

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

Note: Consider Clinical Trials as treatment options for eligible patients.

INITIAL EVALUATION

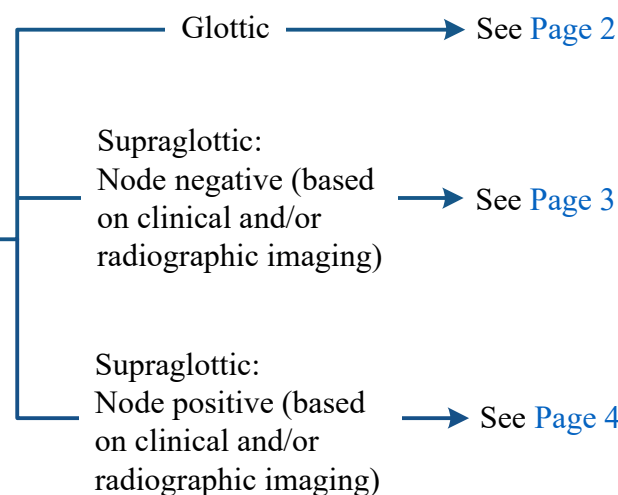
- Confirm outside pathology
- History
 - Chief complaint
 - History of present illness and previous treatment
- Past medical history including but not limited to:
 - Social history (including tobacco and alcohol use)
 - Previous radiation therapy – head and neck, thoracic, breast (for previous primary or benign diagnosis)
- Physical examination
 - Full head and neck examination
 - Fiberoptic exam
 - Videostroboscopy (optional)
 - General medical examination
- Stage T and N (AJCC)
- Imaging studies
 - CT head and neck with contrast¹ or MRI neck with contrast
 - Consider PET-CT scan for stage III/IV
 - Modified barium swallow/esophagoscopy
 - Chest imaging (PET-CT preferred, but CT chest with contrast acceptable)
- Lifestyle risk assessment²

CONSULTATIONS

- If no biopsy/pathology, consider examination under anesthesia (EUA), direct laryngoscopy (DL), biopsy, esophagoscopy
- Radiation Oncology
- Thoracic/Head and Neck Medical Oncology (THNMO)
- Dental Oncology for dentulous patients except those receiving narrow field radiation
- Speech Pathology for all patients and videostroboscopy, if indicated
- Consider esophagoscopy or barium swallow
- Perioperative Evaluation and Management (POEM)
- Plastic Surgery for patients who will require major reconstruction (pharyngeal reconstruction)
- Nutritional assessment
- Smoking cessation for active smokers only

