



亞東紀念醫院

頭頸癌臨床指引

(Head and Neck Cancer Clinical Practice Guideline)

優良照顧品質

完整治療團隊

新穎檢查與治療

創新教學方式

豐富研究成果

民眾首選的醫學中心



頭頸癌醫療照顧多專科團隊

HNC multidisciplinary team, FEMH

一、本共識依下列參考資料修改版本：

1. NCCN Clinical Practice Guidelines in Oncology- Head and Neck cancer V.2.2020
2. 國家衛生研究院癌症共識手冊
3. AJCC第八版
4. Bradley, PJ, MacLennan, K, Brakenhoff, RH, Leemans, CR. Status of primary tumour surgical margins in squamous head and neck cancer: prognostic implications. Curr Opin Otolaryngol Head Neck Surg 2007; 15:74.
5. Vermorken JB, Remenar E, van Herpen C, Gorlia T, Mesia R, Degardin M, Stewart JS, Jelic S, Betka J, Preiss JH, et al. Cisplatin, fluorouracil, and docetaxel in unresectable head and neck cancer. N Engl J Med. 2007 Oct 25; 357(17):1695-704

簡介

本院為新北市唯一的醫學中心，肩負頭頸癌的診治責任。頭頸癌醫療照顧由多專科團隊負責各項頭頸癌診斷及全方位的治療。在疾病照顧方面主要是由耳鼻喉頭頸外科、口腔顎面外科、腫瘤暨血液科、放射腫瘤科、放射診斷/影像醫學科各主治醫師為核心醫療團隊成員，結合整形外科、牙科、肝膽腸胃科、核子醫學科、病理科、復健科、精神科、家庭醫學科安寧療護、護理師、腫瘤個案管理師、藥師、營養師、腫瘤心理師、社工師、語言治療師、復健治療師及靈性關懷人員的專才，加上家庭醫學科協助戒菸、戒檳、癌症篩檢及三高預防，彼此合作凝聚共識，提供良好醫療服務及完善醫療照護。

為了持續提升頭頸癌的診治品質，特訂定本指引，並定期檢視更新。

頭頸癌醫療照顧多專科團隊



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亞東醫院頭頸癌團隊組織結構

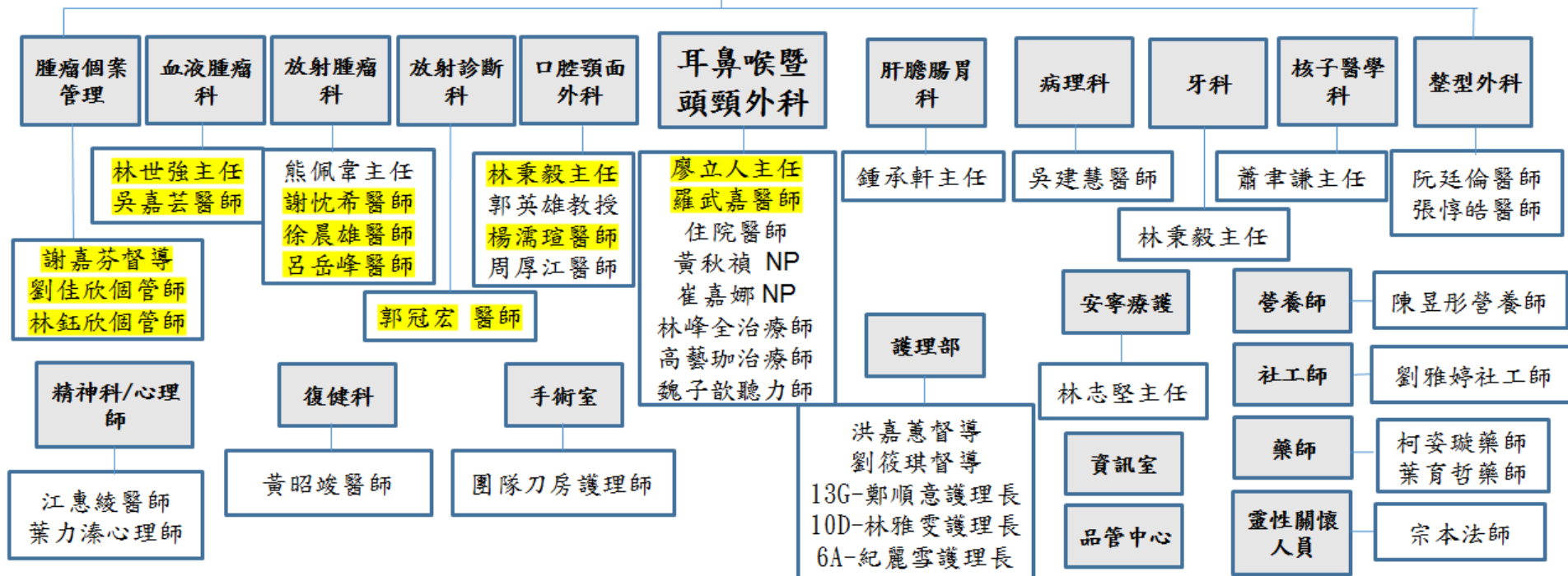
徐元智先生醫療基金會董事會

亞東紀念醫院院長

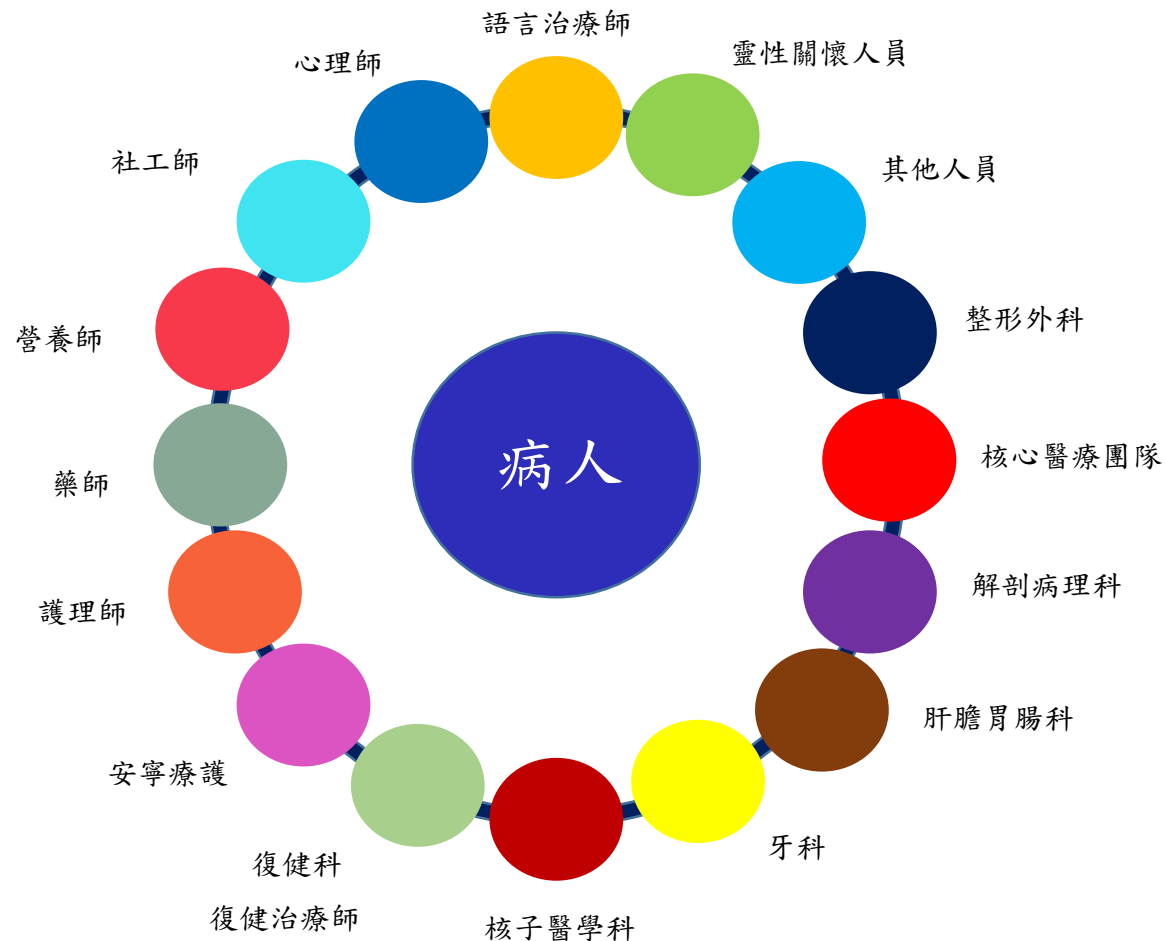
醫療副院長

頭頸癌照護團隊

* 核心醫療團隊



病人為中心之治療團隊

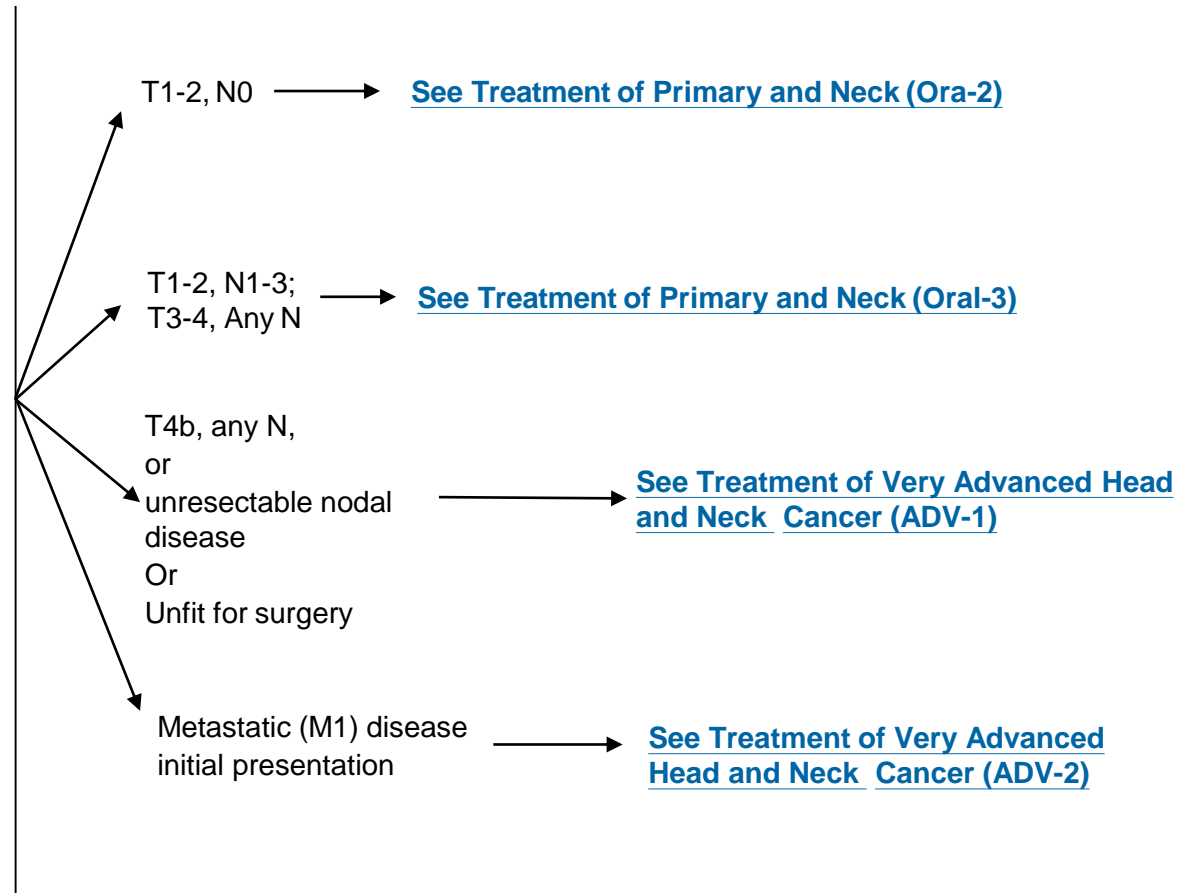




Work-up

- H&P
- Biopsy
- Chest x-ray or chest CT¹
- As indicated for evaluation
 - CT or MRI (optional in early cancer)
 - Panorex (optional)
 - Abdominal sono (optional)
 - Whole body bone scan (optional)
 - PET CT (optional)
- Examination under anesthesia(EUA) with endoscopy,if indicated
- Preanesthesia studies
- Dental evaluation
- Multidisciplinary consultation as indicated
- Nutrition, speech and swallowing evaluation/therapy as indicated
- Smoking cessation counseling
- Fertility/reproductive counseling

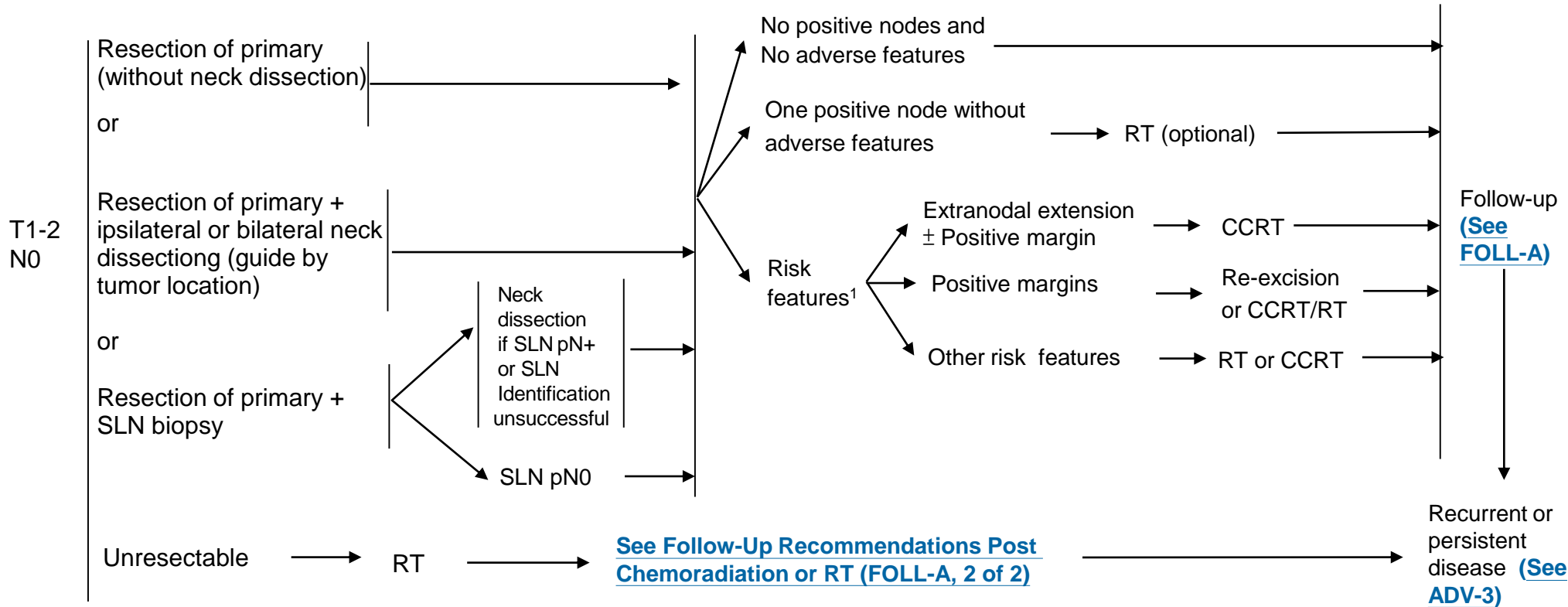
CLINICAL STAGING



1. Chest CT should be considered for patients at high risk for thoracic metastases.

CLINICAL STAGING

TREATMENT OF PRIMARY AND NECK



¹Adverse risk features: extranodal extension, positive margins, pT3 or pT4 primary, pN2 or pN3 nodal disease, nodal disease in levels IV or V, perineural invasion, vascular invasion, lymphatic invasion

➢ Chemotherapy can be given for disease control during pre-RT waiting period.



Buccal mucosa, floor of mouth, anterior tongue, alveolar ridge, retromolar trigone, hard palate, Lip

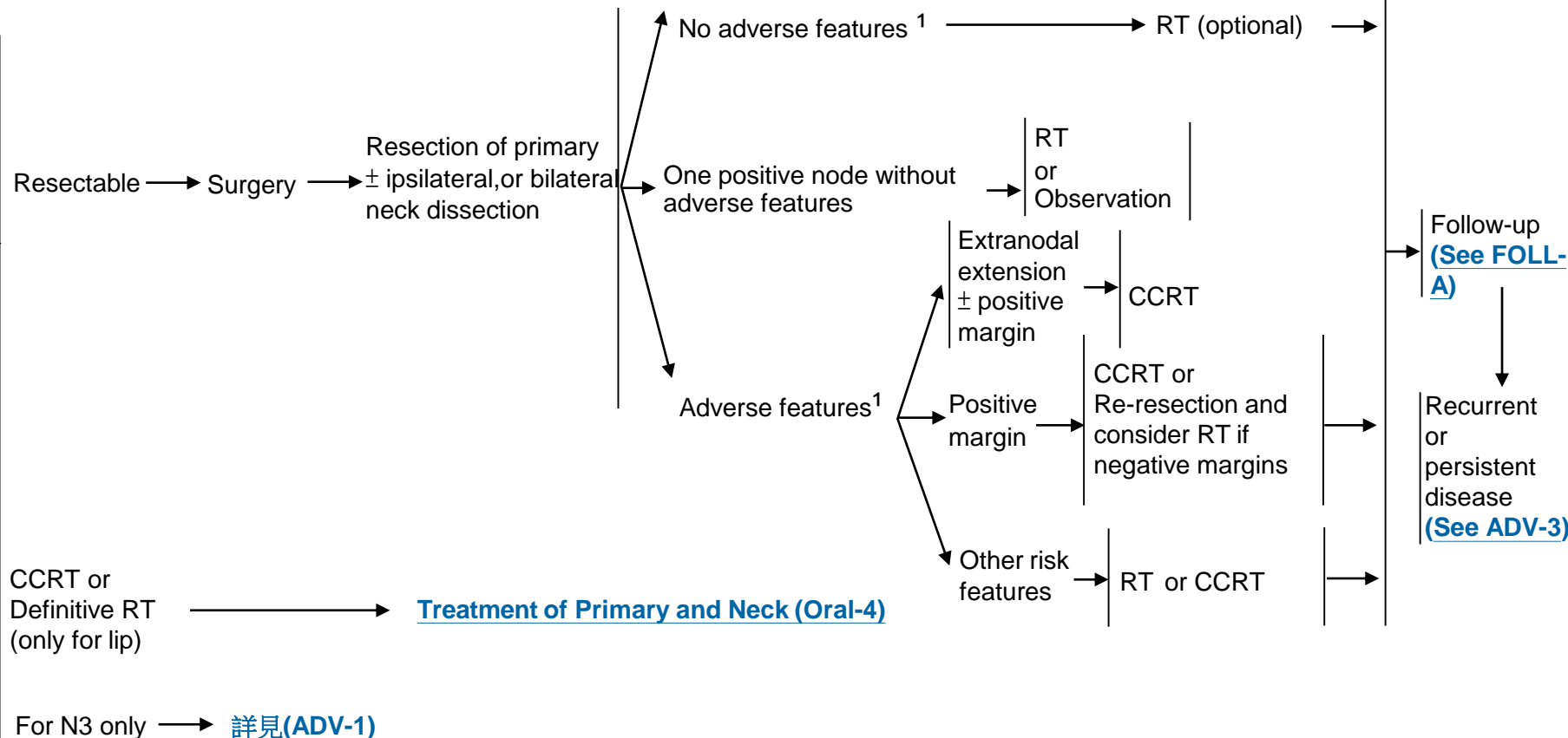
CLINICAL STAGING

TREATMENT OF PRIMARY AND NECK

ADJUVANT TREATMENT

FOLLOW-UP

T1-2, N1-3;
T3-4a, Any
N



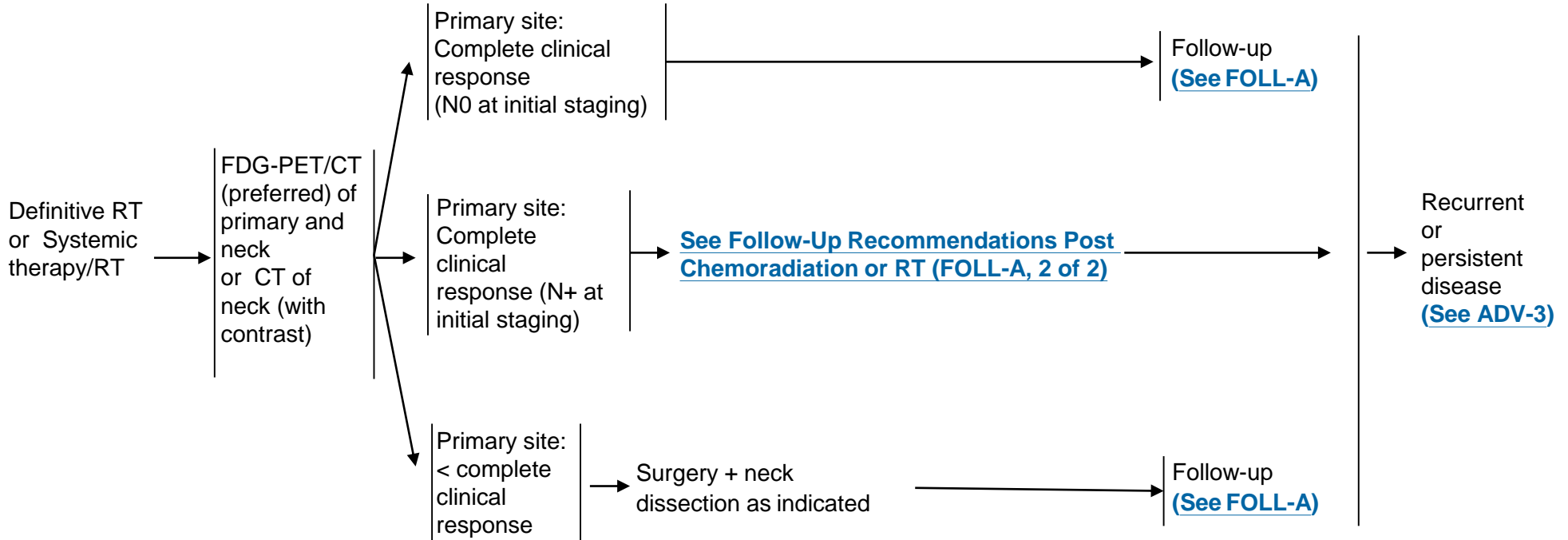
¹.Adverse risk features: extranodal extension, positive margins, pT3 or pT4 primary, N2 or N3 nodal disease, nodal disease in levels IV or V, perineural invasion, vascular invasion, lymphatic invasion

➢ Chemotherapy can be given for disease control during pre-RT waiting period.

