

European Commission Initiative on Breast Cancer

European guidelines on breast cancer screening and diagnosis

Recommendations retrieved: 79 - Printed on: 10/05/2024

TABLE OF CONTENTS

Breast cancer screening

1. Organising screening programmes
2. Screening ages and frequencies
3. Use of artificial intelligence
4. Use of tomosynthesis
5. Women with high breast density
6. Inviting women to screening programmes

Breast cancer diagnosis

7. Informing women about their results
8. Further assessment after the mammogram
9. Staging
10. Planning surgical treatment
11. Towards the treatment of invasive breast cancer

Note

The recommendations included hereafter in this overview from the European Guidelines on Breast Cancer Screening and Diagnosis should be read together with the considerations made by the ECIBC's Guidelines Development Group and the supporting technical documentation accessible at the JRC Healthcare Quality website.

<https://healthcare-quality.jrc.ec.europa.eu/ecibc/european-breast-cancer-guidelines>

Breast cancer screening

1. Organising screening programmes

1.1. Should an organised mammography screening programme vs. an opportunistic or non-organised mammography screening programme be used for early detection of breast cancer in asymptomatic women?

The ECIBC's Guidelines Development Group (GDG) recommends using an organised mammography screening programme for early detection of breast cancer in asymptomatic women.

Strong recommendation, Moderate certainty of the evidence

1.2. Should double reading (with consensus or arbitration for discordant readings) vs. single reading be used to screen mammograms for early detection of breast cancer in organised population-based screening programmes?

The ECIBC's Guidelines Development Group (GDG) suggests using double reading (with consensus or arbitration for discordant readings) over single reading to screen mammograms for early detection of breast cancer in organised population-based screening programmes.

Conditional recommendation, Moderate certainty of the evidence

1.3. Should communication skills training vs. no communication skills training be used for healthcare professionals working with women who undergo screening mammography?

The ECIBC's Guideline Development Group (GDG) suggests communication skills training for healthcare professionals working with women who undergo mammography screening, in the context of an organised population-based screening programme.

Conditional recommendation, Very low certainty of the evidence

1.4. What are the most effective methods for maintaining clear lines of communication between all care providers involved in breast cancer screening?

Breast cancer screening programmes should maintain clear lines of communication with all care providers (ungraded good practice statement).

,

1.5. Should professionals (radiologists, radiographers-readers, nurses and pathologists) with training or professionals without training provide care to women participating in breast cancer screening programmes?

Only professionals with specialised training in the area they practice should provide care to women participating in breast cancer screening programmes, breast cancer diagnostic services or screening assessment services (ungraded good practice statement).

,

1.6. Should an optimal number of readings vs. no specific number be used for allowing mammography readers to work in mammography screening programmes?

The ECIBC's Guidelines Development Group (GDG) suggests that mammography readers read between 3 500 and 11 000 mammograms annually in organised population-based screening programmes.

Conditional recommendation, Very low certainty of the evidence

Breast cancer screening

2. Screening ages and frequencies

2.1. Should organised mammography screening vs. no mammography screening be used for early detection of breast cancer in women aged 40 to 44?

For asymptomatic women aged 40 to 44 with an average risk of breast cancer, the ECIBC's Guidelines Development Group (GDG) suggests not implementing mammography screening.

Conditional recommendation, Moderate certainty of the evidence

2.2. Should organised mammography screening vs. no mammography screening be used for early detection of breast cancer in women aged 45 to 49?

For asymptomatic women aged 45 to 49 with an average risk of breast cancer, the ECIBC's Guidelines Development Group (GDG) suggests mammography screening over no mammography screening, in the context of an organised population-based screening programme.

Conditional recommendation, Moderate certainty of the evidence

2.3. Should organised mammography screening vs. no mammography screening be used for early detection of breast cancer in women aged 50 to 69?

For asymptomatic women aged 50 to 69 with an average risk of breast cancer, the ECIBC's Guidelines Development Group (GDG) recommends mammography screening over no mammography screening, in the context of an organised population-based screening programme.

Strong recommendation, Moderate certainty of the evidence

2.4. Should organised mammography screening vs. no mammography screening be used for early detection of breast cancer in women aged 70 to 74?

