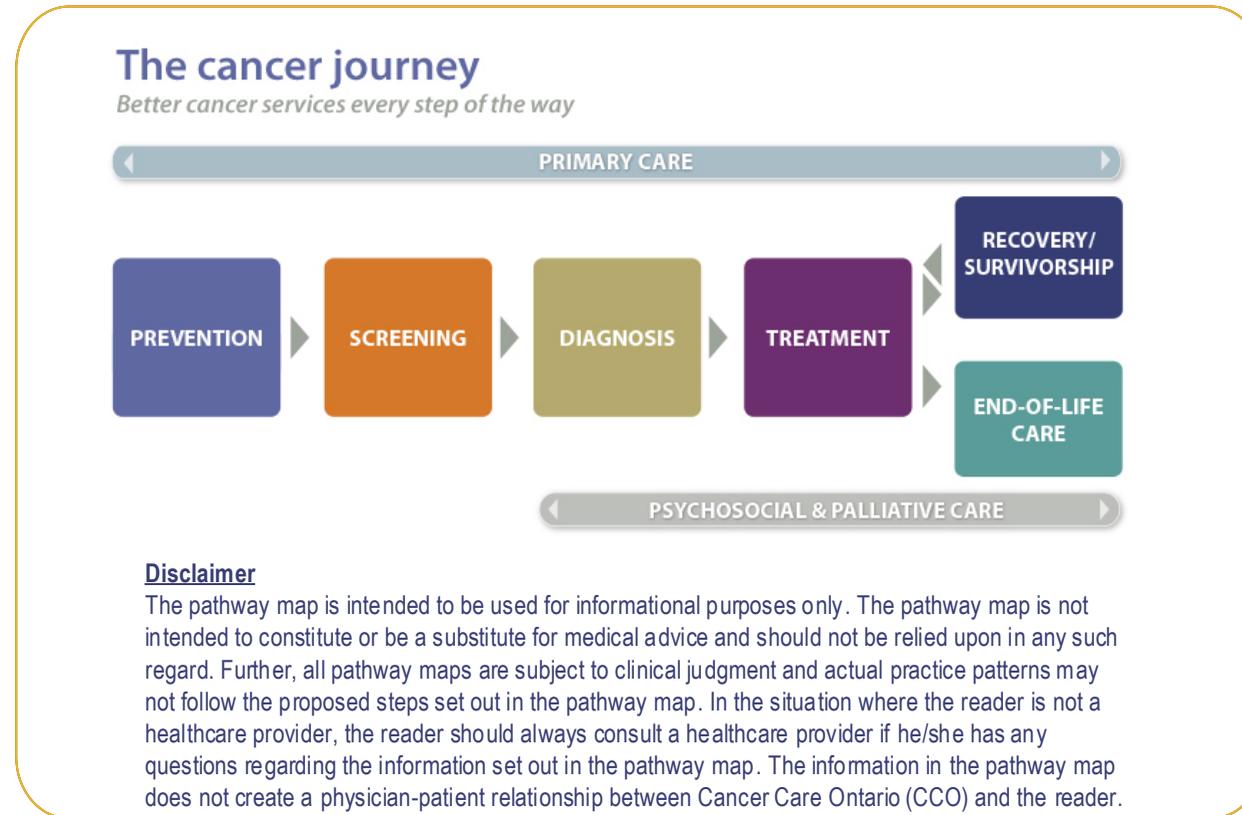


Breast Cancer Tissue Pathway Map

Version 2017.02



Pathway Map Considerations

- This pathway reflects the biomarkers that are approved as of the publishing date of this document. The pathway will be reviewed annually; upon review any newly approved biomarkers will be reflected.
- There is a need to assess if a patient has a family health care provider early on in their cancer journey. Health Care Connect is a government resource that helps patients without a family health care provider (family doctor or nurse practitioner) find one. For more information contact Health Care Connect at 1-800-445-1822 or using their webpage [Health Care Connect](#).
- The primary care provider should be informed of all relevant tests and consultations. Usual ongoing care with the primary care provider is assumed to be part of the pathway.
- The term 'health care provider', used throughout the pathway, includes primary care providers and specialists, nurse practitioners, otolaryngologists, speech language pathologists, dietitians, and emergency physicians.
- Hyperlinks are used throughout the pathway to provide information about relevant CCO tools, resources and guidance documents. These hyperlinks are denoted with **bolded underlined text**.
- Psychosocial oncology (PSO) is the interprofessional specialty concerned with understanding and treating the social, practical, psychological, emotional, spiritual and functional needs and quality-of-life impact that cancer has on patients and their families. Psychosocial care should be considered an integral and standardized part of cancer care for patients and their families at all stages of the illness trajectory. For more information, visit [EBS #19-3](#)
- Throughout the pathway, a shared decision-making model should be implemented to enable and encourage patients to play an active role in the management of their care. For more information see [Person-Centered Care Guideline](#).