CLINICAL STAGING:
T3, T4a, N0; Any T, N1-3

TREATMENT OF PRIMARY AND NECK

FOLLOW-UP



T4b or M1 → 詳見(ADV-1)

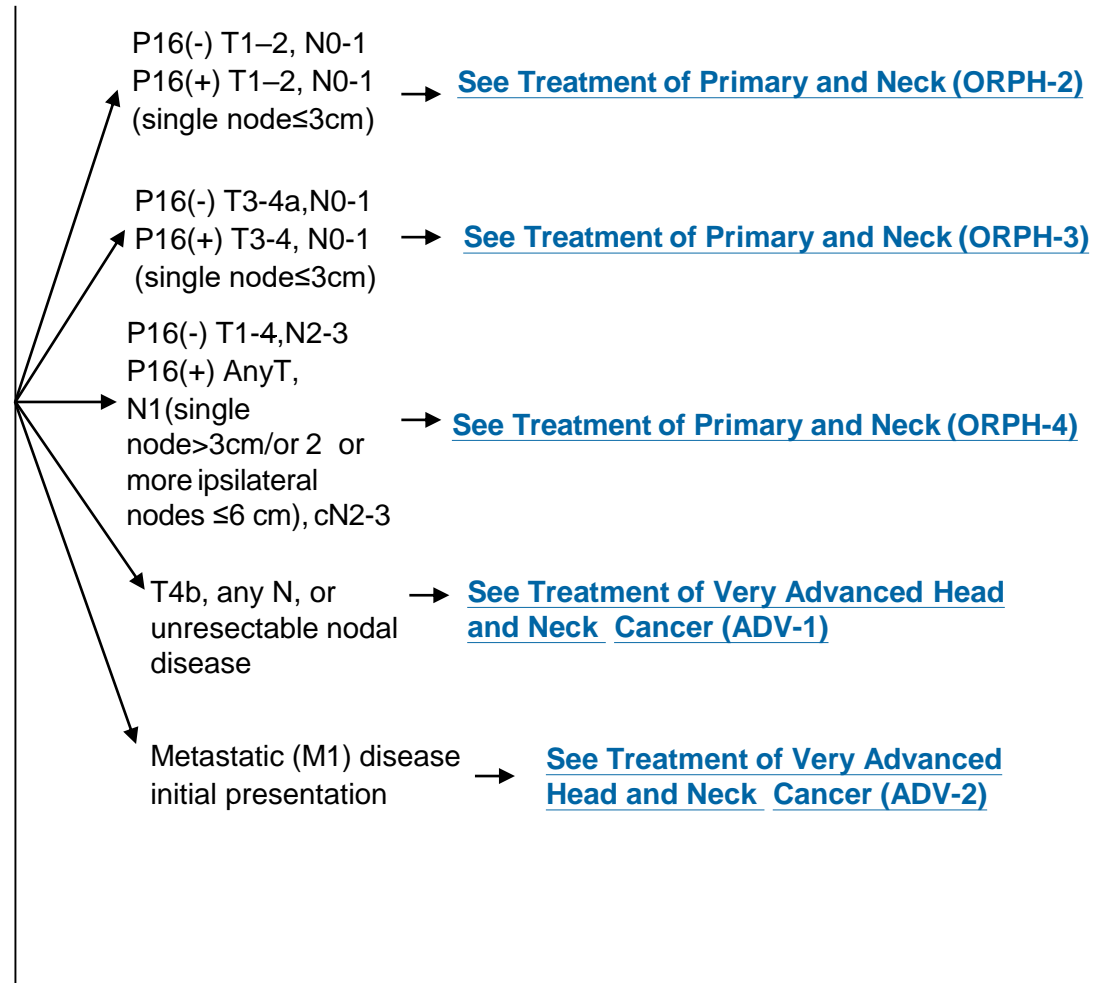
➢ Chemotherapy can be given for disease control during pre-RT waiting period.



Work-up

- Tumor human papillomavirus(HPV) testing by p16 immunohistochemistry (IHC) required
- H&P
- Biopsy
- Chest x-ray or chest CT¹
- As indicated for evaluation
 - CT or MRI (optional in early cancer)
 - Panorex (optional)
 - Abdominal sono (optional)
 - Whole body bone scan (optional)
 - PET CT (optional)
- Examination under anesthesia(EUA) with endoscopy,if indicated if indicated
- Preanesthesia studies
- Dental evaluation
- Multidisciplinary consultation as indicated
- Nutrition, speech and swallowing evaluation/therapy as indicated
- Smoking cessation counseling
- Fertility/reproductive counseling

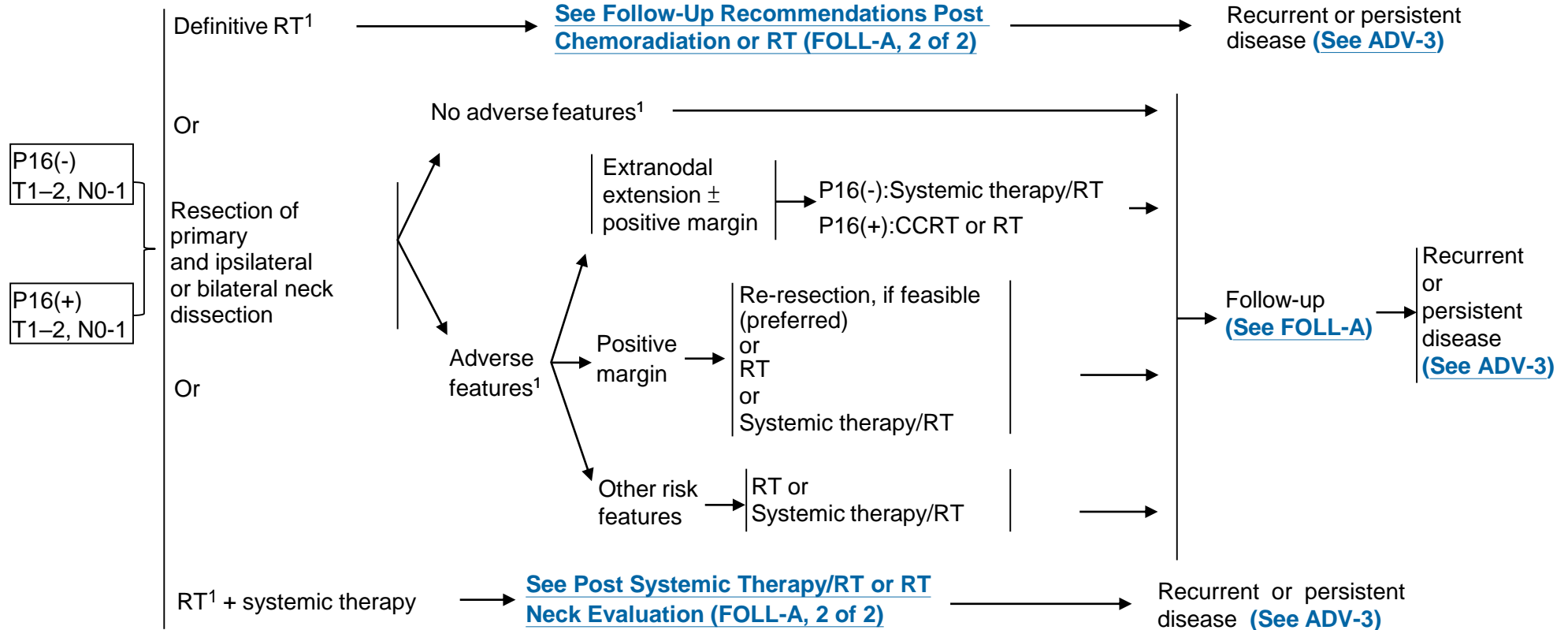
CLINICAL STAGING





Base of tongue/tonsil/posterior pharyngeal wall/soft palate

CLINICAL TREATMENT OF PRIMARY AND NECK ADJUVANT TREATMENT STAGING



¹-Adverse features: extranodal extension, positive margins, pT3 or pT4 primary, N2 or N3 nodal disease, nodal disease in levels IV or V, perineural invasion, vascular invasion, lymphatic invasion (See Discussion).

➢ Chemotherapy can be given for disease control during pre-RT waiting period.

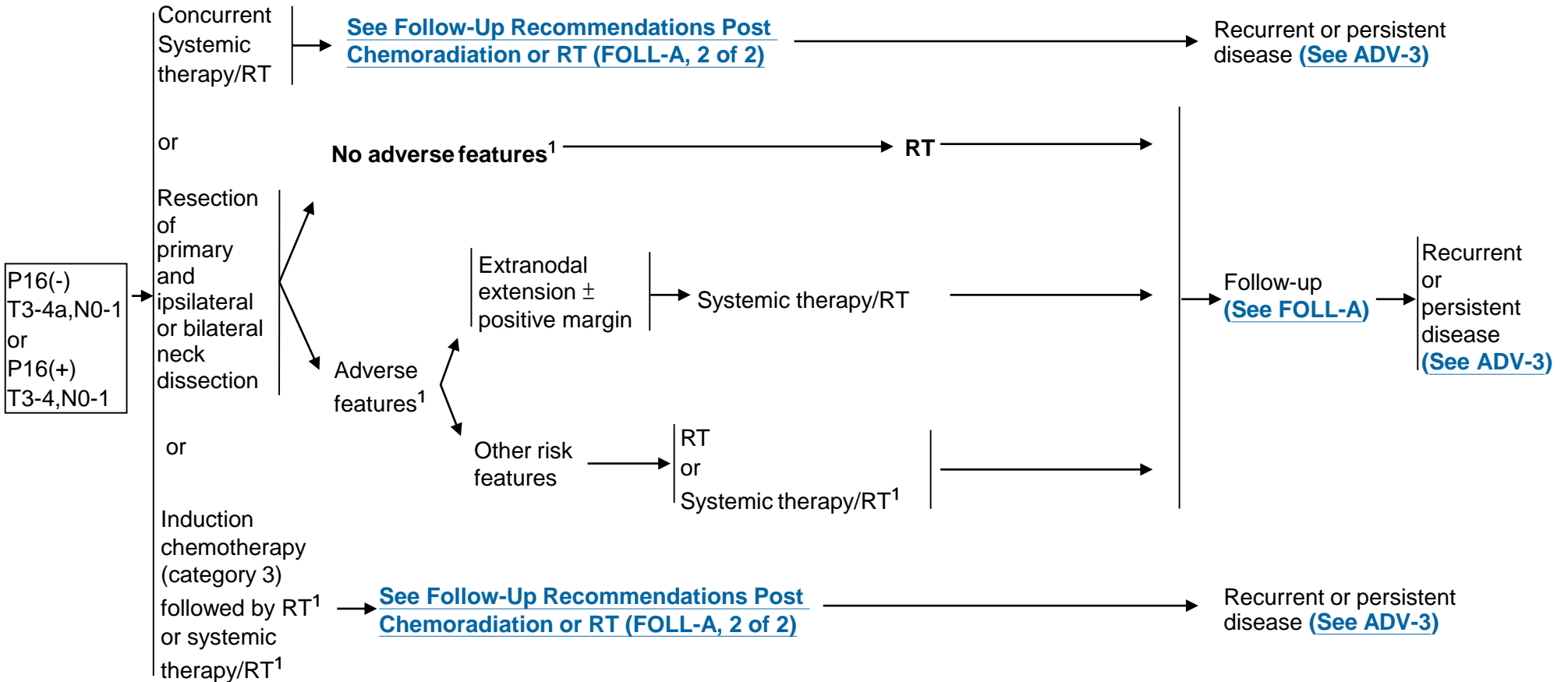


Base of tongue/tonsil/posterior pharyngeal wall/soft palate

CLINICAL STAGING

TREATMENT OF PRIMARY AND NECK

ADJUVANT TREATMENT



1. Adverse features: extranodal extension, positive margins, pT3 or pT4 primary, N2 or N3 nodal disease, nodal disease in levels IV or V, perineural invasion, vascular invasion, lymphatic invasion (See Discussion).

➤ Chemotherapy can be given for disease control during pre-RT waiting period.



Base of tongue/tonsil/posterior pharyngeal wall/soft palate

CLINICAL STAGING

TREATMENT OF PRIMARY AND NECK

ADJUVANT TREATMENT

P16(-)
T1-4,N2-3

Concurrent Systemic therapy/RT
or
Induction chemotherapy (category 3) followed by RT or systemic therapy/RT

See Follow-Up Recommendations Post Chemoradiation or RT (FOLL-A, 2 of 2)

Recurrent or persistent disease (See ADV-3)

P16(+)
T1-4,N0-3

Resection of primary and ipsilateral or bilateral neck dissection

No adverse features¹

Adverse features¹

Extranodal extension ± positive margin

Systemic therapy/RT

Other risk features

RT
Or
Consider Systemic therapy/RT¹

Follow-up (See FOLL-A)

Recurrent or persistent disease (See ADV-3)

T4b or M1 → 詳見(ADV-1)

1. Adverse features: extranodal extension, positive margins, pT3 or pT4 primary, N2 or N3 nodal disease, nodal disease in levels IV or V, perineural invasion, vascular invasion, lymphatic invasion (See Discussion).

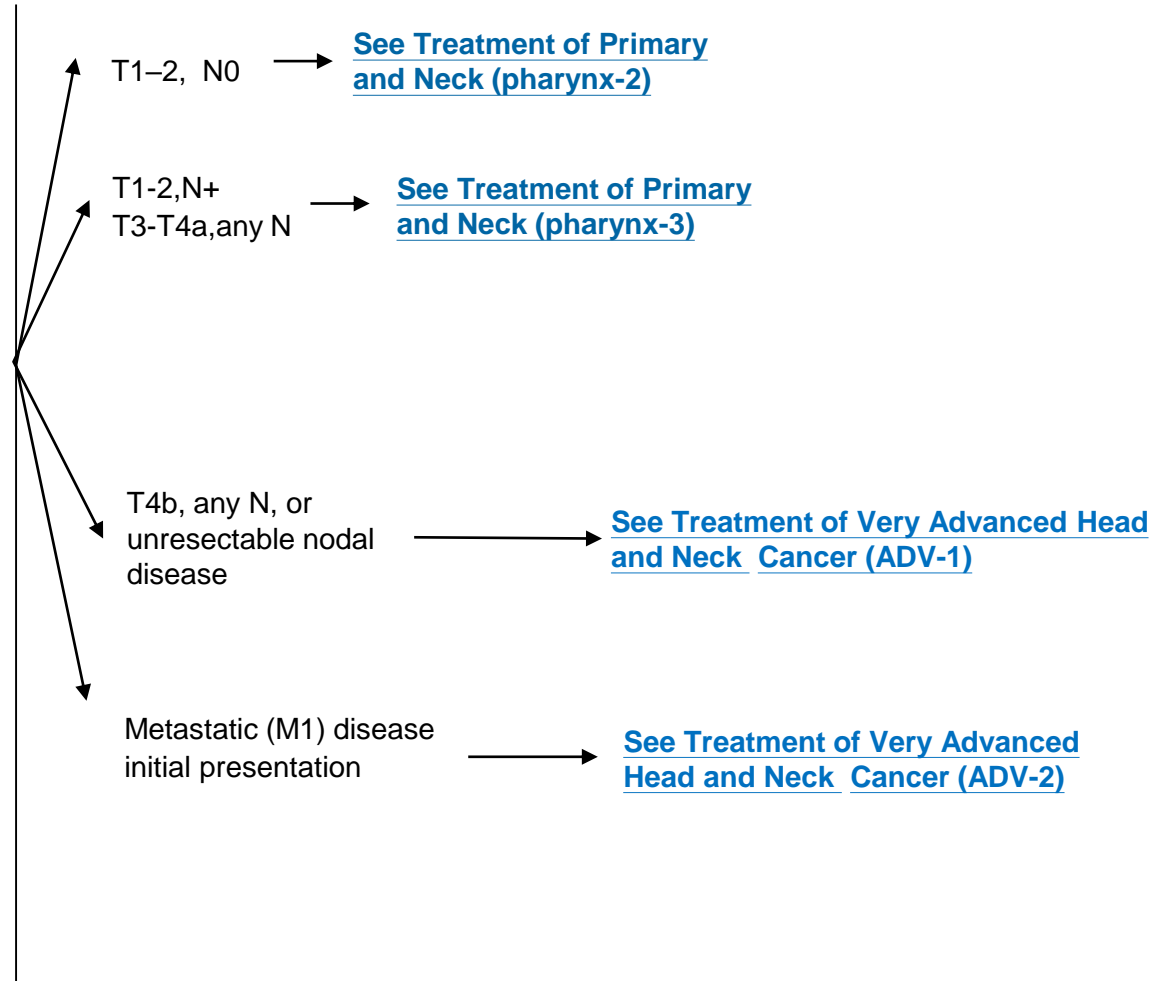
➢ Chemotherapy can be given for disease control during pre-RT waiting period.