For asymptomatic women aged 70 to 74 with an average risk of breast cancer, the ECIBC's Guidelines Development Group (GDG) suggests mammography screening over no mammography screening, in the context of an organised population-based screening programme

Conditional recommendation, Moderate certainty of the evidence

2.5. Should annual mammography screening vs. biennial mammography screening be used for early detection of breast cancer in women aged 45 to 49?

For asymptomatic women aged 45 to 49 with an average risk of breast cancer, the ECIBC's Guidelines Development Group (GDG) suggests not implementing annual mammography screening in the context of an organised population-based screening programme

Conditional recommendation, Very low certainty of the evidence

2.6. Should annual mammography screening vs. biennial mammography screening be used for early detection of breast cancer in women aged 50 to 69?

For asymptomatic women aged 50 to 69 with an average risk of breast cancer, the ECIBC's Guidelines Development Group (GDG) recommends not implementing annual mammography, in the context of an organised population-based screening programme.

Strong recommendation, Very low certainty of the evidence

2.7. Should annual mammography screening vs. biennial mammography screening be used for early detection of breast cancer in women aged 70 to 74?

For asymptomatic women aged 70 to 74 with an average risk of breast cancer, the ECIBC's Guidelines Development Group (GDG) recommends not implementing annual mammography screening, in the context of an organised population-based screening programme

Strong recommendation, Very low certainty of the evidence

2.8. Should annual mammography screening vs. triennial mammography screening be used for early detection of breast cancer in women aged 45 to 49?

For asymptomatic women aged 45 to 49 with an average risk of breast cancer, the ECIBC's Guidelines Development Group (GDG) suggests not implementing annual mammography screening in the context of an organised population-based screening programme

Conditional recommendation, Very low certainty of the evidence

2.9. Should annual mammography screening vs. triennial mammography screening be used for early detection of breast cancer in women aged 50 to 69?

For asymptomatic women aged 50 to 69 with an average risk of breast cancer, the ECIBC's Guidelines Development Group (GDG) recommends not implementing annual mammography, in the context of an organised population-based screening programme

Strong recommendation, Very low certainty of the evidence

2.10. Should annual mammography screening vs. triennial mammography screening be used for early detection of breast cancer in women aged 70 to 74?

For asymptomatic women aged 70 to 74 with an average risk of breast cancer, the ECIBC's Guidelines Development Group (GDG) recommends not implementing annual mammography screening, in the context of an organised population-based screening programme

Strong recommendation, Very low certainty of the evidence

2.11. Should triennial mammography screening vs. biennial mammography screening be used for early detection of breast cancer in women aged 45 to 49?

For asymptomatic women aged 45 to 49 with an average risk of breast cancer, the ECIBC's Guidelines Development Group (GDG) suggests either triennial or biennial mammography screening in the context of an organised population-based screening programme

Conditional recommendation, Very low certainty of the evidence

2.12. Should triennial mammography screening vs. biennial mammography screening be used for early detection of breast cancer in women aged 50 to 69?

For asymptomatic women aged 50 to 69 with an average risk of breast cancer, the ECIBC's Guidelines Development Group (GDG) suggests biennial mammography screening over triennial mammography screening, in the context of an organised population-based screening programme

Conditional recommendation, Very low certainty of the evidence

2.13. Should triennial mammography screening vs. biennial mammography screening be used for early detection of breast cancer in women aged 70 to 74?

For asymptomatic women aged 70 to 74 with an average risk of breast cancer, the ECIBC's Guidelines Development Group (GDG) suggests triennial mammography screening over biennial mammography screening, in the context of an organised population-based screening programme

Conditional recommendation, Very low certainty of the evidence

Breast cancer screening

3. Use of artificial intelligence

3.1. Should single reading supported by artificial intelligence vs. double reading without artificial intelligence support be used to read mammograms using digital mammography (2DFFDM) or digital breast tomosynthesis for early detection of breast cancer in mammography screening programmes?

The ECIBC's Guidelines Development Group (GDG) suggests to not use single reading supported by artificial intelligence (AI) to read mammograms from digital mammography (2DFFDM) or digital breast tomosynthesis for early detection of breast cancer in organised population-based screening programmes.