Patient information presented at multidisciplinary planning conference

PRE-TREATMENT EVALUATION



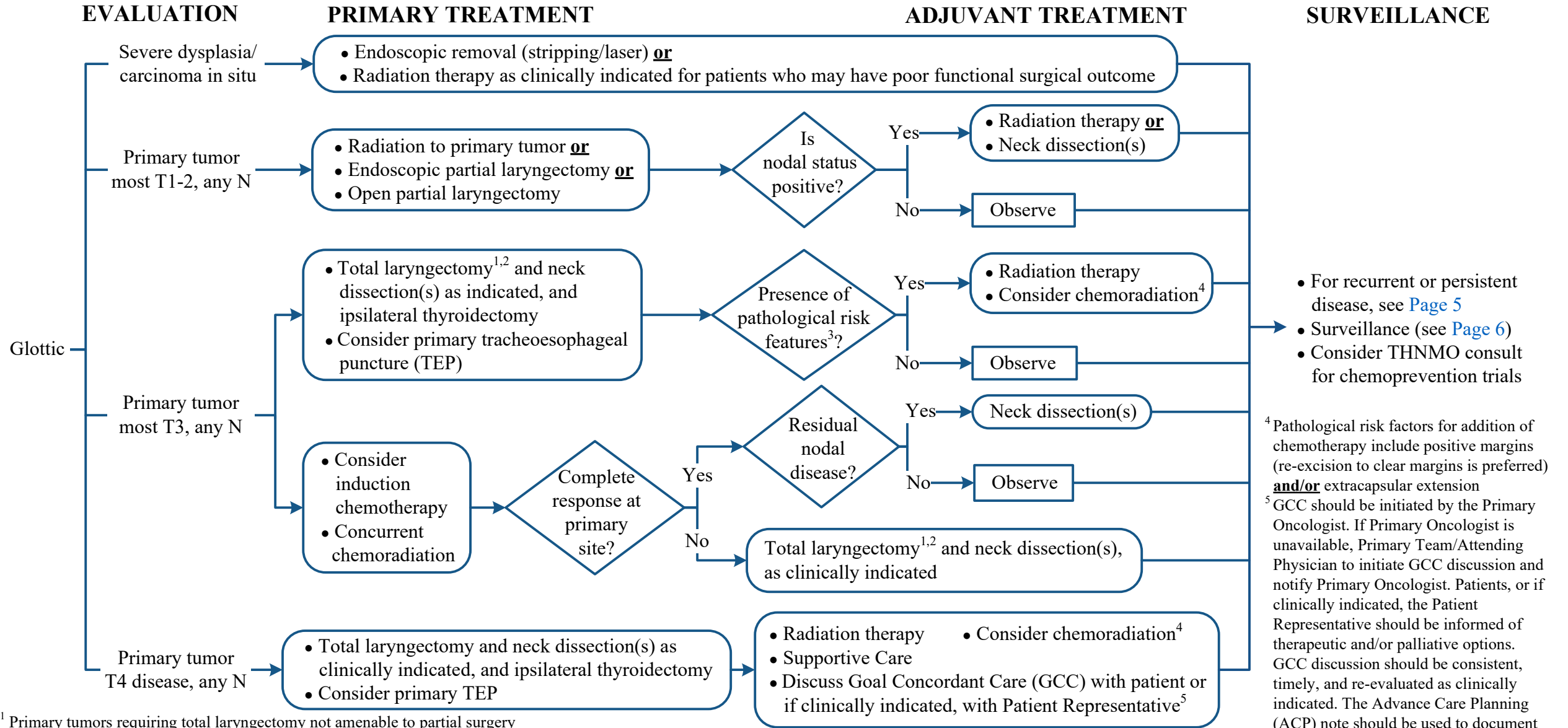
AJCC = The American Joint Committee on Cancer

¹ CT is tailored to oncologic imaging: high-resolution, bone and soft tissue window, 90-100s contrast delay for optimal opacification of mucosa and soft tissues

² See [Physical Activity](#), [Nutrition](#), and [Tobacco Cessation Treatment](#) algorithms; ongoing reassessment of lifestyle risks should be a part of routine clinical practice

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¹ Primary tumors requiring total laryngectomy not amenable to partial surgery

² Total laryngectomy to be considered for patients with significant pretreatment laryngopharyngeal dysfunction or are medically unable to tolerate organ preservation therapy

³ Pathological risk features include:

