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**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
  - Consider PET scan for stage III/IV
  - Modified barium swallow/esophagoscopy
  - Chest imaging (PET-CT preferred, but CT chest with contrast acceptable)
- Lifestyle risk assessment<sup>1</sup>

## CONSULTATIONS

- If no biopsy/pathology, consider examination under anesthesia (EUA), direct laryngoscopy (DL), biopsy, esophagoscopy
- Radiation oncology
- Medical oncology for patients with stage III or IV
- 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
- Conditions for pre-operative Internal Medicine<sup>2</sup>
- 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

- Glottic → See [Page 2](#)
- Supraglottic
  - Node negative → See [Page 3](#)
  - Node positive (based on clinical and/or radiographic imaging) → See [Page 4](#)

AJCC = American Joint Committee on Cancer

<sup>1</sup> See [Physical Activity](#), [Nutrition](#), and [Tobacco Cessation](#) algorithms; ongoing reassessment of lifestyle risks should be a part of routine clinical practice

<sup>2</sup> Conditions for pre-operative Internal Medicine Perioperative Assessment Center (IMPAC) consult:

- Hypertension
  - Uncontrolled or newly diagnosed
  - Poorly compliant patient
  - Multi-drug regimen for control
- Hepatic disease
  - History of cirrhosis
  - Laboratory of hepatic dysfunction
- Anticoagulation

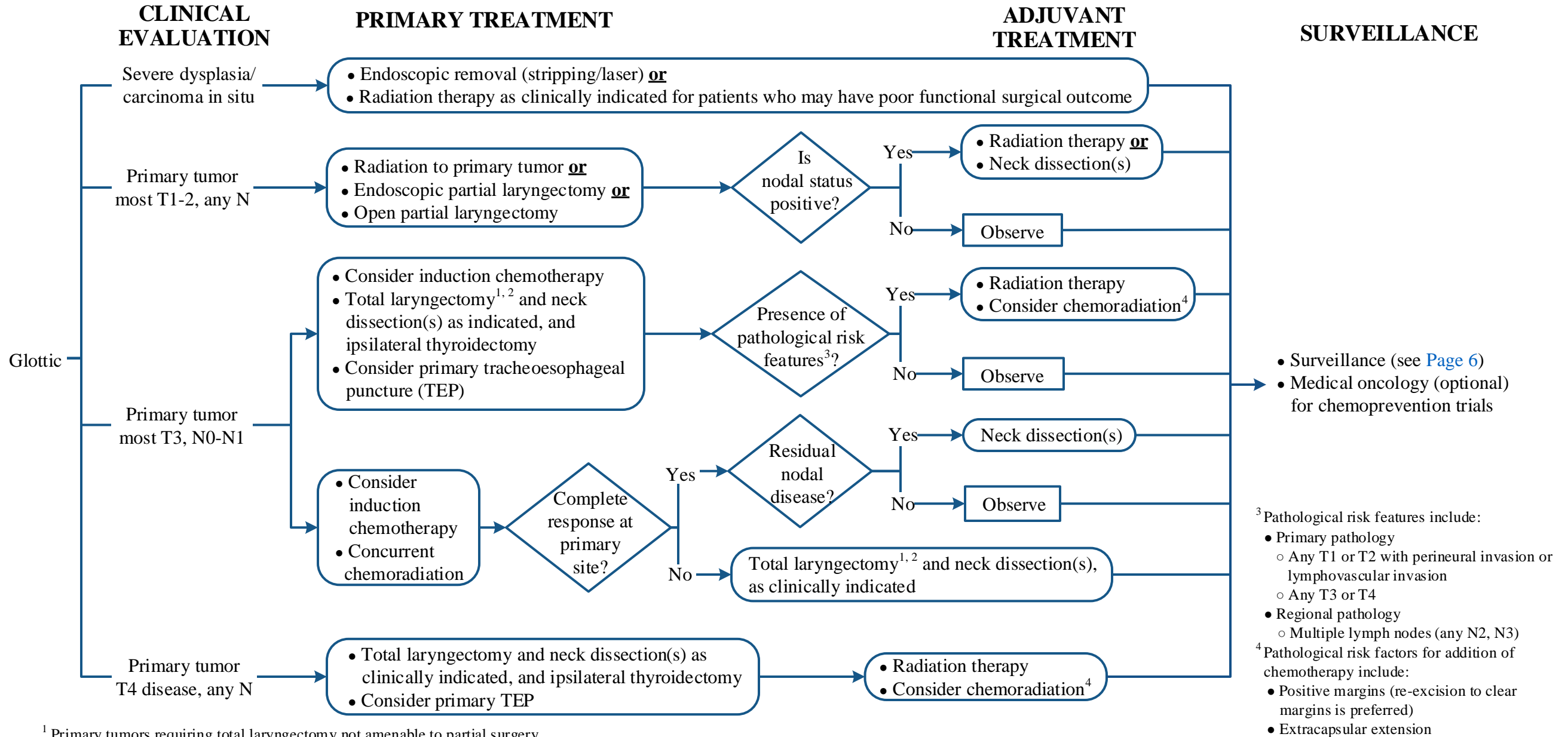
- Pulmonary disease
  - 20 or more pack-year smoking history
  - Moderate to severe chronic obstructive pulmonary disease (COPD) with less than 2 flight exercise tolerance
  - Reactive airway disease
  - Previous lung resection
  - Multiple history of pneumonia
  - History of tuberculosis