- Counseling and treatment for smoking cessation should be initiated early on in the pathway and continued by care providers throughout the pathway as necessary. [Program Training & Consultation Centre – Hospital Based Resources](#)

* **Note.** [EBS #22-1](#) is older than 3 years and is currently listed as 'For Education and Information Purposes'. This means that the recommendations will no longer be maintained but may still be useful for academic or other information purposes.

Pathway Map Legend

Colour Guide

-  Primary Care
-  Supportive and End of Life Care
-  Pathology
-  Diagnostic Assessment Program (DAP)
-  Surgery
-  Radiation Oncology
-  Medical Oncology
-  Radiology
-  Multidisciplinary Cancer Conference (MCC)
-  Psychosocial Oncology (PSO)

Shape Guide

-  Intervention
-  Decision or assessment point
-  Patient (disease) characteristics
-  Consultation with specialist
-  Exit pathway map
-  Off-page reference
-  Patient/Provider Interaction
-  Referral
-  Wait time indicator time point

Line Guide

-  Required
-  Possible

Pathway Map Disclaimer

This pathway map is a resource that provides an overview of the treatment that an individual in the Ontario cancer system may receive.

The pathway map is intended to be used for informational purposes only. The pathway map is not intended to constitute or be a substitute for medical advice and should not be relied upon in any such regard. Further, all pathway maps are subject to clinical judgment and actual practice patterns may not follow the proposed steps set out in the pathway map. In the situation where the reader is not a healthcare provider, the reader should always consult a healthcare provider if he/she has any questions regarding the information set out in the pathway map. The information in the pathway map does not create a physician-patient relationship between Cancer Care Ontario (CCO) and the reader.

