Patent Blue dye by the theatre team and anaesthetist was specifically added.	
63	PP	**Excise all identified sentinel nodes, including internal mammary nodes, if they can be accessed and excised without increased morbidity.**	This practice point was adapted from the CA 2008a guidelines (Australia). The source recommendation was based on a systematic review of the evidence conducted in July 2007 and was not graded by the source guideline authors. The source recommendation was adapted by adding 'including internal mammary nodes' and removing 'non-axillary sentinel nodes'.	

No.	R or PP	Guidance	How this guidance was developed	Links
64	PP	**Do not routinely perform intraoperative assessment of the sentinel node.**	This practice point was developed using an expert consensus process. A potentially relevant ungraded source recommendation was identified from the CA 2008a guidelines (Australia) that recommends intraoperative assessment of the sentinel node. The CA recommendation was not adopted or adapted because it was considered no longer relevant, given how practice has changed since 2008 for this aspect of care.	
65	R	**In order to allow staging as per American Joint Committee on Cancer (AJCC) criteria, sentinel lymph nodes must be examined pathologically by a method which ensures detection of all clinically significant metastases (i.e. 2 mm or greater). All lymph node tissue should be processed. Immunohistochemistry can be used selectively.**	This recommendation was based on the current American Joint Committee on Cancer (AJCC) Staging manual (eighth edition 2017). Although not developed as a clinical practice guideline, the AJCC Staging Manual was based on a comprehensive systematic review of the evidence. Because of the importance of this aspect of care and the strong evidentiary basis of the AJCC Staging Manual, it was agreed that this guidance should be a recommendation rather than a practice point. The guidance from the AJCC Staging Manual was simplified.	RCPA structured pathology reporting of cancer: https://www.rcpa.edu.au/Library/Practising-Pathology/Structured-Pathology-Reporting-of-Cancer AJCC cancer staging manual: https://www.springer.com/us/book/9783319406176 International Collaboration on Cancer Reporting (ICCR) on specimen handling (*currently being updated, link to be inserted later*).
3.10	**Management of the axilla**			
66	R	**Discuss the benefits and risks of having no further axillary treatment after mastectomy or after breast-conserving surgery in patients who have one or two sentinel lymph node macrometastases and have been advised to have radiation therapy and adjuvant systemic therapy.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 2' (using GRADE methods) by the source guideline authors. The source recommendation was adapted by removing the information on clinical trials as this aspect of care is covered in a separate recommendation.	
67	R	**In all patients who have more than two macrometastases, discuss further axillary treatment (axillary node clearance or radiation therapy).**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 1' (using GRADE methods) by the source guideline authors. The source recommendation was accepted with minor stylistic changes, but with no changes to the meaning or tone of the source recommendation.	

No.	R or PP	Guidance	How this guidance was developed	Links
68	R	**Offer axillary node clearance to patients with breast cancer who have a pre-operative ultrasound-guided needle biopsy with pathologically proven lymph node metastases.**	This recommendation was adopted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 1' (using GRADE methods) by the source guideline authors. The source recommendation was accepted with minor stylistic changes, but with no changes to the meaning or tone of the source recommendation.	
69	R	**Do not offer further axillary treatment after breast-conserving surgery and breast radiation therapy or mastectomy to patients who have only micrometastases (0.2 - ≤2 mm) in their sentinel lymph nodes, or who have only isolated tumour cells (<0.2 mm) in their sentinel lymph nodes.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 1' (using SIGN methods) by the source guideline authors. The source recommendation was adapted by replacing the word 'people' with 'patients' and by including '0.2 - ≤2 mm' after the word 'micrometastases' to add further specificity to this recommendation.	
70	PP	**Management of an axilla that becomes sentinel node negative after neoadjuvant systemic therapy is an emerging aspect of care and no definitive guidance can currently be given.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	

3.11 Risk-reducing surgery

71	R	**In patients with breast cancer with a population risk of recurrence do not routinely offer risk-reducing mastectomy for the contralateral breast.**	This recommendation was adapted from the NCCP 2015 guidelines (Ireland). The source recommendation was based on a systematic review of the evidence conducted in September 2014 and was graded 'A' (SIGN methods) by the source guideline authors. The source recommendation was adapted by removing 'if it is discussed at a multidisciplinary team meeting' as this does not always happen in practice. The recommendation was made more directive by adding 'do not routinely offer'.	

No.	R or PP	Guidance	How this guidance was developed	Links
72	R	**In patients with breast cancer with a confirmed germline mutation (e.g. BRCA 1/2) that predisposes to an increased risk of breast cancer, discuss surgical risk-reducing strategies (e.g. contralateral risk-reducing mastectomy, risk-reducing salpingo-oophorectomy).**	This recommendation was adapted from the CA 2014 guidelines (Australia). The source recommendation was based on a systematic review of the evidence conducted in April 2012 and was graded 'B' (NHMRC methods) by the source guideline authors. The source recommendation was adapted by removing the specification of BRCA1/2 mutations, specification of gender in the patient population, and the focus on young women and contralateral risk-reducing strategies.	
73	PP	**For patients considering risk-reducing mastectomy offer referral for counselling with a health professional with psycho-oncology expertise (e.g. a psychologist or psychiatrist)**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process. Referral to a psychiatrist is included as some women experience high levels of anxiety and may benefit from pharmacotherapy.	
74	R	**In patients with breast cancer with a confirmed germline mutation (e.g. BRCA 1/2) that predisposes to an increased risk of breast or ovarian cancer, discuss the benefits and risks of bilateral salpingo-oophorectomy (BSO) on the risk of breast, ovarian and fallopian tube cancers, and the impact of BSO on reproductive capacity in premenopausal women.**	This recommendation was adapted from the CA 2014 guidelines (Australia). The source recommendation was based on a systematic review of the evidence conducted in April 2012 and was graded 'B' (NHMRC methods) by the source guideline authors. The source recommendation was adapted by removing the specification of age and gender in the patient population and by highlighting the impact of this risk-reducing surgery on reproductive capacity.	
3.12		**Systemic therapy planning**		
75	R	**Request simultaneously the oestrogen receptor (ER), progesterone receptor (PR) and human epidermal growth receptor 2 (HER2) status of all invasive breast cancers, at the time of initial histopathological diagnosis.**	This recommendation was adopted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 2' (using GRADE methods) by the source guideline authors. The source recommendation was accepted with minor stylistic changes, but with no changes to the meaning or tone of the source recommendation.	

No.	R or PP	Guidance	How this guidance was developed	Links
76	R	**Assess the ER, PR and HER2 status of all invasive breast cancers using standardised and quality-assured immunohistochemical techniques and report the results quantitatively. Ensure receptor status test results are available and recorded at the preoperative and postoperative multidisciplinary team meetings when systemic treatment is discussed.**	This recommendation was adopted from the NICE 2018 guidelines (UK). This recommendation was adopted from three source recommendations based on a systematic review of the evidence conducted in September 2017. All three source recommendations were graded 'strong' (using GRADE methods) by the source guideline authors. The source recommendations were combined into one recommendation.	
77	PP	**Perform in situ hybridisation testing for HER2 status on core biopsy material if neoadjuvant systemic therapy is being considered, noting that receptor status between core and surgical specimens may be different.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process, based on their clinical expertise and knowledge of the Australian healthcare context.	
78	PP	**Repeat receptor status testing on any residual disease after neoadjuvant systemic therapy.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	
79	R	**Consider adjuvant systemic therapy after surgery for patients with invasive breast cancer, individualising treatment based on a multidisciplinary assessment of prognostic and predictive factors and the possible risks and benefits of treatment. Ensure that recommendations for treatment are recorded at a multidisciplinary team meeting.**	This recommendation was adapted from the NICE 2018 guidelines (UK). Two source recommendations were merged and adapted by noting that the treatment should be individualised rather than 'according to patient preferences'. Both source recommendations were based on a systematic review conducted in September 2017 and graded 'conditional 2' (using GRADE methods) by the source guideline authors.	
80	R	**In patients with breast cancer consider use of the PREDICT tool to estimate prognosis and the absolute benefits of adjuvant systemic therapy, recognising that the PREDICT tool is less accurate in some women and has not been validated in men or in an Australian population. Ki67 should not be used alone in any patient to make treatment decisions.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 2' (using GRADE methods) by the source guideline authors. The source recommendation was adapted by making it less directive, by replacing 'use' with 'consider', by expanding the patient population from 'women' to 'all patients', and by inserting a link to the latest version of the PREDICT tool.	PREDICT tool (National Health Service – NHS UK): https://breast.predict.nhs.uk/predict_v2.0.html

