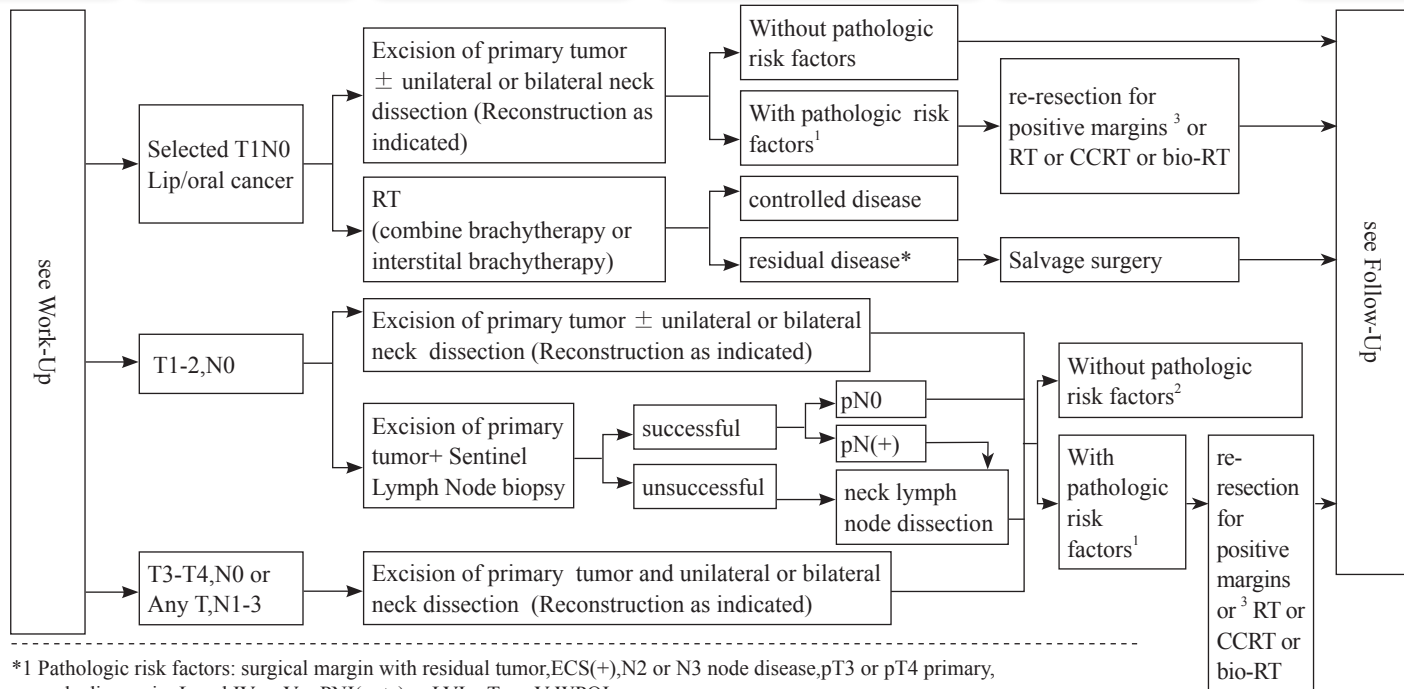


The background features a light gray gradient with several overlapping geometric shapes. A large, light gray diamond is centered, with a smaller, darker gray diamond to its left. In the top right and bottom left corners, there are faint, semi-transparent white circles.

Head and Neck Cancers

《 Cancer of the oral cavity-1 》

Work-Ups Clinical Staging Primary Treatment Pathological(first)/Image Finding Adjuvant Treatment Follow-Up



*1 Pathologic risk factors: surgical margin with residual tumor,ECS(+),N2 or N3 node disease,pT3 or pT4 primary, node disease in Level IV or V、PNI(note)、LVI、Type V-WPOI

*2 no pathologic risk factor:T1-T2,N1 → OBS or RT note:PNI alone in early stage(stage I、II) selective treatment

*3 consider re-resection to achieve negative margins for positive resection margins if feasible