Conditional recommendation, Very low certainty of the evidence

3.2. Should double reading with support by artificial intelligence vs. double reading without support by artificial intelligence be used to read mammograms using digital mammography (2DFFDM) or digital breast tomosynthesis for early detection of breast cancer in mammography screening programmes?

The ECIBC's Guidelines Development Group (GDG) suggests to use double reading (with consensus or arbitration for discordant readings) supported by artificial intelligence (AI) over double reading (with consensus or arbitration for discordant readings) without AI support to read mammograms from digital mammography (2DFFDM) or digital breast tomosynthesis for early detection of breast cancer in organised population-based screening programmes.

Conditional recommendation, Very low certainty of the evidence

Breast cancer screening

4. Use of tomosynthesis

4.1. Should screening using digital breast tomosynthesis vs. digital mammography be used in organised screening programmes for early detection of breast cancer in asymptomatic women?

For asymptomatic women with an average risk of breast cancer, the ECIBC's Guidelines Development Group (GDG) suggests using digital breast tomosynthesis (DBT) over digital mammography (DM) in the context of an organised population-based screening programme.

Conditional recommendation, Very low certainty of the evidence

4.2. Should screening using digital breast tomosynthesis in addition to digital mammography vs. digital mammography alone be used in organised screening programmes for early detection of breast cancer in asymptomatic women?

For asymptomatic women with an average risk of breast cancer, the ECIBC's Guidelines Development Group (GDG) suggests not using both digital breast tomosynthesis (DBT) and digital mammography (DM) in the context of an organised population-based screening programme.

Conditional recommendation, Very low certainty of the evidence

Breast cancer screening

5. Women with high breast density

5.1. Should tailored screening with additional digital breast tomosynthesis vs. no additional digital breast tomosynthesis be used in organised screening programmes for early detection of breast cancer in asymptomatic women with high mammographic breast density detected for the first time with digital mammography in screening?

For asymptomatic women with high mammographic breast density detected for the first time with digital mammography (DM), the ECIBC's Guidelines Development Group (GDG) suggests implementing tailored screening with additional digital breast tomosynthesis (DBT) in the context of an organised population-based screening programme.

Conditional recommendation, Very low certainty of the evidence

5.2. Should tailored screening with magnetic resonance imaging, in addition to digital mammography, vs. digital mammography alone be used for early detection of breast cancer in asymptomatic women with high mammographic breast density in organised population-based screening programmes?

For asymptomatic women, with high mammographic breast density and a negative mammography, in the context of an organised population-based screening programme, the ECIBC's Guidelines Development Group (GDG) suggests not implementing tailored screening with magnetic resonance imaging (MRI).

Conditional recommendation, Very low certainty of the evidence

5.3. Should tailored screening with automated breast ultrasound system based on high mammographic breast density, in addition to mammography, vs. mammography alone be used for early detection of breast cancer in asymptomatic women?

For asymptomatic women, with high mammographic breast density and negative mammography, in the context of an organised population-based screening programme, the ECIBC's Guidelines Development Group (GDG) suggests not implementing tailored screening with automated breast ultrasound system (ABUS).

Conditional recommendation, Very low certainty of the evidence

5.4. Should digital breast tomosynthesis vs. digital mammography be used in organised screening

programmes for early detection of breast cancer in asymptomatic women with high mammographic breast density detected in a previous screening exam?

For asymptomatic women with high mammographic breast density detected in a previous screening exam, the ECIBC's Guidelines Development Group (GDG) suggests using digital breast tomosynthesis (DBT) over digital mammography (DM) in the context of an organised population-based screening programme.

Conditional recommendation, Low certainty of the evidence

5.5. Should tailored screening with hand-held ultrasound based on high mammographic breast density, in addition to mammography, vs. mammography alone be used for early detection of breast cancer in asymptomatic women?

For asymptomatic women, with high mammographic breast density and a negative mammography, in the context of an organised population-based screening programme, the ECIBC's Guidelines Development Group (GDG) suggests not implementing tailored screening with hand-held ultrasound (HHUS), where such is not already the practice.

Conditional recommendation, Low certainty of the evidence

Breast cancer screening

6. Inviting women to screening programmes

6.1. Should a decision aid that explains the benefits and harms of screening vs. an invitation letter be used for informing women about the benefits and harms of participating in an organised population-based breast cancer screening programme?