No.	R or PP	Guidance	How this guidance was developed	Links
81	PP	**In premenopausal women with early stage breast cancer who are at high risk of experiencing ovarian failure as a consequence of chemotherapy, consider the use of the luteinising hormone releasing hormone analogue (LHRHa) goserelin to protect ovarian function. Commence goserelin at least one week prior to the commencement of chemotherapy.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process. Development of the practice point was informed by a source recommendation in the ESO-ESMO 2017 consensus guidelines that was designated as 'Expert Opinion' by the source guideline authors, and by findings from the POEMS clinical study.	
3.13	**Systemic therapies in pregnant and breast-feeding women**			
82	R	**In pregnant women with breast cancer, chemotherapy can be considered after 14 weeks of gestation.**	This recommendation was adapted from the KCE 2013 guideline (Belgium). The source recommendation was based on a systematic review of the evidence conducted in January 2010 and was graded 'weak' (using GRADE methods) by the source guideline authors. The source recommendation was accepted with minor stylistic changes, but with no changes to the meaning or tone of the source recommendation.	
83	PP	**The dosage of chemotherapeutic agents should be the same for pregnant women as compared to non-pregnant women. A lower pre-pregnant weight should not be used.**	This practice point was developed using an expert consensus process. Development of the practice point was informed by a source recommendation in the Amant 2010 guidelines (US) that was not graded by the source guideline authors and was based on a non-systematic review of the evidence (the date of the review was not reported). Strongly directive language was used for this PP because of the serious impact to the woman of receiving a potentially sub-therapeutic dose of a chemotherapeutic agent.	
84	PP	**Advise women with breast cancer who are receiving chemotherapy, anti-HER2 therapy, or tamoxifen, to avoid pregnancy as these therapies are potentially teratogenic.**	This practice point was developed using an expert consensus process. Development of the practice point was informed by a source recommendation in the JBCS 2016 guidelines (Japan) that was not graded by the source guideline authors and based on a non-systematic review of the evidence (the date of the review was not reported)	Deciding about cancer treatment during pregnancy (Cancer Australia): https://breast-cancer.canceraustralia.gov.au/treatment/deciding-about-treatment/pregnancy

No.	R or PP	Guidance	How this guidance was developed	Links
85	PP	**Breastfeeding is not recommended during chemotherapy.**	This practice point was developed using an expert consensus process. Development of the practice point was informed by a source recommendation in the Amant 2010 guidelines (US) that was not graded by the source guideline authors and was based on a non-systematic review of the evidence (the date of the review was not reported).	
3.14		**Indications for adjuvant chemotherapy**		
86	R	**Consider adjuvant chemotherapy for all patients with breast cancer whose disease is at high risk of recurrence and has a molecular subtype likely to respond to adjuvant chemotherapy (e.g. triple negative; HER2-postive; luminal B).**	This recommendation was adapted from the NCCP 2015 guidelines (Ireland). The source recommendation was based on a systematic review of the evidence conducted in September 2014 and was graded 'A' (SIGN methods) by the source guideline authors. The source recommendation was adapted to remove reference to 'moderate risk of recurrence' as the evidence in favour of chemotherapy in this group of patients is not as clear as for patients with a high risk of recurrence. Reference to the likely responsiveness of the cancer based on its molecular biology was also added.	
87	R	**The choice of neoadjuvant or adjuvant chemotherapy should be determined by comorbidities and not by gene mutation status or age alone.**	This recommendation was adapted from the CA 2014 guidelines (Australia). The source recommendation was based on a systematic review of the evidence conducted in April 2012 and was graded 'C' (NHMRC methods) by the source guideline authors. The source recommendation was adapted by expanding the patient population from 'women' to 'all patients', by replacing 'BRCA1/2 status' with ''gene mutation status', and by including age as a factor.	Neoadjuvant therapy before breast cancer surgery (eviQ): https://www.eviq.org.au/patients-and-carers/patient-information-sheets/1645-chemotherapy-or-hormone-therapy-before-breast

No.	R or PP	Guidance	How this guidance was developed	Links
3.15		**Timing of adjuvant chemotherapy**		
88	R	**Ideally adjuvant chemotherapy should commence within 4 to 6 weeks of the date of surgery. If adjuvant chemotherapy and radiation therapy are indicated, the chemotherapy should be given first. The timing of endocrine therapy should be aligned with and linked to the *Optimal Care Pathway for women with breast cancer*.**	This recommendation was adapted from the RACP 2017 guidelines (Australia). The source recommendation was based on a systematic review of the evidence conducted in April 2014 and was graded 'C' (using NHMRC methods) by the source guideline authors. The source recommendation was adapted by removing the aspect of care related to patients with high-risk disease. The second sentence from this recommendation was adopted from the KCE 2013 guidelines (Belgium). The KCE source recommendation was based on a systematic review of the evidence conducted in January 2010 and was graded 'strong' (using GRADE methods) by the source guideline authors. This source recommendation with no changes. Further development of the recommendation included specification of the timing as '4-6 weeks from the date of surgery'.	Optimal care pathway for women with breast cancer (to be updated in 2020): https://www.cancer.org.au/content/ocp/health/optimal-care-pathway-for-women-with-breast-cancer-june-2016.pdf
89	PP	**Chemotherapy can be given concurrently with the gonadotropin-releasing hormone (GnRH) agonist goserelin but not with tamoxifen.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process, with reference to findings from two RCTs: the POEMS trial (goserelin for ovarian protection during breast cancer adjuvant chemotherapy) and the TEXT trial (tailoring adjuvant endocrine therapy for premenopausal breast cancer).	
3.16		**Use of anthracyclines, taxanes and capecitabine**		
90	R	**The cumulative dose of anthracycline in a two-drug regimen should not exceed 240 mg/m^2 for doxorubicin, or 720 mg/m^2 for epirubicin.**	This recommendation was adapted from the ASCO 2016a guidelines (US). The source recommendation was based on a systematic review of the evidence conducted in July 2015 and was not graded by the source guideline authors. The source recommendation was simplified by removing the detail and the specification of the patient population.	

No.	R or PP	Guidance	How this guidance was developed	Links
91	R	**When choosing a chemotherapy regimen, consider the cumulative toxicity when an anthracycline and a taxane are used together.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 2' (using GRADE methods) by the source guideline authors. The source recommendation was simplified by removing the detail regarding additional topics to be discussed with the patients, and linking the recommendation to Table 4 from the NICE guideline, which includes this detail.	Benefits and risks of adding a taxane to anthracycline-containing regimens and comparison of different taxane regimens (table 4, NICE UK guideline 2018): https://www.nice.org.uk/guidance/ng101/chapter/Recommendations#adjuvant-chemotherapy-for-invasive-breast-cancer
92	PP	**For patients with triple negative breast cancer with residual disease after neoadjuvant chemotherapy, consider the addition of capecitabine to a post-neoadjuvant anthracycline-taxane regimen.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	Adjuvant Capecitabine for Breast Cancer after Preoperative Chemotherapy: https://www.ncbi.nlm.nih.gov/pubmed/28564564)
3.17		**Chemotherapy protocols**		
93	R	**For patients in whom an anthracycline-taxane regimen is contraindicated, cyclophosphamide-methotrexate-fluorouracil (CMF) with oral cyclophosphamide is an acceptable chemotherapy alternative.**	This recommendation was adapted from the ASCO 2016a guidelines (US). The source recommendation was based on a systematic review of the evidence conducted in July 2015 and was not graded by the source guideline authors. The source recommendation was simplified by removal of the details of specific chemotherapy regimens.	
94	R	**Refer to eviQ for the preferred adjuvant chemotherapy regimens (including dose-dense regimens and alternatives to doxorubicin-cyclophosphamide x 4).**	This recommendation was adapted from two recommendations in the ASCO 2016a guidelines (US). Each source recommendation was based on a systematic review of the evidence conducted in July 2015 and neither recommendation was graded by the source guideline authors. The EWG accepted the over-all intention of the source recommendations, but removed the details of the different chemotherapy regimens.	Adjuvant chemotherapy regimens (eviQ): https://www.eviq.org.au/medical-oncology/breast

No.	R or PP	Guidance	How this guidance was developed	Links
95	PP	**Treat all patients with growth factor support if dose-dense adjuvant systemic therapy is being prescribed and for other regimens where the risk of febrile neutropenia is higher than 20%.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	Adjuvant therapy with growth factor support (eviQ): https://www.eviq.org.au/medical-oncology/breast/adjuvant/134-breast-adjuvant-ac-doxorubicin-and-cyclophosp https://www.eviq.org.au/medical-oncology/breast/adjuvant/683-breast-adjuvant-ec-epirubicin-and-cyclophosph https://www.eviq.org.au/medical-oncology/breast/adjuvant/160-breast-adjuvant-paclitaxel-dose-dense
96	PP	**Consider adding neratinib to high risk ER-positive/HER2-positive patients who complete one year of trastuzumab and remain disease-free.**	No evidence-based source recommendation was No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	
3.18	**Adjuvant chemotherapy for residual disease**			
97	PP	**Consider trastuzumab emtansine as additional adjuvant treatment for patients with HER2-positive breast cancer who have residual disease after a neoadjuvant taxane-trastuzumab regimen.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	
3.19	**Antiemetics**			
98	PP	**Use adequate antiemetics when treating patients with systemic therapy.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	Clinical practice guidelines for prevention of treatment induced nausea and vomiting (European Society for Medical Oncology ESMO): https://www.esmo.org/Guidelines/Supportive-and-Palliative-Care/MASCC-and-ESMO-Consensus-Guidelines-for-the-Prevention-of-Chemotherapy-and-Radiotherapy-Induced-Nausea-and-Vomiting