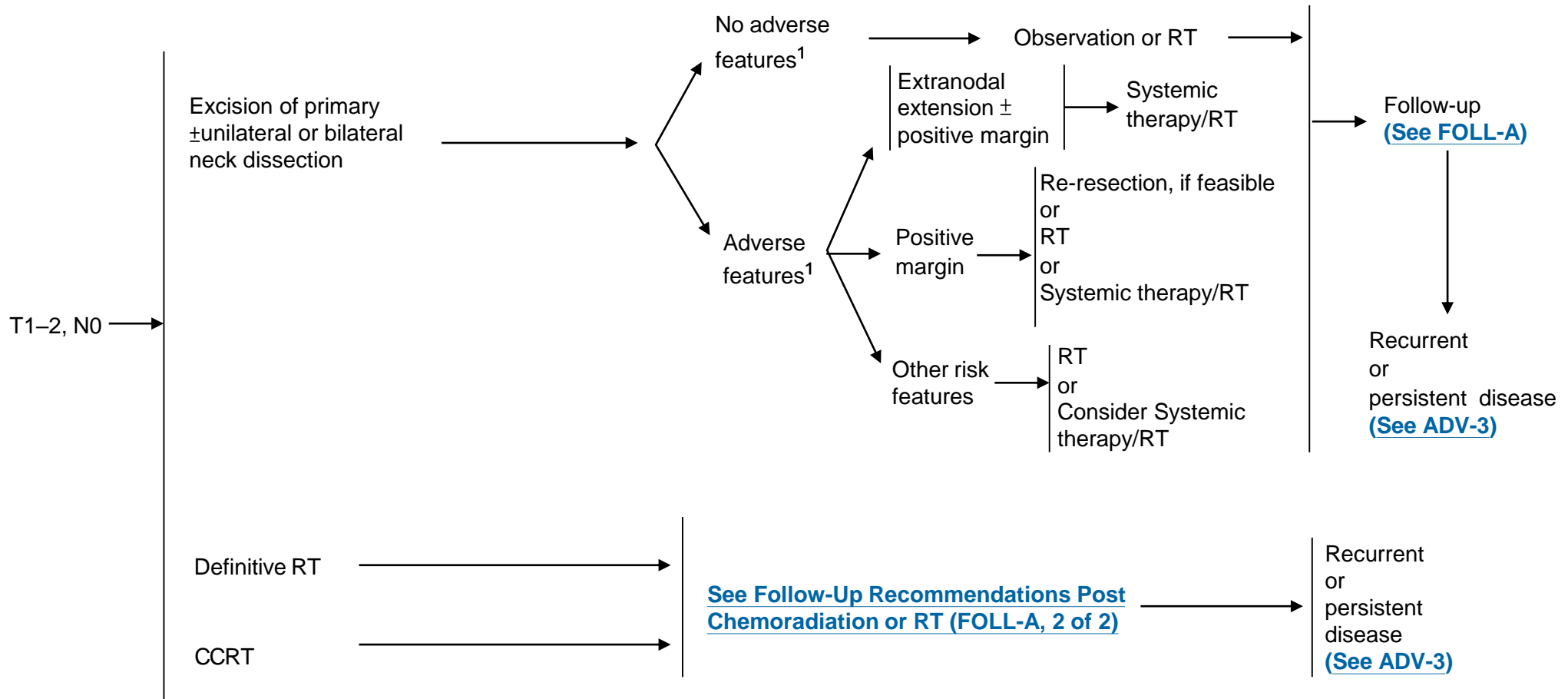
Work-up

- H&P
- Biopsy
- Chest x-ray or chest CT¹
- As indicated for evaluation
 - CT or MRI (optional in early cancer)
 - Panorex (optional)
 - Abdominal sono (optional)
 - Whole body bone scan (optional)
 - PET CT (optional)
- Examination under anesthesia(EUA) with endoscopy,if indicated
- Preanesthesia studies
- Dental evaluation
- Multidisciplinary consultation as indicated
- Nutrition, speech and swallowing evaluation/therapy as indicated
- Consider pulmonary function tests for conservation surgery candidates
- Smoking cessation counseling
- Fertility/reproductive counseling



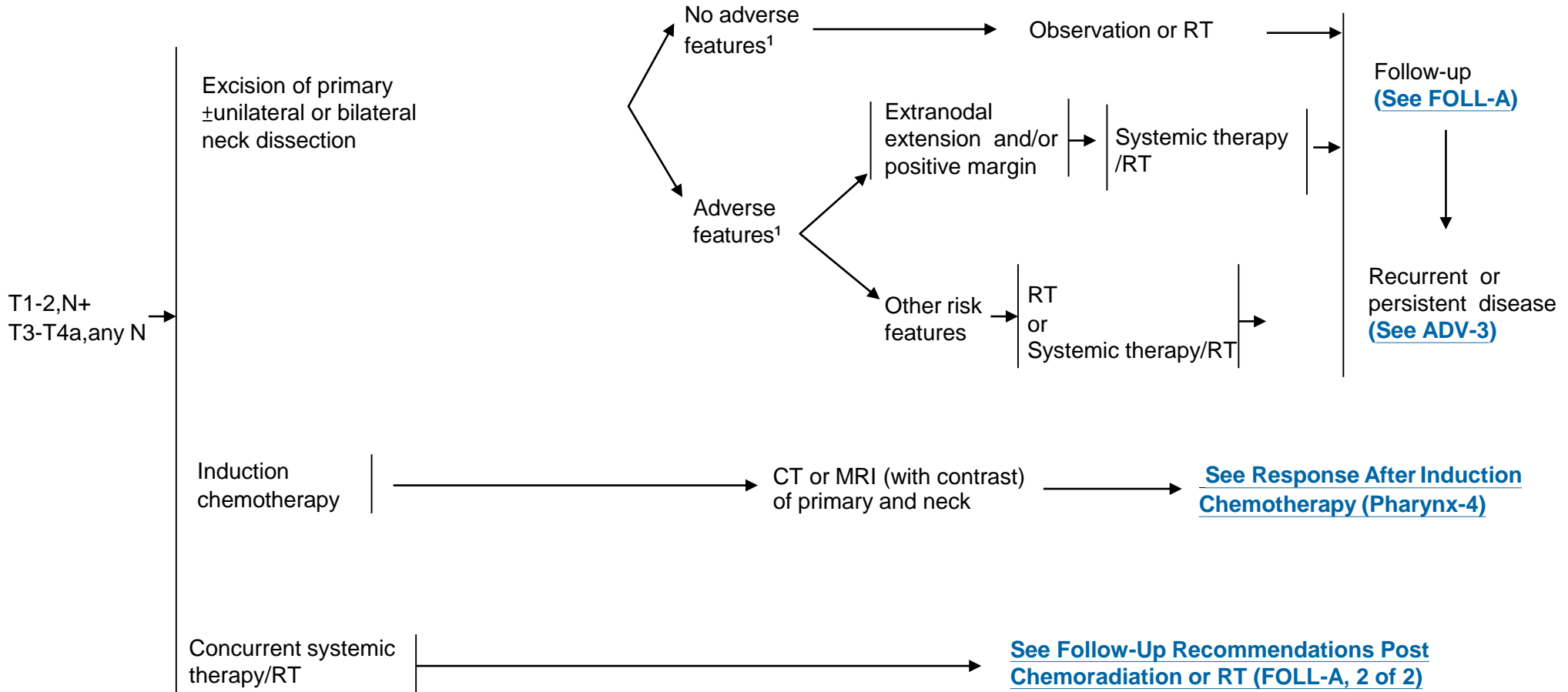


CLINICAL STAGING



¹.Adverse features: extranodal extension, positive margins, pT3 or pT4 primary, N2 or N3 nodal disease, perineural invasion, vascular invasion, lymphatic invasion

➢ Chemotherapy can be given for disease control during pre-RT waiting period.

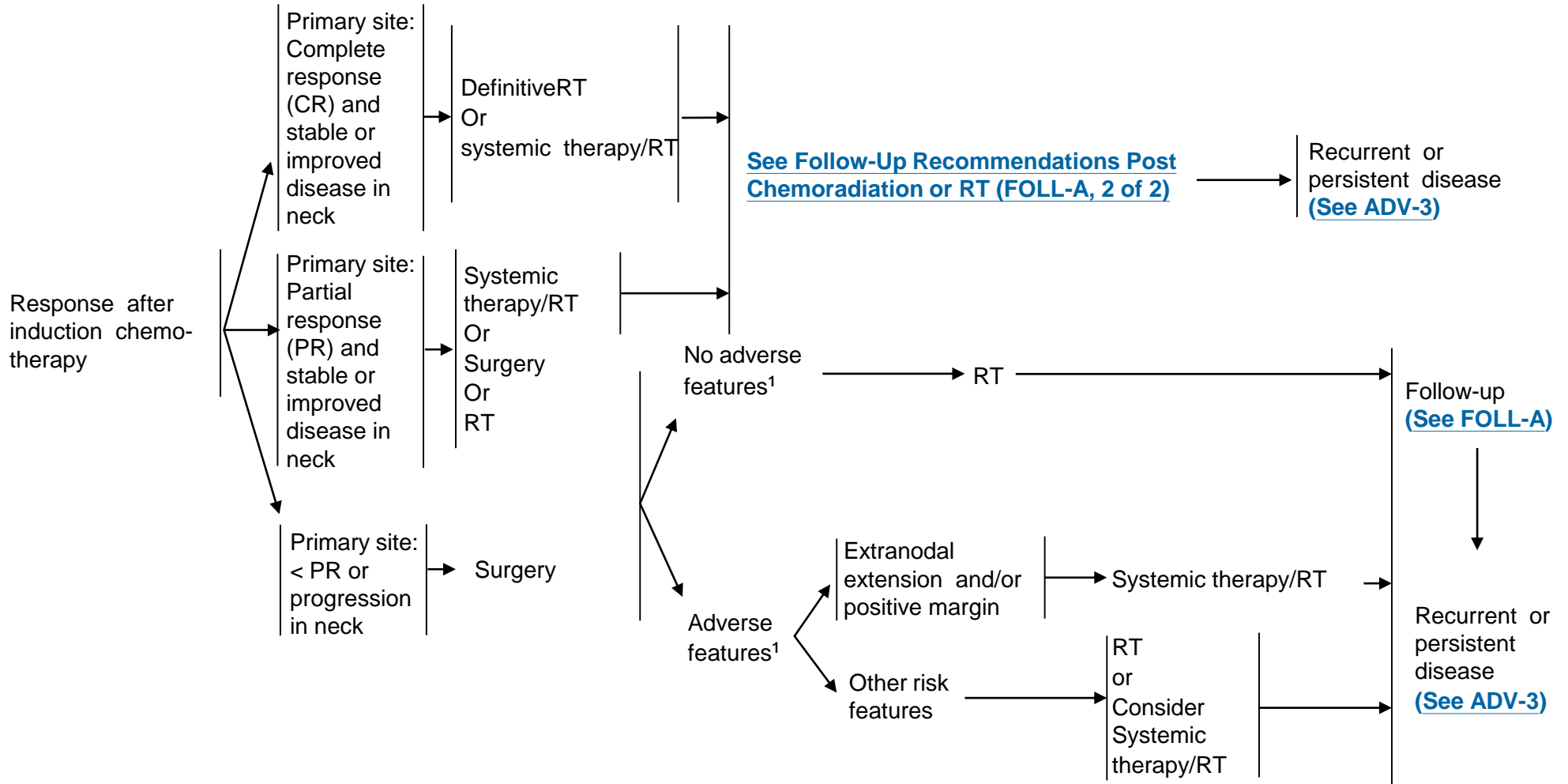


¹Adverse features: extranodal extension, positive margins, pT3 or pT4 primary, N2 or N3 nodal disease, perineural invasion, vascular invasion, lymphatic invasion (See Discussion).

➢ Chemotherapy can be given for disease control during pre-RT waiting period.



頭頸癌臨床指引



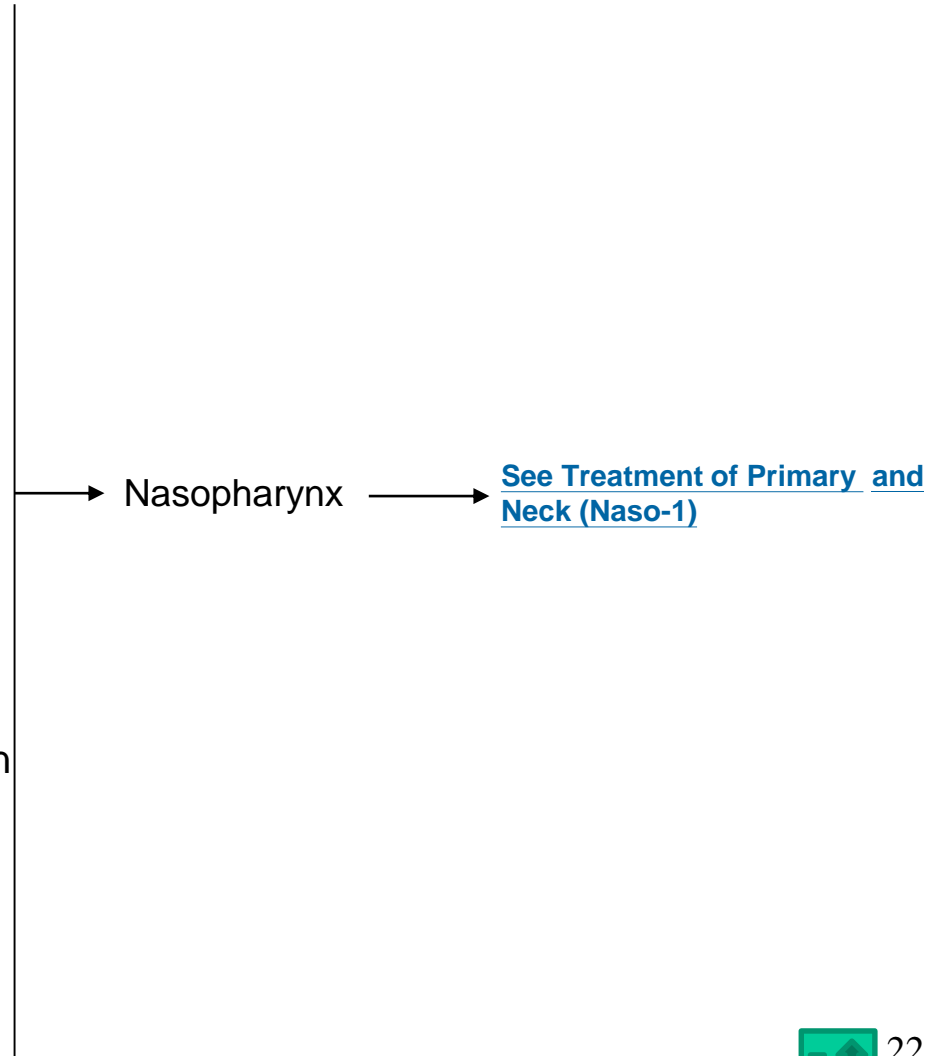
¹-Adverse features: extranodal extension, positive margins, pT3 or pT4 primary, N2 or N3 nodal disease, perineural invasion, vascular invasion, lymphatic invasion.

➢ Chemotherapy can be given for disease control during pre-RT waiting period.



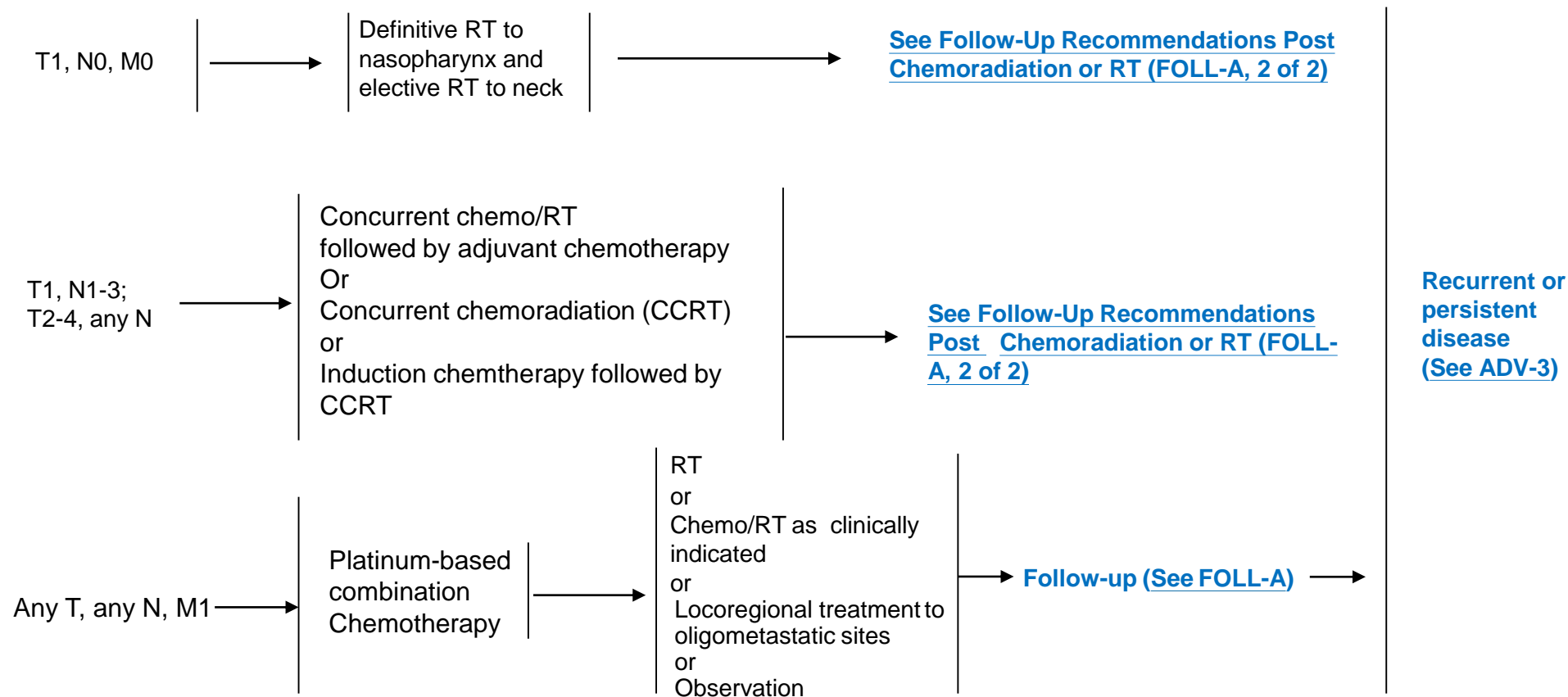
Work-up

- H&P
- Biopsy
- Chest x-ray or chest CT¹
- As indicated for evaluation
 - CT or MRI (optional in early cancer)
 - Panorex (optional)
 - Abdominal sono (optional)
 - Whole body bone scan (optional)
 - PET CT (optional)
- Examination under anesthesia (EUA) with endoscopy, if indicated
- Preanesthesia studies
- Dental evaluation
- Multidisciplinary consultation as indicated
- Consider Epstein-Barr virus (EBV)/DNA testing
- Consider ophthalmologic and endocrine evaluation as clinically indicated.
- Nutrition, speech and swallowing evaluation /therapy as indicated
- Smoking cessation counseling
- Fertility/reproductive counseling



CLINICAL STAGING

TREATMENT OF PRIMARY AND NECK



➤ Chemotherapy can be given for disease control during pre-RT waiting period.