The ECIBC's Guidelines Development Group (GDG) suggests using a decision aid that explains the benefits and harms of screening over an invitation letter for informing women about the benefits and harms of participating in an organised population-based breast cancer screening programme.

Conditional recommendation, Low certainty of the evidence

6.2. Should a targeted communication strategy vs. a general communication strategy be used for socially disadvantaged women?

The ECIBC's Guidelines Development Group (GDG) suggests using a targeted communication strategy over a general communication strategy to improve participation in organised population-based breast cancer screening programmes of socially disadvantaged women between the ages of 50 and 69.

Conditional recommendation, Low certainty of the evidence

6.3. Should a letter with a fixed appointment vs. a letter alone be used for inviting asymptomatic women to organised population-based breast cancer screening programmes?

The ECIBC's Guidelines Development Group (GDG) suggests using a letter with a fixed appointment time over a letter alone to invite asymptomatic women between the ages of 50 to 69 with an average risk of breast cancer (in whom screening is strongly recommended) to attend organised population-based breast cancer screening programmes.

Conditional recommendation, Moderate certainty of the evidence

6.4. Should a letter with a General Practitioner's (GP) signature vs. a letter alone be used for inviting asymptomatic women to organised population-based breast cancer screening programmes?

The ECIBC's Guidelines Development Group (GDG) suggests using a letter with a General Practitioner's (GP) signature over a letter alone to invite asymptomatic women between the ages of 50 to 69 with an average risk of breast cancer (in whom screening is strongly recommended) to attend organised

population-based breast cancer screening programmes.

Conditional recommendation, High certainty of the evidence

6.5. Should a letter followed by a phone call to remind vs. a letter alone be used for inviting asymptomatic women to organised population-based breast cancer screening programmes?

The ECIBC's Guidelines Development Group (GDG) suggests using a letter followed by a phone reminder over a letter alone to invite asymptomatic women between the ages of 50 to 69 with an average risk of breast cancer (in whom screening is strongly recommended) to attend organised population-based breast cancer screening programmes.

Conditional recommendation, Moderate certainty of the evidence

6.6. Should a letter followed by a written reminder vs. a letter alone be used for inviting asymptomatic women to organised population-based breast cancer screening programmes?

The ECIBC's Guidelines Development Group (GDG) suggests using a letter followed by a written reminder over a letter alone to invite asymptomatic women between the ages of 50 to 69 with an average risk of breast cancer (in whom screening is strongly recommended) to attend organised population-based breast cancer screening programmes.

Conditional recommendation, Moderate certainty of the evidence

6.7. Should a letter followed by a face to face intervention vs. a letter alone be used for inviting asymptomatic women to organised population-based breast cancer screening programmes?

The ECIBC's Guidelines Development Group (GDG) suggests not using a letter accompanied by a face to face intervention for inviting asymptomatic women between the ages of 50 to 69 with an average risk of breast cancer (in whom screening is strongly recommended) to attend organised population-based breast cancer screening programmes.

Conditional recommendation, Low certainty of the evidence

6.8. Should numbers in addition to plain language vs. plain language alone be used for informing women about the benefits and harms of participating in an organised population-based breast cancer screening programme?

The ECIBC's Guidelines Development Group (GDG) recommends using numbers in addition to plain language over plain language alone for informing women about the benefits and harms of

participating in an organised population-based breast cancer screening programme.

Strong recommendation, Moderate certainty of the evidence

6.9. Should a tailored communication strategy vs. a general communication strategy be used for socially disadvantaged women?

The ECIBC's Guidelines Development Group (GDG) suggests not using a tailored communication strategy to improve participation in organised population-based breast cancer screening programmes of socially disadvantaged women between the ages of 50 and 69.

Conditional recommendation, Moderate certainty of the evidence

6.10. Should a letter with a fixed appointment vs. a letter alone be used for inviting women to subsequent breast cancer screening rounds?

The ECIBC's Guidelines Development Group (GDG) suggests using a letter with a fixed appointment over a letter alone for inviting women to subsequent breast cancer screening rounds.

Conditional recommendation, Moderate certainty of the evidence

6.11. Should a letter with a General Practitioner's signature vs. a letter alone be used for inviting women to subsequent breast cancer screening rounds?