No.	R or PP	Guidance	How this guidance was developed	Links
3.20		**Scalp cooling for hair loss**		
99	R	**Consider scalp cooling to reduce the risk of hair loss for patients receiving chemotherapy, noting scalp cooling may be less effective with anthracycline-containing regimens.**	This recommendation was adopted from the NCCN 2019 guidelines (US). The source recommendation was based on a systematic review of the evidence conducted in June 2015 and was graded '2A' (using NCCN methods) by the source guideline authors. The source recommendation was accepted with minor stylistic changes such as changing 'alopecia' to 'hair loss', but with no changes to the meaning or tone of the source recommendation.	
3.21		**Adjuvant endocrine therapy - indications**		
100	R	**Adjuvant endocrine therapy should be considered in all patients with ER-positive cancer, defined as ER immunohistochemistry (IHC) staining ≥1%.**	This recommendation was adapted from the CCO 2014a guidelines (Canada). The source recommendation was based on a systematic review of the evidence conducted in March 2012 and was not graded by the source guideline authors. The source recommendation was adapted by removing the phrase 'taking into consideration overall disease risk, patient preference and potential adverse effects'.	
101	R	**In patients with ER-positive tumours who do not commence adjuvant endocrine therapy immediately after surgery or chemotherapy, delayed endocrine therapy is still clinically beneficial.**	This recommendation was adopted from the CCO 2014a guidelines (Canada). The source recommendation was based on a systematic review of the evidence conducted in March 2012 and was not graded by the source guideline authors. The source recommendation was accepted with minor stylistic changes, but with no change to the meaning or tone of the source recommendation.	
102	R	**Consider adjuvant endocrine therapy in patients with ER– but PR-positive tumours.**	This recommendation was adapted from the CCO 2014a guidelines (Canada). The source recommendation was based on a systematic review of the evidence conducted in March 2012 and was not graded by the source guideline authors. The EWG adapted the source recommendation by making it more directive by replacing 'consensus was not reached' to 'consider'.	

No.	R or PP	Guidance	How this guidance was developed	Links
103	R	**Primary endocrine therapy (endocrine therapy alone without surgery) should only be offered to older patients with ER-positive tumours who have a short-estimated life expectancy (<2–3 years), who are considered unfit for surgery after optimisation of comorbid medical conditions (i.e. are frail), or who decline surgery. The involvement of a geriatrician is strongly recommended to estimate life expectancy and guide management of reversible comorbidities. It is reasonable to choose tamoxifen, or an aromatase inhibitor based on potential side-effects.**	This recommendation was adopted from the SIOG/EUSOMA 2012 guidelines (Europe). The source recommendation was based on a systematic review of the evidence conducted in June 2010 and was not graded by the source guideline authors. The EWG accepted the source recommendation with minor stylistic changes, but with no changes to the meaning or tone of the source recommendation.	
104	R	**Omission of adjuvant endocrine therapy is an option for older patients with a very low risk tumour (pT1aN0) or those with life-limiting comorbidities.**	This recommendation was adapted from the SIOG/EUSOMA 2012 guidelines (Europe). The source recommendation was based on a systematic review of the evidence conducted in June 2010 and was not graded by the source guideline authors. The EWG simplified the source recommendation by removing the details of the treatment regimen and replacing 'life-threatening comorbidities' with 'life-limiting comorbidities'.	

3.22 Adjuvant endocrine therapy – initial choice of therapy

105	R	**Offer endocrine therapy to men and women, tailoring therapy in premenopausal women (e.g. ovarian suppression), according to the individual's risk of breast cancer recurrence and comorbidities.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 1' (using GRADE methods) by the source guideline authors. The EWG adapted the source recommendation by expanding the patient population to include postmenopausal women.	

No.	R or PP	Guidance	How this guidance was developed	Links
106	R	**Offer an aromatase inhibitor as the initial adjuvant endocrine therapy for postmenopausal women with lobular cancer or ER-positive breast cancer who are at medium or high risk of disease recurrence. Offer tamoxifen to postmenopausal women who are at low risk of disease recurrence, or if aromatase inhibitors are not tolerated or are contraindicated.**	This recommendation was adopted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in July 2008 and was graded 'conditional 1' (using GRADE methods) by the source guideline authors. The source recommendation was accepted with no changes.	
3.23		**Adjuvant endocrine therapy – extended therapy**		
107	R	**Consider extending the duration of tamoxifen therapy beyond 5 years for premenopausal or postmenopausal women with ER-positive breast cancer with a significant risk of late recurrence.**	This recommendation was adopted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 2' (using GRADE methods) by the source guideline authors. The source recommendation was accepted with minor stylistic changes, but with no changes to the meaning or tone of the source recommendation.	CTS5 risk calculator: https://www.cts5-calculator.com/
3.24		**Aromatase inhibitor use in postmenopausal women**		
108	R	**Offer extended aromatase inhibitor therapy (total duration of endocrine therapy of more than 5 years) for postmenopausal women with ER-positive breast cancer who are at medium or high risk of late recurrence and who have been taking tamoxifen for 2 to 5 years.**	This recommendation was adopted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 1' (using GRADE methods) by the source guideline authors. The source recommendation was accepted with no changes.	CTS5 risk calculator: https://www.cts5-calculator.com/
109	R	**Be aware that alternative strategies for extending aromatase inhibitor therapy beyond 5 years, depending on risk of recurrence and tolerance of therapy, include: continuous therapy to 10 years; a 3 month break each year; and continuous therapy to 7.5 years.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 2' (using GRADE methods) by the source guideline authors. The source recommendation was adapted by being made less directive about the total timeframe for treatment, and by adding 'based on risk of recurrence and tolerance of therapy'.	CTS5 risk calculator https://www.cts5-calculator.com/

No.	R or PP	Guidance	How this guidance was developed	Links
3.25		**Ovarian function suppression**		
110	R	**For premenopausal women with ER-positive breast cancer, consider ovarian function suppression in addition to endocrine therapy (tamoxifen).**	This recommendation was adapted from the NICE 2018 guidelines (UK). Two source recommendations were merged and simplified by omitting 'explain to women that ovarian function suppression may be most beneficial for those women who are at sufficient risk of disease recurrence to have been offered chemotherapy'. Both source recommendations were based on a systematic review conducted in September 2017 and were graded 'conditional 1' (using GRADE methods).	
111	PP	**If a gonadotropin-releasing hormone (GnRH) agonist is used in premenopausal women, it should be given on a monthly basis to optimise ovarian suppression.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process. Development of the practice point was informed by a source recommendation in the ESO-ESMO 2017 (Europe) that was designated as 'Expert Opinion' by the source guideline authors. Reference to checking oestradiol levels was removed as this is a practice limited to women close to menopause who may have chemotherapy-induced amenorrhea and in whom the use of aromatase inhibitors is contraindicated.	
3.26		**Anti-HER2 therapy - indications**		
112	R	**Offer adjuvant trastuzumab (with or without pertuzumab) for patients with at least T1c, HER2-positive breast cancer (given at 3-week intervals for 1 year) in combination with surgery, chemotherapy and radiation therapy as appropriate.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 1' (using GRADE methods) by the source guideline authors. The source recommendation was adapted by adding 'with or without pertuzumab'.	