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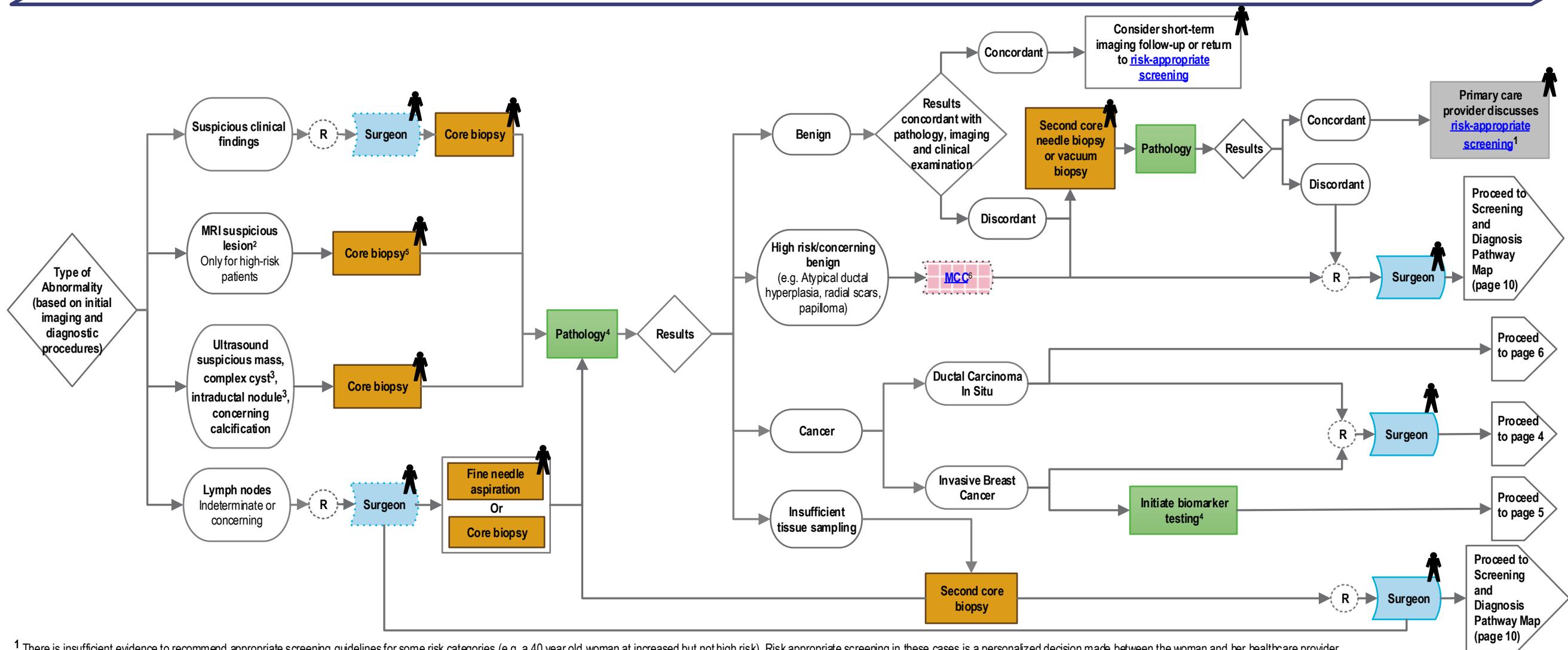
CCO and the pathway map's content providers (including the physicians who contributed to the information in the pathway map) shall have no liability, whether direct, indirect, consequential, contingent, special, or incidental, related to or arising from the information in the pathway map or its use thereof, whether based on breach of contract or tort (including negligence), and even if advised of the possibility thereof. Anyone using the information in the pathway map does so at his or her own risk, and by using such information, agrees to indemnify CCO and its content providers from any and all liability, loss, damages, costs and expenses (including legal fees and expenses) arising from such person's use of the information in the pathway map.

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Screen for psychosocial needs, and assessment and management of symptoms. [Click here for more information about symptom assessment and management tools](#)

Consider the introduction of palliative care, early and across the cancer journey [Click here for more information about palliative care](#)



¹ There is insufficient evidence to recommend appropriate screening guidelines for some risk categories (e.g. a 40 year old woman at increased but not high risk). Risk appropriate screening in these cases is a personalized decision made between the woman and her healthcare provider.

² In rare circumstances a breast MRI may be used as a problem solving tool.

³ An excisional biopsy may be considered for presumed isolated papillary lesions in the appropriate clinical context.

⁴ Biomarkers should be performed on core biopsies showing invasive cancer. For more information refer to [CCO's Position Statement](#)