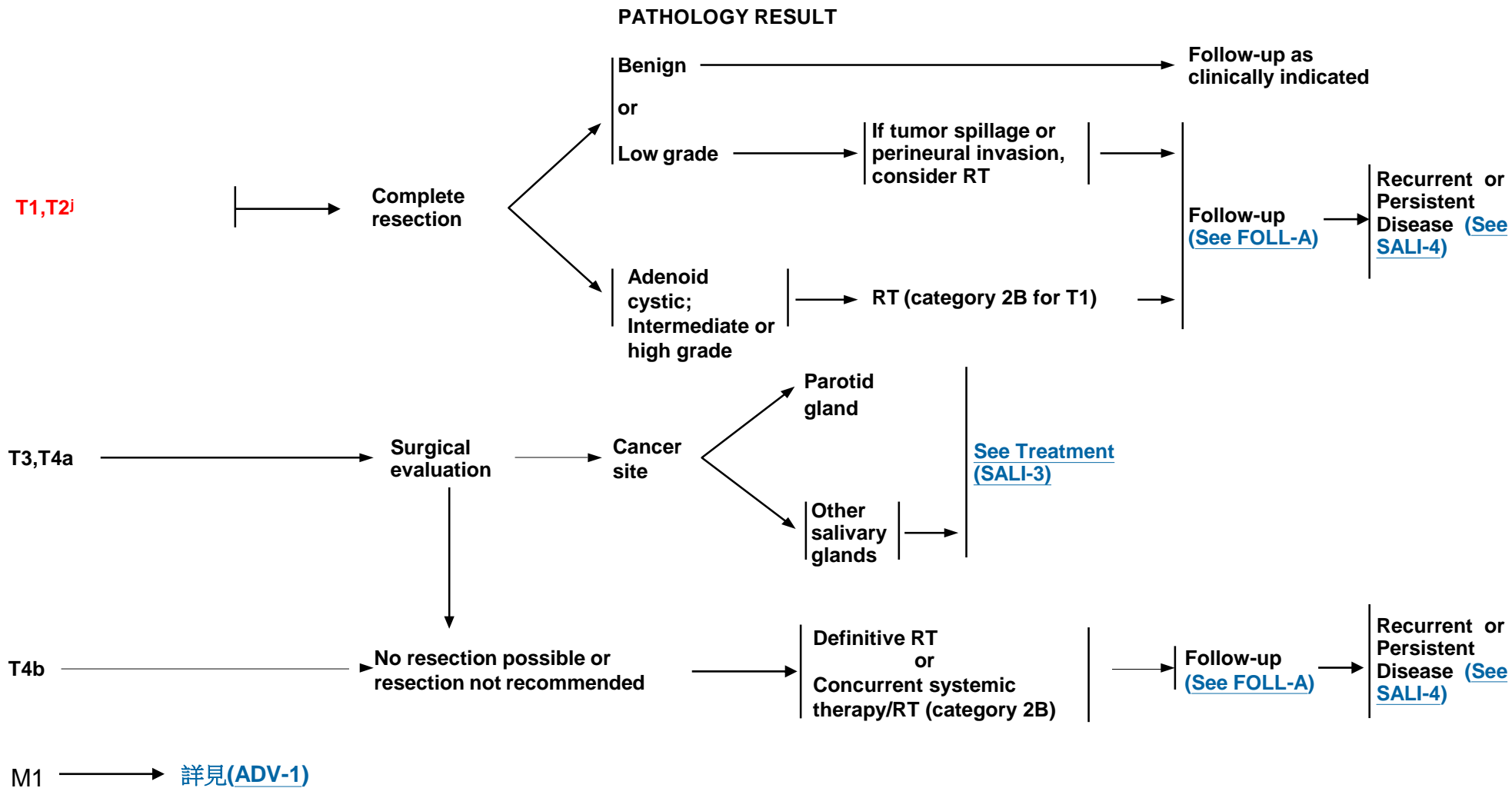


Work-up

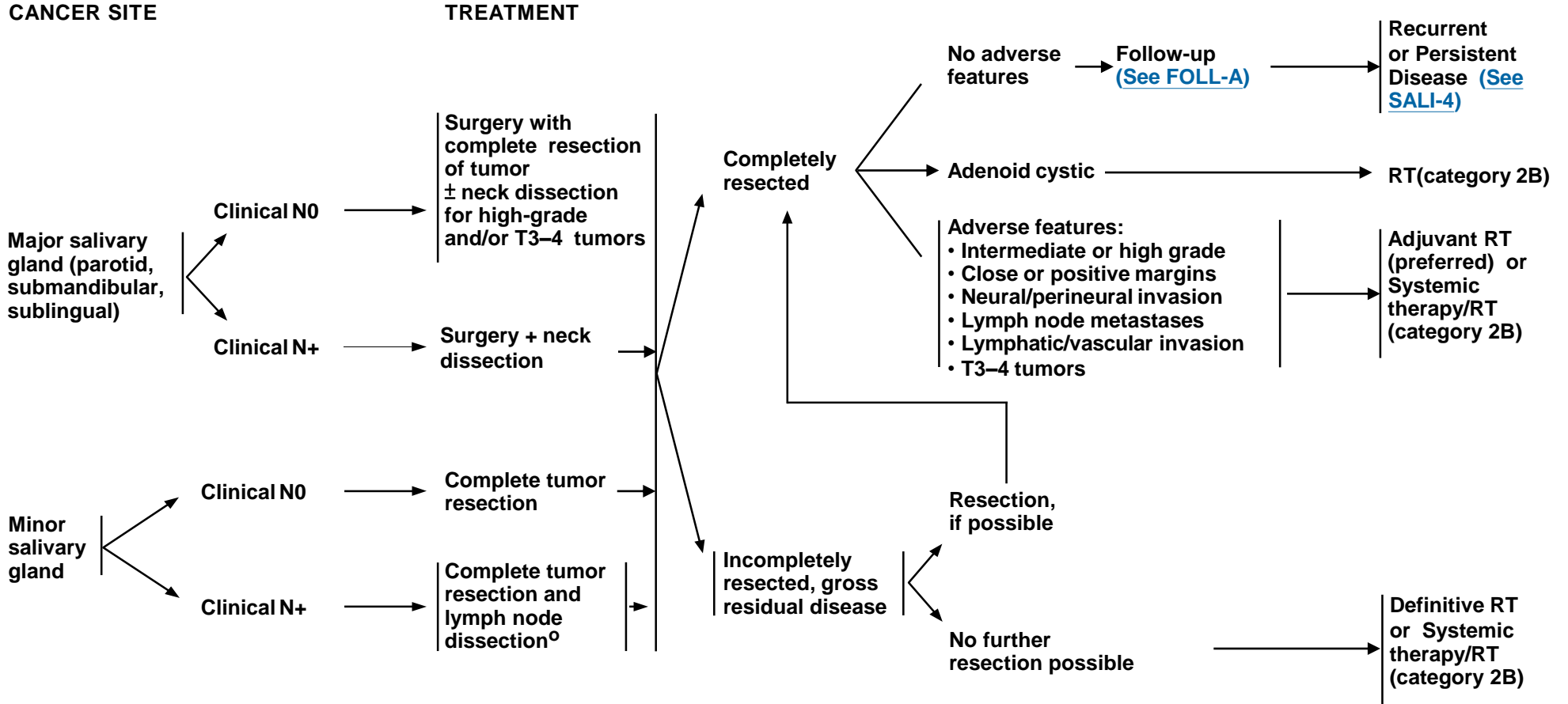
- H&P
- Biopsy
- Chest x-ray or chest CT¹
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 - CT or MRI (optional in early cancer)
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 - Abdominal sono (optional)
 - Whole body bone scan (optional)
 - PET CT (optional)
- Nutritional evaluation as clinically indicated
- Preanesthesia studies
- Dental evaluation
- Multidisciplinary consultation as indicated
- Smoking cessation counseling
- Fertility/reproductive counseling

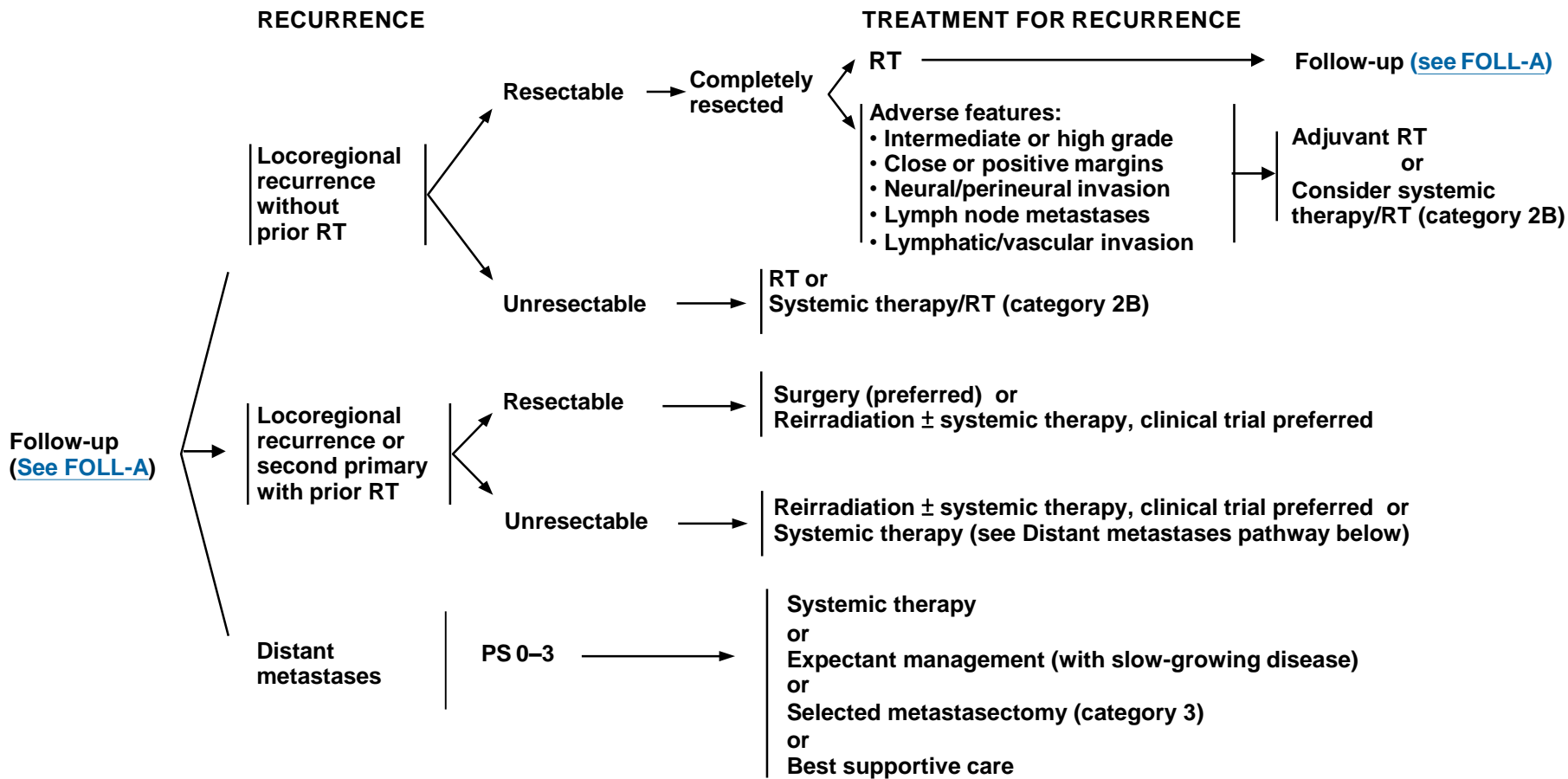
CLINICAL STAGING

→ Salivary Gland → [See Treatment of Primary and Neck \(Sali-2\)](#)



If incidental N+ disease is present go to [SALI-3](#).





PS = Performance Status (ECOG)



Follow-up

- **Physical exam:**

(including local check-up)

- Year 1, every 1 -3mo
- Year 2, every 2-6 mo
- Year 3-5, every 4-8 mo
- ≥5 yrs, every 12 mo

- **Imaging:**

- Chest imaging as clinically indicated for patients with smoking history
- Post-treatment, consider repeating pre-treatment baseline imaging of primary (and neck, if treated) within 6 mo of treatment
- Further reimaging as indicated based on worrisome or equivocal signs/symptoms, smoking history, and areas inaccessible to clinical examination.
- Routine annual imaging (repeat use of pretreatment imaging modality) may be indicated in areas difficult to visualize on exam.

- Thyroid-stimulating hormone (TSH) every 6–12 mo if neck irradiated.

- Dental evaluation for oral cavity and sites exposed to significant intraoral radiation treatment.

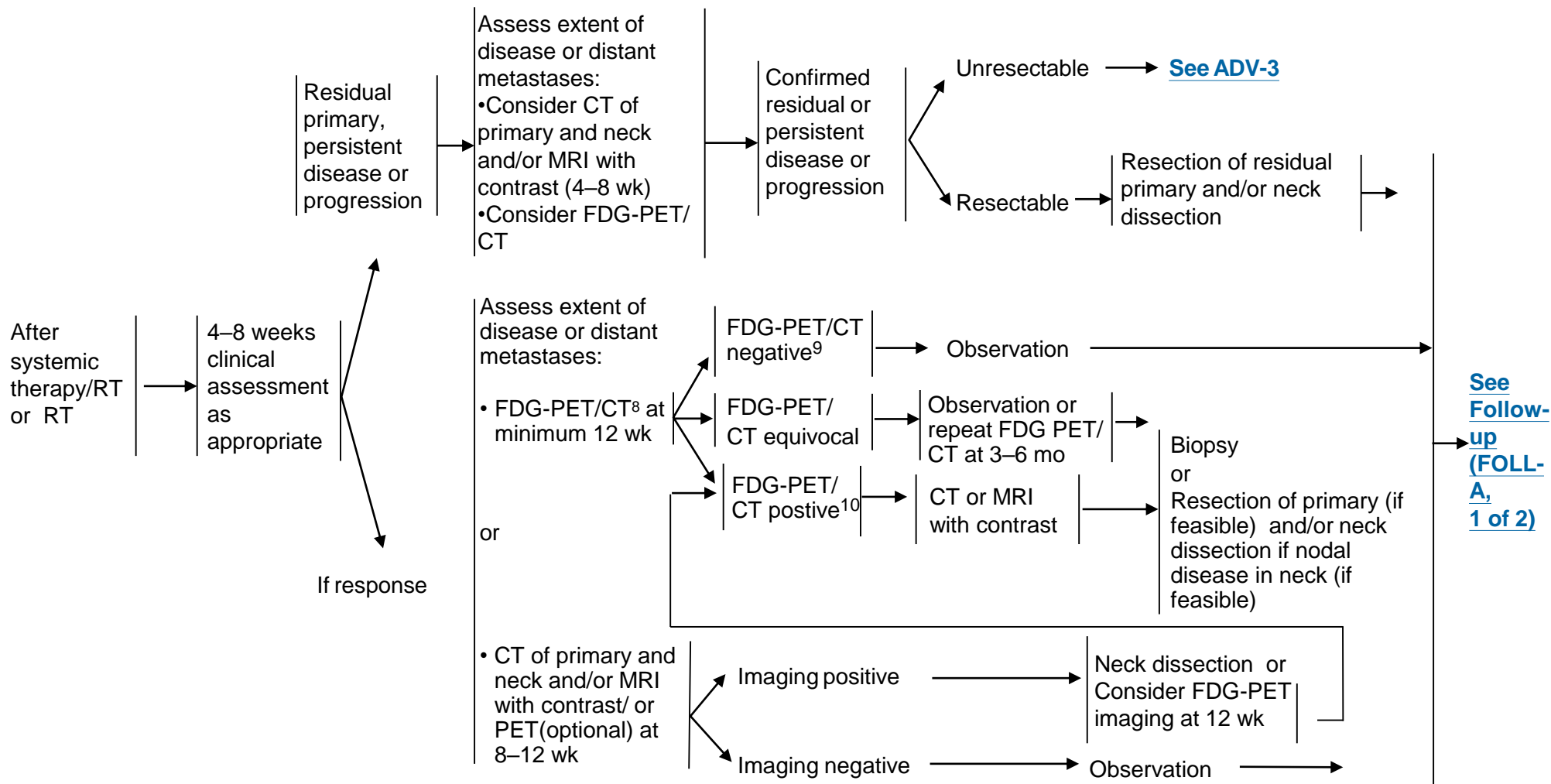
- Consider EBV DNA monitoring for nasopharyngeal cancer .

- Supportive care and rehabilitation:

- Speech/hearing and swallowing evaluation and rehabilitation as clinically indicated.
- Nutritional evaluation and rehabilitation as clinically indicated until nutritional status is stabilized.
- Ongoing surveillance for depression
- Smoking cessation and alcohol counseling as clinically indicated.



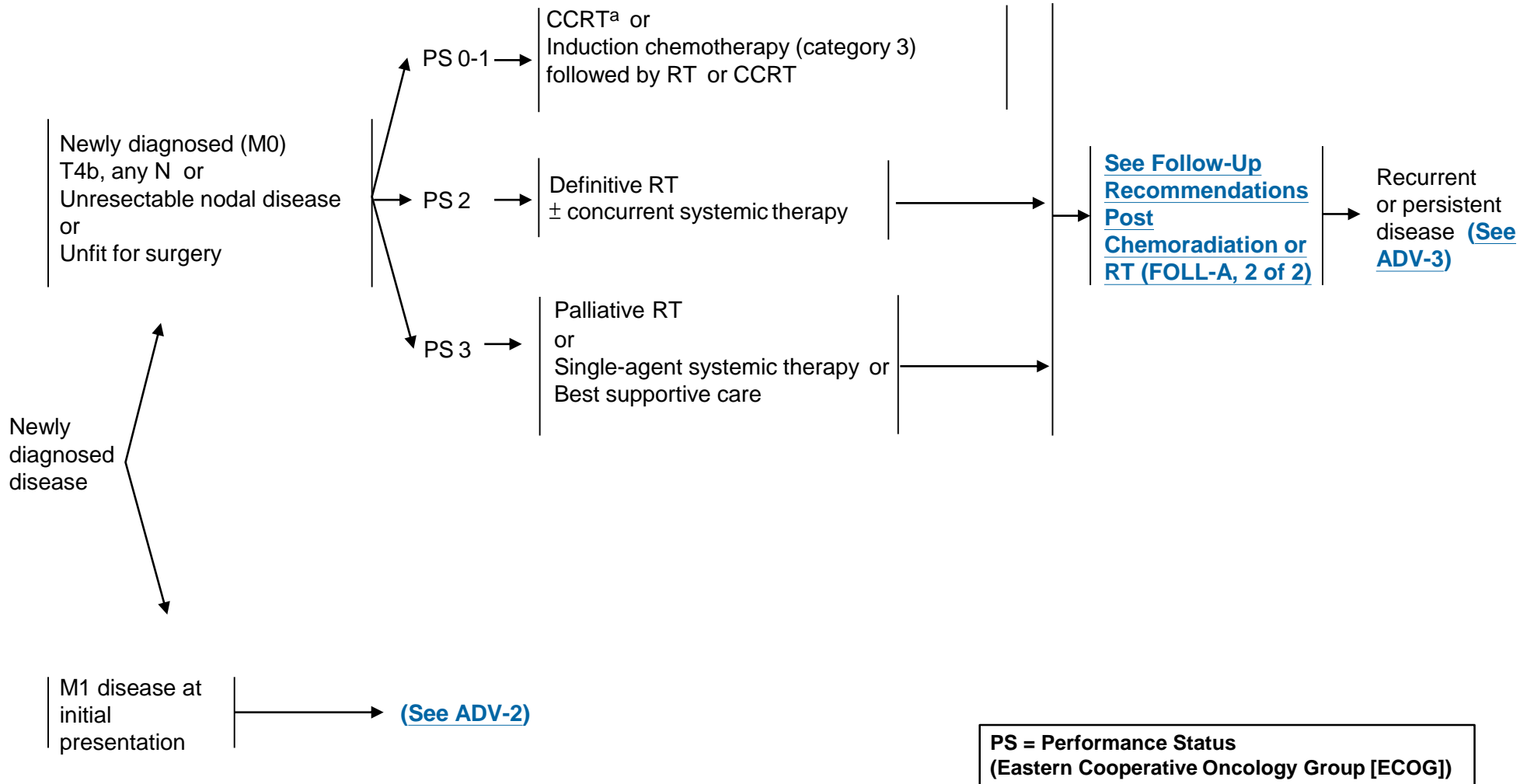
FOLLOW-UP RECOMMENDATIONS POST CHEMORADIATION OR RT NECK EVALUATION



⁸If a FDG-PET/CT is performed and negative for suspicion of persistent cancer, further cross-sectional imaging is optional.

⁹PET negative = No or low-grade uptake, felt not suspicious for disease.

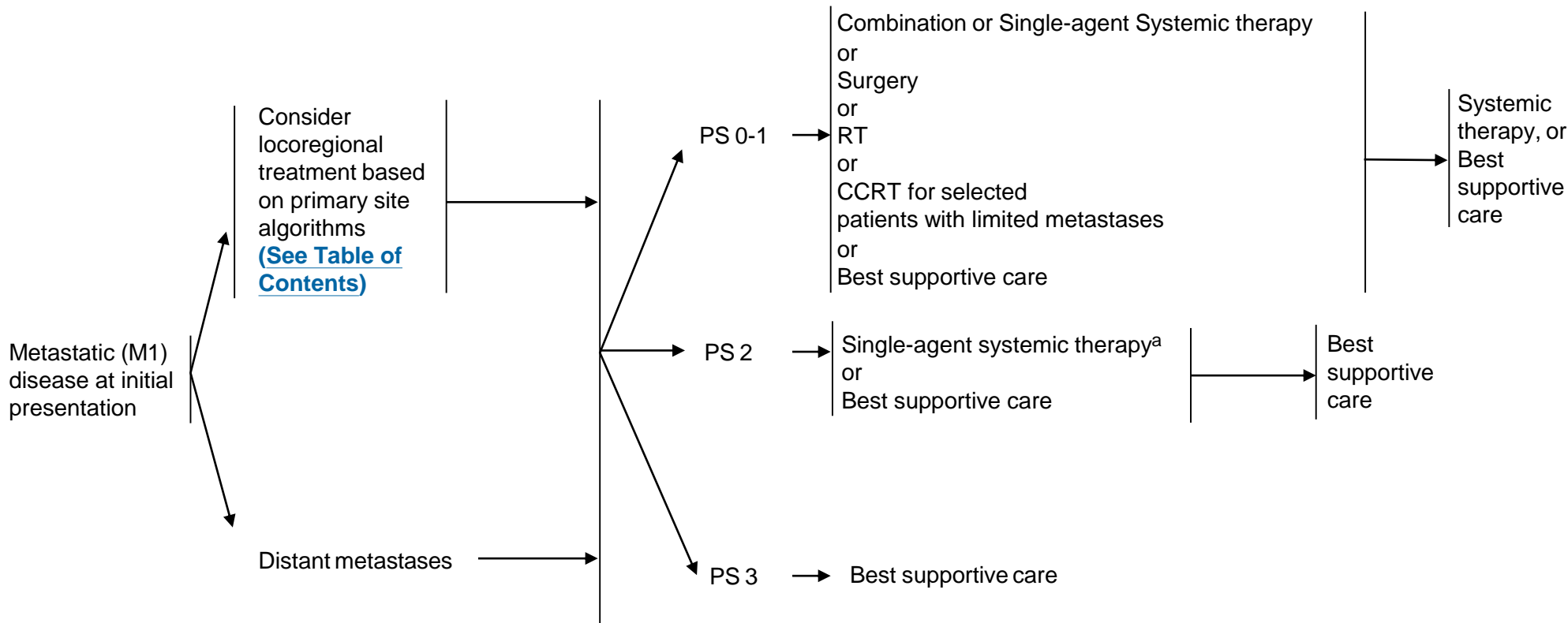
¹⁰PET positive = PET suspicious for disease.