* Pathological(first)/Image Finding

《 Cancer of the oral cavity-2 》

Work-Ups

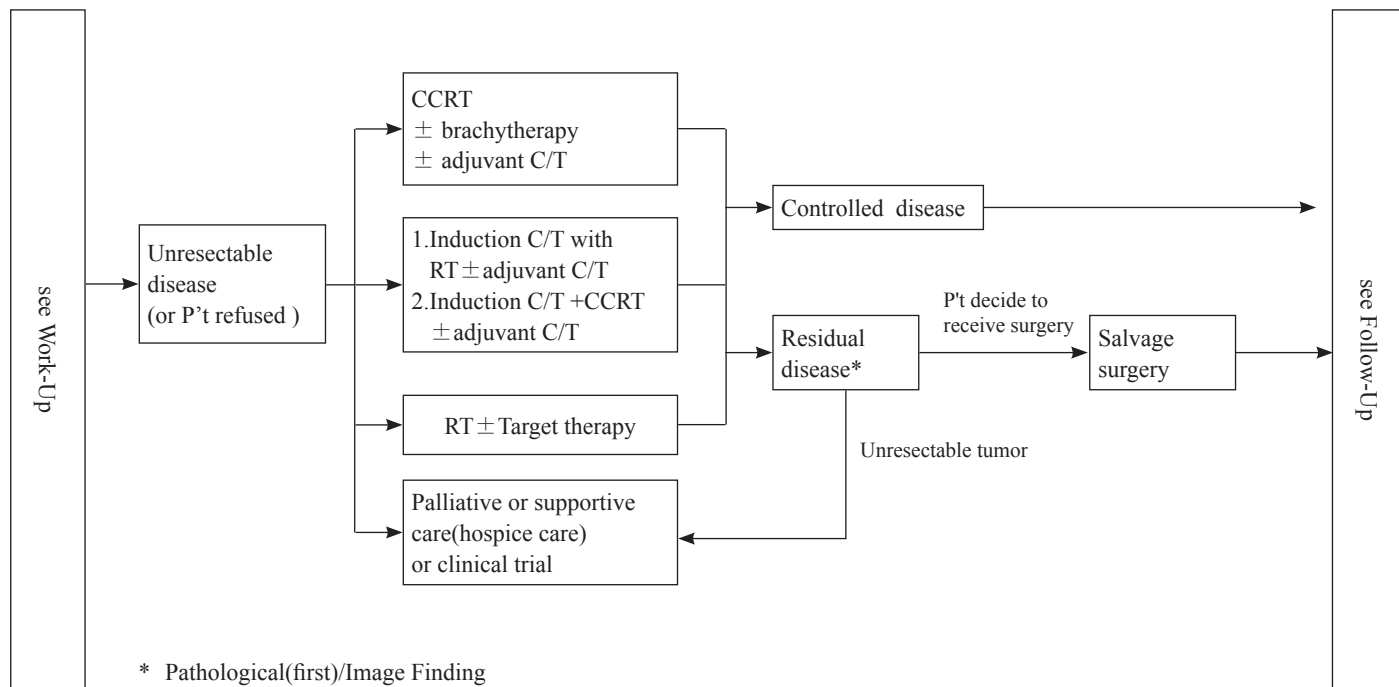
Clinical Staging

Primary Treatment

Pathological(first)/Image Finding

Adjuvant Treatment

Follow-Up



《 Oral cavity 》

Work-Up

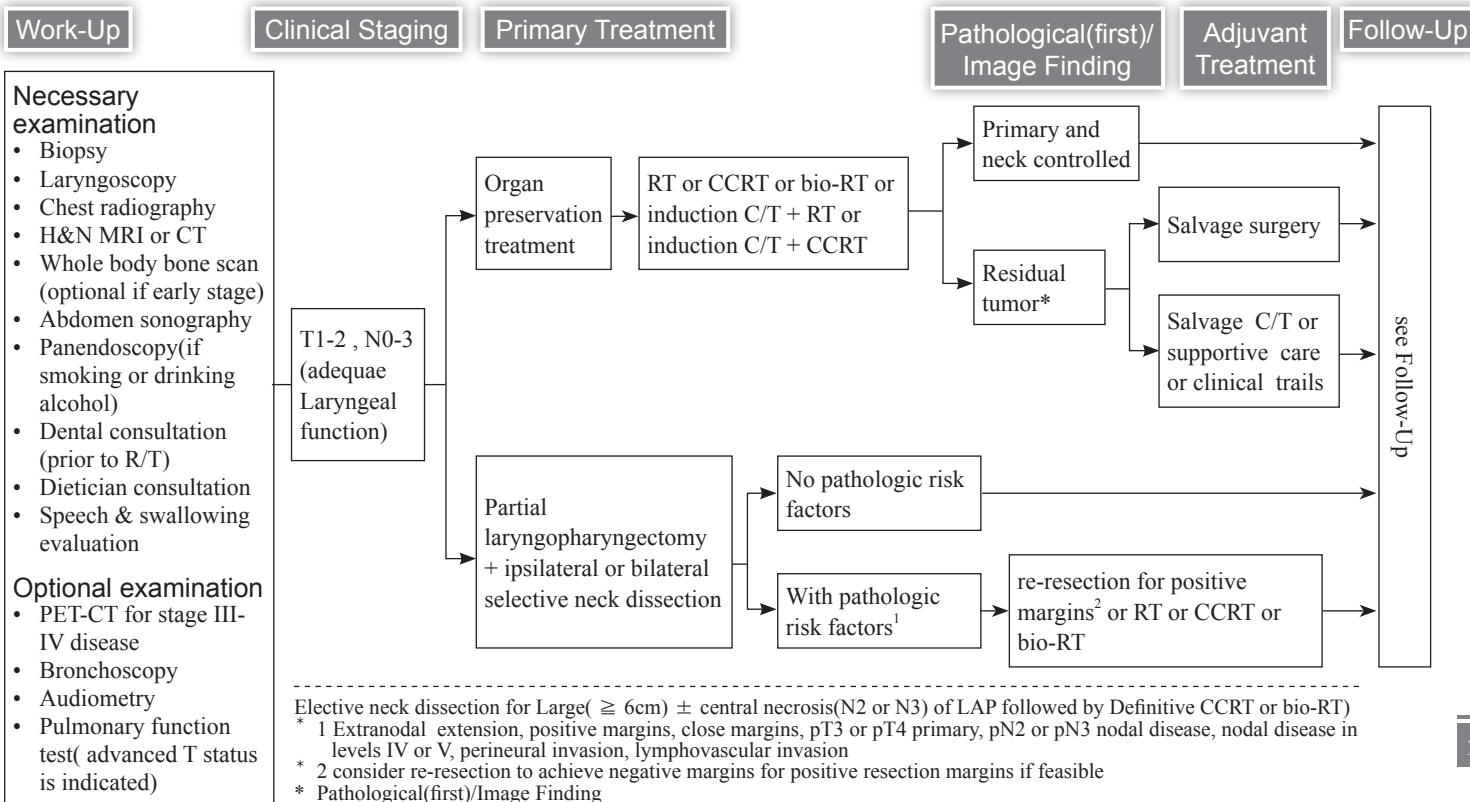
Necessary examination

- Biopsy
- Chest radiography
- H&N MRI or CT
- Whole body bone scan (optional if early stage)
- Abdomen sonography
- Dental consultation (prior to R/T)
- Dietician consultation
- Panendoscopy (if smoking or drinking wine)