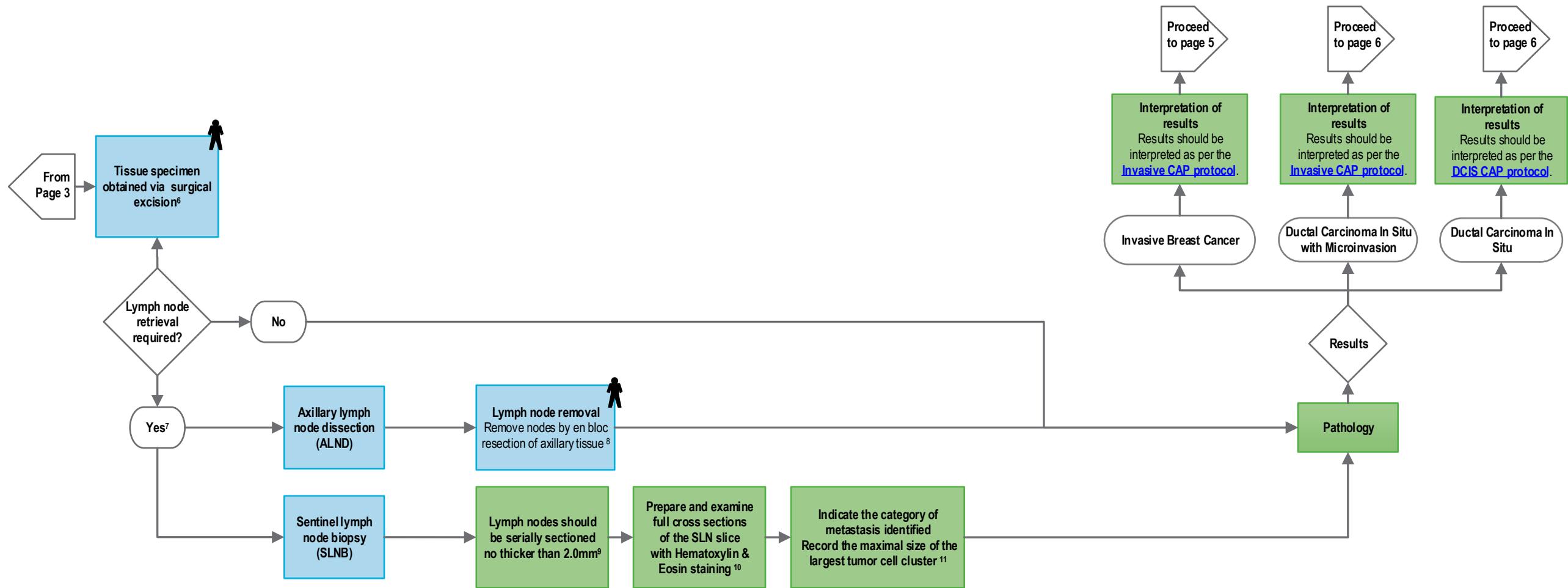
⁵ A very small, safe marker or clip may be placed at the biopsy site.

⁶ Optional: MCC may be used at this point to discuss the diagnosis and treatment of patients with high risk/concerning benign tumours.

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⁶ Where possible, surgical treatment should include Intraoperative margin assessment with specimen imaging and immediate pathologic analysis and immediate excision of any margins thought to be close or positive to avoid re-excision procedures. During surgical excision, the surgeon orients the specimen for the pathologist by placing two or three sutures in the center of the margin surfaces or by intraoperative marking of the margins with ink. The specimen must be submitted with a completed requisition or e-order entry, that includes patient and specimen identifiers, clinical history, sampling date and time for ischemic time calculations

⁷ Lymph node retrieval methods may change if there is a complete or excellent partial imaging response of the nodes and the primary breast cancer to neoadjuvant treatment. For instance initially clinically suspicious lymph nodes and needle biopsy pre-treatment, proven as metastatic shrinking to normal appearing lymph nodes, may then undergo SNLB in certain circumstances.

⁸ Nodes are divided into levels: I (low-axilla: lateral to the lateral border of the pectoralis minor muscle); II (mid-axilla: between the medial and lateral borders of the pectoralis minor muscle and the interpectoral [Rotter's] lymph nodes); and III (apical axilla or infraclavicular nodes: medial to the medial margin of the pectoralis minor muscle and inferior to the clavicle). A surgeon may choose to remove 1 or more of these levels. Levels I and II are typically removed in the axillary dissection, with level III nodes only removed if considered suspicious by the surgeon intraoperatively.