The ECIBC's Guidelines Development Group (GDG) suggests using a letter with a General Practitioner's (GP) signature over a letter alone for inviting women to subsequent breast cancer screening rounds.

Conditional recommendation, High certainty of the evidence

6.12. Should a letter followed by a phone call to remind vs. a letter alone be used for inviting women to subsequent breast cancer screening rounds?

The ECIBC's Guidelines Development Group (GDG) suggests using a letter followed by a phone call to remind over a letter alone for inviting women to subsequent breast cancer screening rounds.

Conditional recommendation, Moderate certainty of the evidence

6.13. Should a letter followed by a written reminder vs. a letter alone be used for inviting women to

subsequent breast cancer screening rounds?

The ECIBC's Guidelines Development Group (GDG) suggests using a letter followed by a written reminder over a letter alone for inviting women to subsequent breast cancer screening rounds.

Conditional recommendation, Moderate certainty of the evidence

6.14. Should a letter followed by a face to face intervention vs. a letter alone be used for inviting women to subsequent breast cancer screening rounds?

The ECIBC's Guidelines Development Group (GDG) suggests not using a letter followed by a face to face intervention for inviting women to subsequent breast cancer screening rounds.

Conditional recommendation, Low certainty of the evidence

6.15. Should infographics vs. plain language with or without numbers be used for informing women about the benefits and harms of participating in an organised population-based breast cancer screening programme?

The ECIBC's Guidelines Development Group (GDG) suggests using infographics in addition to plain language with numbers over plain language with numbers alone for informing women about the benefits and harms of participating in an organised population-based breast cancer screening programme.

Conditional recommendation, Low certainty of the evidence

6.16. Should a tailored communication strategy vs. a targeted communication strategy be used for socially disadvantaged women?

The ECIBC's Guidelines Development Group (GDG) suggests using tailored or targeted communication strategies to improve participation in organised population-based breast cancer screening programmes of socially disadvantaged women between the ages of 50 and 69.

Conditional recommendation, Very low certainty of the evidence

6.17. Should a targeted communication strategy vs. a general communication strategy be used for women with intellectual disability?

The ECIBC's Guidelines Development Group (GDG) suggests using a targeted communication strategy over a general communication strategy to improve participation in organised population-based breast

cancer screening programmes of women with intellectual disability between the ages of 50 and 69.

Conditional recommendation, Low certainty of the evidence

6.18. Should story telling vs. plain language with or without numbers be used for informing women about the benefits and harms of participating in an organised population-based breast cancer screening programme?

The ECIBC's Guidelines Development Group (GDG) suggests not using story telling in addition to plain language with numbers for informing women about the benefits and harms of participating in an organised population-based breast cancer screening programme.

Conditional recommendation, Very low certainty of the evidence

6.19. Should a targeted communication strategy vs. a general communication strategy be used for non-native speakers?

The ECIBC's Guidelines Development Group (GDG) suggests using a targeted communication strategy over a general communication strategy to improve participation in organised population-based breast cancer screening programmes of non-native speaking women between the ages of 50 and 69.

Conditional recommendation, Low certainty of the evidence

6.20. Should a letter followed by a phone call to remind vs. no invitation to organised screening be used for inviting asymptomatic women to organised population-based breast cancer screening programmes?

The ECIBC's Guidelines Development Group (GDG) suggests using a letter followed by a phone call to remind over no letter to invite asymptomatic women between the ages of 50 to 69 with an average risk of breast cancer (in whom screening is strongly recommended) to attend organised population-based breast cancer screening programmes.

Conditional recommendation, Moderate certainty of the evidence

6.21. Should an email vs. a letter be used for inviting asymptomatic women to organised population-based breast cancer screening programmes?

The ECIBC's Guidelines Development Group (GDG) suggests using either an email or a letter for inviting asymptomatic women between the ages of 50-69 (in whom screening is strongly recommended) to attend organised population-based breast cancer screening programmes.

Conditional recommendation, Low certainty of the evidence

6.22. Should an automated telephone call vs. a letter be used for inviting asymptomatic women to organised population-based breast cancer screening programmes?