Optional examination

- ENT consultation
- PET-CT for stage III-IV disease
- Speech & swallowing evaluation)

《 Cancer of the Hypopharynx -1 》



《 Cancer of the Hypopharynx -2 》

Work-ups

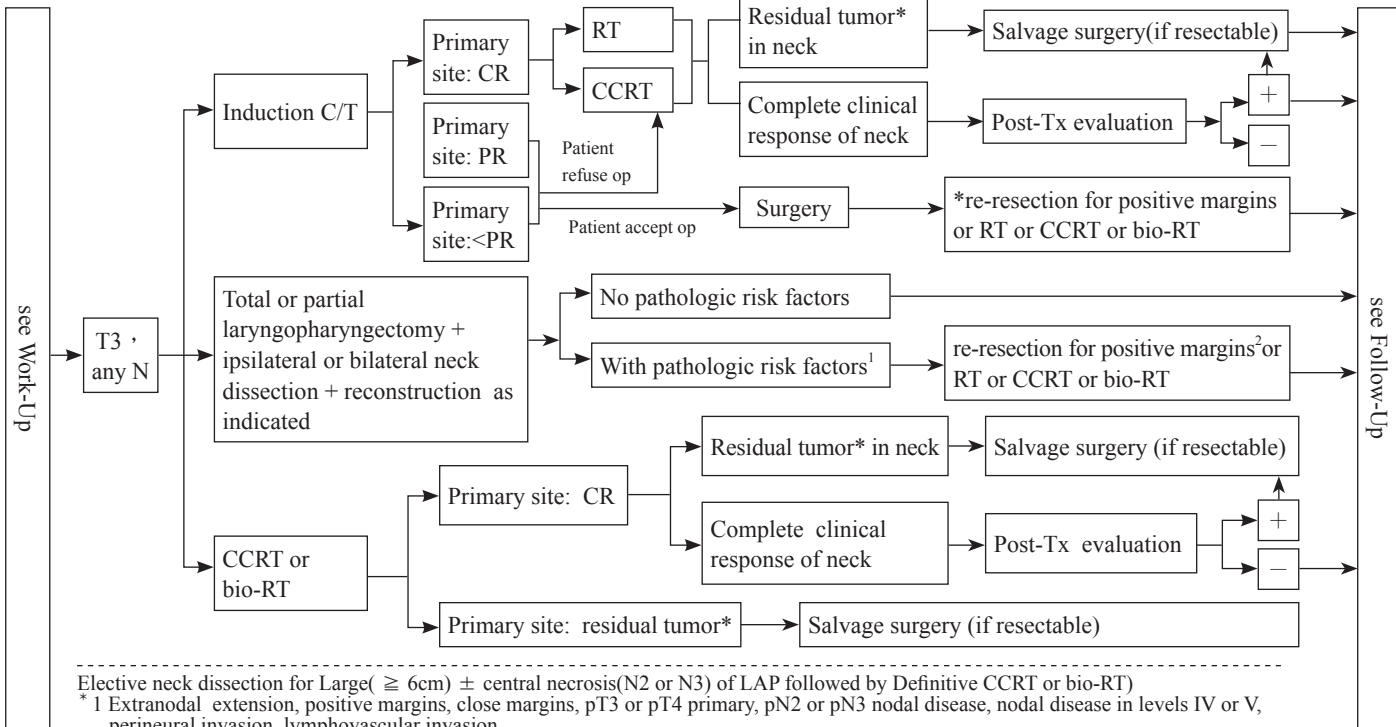
Clinical staging

Primary treatment

Pathological(first)/Image Finding

Adjuvant treatment

Follow-Up



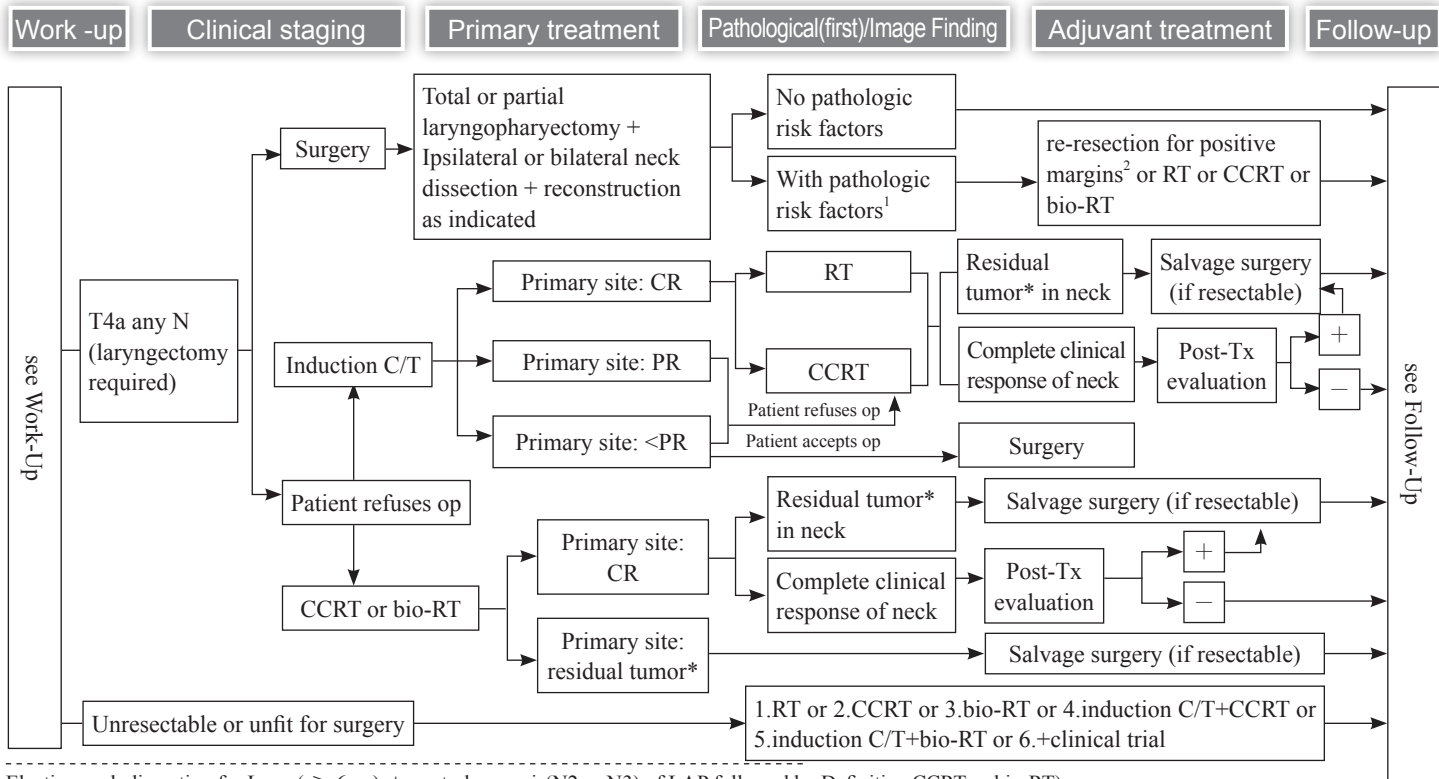
Elective neck dissection for Large ($\geq 6\text{cm}$) \pm central necrosis(N2 or N3) of LAP followed by Definitive CCRT or bio-RT)

* 1 Extranodal extension, positive margins, close margins, pT3 or pT4 primary, pN2 or pN3 nodal disease, nodal disease in levels IV or V, perineural invasion, lymphovascular invasion

* 2 consider re-resection to achieve negative margins for positive resection margins if feasible

* Pathological(first)/Image Finding

《 Cancer of the Hypopharynx -3 》



Elective neck dissection for Large($\geq 6\text{cm}$) \pm central necrosis(N2 or N3) of LAP followed by Definitive CCRT or bio-RT)

* 1 Extranodal extension, positive margins, close margins, pT3 or pT4 primary, pN2 or pN3 nodal disease, nodal disease in levels IV or V, perineural invasion, lymphovascular invasion

