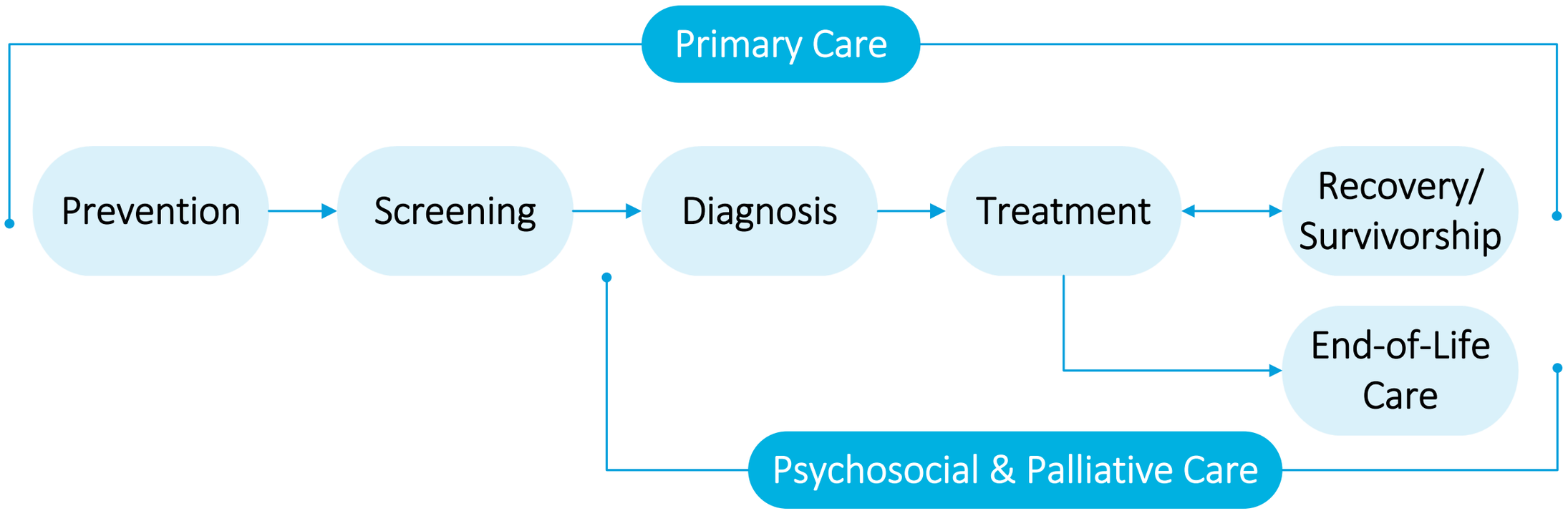
Ovarian Cancer Diagnosis Pathway Map

Version 2025.04



Ontario Health
Cancer Care Ontario

Target Population

- The pathway map reflects the clinical management of patients with signs or symptoms suspicious for epithelial ovarian cancer.
- These patients are in need of diagnostic work-up.

Pathway Map Considerations

- For additional information about the optimal organization of gynecologic oncology services in Ontario refer to **GL #4-11**.
- Primary care providers play an important role in the cancer journey and should be informed of relevant tests and consultations. Ongoing care with a primary care provider is assumed to be part of the pathway map. For patients who do not have a primary care provider, **Health811** is a government resource that helps patients find a doctor or nurse practitioner.
- Throughout the pathway map, 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** and **EBS #19-2 Provider-Patient Communication**.*
- Hyperlinks are used throughout the pathway map to provide information about relevant Ontario Health (Cancer Care Ontario) tools, resources and guidance documents.
- The term 'health care provider', used throughout the pathway map, includes primary care providers and specialists, e.g. family doctors, nurse practitioners, and emergency physicians.
- Multidisciplinary Cancer Conferences (MCCs) may be considered for all phases of the pathway map. For more information on Multidisciplinary Cancer Conferences, visit **MCC Tools**.
- For more information on wait time prioritization, visit **Surgery**.
- Clinical trials should be considered for all phases of the pathway map.
- 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**.*