^aWhen using concurrent systemic therapy/RT, the preferred agent is cisplatin (category 1). See Principles of Systemic Therapy (CHEM-A).

➢ Chemotherapy can be given for disease control during pre-RT waiting period

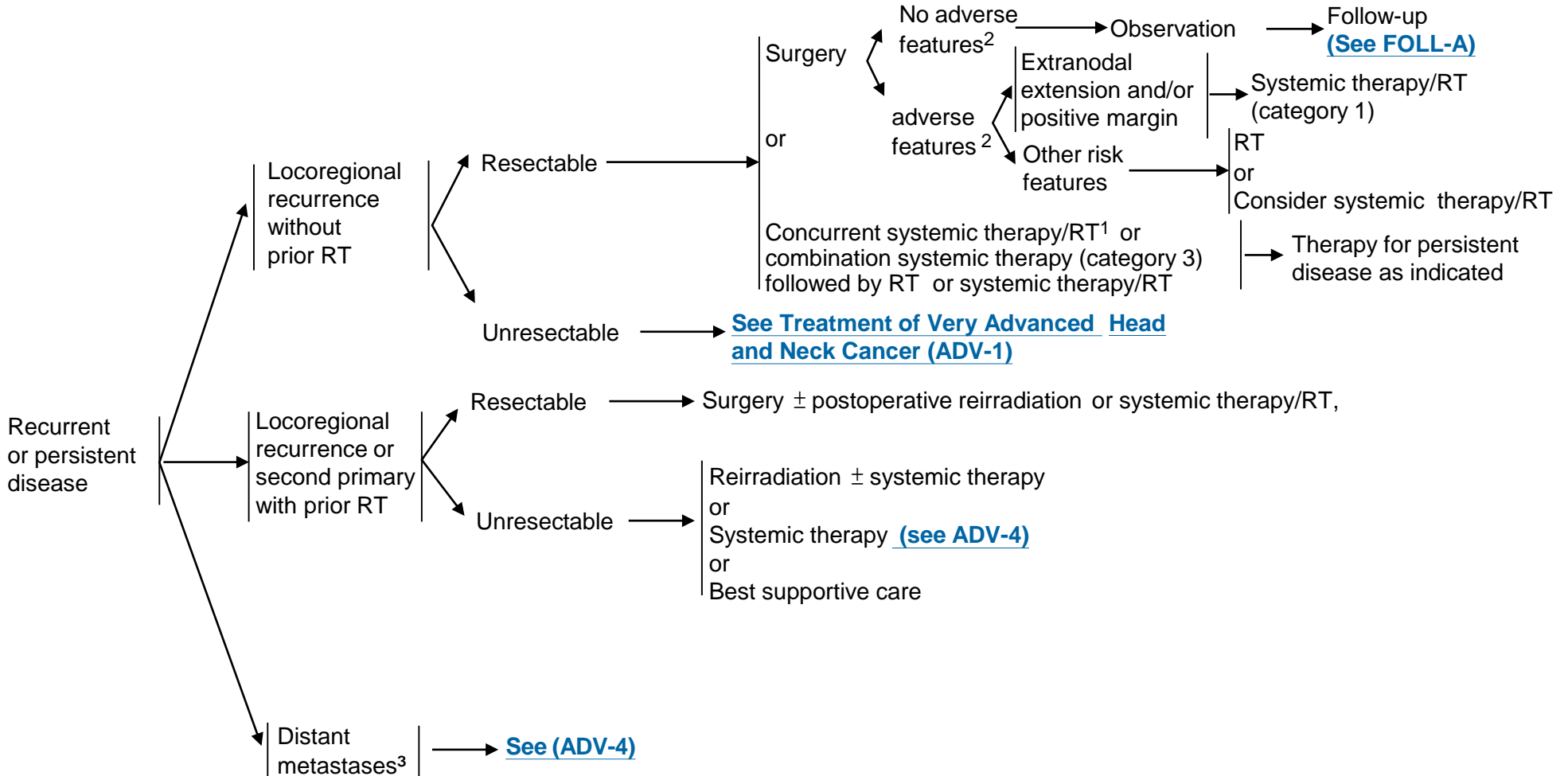




^aWhen using concurrnt systemic therapy/RT, the preferred agent is cisplatin (category 1). [See Principles of Systemic Therapy \(CHEM-A\)](#).

DIAGNOSIS

TREATMENT OF HEAD AND NECK CANCER



1. When using concurrent systemic therapy/RT, the preferred agent is cisplatin (category 1).

2. Adverse features: extranodal extension, positive margins, pT3 or pT4 primary, N2 or N3 nodal disease, perineural invasion, vascular invasion, lymphatic invasion

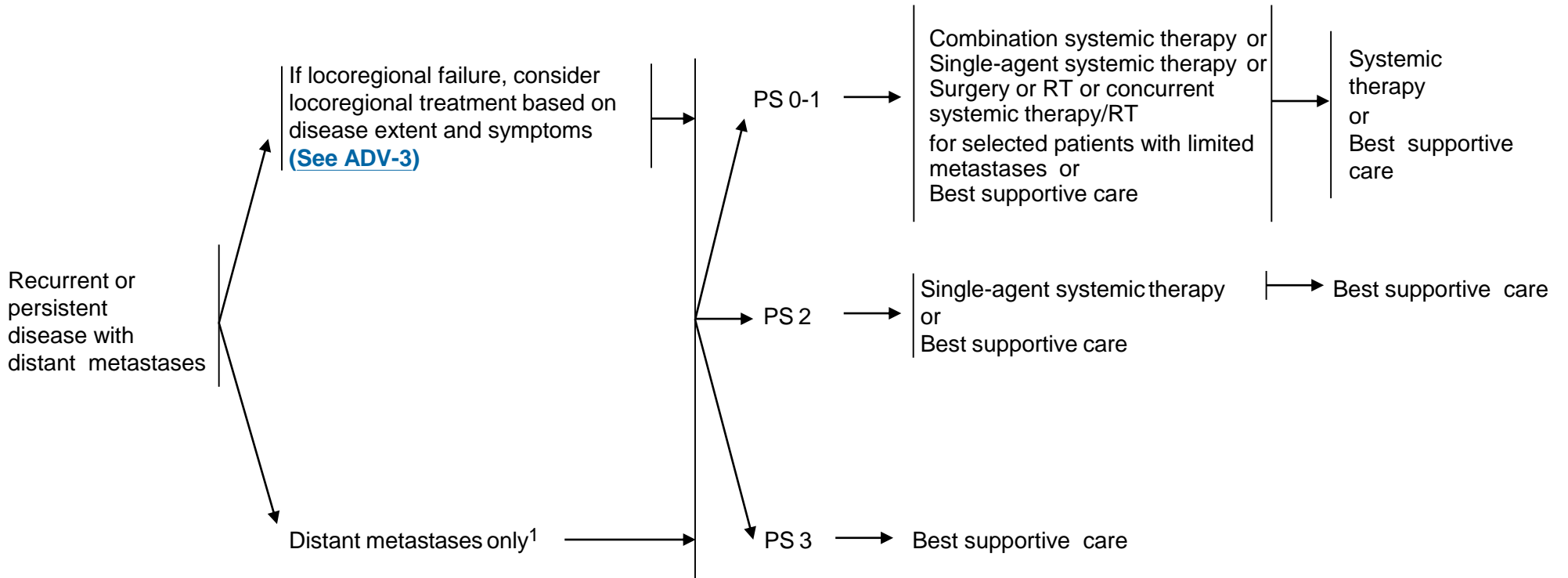
3. Consider palliative RT as clinically indicated (eg, bone metastases).



DIAGNOSIS

TREATMENT

PERSISTENT DISEASE OR PROGRESSION



¹.Consider palliative RT as clinically indicated (eg, bone metastases)



Table 1

American Joint Committee on Cancer (AJCC)

TNM Staging Classification for the Oral Cavity (including mucosa of lip)

(Nonepithelial tumors such as those of lymphoid tissue, soft tissue, bone, and cartilage, mucosal melanoma, and cutaneous squamous cell carcinoma of the vermilion lip are not included)

T : 腫瘤的大小和侵犯程度 Clinical

T Category	T Criteria
TX	Primary tumor cannot be assessed
Tis	Carcinoma in situ
T1	Tumor ≤ 2 cm, ≤ 5 mm depth of invasion (DOI not tumor thickness)
T2	Tumor ≤ 2 cm, DOI > 5mm OR tumor > 2 cm and ≤ 4 cm with DOI ≤ 10 mm
T3	Tumor > 2 cm and ≤ 4 cm with DOI > 10mm OR tumor > 4cm with DOI ≤ 10 mm
T4	Moderately advanced or very advanced local disease
T4a	Moderately advanced local disease OR Tumor invades adjacent structures only (e.g., through cortical bone of the mandible or maxilla, or involves the maxillary sinus or skin of the face) Note: Superficial erosion of bone/tooth socket (alone) by a gingival primary is not sufficient to classify a tumor as T4
T4b	Very advanced local disease Tumor invades masticator space, pterygoid plates, or skull base and/or encases internal carotid artery

N : 區域淋巴結的轉移情況 Clinical

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
N1	Metastasis in a single ipsilateral lymph node, ≤ 3 cm in greatest dimension and ENE (-)
N2	Metastasis in a single ipsilateral lymph node, > 3 cm but ≤ 6 cm in greatest dimension and ENE (-); OR Metastasis in multiple ipsilateral lymph nodes, ≤ 6 cm in greatest dimension and ENE (-); OR Metastasis in bilateral or contralateral lymph nodes, ≤ 6 cm in greatest dimension and ENE (-)
N2a	Metastasis in single ipsilateral lymph node > 3 cm but ≤ 6 cm in greatest dimension and ENE (-)
N2b	Metastasis in multiple ipsilateral lymph nodes, ≤ 6 cm in greatest dimension and ENE (-)
N2c	Metastasis in bilateral or contralateral lymph nodes, ≤ 6 cm in greatest dimension and ENE (-)
N3	Metastasis in a lymph node > 6 cm in greatest dimension and ENE (-); OR metastasis in any lymph node(s) with clinically overt ENE (+)
N3a	Metastasis in a lymph node > 6 cm in greatest dimension and ENE (-)
N3b	Metastasis in any lymph node(s) with clinically overt ENE (+)





Table 1 — Continued

American Joint Committee on Cancer (AJCC)

TNM Staging Classification for the Oral Cavity (including mucosa of lip)

(Nonepithelial tumors such as those of lymphoid tissue, soft tissue, bone, and cartilage, mucosal melanoma, and cutaneous squamous cell carcinoma of the vermilion lip are not included)

N : 區域淋巴結的轉移情況 Pathologic

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
N1	Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension with no extra nodal extension ENE(-)
N2	A single ipsilateral node larger than 3 cm but not larger than 6 cm in greatest dimension and
N2a	ENE(-); or Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension and ENE(+)
N2b	Metastasis in multiple ipsilateral nodes, none larger than 6 cm in greatest dimension and ENE(-)
N2c	Metastasis in bilateral or contralateral lymph node(s), none larger than 6 cm in greatest dimension and ENE(-)
N3	Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-)
N3a	Metastasis in a single ipsilateral node larger than 3 cm in greatest dimension and ENE(+); or
N3b	Multiple ipsilateral, contralateral, or bilateral nodes any with ENE(+); or A single contralateral node of any size and ENE(+)

Oral cancer Prognostic Stage Groups

T	N	M	GROUP
Tis	N0	M0	0
T1	N0	M0	I
T2	N0	M0	II
T3	N0	M0	III
T1.T2.T3	N1	M0	III
T4a	N0.N1	M0	IVA
T1.T2.T3.T4a	N2	M0	IVA
T4b	Any N	M0	IVB
Any T	N3	M0	IVB
Any T	Any N	M1	IVC

Table 2
American Joint Committee on Cancer (AJCC)
TNM Staging System for the Nasopharynx

(The following types of cancer are not included: Mucosal melanoma, lymphoma, sarcoma of the soft tissue, bone and cartilage.)

T : 腫瘤的大小和侵犯程度 Clinical

T Category	T Criteria
TX	Primary tumor cannot be assessed
T0	No tumor identified, but EBV-positive cervical node involvement
Tis	Carcinoma in situ
T1	Tumor confined to nasopharynx, or extends to oropharynx and/or nasal cavity without parapharyngeal involvement
T2	Tumor with parapharyngeal extension, and/or adjacent soft tissue involvement (medial or lateral pterygoid, and/or pre-vertebral muscles)
T3	Tumor invades bony structures of skull base, cervical vertebra, pterygoid structures, and/or paranasal sinuses
T4	Tumor with intracranial extensive, involvement of cranial nerves, hypopharynx, orbit, parotid gland, and/or Or extensive soft tissue infiltration beyond the lateral surface of the lateral pterygoid muscle
N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
N1	Unilateral metastasis in cervical lymph node(s) ,and/or unilateral or bilateral metastasis in retropharyngeal lymph node(s) ,6 cm or smaller in greatest dimension ,above the caudal border of cricoid cartilage
N2	Bilateral metastasis in cervical lymph node(s) , 6 cm or smaller in greatest dimension ,above the caudal border of cricoid cartilage
N3	Unilateral or bilateral metastasis in cervical lymph node(s) ,larger than 6 cm in greatest dimension ,and/or extension below the caudal border of cricoid cartilage

Nasopharyngeal Prognostic Stage Groups

T	N	M	GROUP
Tis	N0	M0	0
T1	N0	M0	I
T0	N1	M0	II
T1	N1	M0	II
T2	N0	M0	II
T2	N1	M0	II
T0	N2	M0	III
T1	N2	M0	III
T2	N2	M0	III
T3	N0	M0	III
T3	N1	M0	III
T3	N2	M0	III
T4	N0	M0	IVA
T4	N1	M0	IVA
T4	N2	M0	IVA
Any T	N3	M0	IVA
Any T	Any N	M1	IVB

Table 3
American Joint Committee on Cancer (AJCC)
TNM Staging System for the Oropharynx (p16-) and Hypopharynx
 (Not included: P16-positive (p16+) oropharyngeal cancers and nasopharyngeal cancer)

Oropharynx (p16-)

TX	Primary tumor cannot be assessed
Tis	Carcinoma <i>in situ</i>
T1	Tumor 2 cm or smaller in greatest dimension
T2	Tumor larger than 2 cm but not larger than 4 cm in greatest dimension
T3	Tumor larger than 4 cm in greatest dimension or extension to lingual surface of epiglottis
T4	Moderately advanced or very advanced local disease
T4a	Moderately advanced local disease Tumor invades the larynx, extrinsic muscle of tongue, medial pterygoid, hard palate, or mandible*
T4b	Very advanced local disease Tumor invades lateral pterygoid muscle, pterygoid plates, lateral nasopharynx, or skull base or encases carotid artery

*Note: Mucosal extension to lingual surface of epiglottis from primary tumors of the base of the tongue and vallecula does not constitute invasion of the larynx.

Hypopharynx

TX	Primary tumor cannot be assessed
Tis	Carcinoma <i>in situ</i>
T1	Tumor limited to one subsite of hypopharynx and/or 2 cm or smaller in greatest dimension
T2	Tumor invades more than one subsite of hypopharynx or an adjacent site, or measures larger than 2 cm but not larger than 4 cm in greatest dimension without fixation of hemilarynx
T3	Tumor larger than 4 cm in greatest dimension or with fixation of hemilarynx or extension to esophagus
T4	Moderately advanced or very advanced local disease
T4a	Moderately advanced local disease Tumor invades thyroid/cricoid cartilage, hyoid bone, thyroid gland, esophageal muscle or central compartment soft tissue*
T4b	Very advanced local disease Tumor invades prevertebral fascia, encases carotid artery, or involves mediastinal structures

*Note: Central compartment soft tissue includes prelaryngeal strap muscles and subcutaneous fat.

Table 3
American Joint Committee on Cancer (AJCC)
TNM Staging System for the Oropharynx (p16-) and Hypopharynx
 (Not included: P16-positive (p16+) oropharyngeal cancers and nasopharyngeal cancer)

Oropharynx(p16-)	
T : 腫瘤的大小和侵犯程度 Clinical	
T Category	T Criteria
TX	Primary tumor cannot be assessed
Tis	Carcinoma in situ
T1	Tumor 2cm or smaller in greatest dimension
T2	Tumor larger than 2 cm but not larger than 4 cm in greatest dimension.
T3	Tumor larger than 4 cm in greatest dimension or extension to lingual surface of epiglottis
T4	Moderately advanced or very advanced local disease
T4a	Moderately advanced local disease Tumor invades the larynx ,extrinsic muscle of tongue ,medial pterygoid ,hard palate ,or mandible
T4b	Very advanced local disease Tumor invades lateral pterygoid muscle , pterygoid plates , lateral nasopharynx ,or skull base or encases carotid artery

Hypopharynx	
T Category	T Criteria
TX	Primary tumor cannot be assessed
Tis	Carcinoma in situ
T1	Tumor limited to one subsite of hypopharynx and/or 2cm or smaller in greatest dimension
T2	Tumor invades more than one subsite of hypopharynx or an adjacent site ,or measures larger than 2 cm but not larger than 4 cm in greatest dimension without fixation of hemilarynx
T3	Tumor larger than 4 cm in greatest dimension or with fixation of . hemilarynx or extension to esophagus
T4	Moderately advanced or very advanced local disease
T4a	Moderately advanced local disease Tumor invades thyroid/cricoid cartilage ,hyoid bone , thyroid gland ,esophageal muscle or central compartment soft tissue
T4b	Very advanced local disease Tumor invades prevertebral fascia ,encases carotid artery ,or involves mediastinal structures



Table 3 — Continued

American Joint Committee on Cancer (AJCC)

TNM Staging System for the Oropharynx (p16-) and Hypopharynx

(Not included: P16-positive (p16+) oropharyngeal cancers and nasopharyngeal cancer)

Regional Lymph Nodes (N)[†]

Clinical N (cN) - Oropharynx (p16-) and Hypopharynx

NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
N1	Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension and ENE(-)
N2	Metastasis in a single ipsilateral node larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-); or metastases in multiple ipsilateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-); or in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)
N2a	Metastasis in a single ipsilateral node larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-)
N2b	Metastasis in multiple ipsilateral nodes, none larger than 6 cm in greatest dimension and ENE(-)
N2c	Metastasis in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)
N3	Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-); or metastasis in any node(s) and clinically overt ENE(+)
N3a	Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-)
N3b	Metastasis in any node(s) and clinically overt ENE(+)

[†]A designation of “U” or “L” may be used for any N category to indicate metastasis above the lower border of the cricoid (U) or below the lower border of the cricoid (L).

Similarly, clinical and pathological ENE should be recorded as ENE(-) or ENE(+).