* 2 consider re-resection to achieve negative margins for positive resection margins if feasible

* Pathological(first)/Image Finding

《 Cancer of the Oropharynx -1 》

Work-Ups

Necessary examination

- Biopsy(P16)
- Laryngoscopy
- Chest radiography
- H&N MRI or CT
- Whole body bone scan (optional if early stage)
- Abdomen sonography
- Panendoscopy (if smoking or drinking wine)
- Dental consultation (prior to R/T)
- Audiometry
- Dietician consultation

Optional examination

- PET-CT for stage III-IV disease
- Speech & swallowing evaluation
- Bronchoscopy

Clinical Staging

T1-2,
N0-1
or T0-
2,N1

Primary treatment

Excision of primary tumor ± unilateral or bilateral neck dissection (Reconstruction as indicated)

RT or CCRT or Target therapy with RT (for N0)

CCRT or Target therapy with RT (for N1)

Pathological(first)/Image Finding

No pathologic risk factors

With pathologic risk factors¹

controlled disease

residual disease*

Adjuvant treatment

re-resection for positive margins² or RT or CCRT or bio-RT

Salvage surgery (if resectable)

Follow-up

see Follow-Up

P16 - T1N0(I), T2N0(II), T1N1(III), T2N1(III)
P16 + T1N0(I), T2N0(I), T1N1(I), T2N1(I)