Pathway Map Legend

Colour Guide

- Primary Care
- Palliative Care
- Pathology
- Organized Diagnostic Assessment
- Surgery
- Radiation Oncology
- Medical Oncology
- Radiology
- Multidisciplinary Cancer Conference (MCC)
- Genetics
- Psychosocial Oncology (PSO)

Shape Guide

- Intervention
- Decision or assessment point
- Patient (disease) characteristics
- Consultation with specialist
- Exit pathway
- Off page reference (or)
- Referral (R)

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 Ontario Health (Cancer Care Ontario) and the reader.

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* **Note. EBS #19-2 and EBS #19-3** are older than 3 years and are 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.

O-RADS™ Ultrasound Risk Stratification and Management System for Classic Benign Lesions (O-RADS™ 2)

Lexicon	Descriptors and Definitions For any atypical features on initial or follow-up exam, use other lexicon descriptors (e.g., unilocular, multilocular, solid, etc.).	Management If sonographic features are only suggestive, and overall assessment is uncertain, consider follow-up US within 3 months.
Typical Hemorrhagic Cyst	Unilocular cyst, **no internal vascularity***, and at least one of the following: • Reticular pattern (fine, thin intersecting lines representing fibrin strands) • Retractile clot intracystic component with straight, concave, or angular margins)	Imaging*: • Premenopausal: ○ =5 cm: None ○ >5 cm but <10 cm: Follow-up US in 2-3 months • Postmenopausal: ○ <10 cm, options to confirm include: ▪ Follow-up US in 2-3 months ▪ US specialist (if available) ▪ MRI (with O-RADS MRI score) Clinical: Referral to a Gynecologist** Note: Hemorrhagic cysts typically do not occur in post-menopausal people. If this is the case for your person, consider recategorizing the lesion with other lexicon descriptors.
Typical Dermoid Cyst	Cystic lesion with =3 locules, **no internal vascularity***, and at least one of the following: • Hyperechoic component(s) (diffuse or regional) with shadowing • Hyperechoic lines and dots • Floating echogenic spherical structures	Imaging: • =3 cm: May consider follow-up US in 12 months*** • >3 cm but <10 cm: If not surgically excised, follow-up US in 12 months*** Clinical: Referral to a Gynecologist**
Typical Endometrioma	Cystic lesion with =3 locules, **no internal vascularity***, homogeneous low-level/ ground glass echoes, and smooth inner walls/ septation(s) • ± Peripheral punctate echogenic foci in wall	Imaging: • Premenopausal: ○ <10 cm: If not surgically excised, follow-up US in 12 months*** • Postmenopausal: ○ <10 cm and initial exam, options to confirm include: ▪ Follow-up US in 2-3 months ▪ US specialist (if available) ▪ MRI (with O-RADS MRI score) Then, if not surgically excised, recommend follow-up US in 12 months*** Clinical: Referral to a Gynecologist**
Typical Paraovarian Cyst	Simple cyst separate from the ovary	Imaging: None Clinical: None
Typical Peritoneal Inclusion Cyst	Fluid collection with ovary at margin or suspended within that conforms to adjacent pelvic organs • ± Septations (representing adhesions)	Imaging: None Clinical: Referral to a Gynecologist**
Typical Hydrosalpinx	Anechoic, fluid-filled tubular structure • ± Incomplete septation(s) (representing adhesions) • Endosalpingeal folds (short, round projections around the inner walls)	

MRI = magnetic resonance imaging; US = ultrasound
*Excludes vascularity in walls or intervening septation(s)
**As needed for management of clinical issues
***There is currently a paucity of evidence for defining the need, optimal duration, or interval of timing for surveillance. If stable, consider US follow-up at 24 months from initial exam, then as clinically indicated. Specifically, evidence does support an increasing risk of malignancy in endometriomas following menopause and those present greater than 10 years. See the following paper for additional information:
O-RADS US Risk Stratification and Management System: A Consensus Guideline from the ACR O-RADS Committee.
+The recommendation differs from O-RADS™ v2022.