No.	R or PP	Guidance	How this guidance was developed	Links
113	R	**Consider trastuzumab in addition to chemotherapy as adjuvant treatment for patients with T1a/T1b HER2-positive breast cancer, taking into account any comorbidities, prognostic features and possible toxicity of chemotherapy.**	This recommendation was adopted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 2' (using GRADE methods) by the source guideline authors. The source recommendation was accepted with no changes.	
114	R	**Ideally adjuvant trastuzumab (with or without pertuzumab) should be given concurrently with taxane-based regimens but should not be given concurrently with anthracyclines.**	This recommendation was adapted from the NCCP 2015 guidelines (Ireland). The source recommendation was based on a systematic review of the evidence conducted in September 2014 and was graded 'A' (using SIGN methods) by the source guideline authors. The source recommendation was adapted by adding 'with or without pertuzumab'.	
115	R	**In patients receiving trastuzumab, cardiac function should be monitored during treatment (e.g. every 3 months) and follow-up. Early referral to a cardiologist should be considered in cases of a deterioration in cardiac function.**	This recommendation was adapted from the KCE 2013 guidelines (Belgium). The source recommendation was based on a systematic review of the evidence conducted in January 2010 and was graded 'strong' (using SIGN methods) by the source guideline authors. The source recommendation was adapted by adding 'Early referral to a cardiologist should be considered in cases of deterioration/drop in cardiac function'.	Cardiac toxicity associated with HER-2 targeted agents (eviQ): https://www.eviq.org.au/clinical-resources/side-effect-and-toxicity-management/cardiovascular/1852-cardiac-toxicity-associated-with-her-2-target
3.27		**Bone health**		
116	R	**Consider imaging with dual energy x-ray (DXA) to measure bone mineral density in patients with breast cancer treated with chemotherapy and/or endocrine therapy.**	This recommendation was adapted from the ASCO 2016 guidelines (United States). The source recommendation was based on a systematic review of the evidence conducted in April 2015 and was not graded by the source guideline authors. The source recommendation was simplified by removing details of the treatment regimens, and by making the recommendation directive by replacing "refer" to "consider" to better reflect the Australian healthcare context.	

No.	R or PP	Guidance	How this guidance was developed	Links
117	R	**Consider the use of zoledronic acid as adjuvant therapy for postmenopausal women with breast cancer with a moderate to high risk of recurrence.**	This recommendation was adapted from the NICE 2018 guidelines (UK). Two source recommendations on bisphosphonate use were merged by the EWG. Both source recommendations were based on a systematic review conducted in September 2017: one was graded 'conditional 1' and the other was graded 'conditional 2' (using GRADE methods) by the source guideline authors. The source recommendations were adapted by removing reference to clodronate as this is no longer available in Australia, by removing treatment details, and by making the recommendation less directive by replacing "offer" with "consider", reflecting the fact that zoledronic acid is not TGA-approved for this indication.	
118	R	**Consider the use of zoledronic acid as adjuvant therapy for premenopausal women receiving ovarian suppression.**	This recommendation was adapted from the ASCO 2016 guidelines (United States). The source recommendation was based on a systematic review of the evidence conducted in April 2015 and was not graded by the source guideline authors. The source recommendation was adapted by removing reference to clodronate as this is no longer available in Australia, and by making it more directive by replacing "may be considered" with "consider", noting that zoledronic acid is not TGA-approved for this indication.	
119	PP	**Consider the use of denosumab for the management of treatment-induced bone loss in patients with breast cancer.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process. The practice point was based on findings from the ABCSG-18 study; acknowledging that while the ability of denosumab to reduce disease recurrence from breast cancer in postmenopausal women with hormone receptor-positive disease is unclear, a significant reduction in clinical fractures was observed when denosumab was given in combination with aromatase inhibitors.	

No.	R or PP	Guidance	How this guidance was developed	Links
120	PP	**Before commencing treatment with a bone modifying agent (denosumab or zoledronic acid) discuss the benefits, common and rare side effects, risks (including unknown harms to future offspring) and regulatory status of the treatments. Refer all patients to a dentist for preventative and ongoing dental care before commencing treatment with a bone modifying agent.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process. Relevant information on preventive dental care was incorporated from 'Cancer Care Ontario'.	Cancer Care Ontario Preventive dental issues: https://www.cancercareontario.ca/en/symptom-management/3156
3.28		**Timing of radiation therapy**		
121	PP	**In patients who have completed definitive surgery for breast cancer, commence radiation therapy as soon as possible after wound healing or typically within 3-6 weeks of completion of adjuvant chemotherapy.**	This practice point was developed using an expert consensus process. A potentially relevant 'grade C' source recommendation was identified from the NCCP 2015 guidelines (Ireland) that recommends local breast irradiation is initiated as soon as possible following wound healing. The NCCP recommendation was used as the basis for the development of this practice point, which is consistent with eviQ recommendations.	
122	PP	**For patients requiring mastectomy and radiation therapy offer breast reconstruction with the opportunity to discuss the risks and benefits of early or delayed reconstruction, taking into account different surgical techniques, reconstruction methods and patient preferences. In patients considering breast reconstruction, discuss the risk of complications and reconstructive failure in relation to the timing of radiation therapy.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	
123	PP	**The ideal sequencing of radiation therapy, neoadjuvant systemic therapy and reconstruction is unknown and therefore should be discussed by a multidisciplinary team (MDT), ideally before surgery or radiation therapy.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process. based on clinical expertise and knowledge of the Australian healthcare context and based on information contained within the NCCN 2018 (USA) guidelines.	

No.	R or PP	Guidance	How this guidance was developed	Links
3.29		**Radiation therapy after neoadjuvant chemotherapy**		
124	R	**For patients with locally advanced breast cancer and/or involved lymph nodes at presentation who have received neo-adjuvant chemotherapy, consider post-mastectomy radiation therapy with or without nodal radiation therapy.**	This recommendation was adapted from the NICE 2018 guidelines (UK). Three source recommendations (for different patient populations, based on investigations of macrometasteses) were merged to generate a recommendation applicable to all three patient populations. All three source recommendations were based on a systematic review conducted in September 2017: one was graded 'conditional 2' and two were graded 'conditional 1' (using GRADE methods) by the source guideline authors.	
125	R	**For patients with inflammatory breast cancer who have been treated with neoadjuvant chemotherapy, offer local/regional treatment with mastectomy followed by radiation therapy.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 1' (using GRADE methods) by the source guideline authors. The source recommendation was adapted by specifying 'neoadjuvant' chemotherapy and by changing the language to make it more applicable to the Australian health care context.	
3.30		**Radiation therapy after breast-conserving surgery**		
126	R	**Offer breast radiation therapy to patients with breast cancer who have had breast-conserving surgery with clear surgical margins.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation is based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 1' (using GRADE methods) by the source guideline authors. The source recommendation was adapted by expanding the patient population from "women" to "all patients".	
127	R	**Discuss the benefits and risks of omitting radiation therapy after breast-conserving surgery in women over 70 years of age with very low risk of local recurrence and who are suitable and willing to take endocrine therapy for five years.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 2' (using GRADE methods) by the source guideline authors. The source recommendation was simplified by removing reference to local recurrence rates, and by adding "discuss the benefits and risks'.	

No.	R or PP	Guidance	How this guidance was developed	Links
128	R	**In patients with breast cancer (excluding lobular type) who have undergone breast-conserving surgery with clear surgical margins and who have a very low risk of local recurrence, partial breast irradiation can be considered in patients who are suitable and willing to take adjuvant endocrine therapy for five years.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 2' (using GRADE methods) by the source guideline authors. The source recommendation was adapted by including a link to a validated method for assessing risk of recurrence instead of providing a definition within the recommendation. The recommendation was also made gender neutral, and less directive by replacing "consider" with "could be considered".	Tools to identify individual risk of recurrence: https://breast.predict.nhs.uk/predict_v2.0.html https://www.cts5-calculator.com/ noting that the CTS calculator is intended for ER + breast cancer and recurrence after 5 years
129	R	**Offer a hypofractionated course of radiation therapy to women with breast cancer who have undergone breast-conserving surgery with clear surgical margins, who are aged ≥50 years with pathological stage T1-2, node-negative (N0) disease, and who require post-operative whole breast radiation therapy. For all patients in whom hypofractionated radiation therapy is being considered, discuss cosmetic outcomes and the possibility of adverse events including acute reactions and late effects.**	This recommendation was adapted from the CA 2015 guidelines (Australia). Two source recommendations were merged and adapted to use language applicable to the Australian health care context. Both source recommendations were based on a systematic review conducted in November 2013: one was graded 'A' and the other 'B' (using NHMRC methods) by the source guideline authors.	
130	R	**Consider a hypofractionated course of radiation therapy for patients with breast cancer who have undergone breast-conserving surgery with clear surgical margins who require post-operative whole breast radiation therapy and who are outside the criteria in recommendation 129.**	This recommendation was adapted from the CA 2015 guidelines (Australia). The source recommendation was based on a systematic review of the evidence conducted in November 2013 and was graded 'C' (using NHMRC methods) by the source guideline authors. The source recommendation was adapted by making it gender neutral, and by removing details of treatment schedules and instead inserting a link to relevant information.	Breast invasive cancer adjuvant whole breast EBRT: https://www.eviq.org.au/radiation-oncology/breast/3650-breast-invasive-cancer-adjuvant-whole-breast#dose-prescription
131	R	**In patients who have breast-conserving surgery and who are aged 50 years or under at diagnosis, offer radiation therapy boost.**	This recommendation was adopted from the NCCP 2015 guidelines (Ireland). The source recommendation was based on a systematic review of the evidence conducted in September 2014 and was graded 'A' (using SIGN methods) by the source guideline authors. The source recommendation was accepted with minor stylistic changes, but with no changes to the meaning or tone of the source recommendation.	