⁹ This is recommended to minimize the possibility of missing a 2 mm subcapsular metastasis, by maximizing the number of cuts across the capsule. See [CAP Protocol](#)

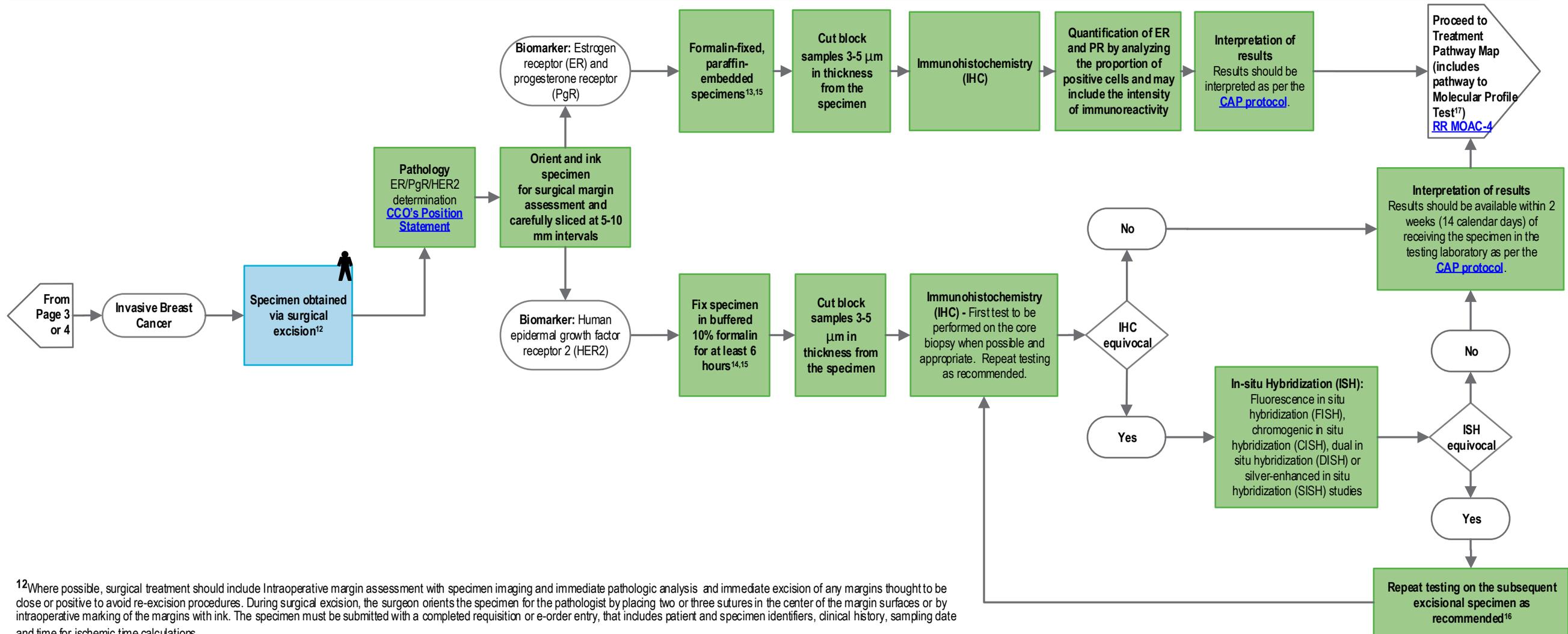
¹⁰ Additional micrometastases are more likely to be detected with step sections at 200- to 500-µm intervals than with superficial serial sections alone.

¹¹ Reporting should be consistent with the current American Joint Commission on Cancer (AJCC) manual and should include an indication of the size of the metastatic deposits in sentinel nodes.

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¹²Where possible, surgical treatment should include Intraoperative margin assessment with specimen imaging and immediate pathologic analysis and immediate excision of any margins thought to be close or positive to avoid re-excision procedures. During surgical excision, the surgeon orients the specimen for the pathologist by placing two or three sutures in the center of the margin surfaces or by intraoperative marking of the margins with ink. The specimen must be submitted with a completed requisition or e-order entry, that includes patient and specimen identifiers, clinical history, sampling date and time for ischemic time calculations

¹³Specimen should be rejected and testing repeated on a separate sample if any of the following conditions exist: (1) external controls are not as expected (scores recorded daily show variation), (2) artifacts involve most of sample.

¹⁴Specimens should be rejected and testing repeated on a separate sample if any of the following conditions exist: (1) inadequate specimen handling, (2) artifacts (crush or edge artifacts) that make interpretation difficult, (3) analytic testing failure

¹⁵The time of tissue collection, which is the time that the tissue is handed off and the time the tissue is placed in fixative should be recorded in order to document the time to fixation of the specimen. ¹⁵ The time from tumor removal to fixation should be kept to ≤1 hour.