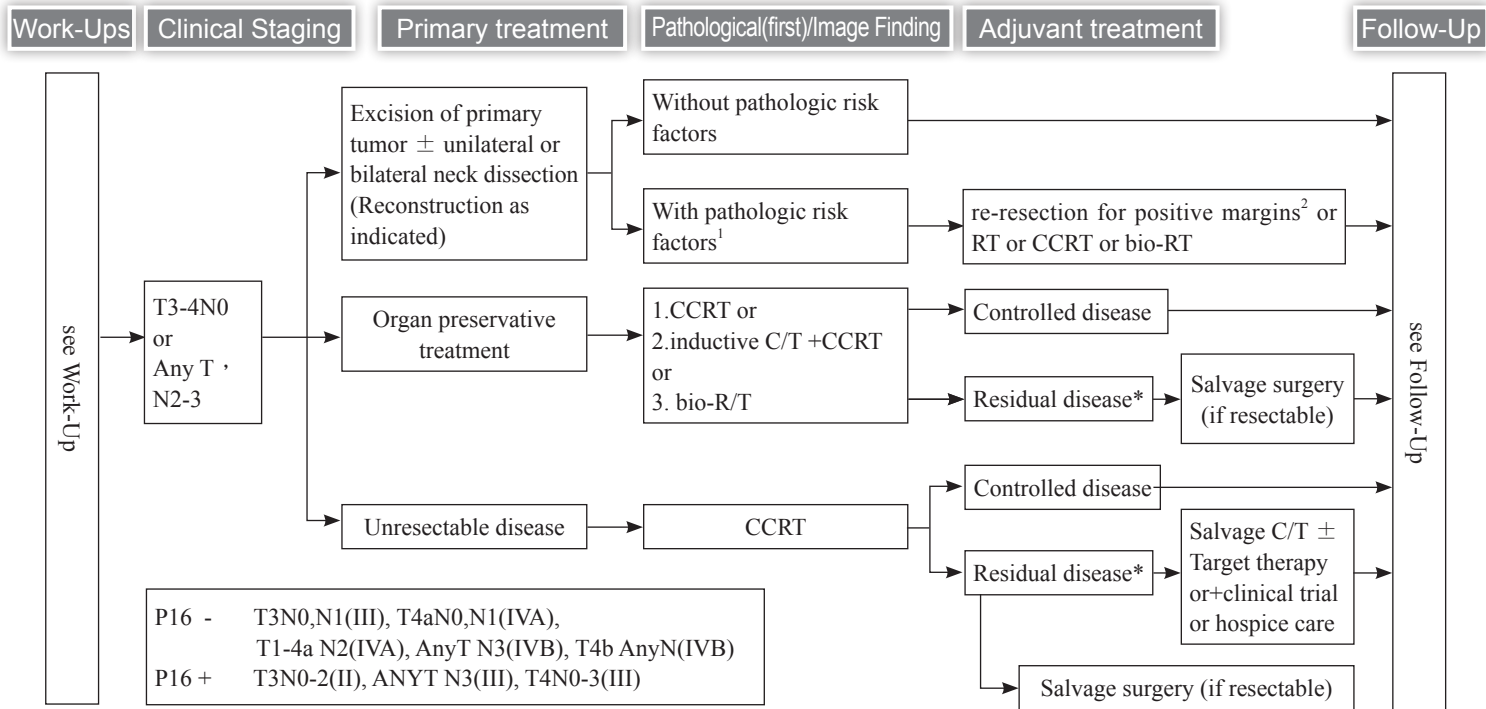
Elective neck dissection for Large(≥ 6cm) ± central necrosis(N2 or N3) of LAP followed by Definitive CCRT or bio-RT)

* 1 Extranodal extension, positive margins, close margins, pT3 or pT4 primary, pN2 or pN3 nodal disease, nodal disease in levels IV or V, perineural invasion, lymphovascular invasion

* 2 consider re-resection to achieve negative margins for positive resection margins if feasible

* Pathological(first)/Image Finding

《 Cancer of the Oropharynx -2 》



Elective neck dissection for Large(≥ 6cm) ± central necrosis(N2 or N3) of LAP followed by Definitive CCRT or bio-RT)

* 1 Extranodal extension, positive margins, close margins, pT3 or pT4 primary, pN2 or pN3 nodal disease, nodal disease in levels IV or V, perineural invasion, lymphovascular invasion

* 2 consider re-resection to achieve negative margins for positive resection margins if feasible

* Pathological(first)/Image Finding

Work-Up

Necessary examination

- Biopsy
- Laryngoscopy
- Chest radiography
- H&N MRI or CT
- Whole body bone scan (optional if early stage)
- Abdomen sonography
- Panendoscopy(if smoking or drinking wine)
- Dental consultation (prior to R/T)
- Dietician consultation
- Speech & swallowing evaluation

Optional examination

- PET-CT for stage III-IV disease
- Bronchoscopy
- Audiometry
- Pulmonary function test(advanced T status is indicated)