O-RADS™ Ultrasound Risk Stratification and Management System Adapted for the Ontario Healthcare Context

O-RADS™ Score	Risk Category	Lexicon Descriptors		Management	
				Premenopausal	Postmenopausal
0	Incomplete Evaluation [N/A]	Lesions features relevant for risk stratification cannot be accurately characterized due to technical factors		Repeat US study or MRI	
1	Normal Ovary [N/A]	No ovarian lesion		None	
		Physiologic cyst: follicle (=3 cm) or corpus luteum (typically =3 cm)			
2	Almost certainly benign [<1%]	Simple Cyst	=3 cm	N/A (see follicle)	None
			>3 to 5 cm	None	Follow-up US in 12 months*
			>5 to <10 cm	Follow-up US in 12 months*	
		Unilocular, smooth, non-simple cyst, smooth (internal echoes and/or incomplete septations)	=3 cm	None	Follow-up US in 12 months*
			>3 cm to <10 cm	Follow-up US in 6 months*	
		Bilocular, smooth cyst			
		Typical benign ovarian lesion (Table 2)	<10 cm	See Table 2 (Classic Benign Lesions) for descriptors and management	
		Typical benign extraovarian lesion (Table 2)	Any size		
3	Low Risk Malignancy [1 - <10%]	Typical benign ovarian lesion (Table 2), =10 cm		Imaging: • If not surgically excised, consider follow-up US within 6 months** • If solid, may consider US specialist (if available) *or* MRI (with O-RADS MRI score)*** Clinical: Referral to a gynecologist	
		Uni- or bilocular cyst, smooth, =10 cm			
		Unilocular cyst, irregular, any size			
		Multilocular cyst, smooth, <10 cm, CS <4			
		Solid lesion, ± shadowing, smooth, any size, CS = 1			
		Solid lesion, shadowing, smooth, any size, CS 2-3			
4	Intermediate Risk [10 - <50%]	Bilocular cyst without solid component(s)	Irregular, any size, any CS	Imaging: • Options include: ○ US specialist (if available) ○ MRI (with O-RADS MRI score)*** Clinical: Referral to a gynecologist with gyne-oncologist consultation or solely by gyne-oncologist	
		Multilocular cyst without solid component(s)	Smooth, =10 cm, CS <4		
			Smooth, any size, CS = 4		
			Irregular, any size, any CS		
		Unilocular cyst with solid component(s)	<4 pps or solid component(s) not considered a pp, any size		
		Bi- or multilocular cyst with solid component(s)	Any size, CS = 1-2		
		Solid lesion, non-shadowing	Smooth, any size, CS = 2-3		
5	High Risk [=50%]	Unilocular cyst, = 4 pps, any size, any CS		Imaging: While referral pending, may consider ordering a staging CT (chest, abdomen, pelvis)* Clinical: Direct urgent referral to a gyne-oncologist+	
		Bi- or multilocular cyst with solid component(s), any size, CS = 3-4			
		Solid lesion, ± shadowing, smooth, any size, CS = 4			
		Solid lesion, irregular, any size, any CS			
		Ascites and/or peritoneal nodules****			

CS = colour score; gyne = gynecologic; MRI = magnetic resonance imaging; N/A = not applicable; US = ultrasound; pps = papillary projections
* Shorter imaging follow-up may be considered in some scenarios (e.g., clinical factors). If smaller (≥10 – 15% decrease in average linear dimension), consider follow-up US at 12 and 24 months from initial exam, then management per gynecology. For changing morphology, reassess using lexicon descriptors. Clinical management with gynecology as needed.
** There is a paucity of evidence for defining the optimal duration or interval for imaging surveillance. Shorter follow-up may be considered in some scenarios (e.g., clinical factors). If stable, follow-up at 12 and 24 months from initial exam, then as clinically indicated. For changing morphology, reassess using lexicon descriptors.
*** MRI with contrast has higher specificity for solid lesions, and cystic lesions with solid component(s).
**** Not due to other malignant or non-malignant etiologies; specifically, must consider other etiologies of ascites in categories 1-2.
+The recommendation differs from O-RADS™ v2022.