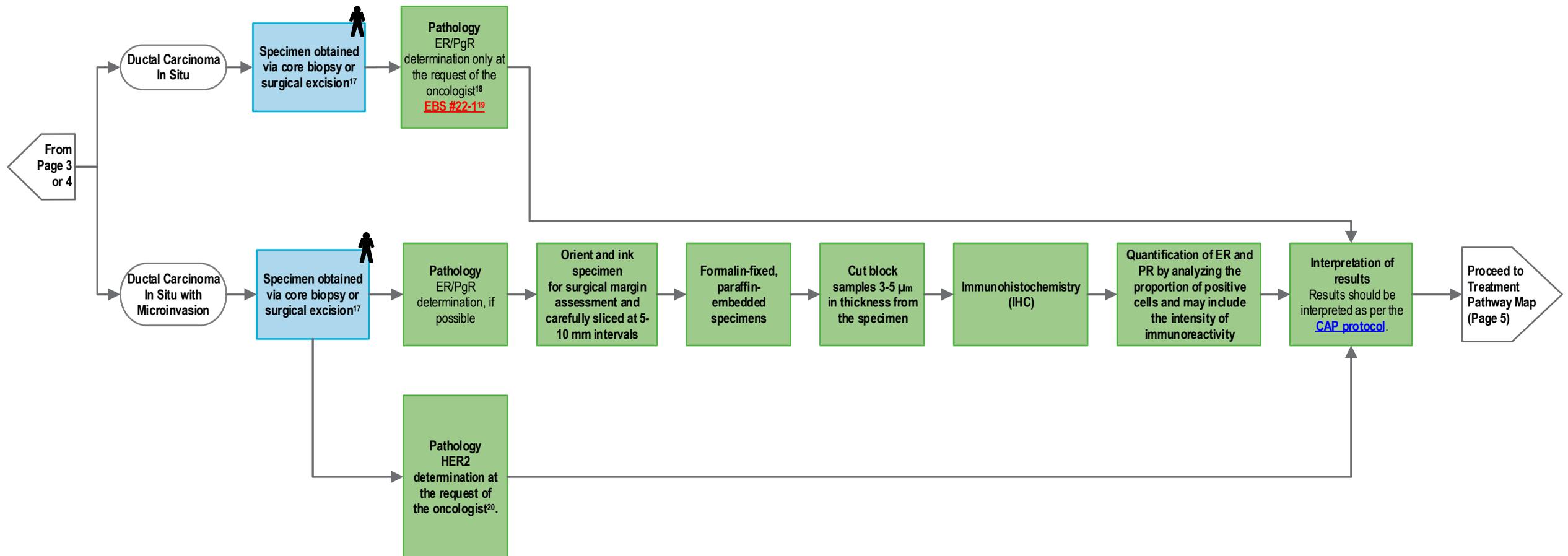
¹⁶Repeat testing should occur if any of the following conditions exist: (1) specimen is ER negative, (2) Neoadjuvant treatment (if ER negative), (3) a comment recommending retesting was placed on initial report, (4) tumor characteristics are different from the core (different type or grade), (5) multifocal tumor when only one focus was previously biopsied if appropriate, (6) core biopsy result is equivocal for HER2 after testing by both ISH and IHC, (7) very small sample of invasive cancer on the core (<2 millimeter).

¹⁷Candidates for molecular profile tests are patients with node negative (N0), ER positive and HER2 negative breast cancer in whom the decision for chemotherapy is unclear.

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¹⁸Reflex Estrogen Receptor (ER) and Progesterone Receptor (PR) analysis of Ductal Carcinoma In Situ (DCIS) not to be performed on the core biopsy reflexively <https://www.ncbi.nlm.nih.gov/pubmed/27299796>

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²⁰HER2 testing is only required on DCIS with multifocal invasion when chemotherapy is being considered as a treatment option for the patient