- Cerebrovascular disease
  - Previous cerebrovascular accident
  - History of transient ischemic attack
  - Carotid bruit or known stenosis
- Diabetes
  - Type I
  - Type II

- Cardiac disease
  - History of myocardial infarction or angina
  - History of cardiac or vascular surgery
  - Cardiac murmur or valvular heart disease
  - Congestive heart failure

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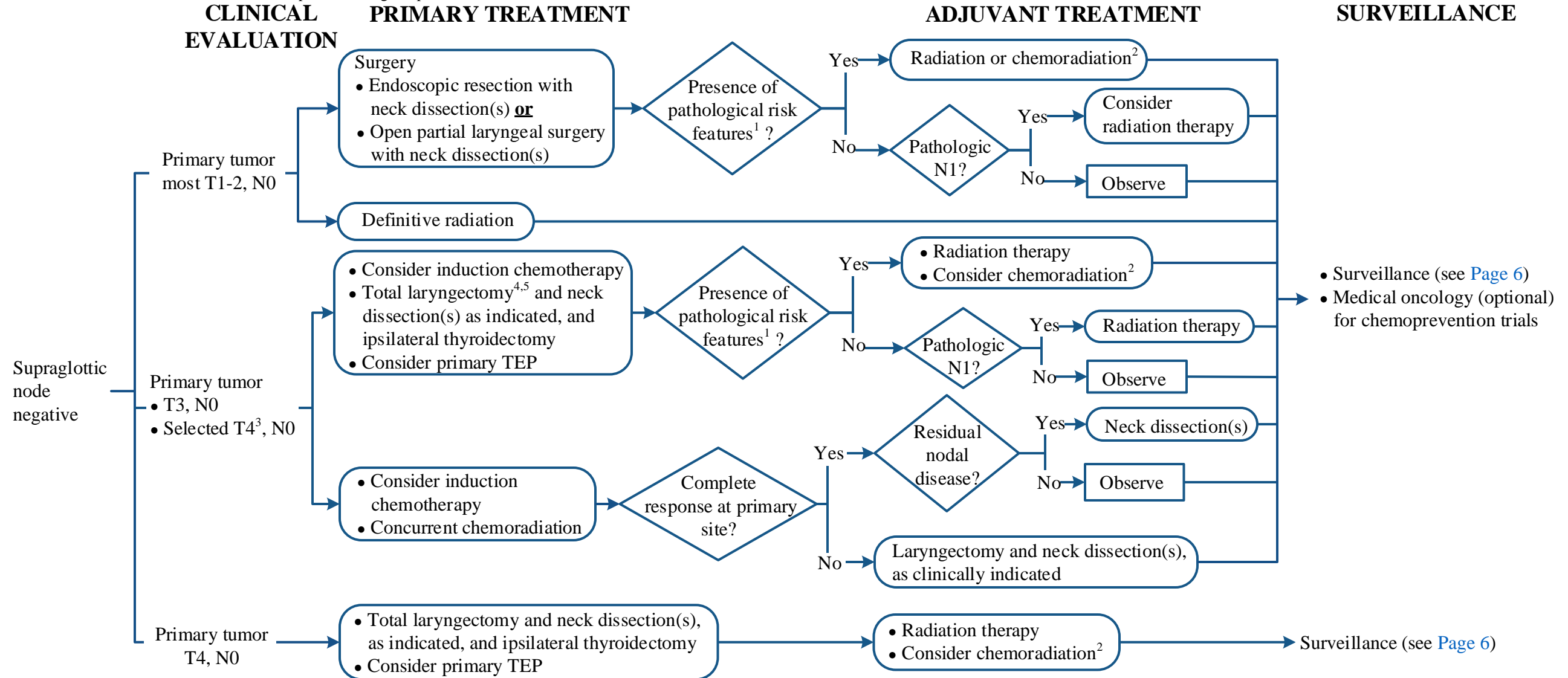