The ECIBC's Guidelines Development Group (GDG) suggests using either an automated telephone call or a letter for inviting asymptomatic women between the ages of 50-69 (in whom screening is strongly recommended) to attend organised population-based breast cancer screening programmes.

Conditional recommendation, Moderate certainty of the evidence

6.23. Should a letter followed by an automated telephone call vs. a letter alone be used for inviting asymptomatic women to organised population-based breast cancer screening programmes?

The ECIBC's Guidelines Development Group (GDG) suggests using a letter followed by an automated telephone call over a letter alone for inviting asymptomatic women between the ages of 50-69 (in whom screening is strongly recommended) to attend organised population-based breast cancer screening programmes.

Conditional recommendation, Very low certainty of the evidence

6.24. Should a letter followed by a SMS notification vs. a letter alone be used for inviting asymptomatic women to organised population-based breast cancer screening programmes?

The ECIBC's Guidelines Development Group (GDG) suggests using a letter followed by a SMS notification over a letter alone for inviting asymptomatic women between the ages of 50-69 (in whom screening is strongly recommended) to attend organised population-based breast cancer screening programmes.

Conditional recommendation, High certainty of the evidence

6.25. Should a letter followed by a personalised telephone call vs. an automated telephone call be used for inviting asymptomatic women to organised population-based breast cancer screening programmes?

The ECIBC's Guidelines Development Group (GDG) suggests not using a letter followed by a personalised telephone call for inviting asymptomatic women between the ages of 50-69 (in whom screening is strongly recommended) to attend organised population-based breast cancer screening programmes.

Conditional recommendation, Very low certainty of the evidence

6.26. Should a letter vs. no invitation to organised screening be used for inviting asymptomatic women to organised population-based breast cancer screening programmes?

The ECIBC's Guidelines Development Group (GDG) recommends using a letter for inviting asymptomatic women between the ages of 50 to 69 with an average risk of breast cancer (in whom screening is strongly recommended) to attend organised population-based breast cancer screening programmes.

Strong recommendation, Moderate certainty of the evidence

6.27. Should a letter vs. no invitation be used for inviting women to subsequent breast cancer screening rounds?

The ECIBC's Guidelines Development Group (GDG) recommends using a letter for inviting women to subsequent breast cancer screening rounds.

Strong recommendation, Moderate certainty of the evidence

Breast cancer diagnosis

7. Informing women about their results

7.1. Should a letter vs. nothing be used for informing women who have a negative screening result?

The ECIBC's Guidelines Development Group (GDG) suggests using a letter for informing women who have a negative screening result.

Conditional recommendation, Very low certainty of the evidence

7.2. Should a phone call vs. a letter be used for informing women who have a negative screening result?

The ECIBC's Guidelines Development Group (GDG) suggests not using a phone call for informing women who have a negative screening result.

Conditional recommendation, Very low certainty of the evidence

7.3. Should a letter followed by a phone call to remind vs. a letter alone be used for inviting women for further diagnostic assessment?

The ECIBC's Guidelines Development Group (GDG) suggests using a letter followed by a phone call over a letter alone for inviting women for further diagnostic assessment, in the context of an organised population-based screening programme.

Conditional recommendation, Low certainty of the evidence

7.4. What is the best timing to invite women for further assessment?

Women with a positive mammography screening result should be informed about their test result in a timely and sensitive manner and scheduled for further assessment as soon as possible (ungraded good practice statement).

,

7.5. Should a face to face interview vs. a letter be used for informing women who have a negative screening result?

The ECIBC's Guidelines Development Group (GDG) suggests not using a face to face interview for informing women who have a negative screening result.

Conditional recommendation, Very low certainty of the evidence

7.6. What is the best timing to inform women who have a negative result?

Women with a negative mammography screening result should be informed about their test result as soon as possible but not beyond 30 days after the mammogram (ungraded good practice statement).

,

Breast cancer diagnosis

8. Further assessment after the mammogram

8.1. Should digital breast tomosynthesis vs. assessment mammography be used to diagnose breast cancer in recalled women due to suspicious lesions at mammography screening?

The ECIBC's Guidelines Development Group (GDG) suggests using digital breast tomosynthesis (DBT) over diagnostic mammography projections in women at average risk for breast cancer recalled for suspicious lesions at mammography screening.