Table 3 — Continued
American Joint Committee on Cancer (AJCC)
TNM Staging System for the Oropharynx (p16-) and Hypopharynx
(Not included: P16-positive (p16+) oropharyngeal cancers and nasopharyngeal cancer)

N : 區域淋巴結的轉移情況 Clinical

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
N1	Metastasis in a single ipsilateral lymph node, 3cm or smaller in greatest dimension ENE(-)
N2	Metastasis in a single ipsilateral node larger than 3cm but not larger than 6 cm in greatest dimension and ENE(-); or metastasis in multiple ipsilateral lymph node, none larger than 6 cm in greatest dimension and ENE(-) ;or in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)
	N2a Metastasis in a single ipsilateral node larger than 3cm but not larger than 6 cm in greatest dimension and ENE(-)
	N2b Metastasis in multiple ipsilateral node, none larger than 6 cm in greatest dimension and ENE(-)
	N2c Metastasis in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)
N3	Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-);or metastasis in any node(s) and clinically overt ENE(+)
	N3a Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-)
	N3b Metastasis in any node(s) and clinically overt ENE(+)

N : 區域淋巴結的轉移情況 Pathological

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
N1	Metastasis in a single ipsilateral lymph node, 3cm or smaller in greatest dimension ENE(-)
	Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension and ENE(+); Or larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-); or metastases in multiple ipsilateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-); or in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)
N2	Metastasis in single ipsilateral node 3 cm or smaller in greatest dimension and ENE(+);
	N2a or a single ipsilateral node larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-)
	N2b Metastases in multiple ipsilateral nodes, none larger than 6 cm in greatest dimension and ENE(-)
	N2c Metastases in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)
N3	Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-); or in a single ipsilateral node larger than 3 cm in greatest dimension and ENE(+); or multiple ipsilateral, contralateral or bilateral nodes, any with ENE(+)
	or a single contralateral nodes of any size and ENE(+)
	N3a Metastases in multiple ipsilateral nodes, none larger than 6 cm in greatest dimension and ENE(-)
N3b	Metastasis in a single ipsilateral node larger than 3 cm in greatest dimension and ENE(+); Or multiple ipsilateral, contralateral or bilateral nodes, any with ENE(+)
	Or a single contralateral nodes of any size and ENE(+)



Table 3 — Continued

American Joint Committee on Cancer (AJCC)

TNM Staging System for the Oropharynx (p16-) and Hypopharynx

(Not included: P16-positive (p16+) oropharyngeal cancers and nasopharyngeal cancer)

Clinical & Pathological Prognostic Stage Groups

T	N	M	GROUP
Tis	N0	M0	0
T1	N0	M0	I
T2	N0	M0	II
T3	N0	M0	III
T1-T3	N1	M0	III
T4a	N0-N1	M0	IVA
T1-T4a	N2	M0	IVA
Any T	N3	M0	IVB
T4b	Any N	M0	IVB
Any T	Any N	M1	IVC

Distant Metastasis (M)

M0 No distant metastasis

M1 Distant metastasis

Histologic Grade (G)

GX Grade cannot be assessed

G1 Well differentiated

G2 Moderately differentiated

G3 Poorly differentiated

G4 Undifferentiated



Table 4
American Joint Committee on Cancer (AJCC)
TNM Staging System for HPV-Mediated (p16+) Oropharyngeal Cancer
(Not including: P16-negative [p16-] cancers of the oropharynx)

T : 腫瘤的大小和侵犯程度 Clinical

T Category	T Criteria
T0	No evidence of primary tumor
T1	Tumor 2cm or smaller in greatest dimension
T2	Tumor larger than 2 cm but not larger than 4 cm in greatest dimension.
T3	Tumor larger than 4 cm in greatest dimension or extension to lingual surface of epiglottis
T4	Moderately advanced local disease Tumor invades the larynx ,extrinsic muscle of tongue ,medial pterygoid ,hard palate ,or mandible or beyond

N : 區域淋巴結的轉移情況 Clinical

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
N1	One or more ipsilateral lymph nodes, none larger than 6 cm
N2	Contralateral or bilateral lymph nodes, none larger than 6 cm
N3	Lymph node(s) larger than 6 cm

N : 區域淋巴結的轉移情況 Pathological

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
pN1	metastasis in 4 or fewer lymph nodes
pN2	metastasis in more than 4 lymph nodes

Distant Metastasis (M)

M0 No distant metastasis
M1 Distant metastasis

Clinical Prognostic Stage Groups

p16/HPV(+)

T	N	M	GROUP
T0. T1.T2	N0-N1	M0	I
T0.T1.T2	N2	M0	II
T3	N0-N2	M0	II
T0.T1.T2.T3.T4	N3	M0	III
T4	N0-N3	M0	III
Any T	Any N	M1	IV

Pathological Prognostic Stage Groups

T	N	M	GROUP
T0. T1.T2	N0-N1	M0	I
T0.T1.T2	N2	M0	II
T3.T4	N0-N1	M0	II
T3.T4	N2	M0	III
Any T	Any N	M1	IV

Table 5
American Joint Committee on Cancer (AJCC) TNM Staging System for the Larynx

(Nonepithelial tumors such as those of lymphoid tissue, soft tissue, bone and cartilage, and mucosal melanoma of the lip and oral cavity are not included)

Primary Tumor (T)
TX Primary tumor cannot be assessed

Tis Carcinoma *in situ*
Supraglottis

- T1** Tumor limited to one subsite of supraglottis with normal vocal cord mobility
- T2** Tumor invades mucosa of more than one adjacent subsite of supraglottis or glottis or region outside the supraglottis (eg, mucosa of base of tongue, vallecula, medial wall of pyriform sinus) without fixation of the larynx
- T3** Tumor limited to larynx with vocal cord fixation and/or invades any of the following: postcricoid area, preepiglottic space, paraglottic space, and/or inner cortex of thyroid cartilage
- T4** Moderately advanced or very advanced
- T4a** Moderately advanced local disease
Tumor invades through the outer cortex of the thyroid cartilage and/or invades tissues beyond the larynx (eg, trachea, soft tissues of neck including deep extrinsic muscle of the tongue, strap muscles, thyroid, or esophagus)
- T4b** Very advanced local disease
Tumor invades prevertebral space, encases carotid artery, or invades mediastinal structures

Glottis

- T1** Tumor limited to the vocal cord(s) (may involve anterior or posterior commissure) with normal mobility
- T1a** Tumor limited to one vocal cord
- T1b** Tumor involves both vocal cords
- T2** Tumor extends to supraglottis and/or subglottis, and/or with impaired vocal cord mobility
- T3** Tumor limited to the larynx with vocal cord fixation and/or invasion of paraglottic space and/or inner cortex of the thyroid cartilage
- T4** Moderately advanced or very advanced
- T4a** Moderately advanced local disease
Tumor invades through the outer cortex of the thyroid cartilage and/or invades tissues beyond the larynx (eg, trachea, cricoid cartilage, soft tissues of neck including deep extrinsic muscle of the tongue, strap muscles, thyroid, or esophagus)
- T4b** Very advanced local disease; Tumor invades prevertebral space, encases carotid artery, or invades mediastinal structures

Subglottis

- T1** Tumor limited to the subglottis
- T2** Tumor extends to vocal cord(s) with normal or impaired mobility
- T3** Tumor limited to larynx with vocal cord fixation and/or inner cortex of the thyroid cartilage
- T4** Moderately advanced or very advanced
- T4a** Moderately advanced local disease
Tumor invades cricoid or thyroid cartilage and/or invades tissues beyond the larynx (eg, trachea, soft tissues of neck including deep extrinsic muscles of the tongue, strap muscles, thyroid, or esophagus)
- T4b** Very advanced local disease; Tumor invades prevertebral space, encases carotid artery, or invades mediastinal structures

[Continued](#)

Table 5
American Joint Committee on Cancer (AJCC) TNM Staging System for the Larynx
(Nonepithelial tumors such as those of lymphoid tissue, soft tissue, bone and cartilage, and mucosal melanoma of the lip and oral cavity are not included)

T : 腫瘤的大小和侵犯程度

supraglottis

T Category	T Criteria
TX	Primary tumor cannot be assessed
Tis	Carcinoma in situ
T1	Tumor limited to one subsite of supraglottis with normal vocal cord mobility
T2	Tumor invades mucosa of more than one adjacent subsite of supraglottis or glottis or region outside the supraglottis (e.g., mucosa of base of tongue, vallecula, medial wall of pyriform sinus) without fixation of the larynx
T3	Tumor limited to larynx with vocal cord fixation and/or invades any of the following: postcricoid area, preepiglottic space, paraglottic space, and/or inner cortex of thyroid cartilage
T4	Moderately advanced or very advanced
T4a	Moderately advanced local disease. Tumor invades through the outer cortex of the thyroid cartilage and/or invades tissues beyond the larynx (e.g., trachea, soft tissues of neck including deep extrinsic muscle of the tongue, strap muscles, thyroid or esophagus)
T4b	Very advanced local disease. Tumor invades prevertebral space, encases carotid artery, or invades mediastinal structures

glottis

T Category	T Criteria
TX	Primary tumor cannot be assessed
Tis	Carcinoma in situ
T1	Tumor limited to the vocal cord(s) (may involve anterior or posterior commissure) with normal mobility
T1a	Tumor limited to one vocal cord
T1b	Tumor involves both vocal cords
T2	Tumor extends to supraglottis and/or subglottis, and/or with impaired vocal cord mobility
T3	Tumor limited to the larynx with vocal cord fixation and/or invasion of paraglottic space, and/or inner cortex of thyroid cartilage
T4	Moderately advanced or very advanced
T4a	Moderately advanced local disease. Tumor invades through the outer cortex of the thyroid cartilage and/or invades tissues beyond the larynx (e.g., trachea, soft tissues of neck including deep extrinsic muscle of the tongue, strap muscles, thyroid or esophagus)
T4b	Very advanced local disease. Tumor invades prevertebral space, encases carotid artery, or invades mediastinal structures

subglottis

T Category	T Criteria
TX	Primary tumor cannot be assessed
Tis	Carcinoma in situ
T1	Tumor limited to the subglottis
T2	Tumor extends to vocal cord(s) with normal or impaired mobility
T3	Tumor limited to larynx with vocal cord fixation and/or invasion of paraglottic space and/or inner cortex of the thyroid cartilage
T4	Moderately advanced or very advanced
T4a	Moderately advanced local disease. Tumor invades cricoid or thyroid cartilage and/or invades tissues beyond the larynx (e.g., trachea, soft tissues of neck including deep extrinsic muscles of the tongue, strap muscles, thyroid or esophagus)
T4b	Very advanced local disease. Tumor invades prevertebral space, encases carotid artery, or invades mediastinal structures

Table 5 — Continued
American Joint Committee on Cancer (AJCC)
TNM Staging System for the Larynx

(Nonepithelial tumors such as those of lymphoid tissue, soft tissue, bone, and cartilage are not included)

Regional Lymph Nodes (N)*
Clinical N (cN)

NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
N1	Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension ENE(–)
N2	Metastasis in a single ipsilateral node, larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(–); or metastases in multiple ipsilateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(–); or metastasis in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(–)
N2a	Metastasis in a single ipsilateral lymph node, larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(–)
N2b	Metastases in multiple ipsilateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(–)
N2c	Metastasis in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(–)
N3	Metastasis in a lymph node, larger than 6 cm in greatest dimension and ENE(–); or metastasis in any lymph node(s) with clinically overt ENE(+)
N3a	Metastasis in a lymph node, larger than 6 cm in greatest dimension and ENE(–)
N3b	Metastasis in any lymph node(s) with clinically overt ENE(+)

*Note: A designation of “U” or “L” may be used for any N category to indicate metastasis above the lower border of the cricoid (U) or below the lower border of the cricoid (L)

Similarly, clinical and pathological ENE should be recorded as ENE(–) or ENE(+)

Table 5 — Continued
**American Joint Committee on Cancer (AJCC)
 TNM Staging System for the Larynx**

(Nonepithelial tumors such as those of lymphoid tissue, soft tissue, bone, and cartilage are not included)

N : 區域淋巴結的轉移情況
Clinical

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
N1	Metastasis in a single ipsilateral lymph node, <=3 cm in greatest dimension and ENE (-)
N2	Metastasis in a single ipsilateral lymph node, > 3 cm but <= 6 cm in greatest dimension and ENE (-); OR mets in multiple ipsilateral lymph nodes, <= 6 cm in greatest dimension and ENE (-); OR mets in bilateral or contralateral lymph nodes, <= 6 cm in greatest dimension and ENE (-)
N2a	Metastasis in single ipsilateral lymph node > 3 cm but <= 6 cm in greatest dimension and ENE (-)
N2b	Metastasis in multiple ipsilateral lymph nodes, <=6 cm in greatest dimension and ENE (-)
N2c	Metastasis in bilateral or contralateral lymph nodes, <= 6 cm in greatest dimension and ENE (-)
N3	Metastasis in a lymph node > 6 cm in greatest dimension and ENE (-); OR metastasis in any lymph node(s) with clinically overt ENE (+)
N3a	Metastasis in a lymph node > 6 cm in greatest dimension and ENE (-)
N3b	Metastasis in any lymph node(s) with clinically overt ENE (+)

Pathologic

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
N1	Metastasis in a single ipsilateral lymph node, <= 3 cm in greatest dimension and ENE (-)
N2	Metastasis in a single ipsilateral lymph node, <= 3 cm in greatest dimension and ENE (+); OR mets in single ipsilateral lymph node, > 3 cm but <= 6 cm in greatest dimension and ENE (-); OR mets in multiple ipsilateral lymph nodes, <= 6 cm in greatest dimension and ENE (-); OR mets in bilateral or contralateral lymph nodes, <= 6 cm in greatest dimension and ENE (-)
N2a	Metastasis in single ipsilateral or node <= 3 cm in greatest dimension and ENE (+); OR metastasis in a single ipsilateral node, > 3 cm but <= 6 cm in greatest dimension and ENE (-);
N2b	Metastasis in multiple ipsilateral lymph nodes, <= 6 cm in greatest dimension and ENE (-)
N2c	Metastasis in bilateral or contralateral lymph nodes, <= 6 cm in greatest dimension and ENE (-)
N3	Metastasis in a lymph node > 6 cm in greatest dimension and ENE (-); OR metastasis in a single ipsilateral node > 3 cm and ENE (+); OR metastasis in multiple ipsilateral, contralateral, or bilateral lymph node(s) and any with ENE (+)
N3a	Metastasis in a lymph node > 6 cm in greatest dimension and ENE (-)
N3b	Metastasis in a single ipsilateral node > 3 cm in greatest dimension and ENE (+); OR metastasis in multiple ipsilateral, contralateral, or bilateral lymph node(s) and any with ENE (+)



Table 5 — Continued

American Joint Committee on Cancer (AJCC)

TNM Staging System for the Larynx

(Nonepithelial tumors such as those of lymphoid tissue, soft tissue, bone, and cartilage are not included)

Pathological N (pN)

- NX** Regional lymph nodes cannot be assessed
- N0** No regional lymph node metastasis
- N1** Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension ENE(-)
- N2** Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension and ENE(+); or larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-); or metastases in multiple ipsilateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-); or in bilateral or contralateral lymph node(s), none larger than 6 cm in greatest dimension and ENE(-)
 - N2a** Metastasis in a single ipsilateral node, 3 cm or smaller in greatest dimension and ENE(+); or metastasis in a single ipsilateral node, larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-)
 - N2b** Metastases in multiple ipsilateral nodes, none larger than 6 cm in greatest dimension and ENE(-)
 - N2c** Metastasis in bilateral or contralateral lymph node(s), none larger than 6 cm in greatest dimension and ENE(-)
- N3** Metastasis in a lymph node, larger than 6 cm in greatest dimension and ENE(-); or metastasis in a single ipsilateral node, larger than 3 cm in greatest dimension and ENE(+); or multiple ipsilateral, contralateral, or bilateral lymph nodes and any with ENE(+); or a single contralateral node of any size and ENE(+)
- N3a** Metastasis in a lymph node, larger than 6 cm in greatest dimension and ENE(-)
- N3b** Metastasis in a single ipsilateral node, larger than 3 cm in greatest dimension and ENE(+); or multiple ipsilateral, contralateral, or bilateral lymph nodes any with ENE(+); or a single contralateral node of any size and ENE(+)

Distant Metastasis (M)

- M0** No distant metastasis
- M1** Distant metastasis

Histologic Grade (G)

- GX** Grade cannot be assessed
- G1** Well differentiated
- G2** Moderately differentiated
- G3** Poorly differentiated

Prognostic Stage Groups

Stage 0	Tis	N0	M0
Stage I	T1	N0	M0
Stage II	T2	N0	M0
Stage III	T3	N0	M0
	T1	N1	M0
	T2	N1	M0
	T3	N1	M0
Stage IVA	T1	N2	M0
	T2	N2	M0
	T3	N2	M0
	N0, N1, N2	M0	Any T
Stage IVB	N3	M0	
	T4b	Any N	M0
Stage IVC	Any T	Any N	M1

*Note: A designation of "U" or "L" may be used for any N category to indicate metastasis above the lower border of the cricoid (U) or below the lower border of the cricoid (L)
Similarly, clinical and pathological ENE should be recorded as ENE(-) or ENE(+)

[Continued](#)



Table 5— Continued

**American Joint Committee on Cancer (AJCC)
TNM Staging System for the Larynx**

(Nonepithelial tumors such as those of lymphoid tissue, soft tissue, bone, and cartilage are not included)

Larynx Prognostic Stage Groups

T	N	M	GROUP
Tis	N0	M0	0
T1	N0	M0	I
T2	N0	M0	II
T3	N0	M0	III
T1.T2.T3	N1	M0	III
T4a	N0.N1	M0	IVA
T1.T2.T3.T4a	N2	M0	IVA
Any T	N3	M0	IVB
T4b	Any N	M0	IVB
Any T	Any N	M1	IVC

Distant Metastasis (M)

M0 No distant metastasis

M1 Distant metastasis

Histologic Grade (G)

GX Grade cannot be assessed

G1 Well differentiated

G2 Moderately differentiated

G3 Poorly differentiated

Table 6
American Joint Committee on Cancer (AJCC)
TNM Staging System for the Nasal Cavity and Paranasal Sinuses

(Mucosal melanoma of the nasal cavity and paranasal sinuses are not included)

Primary Tumor (T)
TX Primary tumor cannot be assessed

Tis Carcinoma *in situ*
Maxillary Sinus
T1 Tumor limited to maxillary sinus mucosa with no erosion or destruction of bone

T2 Tumor causing bone erosion or destruction including extension into the hard palate and/or middle nasal meatus, except extension to posterior wall of maxillary sinus and pterygoid plates

T3 Tumor invades any of the following: bone of the posterior wall of maxillary sinus, subcutaneous tissues, floor or medial wall of orbit, pterygoid fossa, ethmoid sinuses

T4 Moderately advanced or very advanced local disease

T4a Moderately advanced local disease

Tumor invades anterior orbital contents, skin of cheek, pterygoid plates, infratemporal fossa, cribriform plate, sphenoid or frontal sinuses

T4b Very advanced local disease

Tumor invades any of the following: orbital apex, dura, brain, middle cranial fossa, cranial nerves other than maxillary division of trigeminal nerve (V2), nasopharynx, or clivus

Nasal Cavity and Ethmoid Sinus
T1 Tumor restricted to any one subsite, with or without bony invasion

T2 Tumor invading two subsites in a single region or extending to involve an adjacent region within the nasoethmoidal complex, with or without bony invasion

T3 Tumor extends to invade the medial wall or floor of the orbit, maxillary sinus, palate, or cribriform plate

T4 Moderately advanced or very advanced local disease

T4a Moderately advanced local disease

Tumor invades any of the following: anterior orbital contents, skin of nose or cheek, minimal extension to anterior cranial fossa, pterygoid plates, sphenoid or frontal sinuses

T4b Very advanced local disease

Tumor invades any of the following: orbital apex, dura, brain, middle cranial fossa, cranial nerves other than (V2), nasopharynx, or clivus



Table 6 — Continued

American Joint Committee on Cancer (AJCC)

TNM Staging System for the Nasal Cavity and Paranasal Sinuses

(Mucosal melanoma of the nasal cavity and paranasal sinuses are not included)

Regional Lymph Nodes (N)

Clinical N (cN)

- NX** Regional lymph nodes cannot be assessed
- N0** No regional lymph node metastasis
- N1** Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension and ENE(-)
- N2** Metastasis in a single ipsilateral lymph node larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-);
or metastases in multiple ipsilateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-);
or or in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)
 - N2a** Metastasis in a single ipsilateral node larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-)
 - N2b** Metastases in multiple ipsilateral nodes, none larger than 6 cm in greatest dimension and ENE(-)
 - N2c** Metastases in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)
- N3** Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-);
or metastasis in any node(s) with clinically overt ENE(+)
 - N3a** Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-)
 - N3b** Metastasis in any node(s) with clinically overt ENE (ENE_c)

Note: A designation of "U" or "L" may be used for any N category to indicate metastasis above the lower border of the cricoid (U) or below the lower border of the cricoid (L).

Similarly, clinical and pathological ENE should be recorded as ENE(-) or ENE(+).