<sup>1</sup> Primary tumors requiring total laryngectomy not amenable to partial surgery

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

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<sup>1</sup> Pathological risk features include:

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

<sup>2</sup> Pathological risk factors for addition of chemotherapy include:

- Positive margins (re-excision to clear margins is preferred)
- Extracapsular extension

<sup>3</sup> Low-volume base-of-tongue involvement

<sup>4</sup> Primary tumors requiring total laryngectomy not amenable to partial surgery

<sup>5</sup> Total laryngectomy to be considered for patients with significant pretreatment laryngopharyngeal dysfunction or are medically unable to tolerate organ preservation therapy

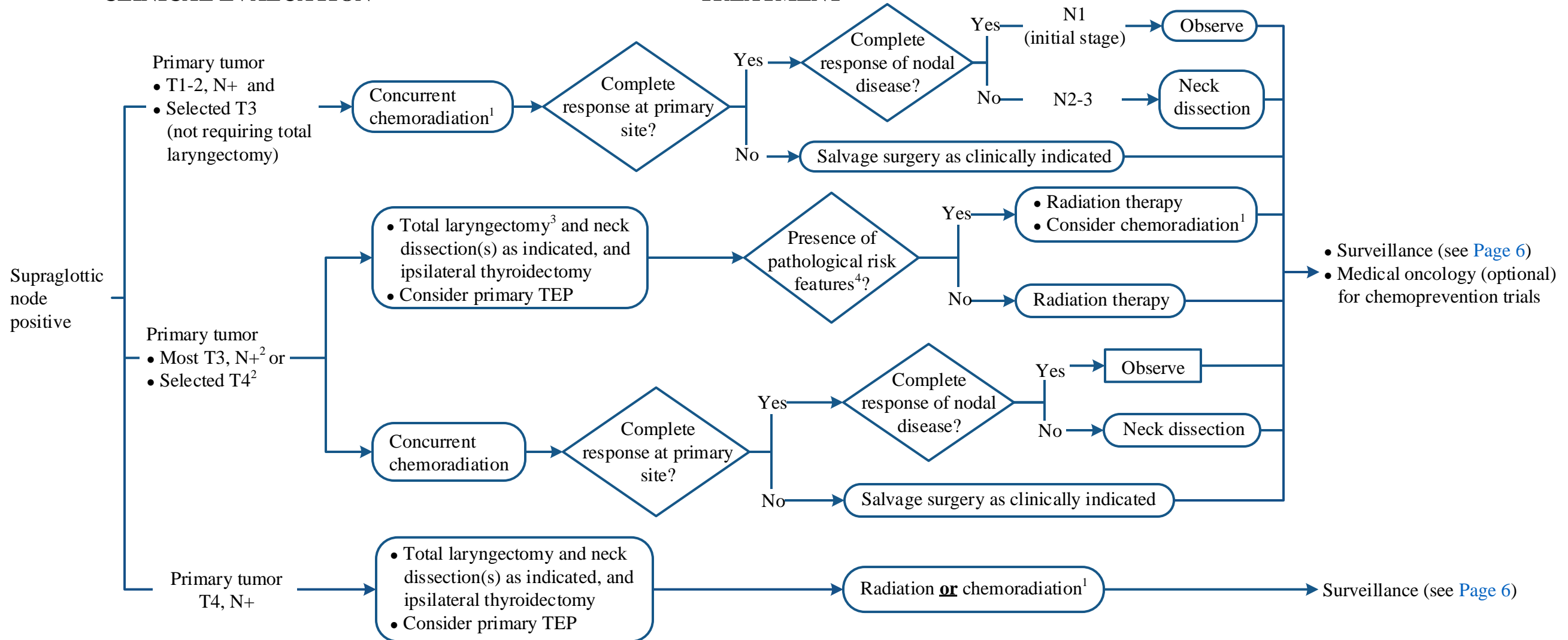
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## CLINICAL EVALUATION

## TREATMENT

## SURVEILLANCE



<sup>1</sup> Pathological risk factors for addition of chemotherapy include:  
 • Positive margins (re-excision to clear margins is preferred)      • Extracapsular extension