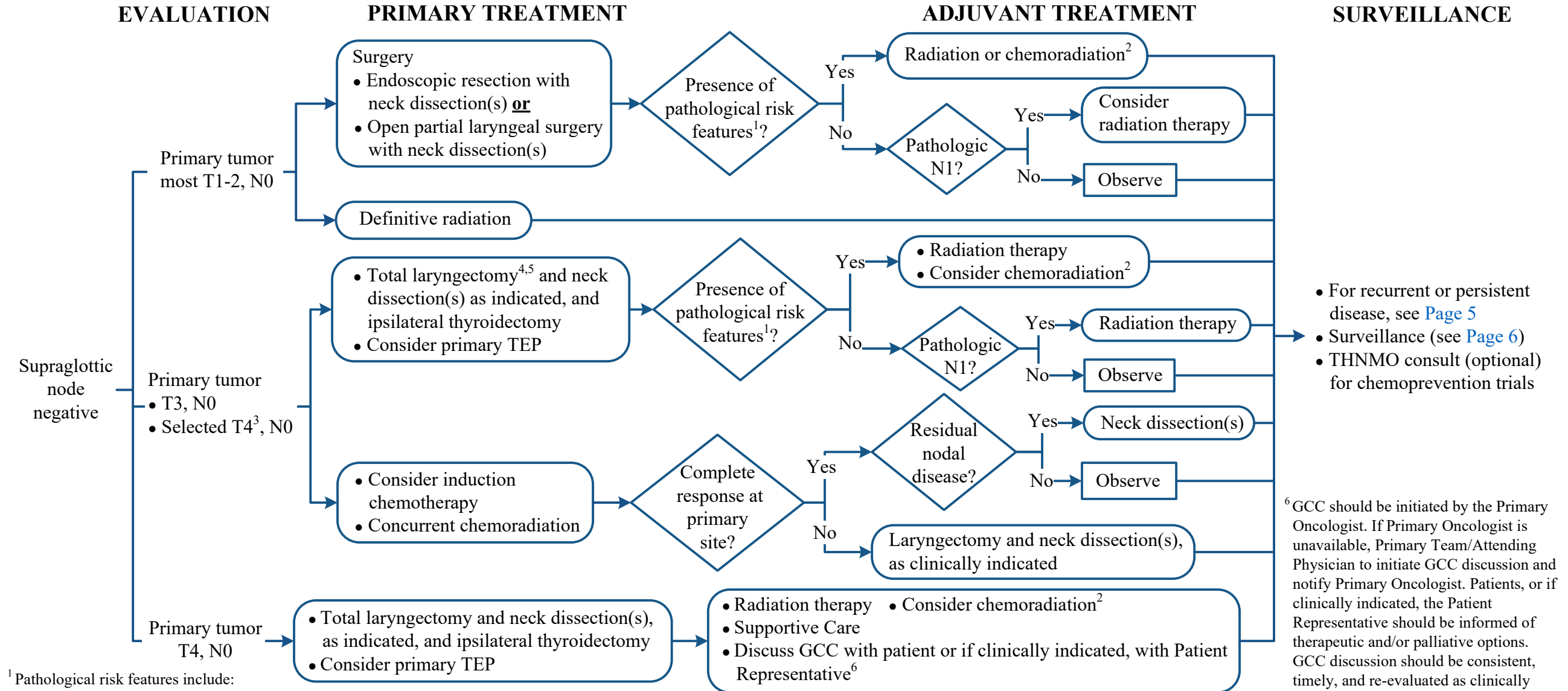
- Primary pathology: Any T1 or T2 with perineural invasion or lymphovascular invasion **or** any T3 or T4
- Regional pathology: Multiple lymph nodes (any N2, N3)

⁴ Pathological risk factors for addition of chemotherapy include positive margins (re-excision to clear margins is preferred) **and/or** extracapsular extension

⁵ GCC should be initiated by the Primary Oncologist. If Primary Oncologist is unavailable, Primary Team/Attending Physician to initiate GCC discussion and notify Primary Oncologist. Patients, or if clinically indicated, the Patient Representative should be informed of therapeutic and/or palliative options. GCC discussion should be consistent, timely, and re-evaluated as clinically indicated. The Advance Care Planning (ACP) note should be used to document GCC discussion. Refer to [GCC home page](#) (for internal use only).