Conditional recommendation, Moderate certainty of the test accuracy evidence

8.2. Should needle core biopsy vs. fine needle aspiration cytology be used to diagnose breast cancer in women with suspicious breast lesions in mammography?

In individuals with suspicious breast lesions (including mass lesions, asymmetric breast density, calcifications and/or architectural distortions) in mammography, the ECIBC's Guidelines Development Group (GDG) recommends needle core biopsy (NCB) over fine needle aspiration cytology (FNAC) to diagnose breast cancer.

Strong recommendation, Moderate certainty of the evidence

8.3. Should stereotactic-guided needle core biopsy or stereotactic-guided vacuum assisted needle core biopsy vs. ultrasound-guided needle core biopsy or ultrasound-guided vacuum assisted needle core biopsy be used to diagnose the presence of breast cancer in individuals presenting with breast calcifications?

In individuals presenting with breast calcifications, the ECIBC's Guidelines Development Group (GDG) recommends the use of stereotactic-guided needle core biopsy over ultrasound-guided needle core biopsy to diagnose the presence of breast cancer.

Strong recommendation, Low certainty of the evidence

Breast cancer diagnosis

9. Staging

9.1. Should conventional staging exams vs. no staging exams be used for patients with clinical stage I breast cancer without symptoms suggestive of metastases?

The ECIBC's Guidelines Development Group (GDG) suggests not using conventional staging exams with imaging in women with clinical stage I breast cancer.

Conditional recommendation, Low certainty of the evidence

9.2. Should conventional staging exams vs. no staging exams be used for patients with clinical stage II breast cancer without symptoms suggestive of metastases?

The ECIBC's Guidelines Development Group (GDG) suggests not using conventional staging exams with imaging in women with clinical stage IIa or IIb breast cancer.

Conditional recommendation, Low certainty of the evidence

9.3. Should conventional staging exams vs. no staging exams be used for patients with clinical stage III breast cancer without symptoms suggestive of metastases?

The ECIBC's Guidelines Development Group (GDG) recommends using conventional staging exams with imaging in women with clinical stage III breast cancer.

Strong recommendation, Moderate certainty of the evidence

9.4. Should fluorodeoxyglucose positron emission tomography-computed tomography (18F-FDG PET-CT) staging exams vs. no PET staging exams be used for patients with clinical stage I breast cancer without symptoms suggestive of metastases?

For patients with clinical stage I breast cancer without symptoms suggestive of metastases, the ECIBC's Guidelines Development Group (GDG) recommends not using positron emission tomography-computed tomography (PET-CT) staging exams.

Strong recommendation, Very low certainty of the evidence

9.5. Should fluorodeoxyglucose positron emission tomography-computed tomography (18F-FDG PET-CT) staging exams vs. no PET staging exams be used for patients with clinical stage II breast cancer without symptoms suggestive of metastases?

For patients with clinical stage IIa breast cancer without symptoms suggestive of metastases, the ECIBC's Guidelines Development Group (GDG) suggests not using positron emission tomography-computed tomography (PET-CT) staging exams. For patients with clinical stage IIb breast cancer without symptoms suggestive of metastases, the ECIBC's Guidelines Development Group (GDG) suggests not using positron emission tomography-computed tomography (PET-CT) staging exams.

Conditional recommendation, Very low certainty of the evidence

9.6. Should fluorodeoxyglucose positron emission tomography-computed tomography (18F-FDG PET-CT) staging exams vs. conventional staging exams be used for patients with clinical stage III breast cancer without symptoms suggestive of metastases?

For patients with clinical stage III breast cancer without symptoms suggestive of metastases, the ECIBC's Guidelines Development Group (GDG) suggests using positron emission tomography-computed tomography (PET-CT) over conventional staging exams.

Conditional recommendation, Low certainty of the evidence

9.7. Should conventional staging exams followed by fluorodeoxyglucose positron emission tomography-computed tomography (18F-FDG PET-CT) staging vs. conventional staging exams be used for patients with clinical stage III breast cancer without symptoms suggestive of metastases?

For patients with clinical stage III breast cancer without symptoms suggestive of metastases, the ECIBC's Guidelines Development Group (GDG) suggests using conventional staging followed by positron emission tomography-computed tomography (PET-CT) over conventional staging alone.