Screen for psychosocial needs, and assessment and management of symptoms. Click here for more information about symptom assessment and management tools

Visit to or test ordered by a Healthcare Provider

Patient presents with suspicious findings from incidental imaging
or
Patient presents with one or more of the following signs/symptoms:
- Suspicious or palpable pelvic or abdominal mass
- Abnormal vaginal bleeding
- Increased abdominal size
- Ascites
- Difficulty eating (early satiety, nausea)

Persistent and/or unexplained:
- Pelvic or abdominal pain
- Gastrointestinal symptoms (e.g. bloating)
- Urinary symptoms (urgency or frequency)

Focused history to include:
- Family history of cancer (paternal & maternal)
- BRCA status
- Clinical menopausal status

Directed physical examination

Pelvic examination
Including speculum and bimanua/pelvirectal examinations, and examination of external genitalia

R → **Gynecologist**

Imaging (If not previously performed)

Transvaginal pelvic ultrasound **and/or** **Other imaging if indicated**

Refer to EBS #4-15 Gastrointestinal (GI) evaluation as needed

Results

Extra-adnexal/non-gynecologic pelvic abnormality → **Refer to appropriate specialist**

O-RADS 1 (no abnormality) → **Return to Primary Care Provider for follow-up**

O-RADS 2 (1% risk of malignancy)
O-RADS 3 (1-<10 % risk of malignancy)
→ **See O-RADS table for appropriate management (page 3)**

O-RADS 4 (10-50 % risk of malignancy) → **Blood test to include:**
- CA-125

May also include:
- CEA
- CA 19-9
- Other tumour makers (e.g., AFP, LDH, HCG)

→ **Proceed to page 5**

O-RADS 5 (>50 % risk of malignancy) → **CT chest** **CT abdomen pelvis**

Blood test to include:
- CA-125

May also include:
- CEA
- CA 19-9
- Other tumour makers (e.g., AFP, LDH, HCG)

R → **Gynecologic Oncologist** → **Proceed to appropriate Treatment Pathway Map, Suspicious Pelvic Mass with No Tissue Diagnosis, Presumed Clinical Early Stage (page 3)**

Peritoneal carcinomatosis[1] with or without an ovarian mass → R → **Gynecologic Oncologist** or **Appropriate specialist[1]**

CT chest **CT abdomen pelvis**
Biopsy **Cytology**

Blood test to include:
- CA-125

May also include:
- CEA
- CA 19-9
- Other tumour makers (e.g., AFP, LDH, HCG)