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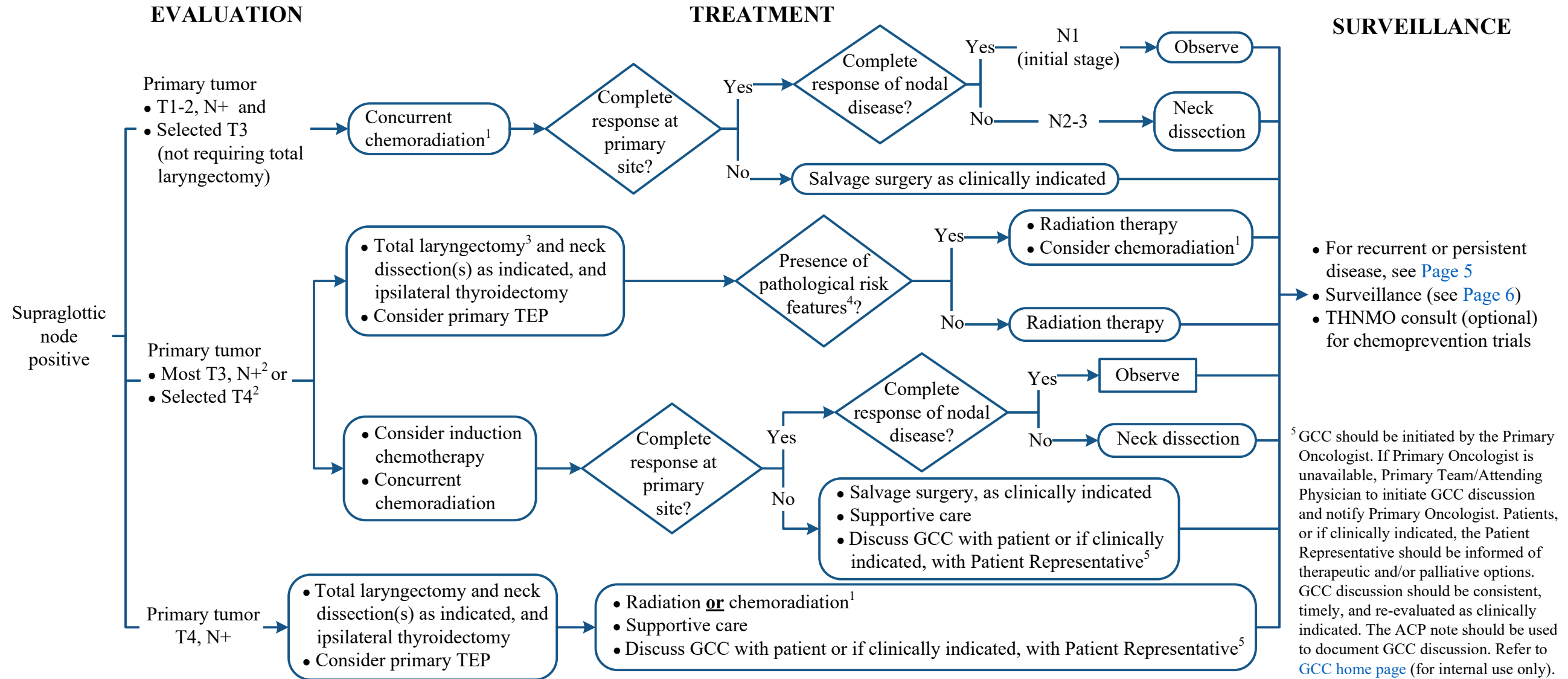
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³ Low-volume base-of-tongue involvement