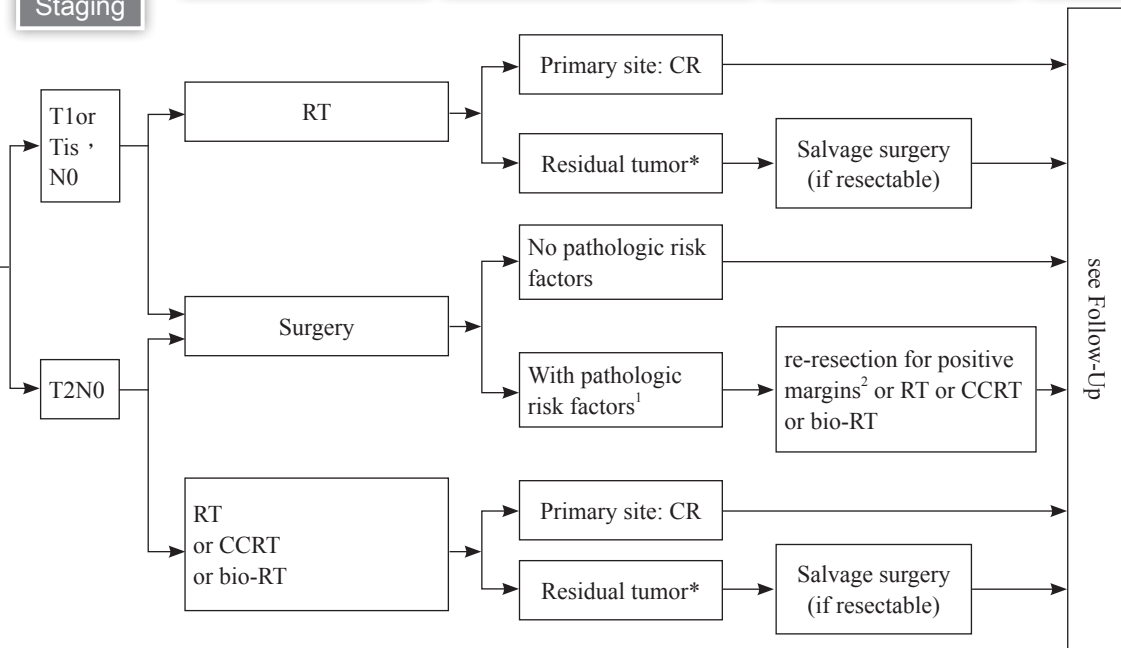
Clinical Staging

Primary treatment

Pathological(first)/Image Finding

Adjuvant Treatment

Follow-Up



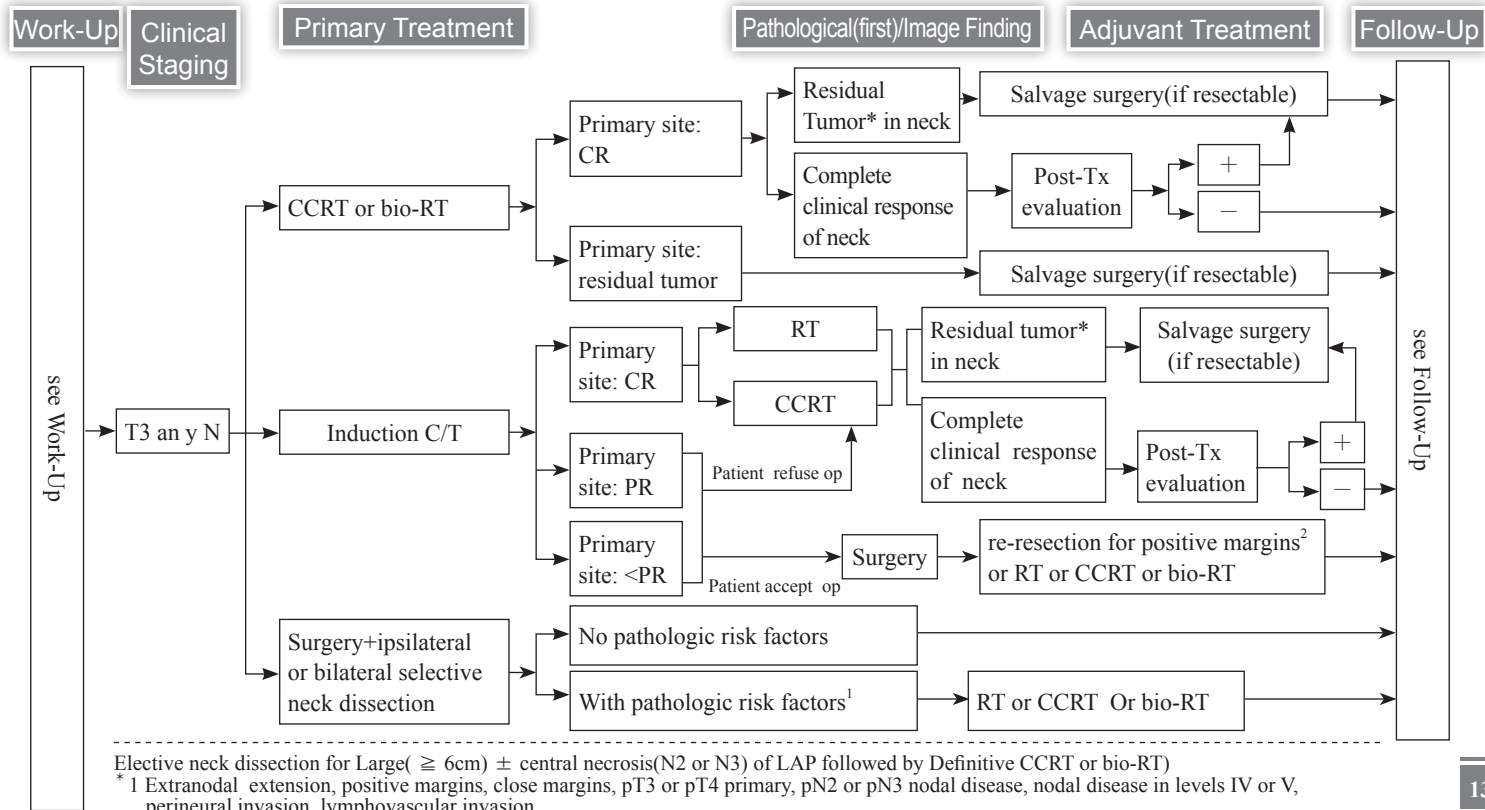
Elective neck dissection for Large($\geq 6\text{cm}$) \pm central necrosis(N2 or N3) of LAP followed by Definitive CCRT or bio-RT)

* 1 Extranodal extension, positive margins, close margins, pT3 or pT4 primary, pN2 or pN3 nodal disease, nodal disease in levels IV or V, perineural invasion, lymphovascular invasion

* 2 consider re-resection to achieve negative margins for positive resection margins if feasible