Results

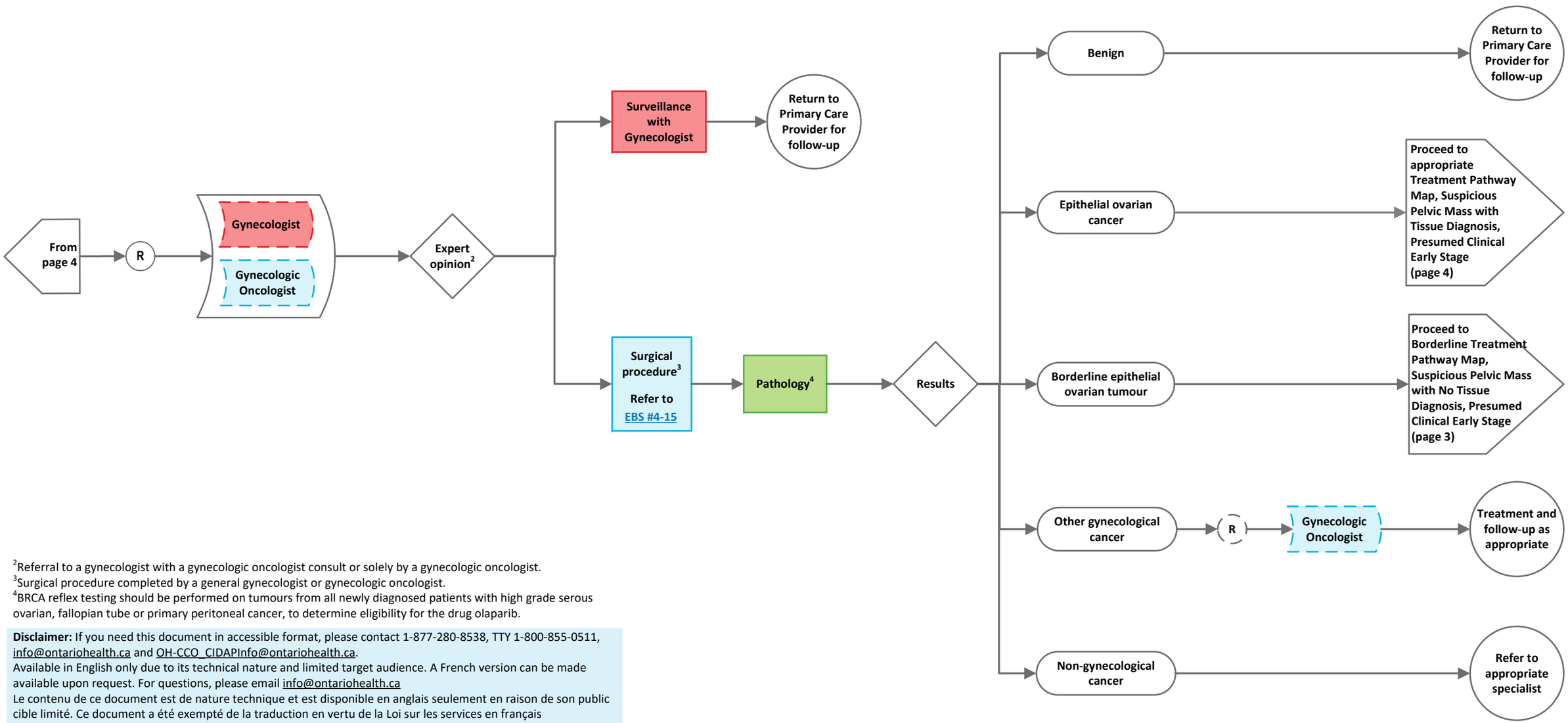
Non-gynecologic cancer → **Refer to appropriate specialist**

Advanced stage EOC → **Proceed to appropriate Treatment Pathway Map, Advanced Stage EOC (page 6)**

Patient with prior pathology report suggestive of a diagnosis of Epithelial Ovarian Cancer (EOC) Tumours or Serous Tubal Intraepithelial Carcinoma (STIC) → **Proceed to appropriate Treatment Pathway Map, Suspicious Pelvic Mass with Tissue Diagnosis, Presumed Clinical Early Stage (page 4)**

[1]Consider a referral to a medical oncologist, hepato-pancreato-biliary surgeon, and/or gastroenterologist as appropriate.

Screen for psychosocial needs, and assessment and management of symptoms. Click here for more information about symptom assessment and management tools



[2]Referral to a gynecologist with a gynecologic oncologist consult or solely by a gynecologic oncologist.
[3]Surgical procedure completed by a general gynecologist or gynecologic oncologist.
[4]BRCA reflex testing should be performed on tumours from all newly diagnosed patients with high grade serous ovarian, fallopian tube or primary peritoneal cancer, to determine eligibility for the drug olaparib.