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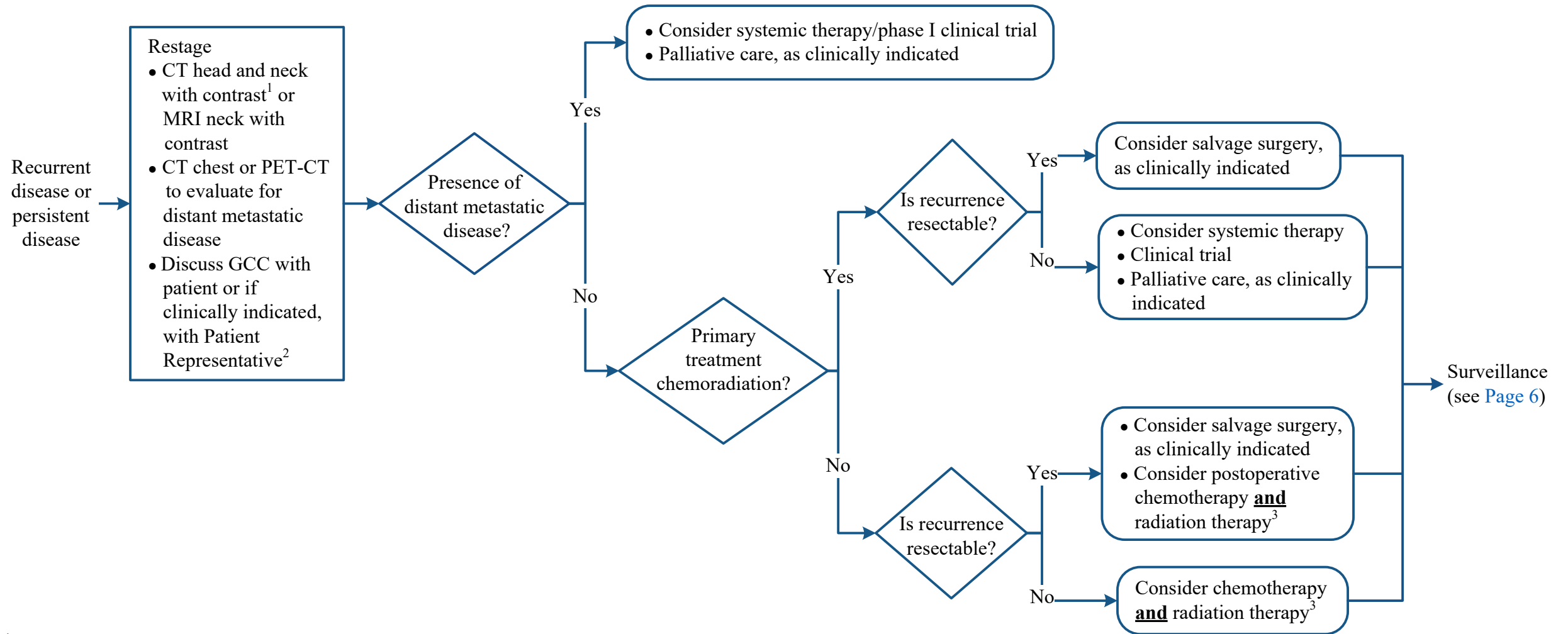
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CLINICAL PRESENTATION

RECURRENT TREATMENT



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³ Pathological risk factors should be taken into consideration when making concurrent treatment decisions

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Larynx Cancer Surveillance

Total years for surveillance				Year 1			Year 2		Year 3
Frequency of surveillance by month	3	6	9	12	16	20	24	30	Refer to Survivorship - Larynx/ Hypopharynx Cancer algorithm
Head and neck history and physical exam including flexible laryngoscopy	x	x	x	x	x	x	x	x	
Baseline/Surveillance CT ¹ or MRI	x	x	x	x	x	x	x	x	
Chest x-ray (CT chest, if smoker)	x			x			x	x	
Thyroid function ²	x			x			x	x	
Supportive care: <ul style="list-style-type: none"> • Speech and hearing evaluation • Swallow evaluation • Nutrition assessment • Depression screening • Smoking cessation • Alcohol counseling • Lymphedema evaluation • Dental evaluation 	As clinically indicated								

¹ For T1 glottic cancers, initial post treatment CT may not be indicated

² If radiation to the neck, thyroid function should be checked every 6-12 months

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SUGGESTED READINGS

- Bradford, C. R., Wolf, G. T., Carey, T. E., Zhu, S., Beals, T. F., Truelson, J. M., . . . Fisher, S. G. (1999). Predictive markers for response to chemotherapy, organ preservation, and survival in patients with advanced laryngeal carcinoma. *Otolaryngology-Head and Neck Surgery*, *121*(5), 534-538. [https://doi.org/10.1016/S0194-5998\(99\)70052-5](https://doi.org/10.1016/S0194-5998(99)70052-5)
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- MD Anderson Institutional Policy #CLN1202 - Advance Care Planning Policy
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DEVELOPMENT CREDITS

This practice algorithm is based on majority expert opinion of the Head and Neck Center providers at the University of Texas MD Anderson Cancer Center. It was developed using a multidisciplinary approach that included input from the following:

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