No.	R or PP	Guidance	How this guidance was developed	Links
132	R	**In patients aged over 50 years who have undergone breast-conserving surgery and who have a high risk of local recurrence, consider radiation therapy boost.**	This recommendation was adapted from the NCCP 2015 guidelines (Ireland). The source recommendation was based on a systematic review of the evidence conducted in September 2014 and was graded 'A' (using SIGN methods) by the source guideline authors. The source recommendation was adapted to include specification of radiation therapy boost after breast-conserving surgery, and by reframing the reference to risk of recurrence.	

3.31 Radiation therapy after mastectomy

133	R	**For patients with breast cancer who have undergone a mastectomy and have at least four positive lymph nodes and a T3 or T4 tumour or involved surgical margins, offer adjuvant radiation therapy to the chest wall.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 1' (using GRADE methods) by the source guideline authors. The source recommendation was adapted by narrowing the population to 'patients who have undergone a mastectomy and have at least four positive nodes and a T3 or T4 tumour or involved surgical margins'.	
134	R	**For patients with breast cancer who have undergone a mastectomy and have macrometastases in 1-3 lymph nodes, consider adjuvant radiation therapy to the chest wall.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation is based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 1' (using GRADE methods) by the source guideline authors. The source recommendation was adapted by narrowing the population to 'patients who have who have undergone a mastectomy and have macrometastases in 1-3 lymph nodes', and by changing the wording from 'offer' to 'consider' as radiation therapy is not conventionally offered to patients with a single positive node.	

No.	R or PP	Guidance	How this guidance was developed	Links
135	R	**For patients with breast cancer who have undergone a mastectomy and have lymph node-negative T3 or T4 cancer consider adjuvant radiation therapy to the chest wall.**	This recommendation was adopted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 2' (using GRADE methods) by the source guideline authors. The source recommendation was accepted with minor stylistic changes, but with no changes to the meaning or tone of the source recommendation.	
136	R	**For patients with breast cancer who have undergone mastectomy and who are at low risk of local recurrence (e.g. most people who have lymph node-negative breast cancer), do not offer radiation therapy to the chest wall.**	This recommendation was adopted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'strong' (using GRADE methods) by the source guideline authors. The source recommendation was accepted with minor stylistic changes, but with no changes to the meaning or tone of the source recommendation.	
3.32	**Radiation therapy of the nodal regions**			
137	PP	**For patients with 4 or more nodes involved, offer radiation of the nodal basins in addition to the chest wall or whole breast.**	This practice point was developed using an expert consensus process. A potentially relevant 'moderate' (using ASCO methods) source recommendation was identified from the KASCO/SSO 2016 guidelines (US) that provided guidance regarding radiation therapy of the nodal regions. The KCE recommendation was not adopted or adapted because it was considered too detailed.	Breast invasive cancer adjuvant nodal irradiation EBRT: https://www.eviq.org.au/radiation-oncology/breast/1924-breast-invasive-cancer-adjuvant-nodal-irradia
138	PP	**For patients with 1-3 lymph nodes involved, consider radiation of the nodal basins in addition to the chest wall or whole breast.**	This practice point was developed using an expert consensus process. A potentially relevant 'moderate' (using ASCO methods) source recommendation was identified from the KASCO/SSO 2016 guidelines (US) that provided guidance regarding radiation therapy of the nodal regions. The KCE recommendation was not adopted or adapted because it was considered too detailed.	

No.	R or PP	Guidance	How this guidance was developed	Links
139	PP	**For patients where involvement of the internal mammary lymph nodes is identified during sentinel node biopsy or an 18F-FDG PET study, consider radiation to the internal mammary lymph node chain.**	This practice point was developed using an expert consensus process. A potentially relevant 'moderate' (using ASCO methods) source recommendation was identified from the KASCO/SSO 2016 guidelines (US) that provided guidance regarding radiation therapy of the nodal regions. The KCE recommendation was not adopted or adapted because it was considered too detailed. The practice point was also informed by the introduction of an MBS item for a whole body 18F-FDG PET study performed for the staging of locally advanced (Stage III) breast cancer in a patient considered potentially suitable for active therapy.	
3.33		**Radiation therapy – adverse events**		
140	R	**In patients undergoing radiation therapy use techniques that minimise the dose to the lung and heart, including deep inspiratory breath-holding for left-sided cancer.**	This recommendation was developed by adopting and merging two source recommendations from the NICE (2018) guideline (UK). The source recommendation is based on a systematic review of the evidence conducted in September 2017 and was graded 'strong' (using GRADE methods) by the source guideline authors. The word 'radiotherapy' was changed to 'radiation therapy' to be consistent with the style of the Guide but the recommendation otherwise was unchanged.	
141	PP	**Wherever possible avoid radiation therapy in patients with p53 genetic mutations.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	
3.34		**Radiation therapy - adverse events**		
142	PP	**In pregnant women with breast cancer with a low to intermediate risk of recurrence, delay radiation therapy until after delivery of the baby.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	

No.	R or PP	Guidance	How this guidance was developed	Links
143	PP	**In pregnant women with breast cancer with a high risk of recurrence, the multidisciplinary team should consider the risks and benefits of radiation therapy to the woman and the fetus, and these should be discussed with the woman.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	
3.35	**Clinical trials**			
144	PP	**Strongly encourage and support patients with breast cancer to participate in clinical trials where a suitable trial is available**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process. Development of the practice point was informed by a source recommendation in the KCE 2013 guidelines (Belgium) that was designated as 'Expert Opinion' by the source guideline authors. In developing this practice point it was acknowledged that patients who participate in clinical trials have better outcomes than patients who do not, and that it is important for clinicians to understand the barriers and enablers of patient participation in clinical trials.	Clinical trials information: http://www.australiancancertrials.gov.au/ https://www.breastcancertrials.org.au/current-clinical-trials

4 Monitoring, follow up[1] and survivorship

No.	R or PP[2]	Guidance	How this guidance was developed	Links
4.1		**Continuity of care**		
145	R	**The selection of the provider of follow-up care (specialist(s) and/or general practitioner) should be a decision made by the multidisciplinary team and the patient and be based on the purpose of follow-up and the individual patient's needs, risk of recurrence, circumstances, health literacy, and preferences for shared follow-up care. All patients should be offered the opportunity for their follow-up care to be shared between a GP and a specialist, to provide more accessible, whole-person care. This decision should be reviewed over time. All patients should be provided with information to make an informed choice.**	This recommendation was adapted from the CA 2010 guidelines (Australia). The source recommendation was based on a systematic review of the evidence conducted in January 2008 and was not graded by the source guideline authors. The source recommendation was adapted by making it gender neutral, including information on shared-care plans, and by using language applicable to the Australian health care context.	Cancer Australia resource on survivorship: https://canceraustralia.gov.au/publications-and-resources/cancer-australia-publications/principles-cancer-survivorship
146	R	**The multidisciplinary team, including the GP and the patient should be informed of the health professional(s) designated to provide follow-up care, and the schedule for follow-up.**	This recommendation was adapted from the CA 2010 guidelines (Australia). The source recommendation was based on a systematic review of the evidence conducted in January 2008 and was not graded by the source guideline authors. The source recommendation was adapted by making it gender neutral and by inserting a link to the relevant CA recommendations.	For follow-up care shared between a GP and specialist: https://canceraustralia.gov.au/publications-and-resources/cancer-australia-publications/shared-care-plan-0
147	R	**A patient-held follow-up schedule and shared care plan should be provided to assist with coordination of the patient care plan.**	This recommendation was adopted from the CA 2010 guidelines (Australia). The source recommendation was based on a systematic review of the evidence conducted in January 2008 and was not graded by the source guideline authors. The source recommendation was accepted with no changes.	