Conditional recommendation, Low certainty of the evidence

Breast cancer diagnosis

10. Planning surgical treatment

10.1. Should clip-marking vs. no clip-marking after needle core biopsy/vacuum assisted needle core biopsy be used for surgical therapy planning in patients with breast cancer lesions?

The ECIBC's Guidelines Development Group (GDG) suggests using clip-marking after needle core biopsy (NCB)/vacuum assisted needle core biopsy (VANCB) for surgical therapy planning in patients with breast cancer lesions.

Conditional recommendation, Very low certainty of the evidence

10.2. Should additional magnetic resonance imaging vs. no additional magnetic resonance imaging be used in women with histologically confirmed ductal carcinoma in situ for preoperative planning?

In women with histologically confirmed ductal carcinoma in situ (DCIS), the ECIBC's Guidelines Development Group (GDG) suggests not using additional magnetic resonance imaging (MRI) for preoperative planning.

Conditional recommendation, Very low certainty of the evidence

10.3. Should contrast-enhanced mammography vs. magnetic resonance imaging be used as additional imaging method to assist in surgical treatment planning in women with histologically confirmed invasive breast cancer?

In women with histologically confirmed invasive breast cancer, who require further evaluation, the ECIBC's Guidelines Development Group (GDG) suggests using contrast-enhanced mammography (CEM) over magnetic resonance imaging (MRI) as additional imaging method to assist in surgical treatment planning.

Conditional recommendation, Low certainty of the test accuracy evidence

Breast cancer diagnosis

11. Towards the treatment of invasive breast cancer

11.1. Should a threshold of 10% or more vs. 1% or more of cells showing oestrogen receptor positivity be used for providing endocrine therapy in women with invasive breast cancer?

In women with invasive breast cancer, the ECIBC's Guidelines Development Group (GDG) suggests administration of adjuvant endocrine therapy if 1% or greater of tumour cells show oestrogen receptor positivity rather than applying a threshold of 10% tumour cell oestrogen receptor positivity.

Conditional recommendation, Very low certainty of the evidence

11.2. Should 70 gene signature test vs. no testing be used for patients who have hormone receptor positive, HER2-negative, lymph node negative or up to 3 lymph nodes positive invasive breast cancer to guide the use of chemotherapy (subgroup: low clinical risk)?

For women with hormone receptor positive, HER2-negative, lymph node negative or up to 3 lymph nodes positive invasive breast cancer at low clinical risk, the ECIBC's Guidelines Development Group (GDG) recommends not using the 70 gene signature test to guide the use of chemotherapy.

Strong recommendation, Low certainty of the evidence

11.3. Should a threshold of 10% or more vs. 1% or more of cells showing progesterone receptor positivity be used for providing endocrine therapy in women with invasive breast cancer?

In women with invasive breast cancer, the ECIBC's Guidelines Development Group (GDG) suggests administration of adjuvant endocrine therapy if 1% or greater of tumour cells show progesterone receptor positivity rather than applying a threshold of 10% tumour cell progesterone receptor positivity.

Conditional recommendation, Very low certainty of the evidence

11.4. Should 70 gene signature test vs. no testing be used for patients who have hormone receptor positive, HER2-negative, lymph node negative or up to 3 lymph nodes positive invasive breast cancer to guide the use of chemotherapy (subgroup: high clinical risk)?

For women with hormone receptor positive, HER2-negative, lymph node negative or up to 3 lymph nodes positive invasive breast cancer at high clinical risk, the ECIBC's Guidelines Development Group

(GDG) suggests using the 70 gene signature test to guide the use of chemotherapy.

Conditional recommendation, Low certainty of the evidence

11.5. Should 21 gene recurrence score vs. no testing be used for patients who have hormone receptor positive, HER2-negative, lymph node negative or up to 3 lymph nodes positive invasive breast cancer to guide the use of chemotherapy?

For women with hormone receptor positive, HER2-negative, lymph node negative invasive breast cancer, the ECIBC's Guidelines Development Group (GDG) suggests using the 21 gene recurrence score to guide the use of chemotherapy.

Conditional recommendation, Very low certainty of the evidence