Table 6 — Continued

American Joint Committee on Cancer (AJCC)

TNM Staging System for the Nasal Cavity and Paranasal Sinuses

(Mucosal melanoma of the nasal cavity and paranasal sinuses are not included)

Regional Lymph Nodes (N)

Pathological N (pN)

- NX** Regional lymph nodes cannot be assessed
- N0** No regional lymph node metastasis
- N1** Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension and ENE(-)
- N2** Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension and ENE(+);
or larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-);
or metastases in multiple ipsilateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-);
or in bilateral or contralateral lymph node(s), none larger than 6 cm in greatest dimension and ENE(-);
 - N2a** Metastasis in single ipsilateral node 3 cm or less in greatest dimension and ENE(+);
or a single ipsilateral node larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-)
 - N2b** Metastases in multiple ipsilateral nodes, none larger than 6 cm in greatest dimension and ENE(-)
 - N2c** Metastases in bilateral or contralateral lymph node(s), none larger than 6 cm in greatest dimension and ENE(-)
- N3** Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-); or metastasis in a single
ipsilateral node larger than 3 cm in greatest dimension and ENE(+); or multiple ipsilateral, contralateral, or
bilateral nodes, any with ENE(+); or a single contralateral node 3 cm or smaller and ENE(+).
 - N3a** Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-)
 - N3b** Metastasis in a single ipsilateral node larger than 3 cm in greatest dimension and ENE(+); or multiple ipsilateral,
contralateral, or bilateral nodes, any with ENE(+); or a single contralateral node 3 cm or smaller and ENE(+)

Note: A designation of "U" or "L" may be used for any N category to indicate metastasis above the lower border of the cricoid (U) or below the lower border of the cricoid (L).

Similarly, clinical and pathological ENE should be recorded as ENE(-) or ENE(+).

Table 6 — Continued

American Joint Committee on Cancer (AJCC)

TNM Staging System for the Nasal Cavity and Paranasal Sinuses

(Mucosal melanoma of the nasal cavity and paranasal sinuses are not included)

Prognostic Stage Groups

Stage 0	Tis	N0	M0
Stage I	T1	N0	M0
Stage II	T2	N0	M0
Stage III	T1	N1	M0
	T2	N1	M0
	T3	N0, N1	M0
Stage IVA	T1	N2	M0
	T2	N2	M0
	T3	N2	M0
	T4a	N0, N1, N2	M0
Stage IVB	Any T	N3	M0
	T4b	Any N	M0
Stage IVC	Any T	Any N	M1

Distant Metastasis (M)

- M0** No distant metastasis (no pathologic M0; use clinical M to complete stage group)
- M1** Distant metastasis

Histologic Grade (G)

- GX** Grade cannot be assessed
- G1** Well differentiated
- G2** Moderately differentiated
- G3** Poorly differentiated

Table 7
American Joint Committee on Cancer (AJCC)
TNM Staging System for Cervical Lymph Nodes and Unknown Primary Tumors of the Head and Neck
 (Squamous cell carcinoma and salivary gland carcinoma of all head and neck sites except HPV-related oropharynx cancer, nasopharynx cancer, melanoma, thyroid carcinoma, and sarcoma. Staging of the patient who presents with an occult primary tumor and EBV-unrelated and HPV-unrelated metastatic cervical lymphadenopathy is also included.)

Regional Lymph Nodes (N)

Clinical N (cN): For patients who are treated with primary nonsurgical treatment without a cervical lymph node dissection.

- NX** Regional lymph nodes cannot be assessed
- N0** No regional lymph node metastasis
- N1** Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension and ENE(-)
- N2** Metastasis in a single ipsilateral lymph node, larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-); or metastases in multiple ipsilateral lymph node(s), none larger than 6 cm in greatest dimension and ENE(-); or in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)
 - N2a** Metastasis in a single ipsilateral node larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-)
 - N2b** Metastases in multiple ipsilateral nodes, none larger than 6 cm in greatest dimension and ENE(-)
 - N2c** Metastases in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)
- N3** Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-); or metastases in any node(s) with clinically overt ENE(+) (ENE_c)**
 - N3a** Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-)
 - N3b** Metastasis in any node(s) with clinically overt ENE(+) (ENE_c)**

*Midline nodes are considered ipsilateral nodes.

**ENE_c is defined as invasion of skin, infiltration of musculature, dense tethering or fixation to adjacent structures, or cranial nerve, brachial plexus, sympathetic trunk, or phrenic nerve invasion with dysfunction Note: A designation of "U" or "L" may be used for any N category to indicate metastasis above the lower border of the cricoid (U) or below the lower border of the cricoid (L). Similarly, clinical and pathological ENE should be recorded as ENE(-) or ENE(+).

Note: A designation of "U" or "L" may be used for any N category to indicate metastasis above the lower border of the cricoid (U) or below the lower border of the cricoid (L). Similarly, clinical and pathological ENE should be recorded as ENE(-) or ENE(+).



Table 7 — Continued

American Joint Committee on Cancer (AJCC)

TNM Staging System for Cervical Lymph Nodes and Unknown Primary Tumors of the Head and Neck (8th ed., 2017)

(Squamous cell carcinoma and salivary gland carcinoma of all head and neck sites except HPV-related oropharynx cancer, nasopharynx cancer, melanoma, thyroid carcinoma, and sarcoma. Staging of the patient who presents with an occult primary tumor and EBV-unrelated and HPV-unrelated metastatic cervical lymphadenopathy is also included.)

Regional Lymph Nodes (N)

Pathological N (pN): For patients who are treated surgically with a cervical lymph node dissection.

NX Regional lymph nodes cannot be assessed

N0 No regional lymph node metastasis

N1 Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension and ENE(-)

N2 Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension and ENE(+); or larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-); or metastases in multiple ipsilateral lymph node(s), none larger than 6 cm in greatest dimension and ENE(-); or in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)

N2a Metastasis in single ipsilateral node 3 cm or smaller in greatest dimension and ENE(+);

or a single ipsilateral node larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-)

N2b Metastases in multiple ipsilateral nodes, none larger than 6 cm in greatest dimension and ENE(-)

N2c Metastases in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)

N3 Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-) or metastasis in a single ipsilateral node larger than 3 cm in greatest dimension and ENE(+) or multiple ipsilateral, contralateral, or bilateral nodes in any size with ENE(+) in any node; or a single contralateral node 3 cm or smaller and ENE(+)

N3a Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-)

N3b Metastasis in a single ipsilateral node larger than 3 cm in greatest dimension and ENE(+); or multiple ipsilateral, contralateral, or bilateral nodes any size and ENE(+) in any node; or a single contralateral node 3 cm or smaller and ENE(+)

Anatomic Stage/Prognostic Groups

Stage III T0 N1 M0

Stage IVA T0 N2 M0

Stage IVB T0 N3 M0

Stage IVC T0 Any N M1

*Midline nodes are considered ipsilateral nodes

**ENE detected on histopathologic examination is designated as ENEmi (microscopic ENE ≤ 2 mm) or ENEMA (major ENE > 2 mm).

Both ENEmi and ENEMA qualify as ENE(+) for definition of pN.

Note: A designation of "U" or "L" may be used for any N category to indicate metastasis above the lower border of the cricoid (U) or below the lower border of the cricoid (L). Similarly, clinical and pathological ENE should be recorded as ENE(-) or ENE(+).

[Continued](#)

Used with permission of the American College of Surgeons, Chicago, Illinois. The original source for this information is the AJCC Cancer Staging Manual, Eighth Edition (2017) published by Springer International Publishing. (For complete information and data supporting the staging tables, visit www.springer.com.)

Table 8
American Joint Committee on Cancer (AJCC)
TNM Staging System for the Major Salivary Glands
 (Parotid, Submandibular, and Sublingual)

Primary Tumor (T)

TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
Tis	Carcinoma in situ
T1	Tumor 2 cm or smaller in greatest dimension without extraparenchymal extension*
T2	Tumor larger than 2 cm but not larger than 4 cm in greatest dimension without extraparenchymal extension*
T3	Tumor larger than 4 cm and/or tumor having extraparenchymal extension*
T4	Moderately advanced or very advanced disease
T4a	Moderately advanced disease Tumor invades skin, mandible, ear canal, and/or facial nerve
T4b	Very advanced disease Tumor invades skull base and/or pterygoid plates and/or encases carotid artery

*Note: Extraparenchymal extension is clinical or macroscopic evidence of invasion of soft tissues. Microscopic evidence alone does not constitute extraparenchymal extension for classification purposes.

Regional Lymph Nodes (N)

Clinical N (cN)

NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
N1	Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension and ENE(-)
N2	Metastasis in a single ipsilateral lymph node, larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-); or metastases in multiple ipsilateral lymph node(s), none larger than 6 cm in greatest dimension and ENE(-); or in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)
N2a	Metastasis in a single ipsilateral node larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-)
N2b	Metastasis in multiple ipsilateral nodes, none larger than 6 cm in greatest dimension and ENE(-)
N2c	Metastasis in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)
N3	Metastasis in a lymph node, more than 6 cm in greatest dimension and ENE(-); or metastases in any node(s) with clinically overt ENE(+)
N3a	Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-)
N3b	Metastasis in any node(s) with clinically overt ENE(+)

Note : A designation of "U" or "L" may be used for any N category to indicate metastasis above the lower border of the cricoid (U) or below the lower border of the cricoid (L). Similarly, clinical and pathological ENE should be recorded as ENE(-) or ENE(+)

Continued

Table 8
American Joint Committee on Cancer (AJCC)
TNM Staging System for the Major Salivary Glands
 (Parotid, Submandibular, and Sublingual)

T : 腫瘤的大小和侵犯程度

T Category	T Criteria
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
Tis	Carcinoma in situ
T1	Tumor 2 cm or smaller in greatest dimension without extraparenchymal extension*
T2	Tumor larger than 2 cm but not larger than 4 cm in greatest dimension without extraparenchymal extension*
T3	Tumor larger than 4 cm and/or tumor having extraparenchymal extension*
T4	Moderately advanced or very advanced disease
T4a	Moderately advanced disease. Tumor invades skin, mandible, ear canal, and/or facial nerve
T4b	Very advanced disease. Tumor invades skull base and/or pterygoid plates and/or encases Carotid artery

N : 區域淋巴結的轉移情況
Clinical

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
N1	Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension and ENE(-)
N2	Metastasis in a single ipsilateral node larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-); or metastases in multiple ipsilateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-); or in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)
	Metastasis in a single ipsilateral node larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-)
N3	N2a
	N2b Metastases in multiple ipsilateral nodes, none larger than 6 cm in greatest dimension and ENE(-)
	N2c Metastases in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)
N3	Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-); or metastasis in any node(s) with clinically overt ENE(+)
	N3a Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-)
	N3b Metastasis in any node(s) with clinically overt ENE(+)



Table 8 — Continued

**American Joint Committee on Cancer (AJCC)
TNM Staging System for the Major Salivary Glands**
(Parotid, Submandibular, and Sublingual)

Regional Lymph Nodes (N)

Pathological N (pN)

- NX** Regional lymph nodes cannot be assessed
- N0** No regional lymph node metastasis
- N1** Metastasis in a single ipsilateral lymph node, 3 cm or less smaller in greatest dimension and ENE(-)
- N2** Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension and ENE(+); or larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-); or metastases in multiple ipsilateral lymph node(s), none larger than 6 cm in greatest dimension and ENE(-); or in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)
 - N2a** Metastasis in a single ipsilateral lymph node 3cm or smaller in greatest dimension and ENE(+) or a single ipsilateral node larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-)
 - N2b** Metastasis in multiple ipsilateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)
 - N2c** Metastasis in bilateral or contralateral lymph node(s), none more than 6 cm in greatest dimension and ENE(-)
- N3** Metastasis in a lymph node, more than 6 cm in greatest dimension and ENE(-) or in a single ipsilateral node larger than 3 cm in greatest dimension and ENE(+); or multiple ipsilateral, contralateral, or bilateral nodes any with ENE(+); or a single contralateral node of any size and ENE(+)
 - N3a** Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-)
 - N3b** Metastasis in a single ipsilateral node larger than 3 cm in greatest dimension and ENE(+); or multiple ipsilateral, contralateral, or bilateral nodes any with ENE(+); or a single contralateral node of any size and ENE(+)

Distant Metastasis (M)

- M0** No distant metastasis
- M1** Distant metastasis

Anatomic Stage/Prognostic Groups

Stage I	T1	N0	M0
Stage II	T2	N0	M0
Stage III	T3	N0	M0
	T0, T1, T2, T3	N1	M0
Stage IVA	T0	N2	M0
	T1	N2	M0
	T2	N2	M0
	T3	N2	M0
	T4a	N0, N1, N2	M0
Stage IVB	Any T	N3	M0
	T4b	Any N	M0
Stage IVC	Any T	Any N	M1

Note : A designation of "U" or "L" may be used for any N category to indicate metastasis above the lower border of the cricoid (U) or below the lower border of the cricoid (L). Similarly, clinical and pathological ENE should be recorded as ENE(-) or ENE(+)

Continued

Table 8 — Continued
American Joint Committee on Cancer (AJCC)
TNM Staging System for the Major Salivary Glands
(Parotid, Submandibular, and Sublingual)

Pathologic

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
N1	Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension and ENE(-)
N2	Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension and ENE(+); or larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-); or metastases in multiple ipsilateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-); or in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)
	Metastasis in single ipsilateral node 3 cm or smaller in greatest dimension and ENE(+) or a single ipsilateral node larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(-)
N2a	
N2b	Metastases in multiple ipsilateral nodes, none larger than 6 cm in greatest dimension and ENE(-)
N2c	Metastases in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(-)
N3	Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-); or in a single ipsilateral node larger than 3 cm in greatest dimension and ENE(+); or multiple ipsilateral, contralateral, or bilateral nodes any with ENE(+); or a single contralateral node of any size and ENE(+)
	Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(-)
N3a	
N3b	Metastasis in a single ipsilateral node larger than 3 cm in greatest dimension and ENE(+); or multiple ipsilateral, contralateral, or bilateral nodes any with ENE(+); or a single contralateral node of any size and ENE(+)

Distant Metastasis (M)

M0 No distant metastasis

M1 Distant metastasis

Major Salivary Glands Prognostic Stage Groups

T	N	M	GROUP
Tis	N0	M0	0
T1	N0	M0	I
T2	N0	M0	II
T3	N0	M0	III
T0.T1.T2.T3	N1	M0	III
T4a	N0.N1	M0	IVA
T0.T1.T2.T3.T4a	N2	M0	IVA
Any T	N3	M0	IVB
T4b	Any N	M0	IVB
Any T	Any N	M1	IVC



根治性未開刀頭頸癌之放射治療療程規劃

同步整合加量放射治療 (Simultaneous integrated boost, SIB)	二~三段階放射治療 (Sequential)	
CTV_H : 2~2.2 Gy/fx, to 69.3~72.6 Gy CTV_M : 1.8 Gy/fx, to 59.4~63 Gy CTV_L : 1.6~1.8 Gy/fx, to 50.4~56 Gy 照射次數：32~35次，每日1次。每周5次。	階段一第(Phase 1) 照射範圍：CTV_H+CTV_M+CTV_L ：量劑方處44~50 Gy ：數次射照22~25次，每日1次。	
	階段二第(Phase 2) 照射範圍：CTV_H 累積劑量：66~72 Gy	階段二第(Phase 2) 照射範圍： CTV_H+CTV_M 累積量劑：54~60 Gy
	階段三第(Phase 3) 照射範圍：CTV_H 累積量劑：66~72 Gy	

積體靶床臨*(clinical target volume, CTV)：腫瘤及其可能侵犯之範圍。
 依照風險的高低可以分為 CTV_H、CTV_M及CTV_L。



手術切除後頭頸癌之放射治療療程規劃

同步整合加量放射治療 (Simultaneous integrated boost, SIB)	二~三段階放射治療 (Sequential)	
CTV_H：2~2.2 Gy/fx, to 60~66 Gy CTV_M：1.8 Gy/fx, to 54~59.4 Gy CTV_L：1.6~1.8 Gy/fx, to 50.4~56 Gy 照射次數：30~33次，每日1次。每周5次。	段階一第(Phase 1) 照射範圍：CTV_H+CTV_M+CTV_L 量劑方處44~50 Gy 數次射照22~25次，每日1次。	段階二第(Phase 2) 照射範圍： CTV_H+CTV_M 累積量劑：54~60 Gy
	段階二第(Phase 2) 照射範圍：CTV_H 累積劑量：60~66 Gy	段階三第(Phase 3) 照射範圍：CTV_H 累積量劑：60~66 Gy
手術後若有殘餘腫瘤或轉移性頸部淋巴結，則應加強照射劑量至70~74Gy。		

積體靶床臨*(clinical target volume, CTV)：腫瘤及其可能侵犯之範圍。
 依照風險的高低可以分為 CTV_H、CTV_M及CTV_L。

危急器官(organs at risk)及劑量限制

官器急危	建議制限量劑
幹腦	量劑高最 < 64 Gy (point dose < 1cc)
叉交經神視、經神視	最高劑量 < 54 Gy 或 1% 的體積不超過 60 Gy
顱葉	最高劑量 < 60 Gy 或 1% 的體積不超過 65 Gy
脊髓	量劑高最 < 54 Gy
中耳與內耳	量劑均平 < 50 Gy
眼球	量劑均平 < 35 Gy
眼球水晶體	於小量盡量劑高最 12 Gy
腺腮	量劑均平 < 26 Gy
節關頷下顱、骨頷下	量劑高最 < 70Gy 或 1 cc 的體積過超不 75 Gy
口腔	於低量盡量劑均平 50 Gy
帶聲	量劑均平 < 45 Gy
食道	於低量盡量劑均平 35 Gy
腺狀甲	30Gy 的體積於低量盡 62.5%
臂神經叢	最高劑量 < 66 Gy

*如果靶體積與危急器官之劑量限制有抵觸，原則上以重要性較高之危急器官為主要考慮，但最終決定由主治醫師作出判斷。

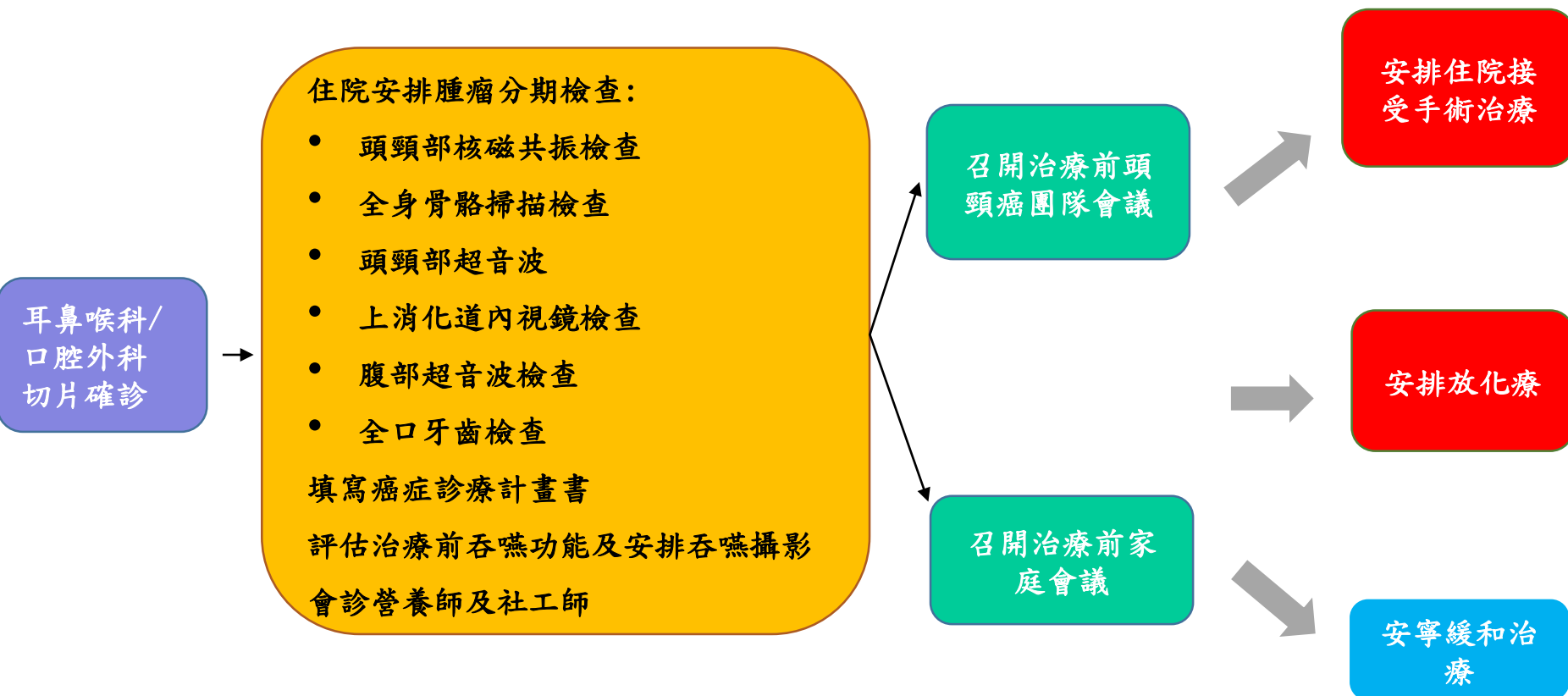


頭頸癌高危險群病人及高風險之臨床醫療照護，標準作業程序

頭頸癌高風險群病人定義與處理 嚴重共病症病人(心肺肝腎功能嚴重不全)	P.60~61
治療後之復健: 頭頸部癌症患者的嗓音及吞嚥復健指引	P.62~69
高風險根治性、皮瓣重建手術	P.70~76
治療造成第四級副作用之病人	P.77~81
接受化療之活動性 B 型肝炎病人	P.82~90
住院病人照護品質滿意度調查表	P.91
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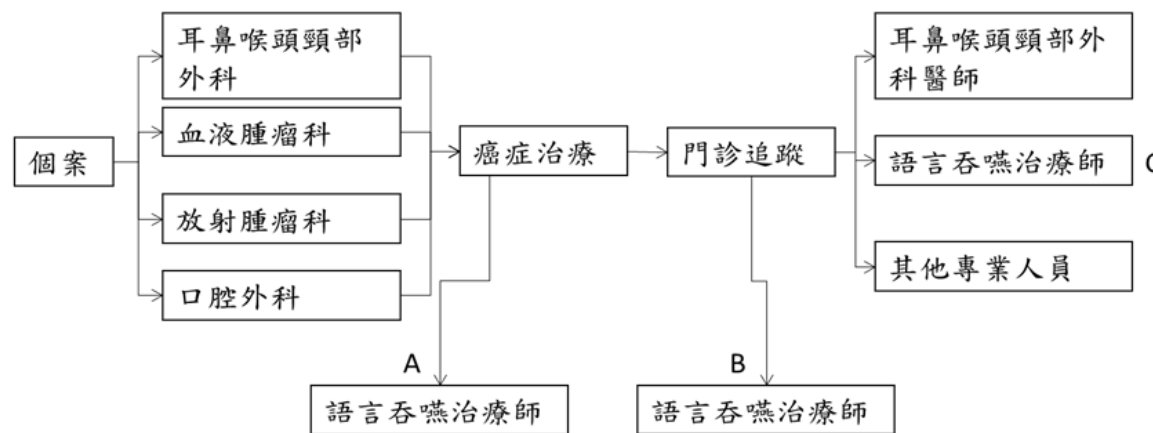
頭頸癌治療以手術、放射線治療、化學治療為主。或因區域位置可採性不同，或因功能保存等因素而有不同治療首選。以下列出之高風險因子，可能在治療前因風險過高導致治療計畫由較侵入性的手術轉為放射線和化學合併治療，或是在治療前因風險過高建議必須先進行侵入性手術，或是在最後的安寧緩和階段可能導致病人死亡等。