[1] Follow-up is after completion of active treatment
[2] Recommendation (R) or Practice Point (PP)

No.	R or PP[2]	Guidance	How this guidance was developed	Links
148	PP	**In patients with breast cancer ensure that follow-up care includes on-going assessment and supportive care for possible long-term toxicities and late effects of adjuvant treatments (including secondary cancers, cardiovascular toxicity, irreversible ovarian failure, weight gain, impaired cognitive function, and effects on bone health).**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process. The practice point was informed by a source recommendation in the ESO-ESMO 2017 consensus guidelines that was designated as 'Expert Opinion' by the source guideline authors.	
4.2	**Patient education related to recurrence**			
149	R	**All patients should be provided with information about the symptoms and signs of local or regional recurrence and their individual risk of recurrence.**	This recommendation was adapted from the ASCO 2016 guidelines (US). The source recommendation was based on a systematic review of the evidence conducted in April 2015 and was not graded by the source guideline authors. The source recommendation was adapted by making it gender neutral, and initially by changing "GP" to "cancer care team". Subsequently, reference to any particular health care professional was removed.	Tool to identify individual risk of recurrence: https://breast.predict.nhs.uk/predict_v2.0.html CTS calculator (intended for ER+ breast cancer and recurrence after 5 years) https://www.cts5-calculator.com/
4.3	**Clinical follow-up**			
150	R	**All patients who have received treatment for breast cancer should be screened for other cancers as per the general population.**	This recommendation was adopted from the ASCO 2016 guidelines (United States). The source recommendation was based on a systematic review of the evidence conducted in April 2015 and was not graded by the source guideline authors. The source recommendation was accepted with minor stylistic changes but with no changes to the meaning or tone of the source recommendation.	
151	R	**Patient history and clinical examination should occur every 3-6 months for the first 2 years, every 6-12 months for the next 3 years and annually after 5 years.**	This recommendation was adopted from the CA 2010 guidelines (Australia). The source recommendation was based on a systematic review of the evidence conducted in January 2008 and was not graded by the source guideline authors. The source recommendation was accepted with minor stylistic changes but with no changes to the meaning or tone of the source recommendation.	

No.	R or PP[2]	Guidance	How this guidance was developed	Links
152	R	**In patients who have undergone a mastectomy and breast reconstruction surveillance should consist of regular clinical examination of the chest wall and reconstructed breast at every routine follow-up visit.**	This recommendation was adapted from the CCO 2016 guidelines (Canada). The source recommendation was based on a systematic review of the evidence conducted in September 2013 and was not graded by the source guideline authors. The source recommendation was adapted by making it gender neutral, by adding more specificity to the guidance, and by removing the phrase 'as per the regular breast cancer follow-up regimen'.	
153	R	**Patients prescribed adjuvant endocrine therapy should be provided with information and support to continue their full course of therapy.**	This recommendation was adapted from the ASCO 2016 guidelines (United States). The source recommendation was based on a systematic review of the evidence conducted in April 2015 and was not graded by the source guideline authors. The source recommendation was accepted with minor stylistic changes, but with no changes to the meaning or tone of the source recommendation.	
154	R	**In patients with clinical signs or symptoms of cardiac dysfunction during routine clinical assessment during treatment, offer the following approaches:** **i. Echocardiogram for diagnostic workup** **ii. Cardiac MRI or a gated heart pool scan if echocardiogram is not available or is not technically feasible (e.g. poor image quality), with preference given to cardiac MRI** **iii. Serum cardiac biomarkers (troponins, natriuretic peptides)** **iv. Referral to a cardiologist based on clinical context and findings.** **Consider routine surveillance of cardiac function during cancer treatment and defer or cease cardiotoxic treatment where clinically indicated.**	This recommendation was adopted from the Armenian (2017) guideline (US). The source recommendation is based on a systematic review of the evidence conducted in February 2016 and was graded 'moderate' (using ASCO methods) by the source guideline authors.	

No.	R or PP[2]	Guidance	How this guidance was developed	Links
155	R	**In asymptomatic patients considered to be at increased risk of cardiac dysfunction, perform cardiac imaging (preferably an echocardiogram, or a cardiac MRI or a gated heart pool scan) between 6 and 12 months after completion of cancer-directed therapy.**	This recommendation was adapted from the Armenian (2017) guideline (US). The source recommendation is based on a systematic review of the evidence conducted in February 2016 and was graded 'moderate' (using ASCO methods) by the source guideline authors. 'Gated heart pool scan' is the relevant terminology used in Australia (rather than multi-gated acquisition (MUGA) scan).	
4.4	**Imaging after breast cancer treatment**			
156	R	**In patients who have been treated for breast cancer and who are not experiencing symptoms, do not perform intensive testing (full blood count, biochemistry or tumour markers) or intensive imaging (chest x-ray, PET, CT or radionuclide bone scans), as part of standard follow-up.**	This recommendation was adapted from the ASCO 2016 guidelines (US). The source recommendation was based on a systematic review of the evidence conducted in April 2015 and was not graded by the source guideline authors. The source recommendation was adapted by using language consistent with the *Cancer Australia Statement – Influencing best practice in breast cancer* (2017), and to reflect the fact that all clinicians, not just GPs, can be responsible for patient follow-up.	*Cancer Australia Statement – Influencing best practice in breast cancer*: https://thestatement.canceraustralia.gov.au/
157	PP	**Individualise follow-up imaging for patients who have been treated for breast cancer with a high risk of early recurrence (e.g. triple negative, high node positive).**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	
4.5	**Imaging after breast-conserving surgery**			
158	R	**Patients who have undergone breast-conserving surgery should be referred for annual mammography of both breasts. Patients who have undergone a unilateral mastectomy should be referred for annual mammography on the intact breast. Consider the addition of ultrasound to mammography for follow-up, when indicated on clinical or radiological grounds.**	This recommendation was adapted from the ASCO 2016 guidelines (United States). The source recommendation was based on a systematic review of the evidence conducted in April 2015 and was not graded by the source guideline authors. The source recommendation was adapted by making it gender neutral, and to reflect the fact that all clinicians, not just GPs, can be responsible for referring patients for mammography. The use of ultrasound was also added.	

No.	R or PP[2]	Guidance	How this guidance was developed	Links
159	PP	**In patients who have undergone breast-conserving surgery diagnostic imaging (mammography, ultrasound, or magnetic resonance imaging) is useful in the evaluation of new symptoms (e.g. lumps, skin changes).**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process. The practice point was informed by the evidence-based recommendations in the CCO 2016 guidelines (Canada) for patients who have undergone a mastectomy and breast reconstruction, and by recent evidence in patients who had undergone breast-conserving surgery.	
160	PP	**In patients less than 50 years of age who are carriers of high-risk gene mutations (e.g. BRCA1/2) and who have not undergone risk-reducing mastectomy, consider the use of annual magnetic resonance imaging (MRI) of both breasts during follow-up.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	
161	PP	**Patients who have undergone breast-conserving surgery and are found to have breast symptoms or suspicious masses during follow-up should be referred to a surgeon for further assessment.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process. The practice point was informed by the evidence-based recommendation in the Shea-Budgell 2014 guidelines (Canada) for patients who have undergone a mastectomy and breast reconstruction.	
4.6	**Imaging after breast reconstruction**			
162	R	**In patients who have undergone a mastectomy and breast reconstruction and who are asymptomatic, routine imaging of the reconstructed breast is not recommended.**	This recommendation was adapted from the CCO 2016 guidelines (Canada). The source recommendation was based on a systematic review of the evidence conducted in September 2013 and was not graded by the source guideline authors. The source recommendation was adapted by replacing 'surveillance mammography' with 'routine imaging', and by making it more directive by changing 'there is insufficient evidence' to 'is not recommended'.	

No.	R or PP[2]	Guidance	How this guidance was developed	Links
163	R	**In patients who have undergone a mastectomy and breast reconstruction diagnostic imaging (mammography, ultrasound, or magnetic resonance imaging) is useful in the evaluation of new symptoms (e.g., lumps, skin changes).**	This recommendation was adapted from the CCO 2016 guidelines (Canada). The source recommendation was based on a systematic review of the evidence conducted in September 2013 and was not graded by the source guideline authors. The source recommendation was adapted by making the recommendation gender neutral and more directive by replacing "*may be helpful*" with "*is useful*".	
164	R	**Patients who have undergone a mastectomy and breast reconstruction and are found to have breast symptoms or suspicious masses during follow-up should be referred to a surgeon for further assessment.**	This recommendation was adapted from the Shea-Budgell 2014 guidelines (Canada). The source recommendation was based on a systematic review of the evidence conducted in April 2013 and was not graded by the source guideline authors. The source recommendation was adapted by adding '*undergone a mastectomy and breast reconstruction*' to the description of the patient population and making minor stylistic changes with no change to the meaning or tone of the source recommendation.	
4.7	**Lymphoedema**			
165	R	**For patients who have had treatment for breast cancer, give advice on skin care and how to prevent and manage infection that may cause or exacerbate lymphoedema.**	This recommendation was adopted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 1' (using GRADE methods) by the source guideline authors. The source recommendation was accepted with minor rearrangement of the wording, with no changes to the meaning or tone of the source recommendation.	