* Pathological(first)/Image Finding

《 Cancer of the Glottic Larynx -2 》



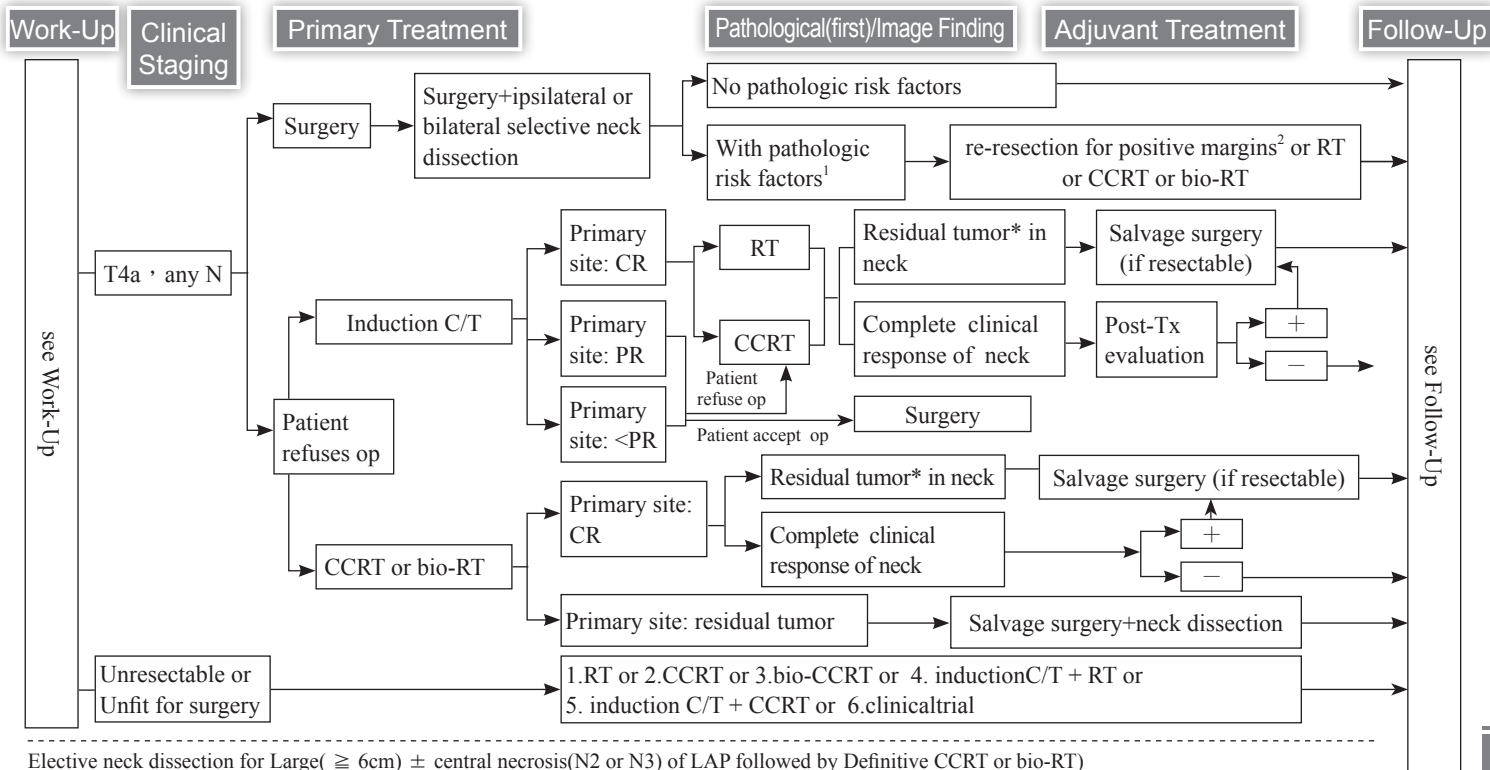
Elective neck dissection for Large (≥ 6cm) ± central necrosis(N2 or N3) of LAP followed by Definitive CCRT or bio-RT)

* 1 Extranodal extension, positive margins, close margins, pT3 or pT4 primary, pN2 or pN3 nodal disease, nodal disease in levels IV or V, perineural invasion, lymphovascular invasion

* 2 consider re-resection to achieve negative margins for positive resection margins if feasible

* Pathological(first)/Image Finding

《 Cancer of the Glottic Larynx -3 》



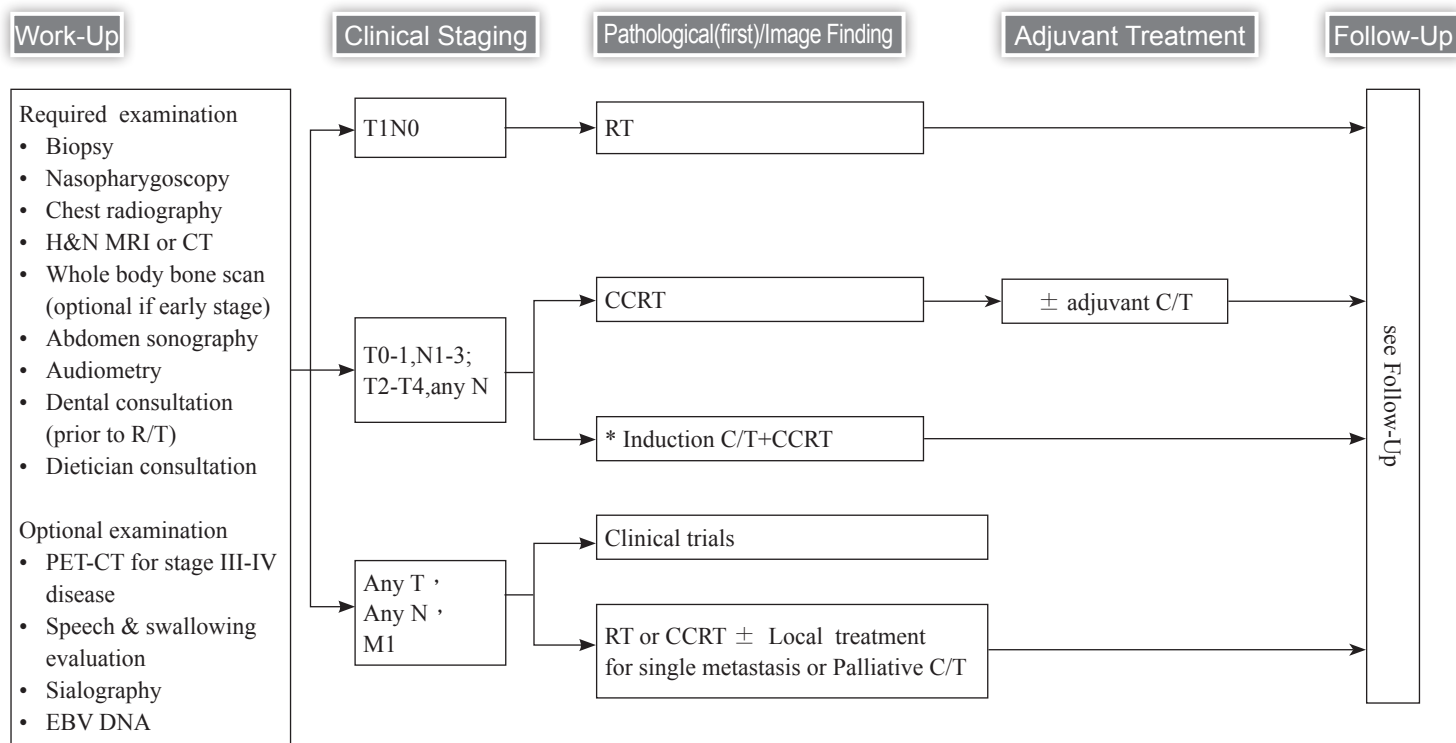
Elective neck dissection for Large($\geq 6\text{cm}$) \pm central necrosis(N2 or N3) of LAP followed by Definitive CCRT or bio-RT)