<sup>2</sup> Low-volume base-of-tongue involvement

<sup>3</sup> Total laryngectomy to be considered for patients with significant pretreatment laryngopharyngeal dysfunction or are medically unable to tolerate organ preservation therapy

<sup>4</sup> Pathological risk features include:

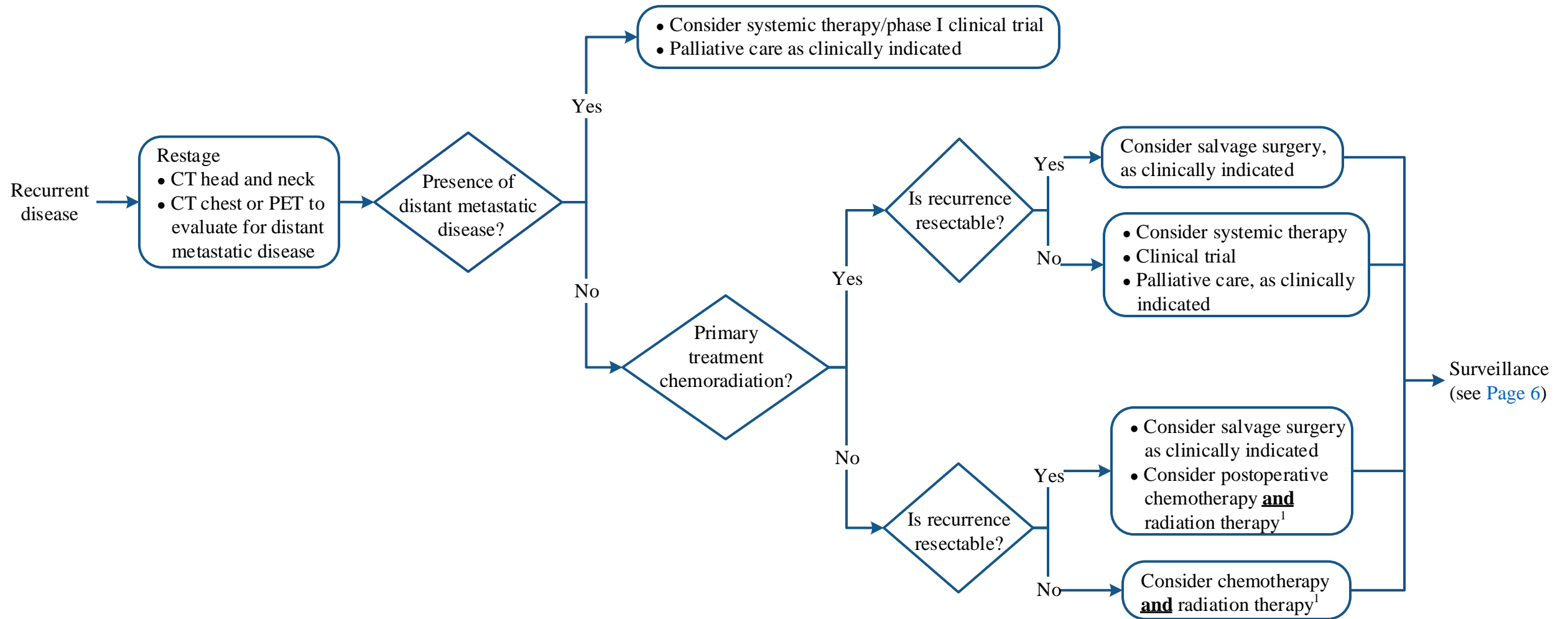
- Primary pathology
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## CLINICAL PRESENTATION

## RECURRENT TREATMENT



<sup>1</sup> Pathological risk factors should be taken into consideration when making concurrent treatment decisions

# Larynx Cancer

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## Larynx Cancer Surveillance

| Total years for surveillance            |   |   |   | Year 1 |    |    | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|--------|----|----|--------|--------|--------|--------|
| Frequency of surveillance by month      | 3 | 6 | 9 | 12     | 16 | 20 | 24     | 36     | 48     | 60     |
| Head and neck history and physical exam | x | x | x | x      | x  | x  | x      | x      | x      | x      |
| Baseline CT                             | x | x | x | x      | x  | x  | x      | x      | x      | x      |
| Chest x-ray (CT chest, if smoker)       | x |   |   | x      |    |    | x      | x      | x      | x      |
| Thyroid function                        | x |   |   | x      |    |    | x      | x      | x      | x      |



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## SUGGESTED READINGS

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## DEVELOPMENT CREDITS

This practice algorithm is based on majority expert opinion of the Head and Neck Center Faculty 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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