No.	R or PP[2]	Guidance	How this guidance was developed	Links
166	R	**When informing patients with breast cancer about the risk of developing lymphoedema or breast or chest wall oedema, advise them of the importance of using the treated arm in daily activities and of regular participation in physical activities to minimise the impact of lymphoedema/oedema.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 1' (using GRADE methods) by the source guideline authors. The source recommendation was simplified by adding '*breast/chest wall oedema*' and the tone of the source recommendation was changed by replacing the double-negative phrase '*do not need to restrict their physical activity*' with the positive phrase '*advise them of the importance of using the treated arm in daily activities and of regular participation in physical activities*'.	
167	R	**Low risk medical procedures (such as injections, blood tests, or intravenous administration of medicines) can be performed on the arm of the treated side as such procedures will not cause or worsen lymphoedema. In patients with lymphoedema blood pressure monitoring on the arm of the treated side should depend on clinical need.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in September 2017 and was graded 'conditional 1' (using GRADE methods) by the source guideline authors. The adaptation clarified that low risk medical procedures can be performed on the affected side without fear of causing or worsening lymphoedema. It was acknowledged that there is insufficient evidence to support or not support blood pressure monitoring of the treated arm, hence the decision should be based on clinical need.	
168	R	**Patients with breast cancer who develop lymphoedema should have access to a lymphoedema therapist.**	This recommendation was adapted from the NICE 2018 guidelines (UK). The source recommendation was based on a systematic review of the evidence conducted in July 2008 and was graded 'strong' (using SIGN methods) by the source guideline authors. The recommendation was adapted by removing the word 'rapid' as rapid access is not always feasible, and by using language applicable to the Australian health care context.	

No.	R or PP[2]	Guidance	How this guidance was developed	Links
4.8		**Cardiac risk assessment and monitoring**		
169	R	**A baseline cardiac risk assessment should be undertaken for patients with cancer whose treatment will include chemotherapy (especially anthracyclines or trastuzumab), or left-sided radiation therapy.**	This recommendation was adapted from the Armenian (2017) guideline (US). The source recommendation is based on a systematic review of the evidence conducted in February 2016 and was graded 'moderate' (using ASCO methods) by the source guideline authors. It was advised that doses can change over time and this advice won't remain contemporary if dosages remain in these recommendations. A link to eviQ advice on cardiac toxicity was advised.	Cardiac toxicity associated with antineoplastic agents (eviQ): https://www.eviq.org.au/clinical-resources/side-effect-and-toxicity-management/cardiovascular/1851-cardiac-toxicity-associated-with-antineoplast#assessment-and-management)
170	PP	**Avoid or minimise the use of potentially cardiotoxic therapies if established alternatives exist that would not compromise cancer-specific outcomes**	This practice point was adopted from the ASCO 2017 (US) guidelines. The source recommendation was graded 'Strong' (using ASCO methods) by the source guideline authors based on consensus. The source recommendation was accepted with no changes.	
171	PP	**Inform patients of potential cardiac health and cardiovascular risk in relation to their baseline and future risk of cardiac dysfunction associated with treatment.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	
4.9		**Management of menopausal symptoms after primary treatment**		
172	R	**Discuss the risks and benefits of therapies for managing menopausal symptoms (hot flushes, night sweats and vaginal dryness) associated with breast cancer treatments, noting that all forms of systemic menopausal hormonal therapy (MHT) including oestrogen-only, combined oestrogen and progestogen, tibolone, and compounded or bioidentical hormones are contraindicated in women with a personal history of breast cancer.**	This recommendation was adapted from the KCE 2013 guidelines (Belgium) and CA 2016 guidelines (Australia). The KCE 2013 recommendation against menopausal hormone therapy (MHT) was based on a systematic review of the evidence conducted in January 2010. The KCE recommendation was graded 'strong' (using GRADE methods) by the source guideline authors. The recommendation from CA 2016 relates to exceptional cases where MHT can be considered and how the benefits and risks should be discussed. The CA recommendation was based on a systematic review conducted in January 2014 and was graded 'B' (using NHMRC methods). The two recommendations were merged, and acknowledgement was made to more recent evidence that a personal history of breast cancer is now considered to be an absolute contraindication to MHT.	

No.	R or PP[2]	Guidance	How this guidance was developed	Links
173	R	**In women with a personal history of breast cancer consider first-line treatment with cognitive behavioural therapy (CBT) delivered in person or online for the management of moderate to severe hot flushes or night sweats and sleep disturbance.**	This recommendation was adapted from the CA 2016 guidelines for the management of menopausal symptoms in women with a history of breast cancer (Australia). The source recommendation was based on a systematic review of the evidence conducted in 2015 and was graded 'C' (using NHMRC methods) by the source guideline authors. The source recommendation was simplified to reflect the overarching principle of the source guidelines of offering first-line treatment with non-systemic therapies. The adapted recommendation acknowledged the 2015 Position Statement of the North American Menopause Society, and more recent RCT evidence, that CBT is now accepted as first line treatment for sleep disturbance, and it can be delivered effectively in person or online.	Sleep disturbance: Pharmacological interventions (CA 2016 guideline): https://canceraustralia.gov.au/publications-and-resources/clinical-practice-guidelines/menopausal-guidelines/summary-evidence-sleep-disturbance/sleep-disturbance-pharmacological-interventions 2015 position statement of The North American Menopause Society: http://www.menopause.org/docs/default-source/professional/pap-pdf-meno-d-15-00241-minus-trim-cme.pdf CBT delivered in person or via online treatment: https://www.ncbi.nlm.nih.gov/pubmed/29471478 .
174	R	**In women with a personal history of breast cancer consider second-line treatment with non-endocrine systemic therapies (venlafaxine, desvenlafaxine, paroxetine, escitalopram, clonidine, or gabapentin) at doses shown to be effective in the management of moderate to severe hot flushes or night sweats. Women treated with any of these drugs should be monitored for the development of adverse effects which may include sexual dysfunction, gastrointestinal symptoms, anxiety, sleep disturbance, or in rare cases suicidal ideation. Be aware that paroxetine should be avoided in women treated with tamoxifen.**	This recommendation was adapted from the CA 2016 guidelines for the management of menopausal symptoms in women with a history of breast cancer (Australia). Six source recommendations (one for each pharmaceutical treatment) were merged and simplified by removing prescribing details. All six source recommendations were based on a systematic review conducted in 2015: five (venlafaxine, paroxetine, escitalopram, desvenlafaxine and clonidine) were graded 'strong' (A or B using NHMRC methods) and the one for gabapentin was graded 'conditional' (C using NHMRC methods) by the source guideline authors.	Pharmacological interventions (CA 2016): https://canceraustralia.gov.au/publications-and-resources/clinical-practice-guidelines/menopausal-guidelines/summary-evidence-vasomotor-symptoms

No.	R or PP[2]	Guidance	How this guidance was developed	Links
175	R	**In breast cancer patients experiencing sleep disturbance that is impacting on their quality of life, consider the second-line use of non-endocrine systemic therapies (desvenlafaxine, paroxetine, gabapentin) at doses shown to be effective in the management of sleep disturbance due to vasomotor symptoms. Be aware that paroxetine should be avoided in women treated with tamoxifen.**	This recommendation was adapted from the CA 2016 guidelines for the management of menopausal symptoms in women with a history of breast cancer (Australia). Three source recommendations (one for each pharmaceutical treatment) were merged and simplified by removing unnecessary details. All three source recommendations were based on a systematic review conducted in 2015: the Desvenlafaxine source recommendation was graded 'B' (using NHMRC methods) and the paroxetine and gabapentin source recommendations were graded 'C' (using NHMRC methods) by the source guideline authors.	Sleep disturbance (CA 2016): https://canceraustralia.gov.au/publications-and-resources/clinical-practice-guidelines/menopausal-guidelines/summary-evidence-sleep-disturbance/sleep-disturbance-pharmacological-interventions
176	PP	**Advise patients that there is negative or insufficient evidence of the effectiveness of other complementary or alternative therapies for the management of hot flushes, night sweats or vaginal dryness.**	This practice point was developed using an expert consensus process. The practice point acknowledged the 2015 Position Statement of the North American Menopause Society.	Management of hot flushes, night sweats or vaginal dryness (CA 2016): https://canceraustralia.gov.au/publications-and-resources/clinical-practice-guidelines/menopausal-guidelines
177	PP	**Diagnose and treat anxiety and depression in patients with breast cancer the same way as in the general population, noting that depression and anxiety reduce an individual's ability to cope with disease and treatment burden. Be aware that menopausal symptoms and anxiety/depression are interconnected: treatment of menopausal symptoms may improve anxiety and depression (particularly via the resolution of sleep disturbance), whilst treatment of anxiety and depression may improve an individual's ability to cope with menopausal symptoms.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	Edmonton Symptom Assessment System (ESAS) tool to assess symptoms common in cancer patients: http://www.npcrc.org/files/news/edmonton_symptom_assessment_scale.pdf