*1 Extranodal extension, positive margins, close margins, pT3 or pT4 primary, pN2 or pN3 nodal disease, nodal disease in levels IV or V, perineural invasion, lymphovascular invasion *

*2 consider re-resection to achieve negative margins for positive resection margins if feasible

*Pathological(first)/Image Finding

《 Cancer of the Nasopharynx -1 》



* Induction chemotherapy can be used in selective patients (T4 or N3)

《 follow up recommendation 》

Follow-up frequency

- Every month in the 1st year after treatment
- Every 2-3 months in the 2nd year after treatment
- Every 3 months in the 3rd year after treatment
- Every 6 months in the 4th-5th year after treatment

H&N MRI or CT

- Every 3-6 months within the first 3 years after treatment
- Every 6-12 months beyond 3 years after treatment

Whole body bone scan

- Every 3-6 months within the first 3 years after treatment
- Every 6-12 months beyond 3 years after treatment

Abdomen sonography

- Every 3-6 months within the first 3 years after treatment
- Every 6-12 months beyond 3 years after treatment

PET and Whole body bone scan and Panendoscopy

- If indicated clinically

《 Reference 》

1. Al-Sarrf M, LeBlanc M, Giri PG, et al. Chemotherapy versus radiotherapy in patients with advanced nasopharyngeal cancer : phase III randomized Intergroup study 0099. J Clin Oncol 1998; 16:1310-1317. Wee J, Tan EH, Tai BC, et al. Randomized trial of radiotherapy versus concurrent chemoradiotherapy followed by adjuvant chemotherapy in patients with American Joint Committee on Cancer/International Union against cancer stage III and IV nasopharyngeal cancer of the endemic variety. J Clin Oncol 2005; 23 : 6730-6738.
2. Bernier J, Cooper JS, Pajuk TF, et al. Defining risk levels in locally advanced head and neck cancers : A comparative analysis of concurrent postoperative radiation plus chemotherapy trials of the EORTC (#22931) and RTOG (#9501). Head Neck 2005; 27: 843-850.
3. Bernier J, Dumenige C, Ozsahin M et al. Postoperative irradiation with or without concomitant chemotherapy for locally advanced head and neck cancer. N Engl J Med 2004; 350:1945-1952.
4. Budach W, Hehr T, Budach V, et al. A meta-analysis of hyperfractionated and accelerated radiotherapy and combined chemotherapy and radiotherapy regimens in unresected locally advanced squamous cell carcinoma of the head and neck. BMC Cancer 2006; 6 : 28-38.
5. Chan AT, Leung SF, Ngan RK, et al. Overall survival after concurrent cisplatin-radiotherapy compared with radiotherapy alone in locoregionally advanced nasopharyngeal carcinoma. J Natl Cancer Inst 2005; 97: 536-539.
6. Chan ATC, Hsu M-M, Goh BC, et al. Multicenter, phase II study of cetuximab in combination with carboplatin in patients with recurrent or metastatic nasopharyngeal carcinoma. J Clin Oncol 2005; 23: 3568-3576.
7. Cooper JS, Pajak TF, Forastiere AA et al. Postoperative concurrent radiotherapy and chemotherapy for high-risk squamous-cell carcinoma of the head and neck. N Engl J Med 2004; 350(19) : 1937-1944.
8. Hartford AC, Palosca MG, Eichler TJ, et al. American Society for Therapeutic Radiology and Oncology (ASTRO) and American College of Radiology (ACR) Practice Guidelines for Intensity-Modulated Radiation Therapy (IMRT). Int J Radiat Oncol Biol Phys 2009; 73: 9-14.
9. NCCN Head and Neck Cancer Guidelines Version 3, 2021.

10. Machtay M, Moughan J, Trotti A, et al. Factors associated with severe late toxicity after concurrent chemoradiation for locally advanced head and neck cancer : an RTOG analysis. *J Clin Oncol* 2008; 26 : 3582-3589.
11. Sanguineti G, Geara FB, Garden AS, et al. Carcinoma of the nasopharynx treated by radiotherapy alone : determinants of local and regional control. *Int J Radiat Oncol Biol Phys* 1997; 37: 985-996.