No.	R or PP[2]	Guidance	How this guidance was developed	Links
4.10		**Cognitive impairment**		
178	R	**If cognitive impairment in association with breast cancer or its treatment is suspected, assess for and treat reversible contributing factors (e.g. thyroid dysfunction) and offer referral to a psychologist/ other health professional as appropriate.**	This recommendation was adapted from the ASCO 2016 guidelines (US). Two source recommendations were merged, and the language was modified to be applicable to the Australian healthcare context. Both source recommendations were based on a systematic review conducted in April 2015 and neither recommendation was graded by the source guideline authors. In the adaptation of the source recommendations it was made clear that cognitive impairment can arise as a consequence of the cancer and/or its treatment.	Insight tool: https://www.canadiantestcentre.com/INSIGHT/INSIGHT-About.php
4.11		**Reproductive and sexual health prior to, during or after treatment**		
179	PP	**In women with a personal history of breast cancer and who have vaginal dryness, offer first-line treatment with vaginal lubricants during sexual activity. Consider topical lidocaine treatments to the vulvovaginal area for women with a history of breast cancer experiencing pain with sexual activity.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process. The practice point was informed by a source recommendation in the ASCO 2016 guidelines (US) that was designated as 'Expert Opinion' by the source guideline authors. This recommendation was not adopted or adapted because it was considered confusing, and vaginal moisturisers have not been shown to be effective.	
180	R	**Ask patients about concerns with sexual intimacy, and refer for further therapy, if appropriate.**	This recommendation was adapted from the ASCO 2016 guidelines (US). The source recommendation was based on a systematic review of the evidence conducted in April 2015 and was not graded by the source guideline authors. The source recommendation was adapted by replacing 'problems' with 'concerns', and by removing "primary care clinician" as this aspect of care could be addressed by other members of the cancer care team, as well as GPs.	

No.	R or PP[2]	Guidance	How this guidance was developed	Links
181	R	**In women with a personal history of breast cancer who have persistent vulvovaginal symptoms that are unresponsive to non-hormonal treatments, consider second-line treatment with vaginal oestrogens (low dose vaginal oestradiol, or vaginal oestriol).**	This recommendation was adapted from the CA 2016 guidelines (Australia). The source recommendation was based on a systematic review of the evidence conducted in January 2014 and was graded 'C' (using NHMRC methods) by the source guideline authors. The source recommendation was adapted by using language that is applicable to the Australian healthcare context, and removing additional details related to vaginal oestrogen.	Management of menopausal symptoms in women with a history of breast cancer (CA 2016): https://canceraustralia.gov.au/publications-and-resources/clinical-practice-guidelines/menopausal-guidelines
182	R	**Exogenous testosterone is not recommended as a treatment to improve sexual function in women with a personal history of breast cancer as the efficacy and long-term safety after breast cancer has not been established.**	This recommendation was adopted from the CA 2016 guidelines (Australia). The source recommendation was based on a systematic review of the evidence conducted in January 2014 and was graded 'C' (using NHMRC methods) by the source guideline authors. The source recommendation was accepted with no changes.	
183	R	**Patients of childbearing age who experience infertility after treatment for breast cancer should be referred to a specialist in reproductive endocrinology and infertility as soon as possible.**	This recommendation was adapted from the ASCO 2016 guidelines (US). The source recommendation was based on a systematic review of the evidence conducted in April 2015 and was not graded by the source guideline authors. The source recommendation was adapted to make it clearer that the recommendation is for patients intending to become pregnant after breast cancer treatment.	
4.12	**Fatigue and sleep disorders**			
184	R	**Assess all patients with breast cancer for fatigue and advise patients on the importance of good sleep hygiene practices**	This recommendation was adapted from the ASCO 2016 guidelines (US). The source recommendation was based on a systematic review of the evidence conducted in April 2015 and was not graded by the source guideline authors. The source recommendation was adapted by removal of reference to 'primary care clinicians', as all health professionals involved in the care of a patient could take responsibility for this aspect of care.	Pan-Canadian Practice Guideline: Prevention, Screening, Assessment and Treatment of Sleep Disturbances in Adults with Cancer: https://www.cancercareontario.ca/en/content/pan-canadian-practice-guideline-prevention-screening-assessment-and-treatment-sleep-disturbances-adults-cancer

No.	R or PP[2]	Guidance	How this guidance was developed	Links
185	R	**Offer therapy or referral, as appropriate, for factors that may impact on or cause fatigue (e.g. depression, sleep disturbance, pain, anaemia, thyroid or cardiac dysfunction). For those patients who do not have an otherwise identifiable cause of fatigue, offer referral to appropriate assessment and treatment services (such as a psychologist).**	This recommendation was adapted from the ASCO 2016 guidelines (US). The source recommendation was based on a systematic review of the evidence conducted in April 2015 and was not graded by the source guideline authors. The source recommendation was adapted by adding reference to referral to appropriate assessment and treatment services.	Chronic Disease Management Patient (GP Management plan): https://www1.health.gov.au/internet/main/publishing.nsf/Content/mbsprimarycare-chronicdisease-pdf-infosheet
186	PP	**In patients with breast cancer who are experiencing fatigue, encourage physical activity as exercise counteracts the adverse effects of cancer and its treatment**	This practice point was developed using an expert consensus process. The practice point was informed by the COSA Position Statement on exercise in cancer care (2017).	Brief Fatigue inventory: https://www.mdanderson.org/content/dam/mdanderson/documents/Departments-and-Divisions/Symptom-Research/BFI_English_SAMPLE.pdf Exercise & Sports Science Australia (ESSA) eBook on Exercise and Cancer: https://exerciseright.com.au/wp-content/uploads/2019/10/Cancer-eBook_2019_FINAL2510.pdf COSA exercise in cancer care Position Statement: https://www.cosa.org.au/media/332583/cosa-position-statement-oct2019-web-final.pdf
4.13	**Pain**			
187	PP	**Assess for pain and contributing factors with the use of a simple pain scale and comprehensive history of the patient's condition. Be aware of the importance of assessing ongoing and persistent or new pain, and consider the possibility of local recurrence.**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	Brief Pain Inventory (BPI) scale (MD Anderson Cancer Centre): https://www.mdanderson.org/research/departments-labs-institutes/departments-divisions/symptom-research/symptom-assessment-tools/brief-pain-inventory.html

No.	R or PP[2]	Guidance	How this guidance was developed	Links
188	R	**Where treatment-related pain is present, offer interventions such as paracetamol and non-steroidal anti-inflammatory drugs. Consider referral to a specialist practitioner (e.g. lymphoedema therapist, occupational therapist, or pain specialist) as appropriate, depending on the underlying cause of the pain. A GP Management Plan can help access appropriate assessment and management services.**	This recommendation was adapted from the ASCO 2016 guidelines (US). Four source recommendations were merged and adapted by using language applicable to the Australian healthcare context. All four source recommendations were based on a systematic review conducted in April 2015 and were not graded by the source guideline authors.	Chronic Disease Management Patient (GP Management plan): https://www1.health.gov.au/internet/main/publishing.nsf/Content/mbsprimarycare-chronicdisease-pdf-infosheet
189	R	**Assess for peripheral neuropathy in relation to chemotherapy by asking the patient about their symptoms, specifically symmetrical numbness and tingling in their hands and/or feet, and the characteristics of the symptoms. Physical activity and/or duloxetine may be helpful in the treatment of painful peripheral neuropathic pain, numbness, and tingling. Be aware that asymmetrical numbness of the hands may be due to carpal tunnel syndrome, which is more common in women with breast cancer on endocrine therapy and will require different management.**	This recommendation was adapted from the ASCO 2016 guidelines (US). Two source recommendations were merged, and language was used that is applicable to the Australian healthcare context, including making the action- specific, rather than clinician-specific. Both source recommendations were based on a systematic review conducted in April 2015 and were not graded by the source guideline authors. The source recommendations were adapted by adding specificity regarding the importance of differentiating between peripheral neuropathy and carpal tunnel syndrome.	
4.14		**Fear of recurrence**		
190	PP	**Ask patients if they're worried about the cancer recurring. Assess whether these worries are significantly impacting their life and if so, offer referral to a psychologist**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using a consensus process.	Fear of cancer recurrence in adult cancer survivors: https://canceraustralia.gov.au/publications-and-resources/clinical-practice-guidelines/recommendations-identification-and-management-fear-cancer-recurrence-adult-cancer-survivors

No.	R or PP[2]	Guidance	How this guidance was developed	Links
4.15	**Return to work**			
191	PP	**Be aware that return to work is often a challenge after breast cancer treatment and that extra health professional support may be needed (e.g. psychological services).**	No evidence-based source recommendation was identified for this topic, which was considered an important aspect of care. This practice point was developed using an expert consensus process.	Work and breast cancer (Breast Cancer Network Australia-BCNA): https://www.bcna.org.au/work-and-breast-cancer/ GP Management plan (The Department of Health): https://www1.health.gov.au/internet/main/publishing.nsf/Content/mbsprimarycare-chronicdisease-pdf-infosheet