1. 全身性系統性疾病：心肺功能不全（Unstable angina、recent myocardial infarction、decompensated heart failure、COPD FEV1 < 50%）、肝腎功能不全（Ccr <30、cirrhosis child C）、中風後performance status差（ECOG 3-4）
2. 年齡>85歲
3. 長期服用免疫抑制劑
4. 凝血功能不全：liver cirrhosis導致血小板不足、PT、APTT prolonged等
5. 腫瘤因素導致潛在性呼吸道壓迫：tongue、tongue base、mouth floor、hypopharynx、larynx等位於中線位置腫瘤，太大(T4b)有可能造成慢性呼吸道壓迫，嚴重的頸部轉移(N3b)也有呼吸道壓迫風險，另外病人若是有嚴重張口受限導致插管困難，以上皆是建議進行預防性氣管切開術之適應症。
6. 腫瘤因素導致潛在性出血風險：腫瘤侵犯血管造成出血，或是過於靠近大血管（tumor engage common carotid artery, T4b）。
7. 營養狀況：
 - Cachexia/Severe weight loss: BWL >5% in one month、BWL >10% in two to six month
 - 吞嚥攝影scale 1-5分，但病人依據營養科體重指標，BW一個禮拜下降>2%，一個月體重下降>5%。



頭頸癌患者復健簡介

口腔、鼻、及咽喉組成人體上呼吸道及上消化道，此通道和我們的呼吸、說話及進食有密不可分的關係。當腫瘤發生於上述部位，即統稱為頭頸癌；常見有口腔癌、鼻咽癌、口咽癌、下咽癌、喉癌等，目前口腔癌已是導致國人男性癌症死亡的第四名殺手。頭頸癌的治療常常需要合併手術、放射線或化學治療，在清除腫瘤細胞同時也可能破壞正常組織，造成說話及進食功能受影響，可能常見出現的困難有：1.構音障礙、2.嗓音問題、3.吞嚥障礙。過去病患常在治療完成後，發現說話及吞嚥功能嚴重受損時，才考慮復健，可能讓復健成效不佳。近年來，病患的早期復健愈來愈受重視，亞東醫院頭頸癌醫療團隊在選擇治療計畫同時，會考慮治療對說話及吞嚥功能的可能影響，醫師團隊會安排語言吞嚥治療師評估及諮商，及早介入說話及吞嚥復健，以提升治療後病患生活品質(圖1)。



- A. 治療前評估與諮商
- B. 急性期語言與吞嚥治療
- C. 慢性期語言與吞嚥治療

圖1. 亞東醫院頭頸部腫瘤照護流程圖



一、醫學處置對吞嚥及言語造成的可能影響

頭頸癌的治療常常需要合併手術、放射線或化學治療，在清除腫瘤細胞同時也可能破壞正常組織，可能造成的影響包括：

(一) 手術

1. 組織切除和重建造成肌肉彈性、力量和活動範圍下降、組織密合度受影響。
2. 食團控制、食物後推及咀嚼能力下降
3. 鼻腔逆流
4. 吞嚥反射起動時間延遲
5. 喉部上抬及咽部收縮力量下降
6. 呼吸道保護變差

(二) 放射線及化學治療

1. 口腔黏膜炎
2. 放射性皮膚炎
3. 口乾症(xerostomia)
4. 肌肉纖維化(fibrosis)
5. 牙關緊閉(trismus)
6. 食道狹窄
7. 味覺及嗅覺改變
8. 聽力損失

頭頸癌的言語復健

說話功能評估包括「構音」及「嗓音」兩大部分。以下針對構音及嗓音的評估與復健加以介紹：

壹. 構音

(一) 構音功能

「構音」指的是發出語音的複雜動作：來自肺部的氣體通過聲帶，流經構音器官—唇、齒、舌、顎、咽，藉以發出清晰的語音；如果發音過程中某個構音器官有缺陷或不協調，發出來的語音不正確，即會產生構音問題。頭頸癌腫瘤本身即會壓迫唇、頰、舌、顎造成構音問題、這些部位的切除造成閉合不良、肌肉力量及活動範圍不足，以及放射線及化學治療使唾液減少、口腔破皮、潰瘍及發炎、嘴巴無法打開(牙關緊閉)，都可能使說話清晰度降低。

(二) 構音功能之評估

包括言語機轉評估、呼吸發聲共鳴評估、口腔構造功能檢查、臉唇齒舌顎咽評估、口腔輪替動作及進食狀況評估。

(三) 構音復健指引：

1. 增加構音器官力量：受影響構音器官(包含唇、舌、臉頰、顎)肌肉阻抗練習，以壓舌板、海綿棒或手向構音器官活動相反方向施力，而肌肉需朝活動方向盡力抵抗。阻抗運動從維持3秒鐘開始，視肌肉組織力量的增加慢慢延長抵抗時間，需做到極限以促進肌纖維的增長。
2. 增加構音器官活動範圍(range of motion, ROM)：
 - (1) 嘴唇：噘嘴發"ㄨ"、"一"，以及交替說"ㄨ"、"一"十次，動作盡量大。
 - (2) 舌頭：舌頭盡量往前伸出、往後縮回；伸出口腔往上翹、往下舔、往左右嘴角移動。
3. 放慢說話速度：放慢說話速度使構音動作能較為完整、確實，以提升整體興清晰度。
4. 誇大構音：加大構音器官的動作以提升構音準確性。



貳. 嗓音

(一) 嗓音功能

「嗓音」指的是說話時的聲音，通常考量聲音的音質、音量、音調。嗓音異常指的是：說話時嗓音的音質、音量、音調或彈性異於同年齡、同性別、同文化團體中的其他人，或自覺有嗓音問題者。腫瘤本身壓迫聲帶及呼吸道可能造成聲音沙啞及發聲困難，部分喉切除術後會使聲音沙啞及氣息聲，全喉切除病人在術後則無法說話；放射線治療後喉部部周圍水腫及頸部肌肉纖維化會使聲音沙啞，這些都會影響聲音的品質及發聲。

(二) 嗓音功能評估

包括聲帶振動特徵評價，發音質量的主、客觀評估，氣流動力學喉功能評估，喉神經肌肉電功能評估，影像學評估等方面。

(三) 嗓音復健指引：

1. 聲帶功能練習(vocal function exercise)：

- (1) 輕輕說"一"，說得越長越好，且盡量保持聲音穩定。
- (2) 說"ㄋㄨ"(NO)音，由低音滑到高音。
- (3) 說"ㄋㄨ"(NO)音，由高音滑到低音。
- (4) 以"ㄨ"音來唱 Do、Re、Mi、Fa、Sol，每個音盡量拉長且維持穩定。

2. 軟起聲練習。

3. 共鳴練習。

4. 全喉切除患者言語復健：練習食道語、氣動式人工發聲器、電動式人工發聲器、發聲瓣的使用。



四、頭頸癌患者的吞嚥功能評估及復健

(一)正常的吞嚥

「吞嚥」指食物或液體由嘴巴進入胃中的一個複雜過程。正常的吞嚥過程包含四期：1. 口腔準備期：將食物咀嚼磨碎形成食團。2. 口腔期：將食團後送引起吞嚥反射。3. 咽部期：吞嚥反射將食團推到食道上方。4. 食道期：食團通過食道進入胃中。任一吞嚥期間的動作或流程延遲、不完整將改變食物流向，造成食物哽噎或噎咳。

(二)常見的吞嚥問題

1. 嘴唇閉合不佳：容易流口水，進食時食物由嘴唇溢出。
2. 兩頰張力不足：食物散落到牙齒外側，不易形成食團。
3. 舌頭控制不良：無力或活動不佳，食團無法由前向後推送、黏附在上顎或口底。
4. 顎咽功能障礙：食團逆流到鼻腔。
5. 口腔感覺敏感度降低：延遲吞嚥反射，造成食物堆積或是噎咳。
6. 舌根與咽壁接觸減少：感覺吞不下去或吞不乾淨。
7. 呼吸道關閉不良：容易噎到。
8. 唾液減少：固體食物易黏於口中。

(一)吞嚥功能的評估方式

1. 口腔運動功能：包含嘴唇閉合、兩頰力量、舌頭力量及活動度、軟餓上提、咀嚼、發聲能力、咳嗽力量等。
2. 嘗試吞嚥功能評估(trial swallow)：依序及依病人狀況給予少量液體、濃稠液體、糊狀食物、軟質食物或固體食物，在實際吞嚥過程中評估喉部上抬能力、吞嚥反射時間、食物殘餘(residue)、是否噎咳及清除食物殘餘能力。
3. 儀器檢查：包含電視螢光吞嚥攝影(Videofluoroscopic swallowing study)、纖維內視鏡吞嚥檢查(Fiberoptic Endoscopic Examination, FEES)。

(一)吞嚥障礙的治療方式

1. 代償性治療方法：包含調整食物質地、味道、溫度以及調整進食姿勢
2. 口腔動作運動：改善唇、頰、舌、顎、喉部及咽部肌肉的力量及增加可活動範圍。
3. 吞嚥手法：
 - (1)多次吞嚥法：增加吞嚥的次數，將堆積的食團吞乾淨。
 - (2)上聲門吞嚥法：利用「閉氣、吞嚥、咳嗽」的步驟進行吞嚥動作，可避免食團滲入呼吸道。
 - (3)超上聲門吞嚥法：利用「用力閉氣、吞嚥、咳嗽」的步驟進行吞嚥動作，可關閉呼吸道入口，避免食團滲入呼吸道。
 - (4)用力吞嚥法：吞嚥的時候喉部肌肉用力擠壓，可增加舌根向後移動，清除會厭的殘留。
 - (5)孟德爾森吞嚥法：吞口水時讓喉部停留在上方數秒，增加喉部上抬的幅度與時間，減少梨狀竇殘留。
 - (6)Masako 吞嚥法：輕輕咬住舌頭乾吞口水，可增加咽部收縮的力量。
4. 深咽神經肌肉刺激(Deep pharyngeal neuromuscular stimulation)



五、 結語

醫學為生命延長壽命，復健為壽命添增生命。頭頸癌治療或多或少會為病人帶來語言、吞嚥的後遺症。在頭頸癌治療團隊的通力合作下，早期的介入頭頸癌患者的語言與吞嚥評估與治療，將為患者延長壽命外更添加生活品質。

六、參考文獻

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一、目的：

為提升頭頸癌病患於本院治療之效率，及提高頭頸癌病患照顧品質，特訂定本指引(共識)

二、資格限制：

科別	職稱	證照
耳鼻喉頭頸外科	廖立人主任	耳鼻喉專科醫師暨頭頸部腫瘤專科醫師
	羅武嘉醫師	耳鼻喉專科醫師暨頭頸部腫瘤專科醫師
口腔外科	林秉毅主任	牙科專科醫師暨口腔外科專科醫師
	郭英雄教授	牙科專科醫師暨口腔外科專科醫師
	楊濡瑄醫師	牙科專科醫師暨口腔外科專科醫師
整形外科	張惇皓醫師	整形外科專科醫師
	阮廷倫醫師	整形外科專科醫師

三、背景:

1. 亞東醫院有完整的頭頸癌治療團隊。
2. 針對根治性暨重建手術因為需要跨團隊的治療。
3. 過去有時因為排程需要讓病患先進行化療，才進行根治性手術；病患可能因此轉院治療。
4. 為提升頭頸癌病患於本院治療之效率，提高病患照顧品質，替訂定本辦法。

四、病歷回顧(附件一)

1. 2019-05 到 2020/08
2. 從決定開刀至手術日的平均天數: 23.3 days (目標: 縮短)
3. 開刀當天等待時間: 163.2 min (目標: 縮短)
4. 手術結束時間 (目標: 提早)
5. 半年後再回顧看是否改善

五、檢討:

頭頸癌從決定跨團隊根治性暨重建手術到執行手術時間需要3週以上，部分病人因此需要進行化療延緩腫瘤進展，再進行根治性暨重建手術

手術當天可能因為等待加護病房讓手術太晚結束，或擔心沒有加護病房被迫取消手術導致患可能選擇自行到其他醫學中心就醫

六、他院狀況

醫院	手術房間	接刀時間	結束轉送	開刀數	其他
臺大醫院	ENT combine 房， 一週星期四一線	AM 8:00	SICU 或 BICU, PS 安排	1週1台	PS Fellow 開刀; 等四 週者Bridge CT
馬偕醫院	ENT 或 PS 協調	該科先開2- 3hr，再接刀	兩天前訂 SICU, 沒 有到 BICU或 NICU，一定有 ICU	一週最多三台	PS Fellow 12:00~20:00 值班; 約 2-3 週可以排到刀， 不會 Bridge CT
中榮	PS 房間	AM 8:00	PS會安排 SICU 或 BICU	週1-5 都有 PS 可以配合flap 重 建, 一天最多兩台	1-2週可以排到刀
高榮	用 ENT或 PS 的線	AM 8:00	定 SICU會保留床 位	週1-5 都有 PS 可以配合flap 重 建	1-2週可以排到刀
慈濟	PS 房間(PS 一天兩 線)	PS 開完再接	SICU 或 BICU, PS 安排	週1-5都有 PS 可 以配合flap 重建;	排刀約等1週，年 100台



七、實施辦法及流程

1. 臨床上頭頸外科及口腔外科醫師判斷頭頸癌患者須進行頭頸癌跨團隊根治性暨重建手術時發動
2. 聯絡整形外科團隊，協調手術時間，依共識進行(附件2)
3. 確定手術時間(或住院時)通知開刀房(控台或護理長宥均88038)及外科加護病房(88096 ICU輪值NP,下班時段為值班CR)
4. 需同時通知該病人進住之一般病房。(但書:若手術當天ICU無法空出床位，則ICU跟原病房一床換一床)
5. 原則一週一台為上限，往後視情況調整
6. 病患取消時也要通知開刀房(控台或宥均)及外科加護病房(88096 ICU輪值NP,下班時段為值班CR)
7. 需依照開刀房規定完備術前準備(癌症診療計畫說明書、手術同意書、術前評估等)(**check list 附件 3**)
8. 須依本院照顧病患原則完備歷程(包括EBM, 手術紀錄、病歷紀錄等)
9. 頭頸癌團隊或開刀房管委會得定期檢視診治歷程，如有嚴重違規，得經頭頸癌團隊或開刀房管委會決議，要求改善、甚至暫停或取消資格

附件1. 2019-05 到 2020-08 combine 手術病人表

Name	Chart No.	Dept.	VS	Diagnosis	Diagnosis date	OPD date	OP date	OPD to OP (Day)	OP time (start)	OP waing time(min)	OP time (finish)			
鐘○結	J70415	OS	郭英雄/阮廷倫	R't mandible gingiva SCC	2019/03/26	2019/04/02	2019/05/06	34	09:00	60	18:00			
蔡○進	G41916	OS	郭英雄/張惇皓	R't lower gingival SCC, p	2019/05/01	2019/05/02	2019/05/27	25	12:25	265	* 03:00			
劉○義	Y53605	OS	郭英雄/柯安達	R't buccal SCC, s/p OP & RT, with R't man		2019/04/25	2019/06/03	39	13:40	340	21:00			
林○港	1067861	OS	周厚江/張惇皓	Multiple teeth fracture and mandible fractur	ER	2019/05/3	2019/06/06	6	08:45	45	14:20	術後沒去ICU		
黃○風	S06121	OS	楊瀟瑄/張哲璋	Lower lip SCC, pT2N0M0	2019/05/01	2019/05/09	2019/06/12	34	11:30	210	23:10			
吳○宏	M78386	OS	林秉毅/阮廷倫	R't mandible gingival SCC	2019/05/22	2019/05/27	2019/06/19	23	10:20	140	17:45			
陳○裕	R92214	OS	郭英雄/柯安達	R't mandible gingival SCC	2019/06/13	2019/06/13	2019/07/01	18	11:10	190	* 00:30			
張○昌	S92329	OS	胡廣煜/阮廷倫	R't buccal SCC, pT4aN0MB, s/p OP, s/p C		2019/07/02	2019/07/10	8	12:12	252	21:15			
蔡○道	1075212	ENT	羅武嘉/張惇皓	R't buccal SCC, pT4aN2t	2019/07/12	2019/07/11	2019/07/25	14	09:25	85	22:45			
祁○華	S30695	OS	林秉毅/張惇皓	R't buccal SCC, pT2N1MB, s/p OP, s/p CC		2019/07/26	2019/08/01	6	09:10	70	11:40	for teeth extraction and commsuroplasty		
許○霖	896326	OS	胡廣煜/張哲璋	L't buccal SCC, pT4aN2t	2019/08/08	2019/08/13	2019/08/28	15	12:30	270	* 01:20			
王○聰	F53357	ENT	廖立人/柯安達	R't buccal SCC, pT2N2a	2019/07/25	2019/08/13	2019/08/28	15	11:05	185	19:30			
吳○山	707158	ENT	羅武嘉/張惇皓	L't upper gingival SCC, p	2020/04/01	2020/04/02	2020/05/04	32	09:15	75	19:25			
陳○亨	G43182	OS	林秉毅/楊瀟瑄	tongu SCC, pT4aN0M0, s	2020/03/30	2020/04/07	2020/05/06	29	08:45	45	18:15			
陳○財	1128041	OS	林秉毅/阮廷倫	L't tongue SCC, pT4aN3t	2020/04/22	2020/04/24	2020/05/13	19	12:35	275	* 00:50			
許○勝	362261	OS	郭英雄/阮廷倫	R't lower gingival SCC, p	2020/04/23	2020/04/28	2020/05/25	27	09:30	90	16:45			
王○順	1131739	OS	林秉毅/張惇皓	L't soft palate SCC, pT1N0M0, stage I		2020/05/15	2020/06/04	20	10:55	175	* 00:45	外院診斷		
陳○謙	1135125	ENT	羅武嘉/張惇皓	Tongue SCC, pT4aN0M0	2020/06/30	2020/07/07	2020/07/13	6	11:35	215	22:00			
吳○輝	A03930	ENT	廖立人/阮廷倫	R't RMT SCC, cT4bN2bM	2020/05/25	2020/06/03	2020/07/13	40	11:05	185	17:45			
陳○榮	469523	OS	林秉毅/張惇皓	R't buccal SCC, pT4N0M	2020/06/04	2020/06/08	2020/07/23	45	09:20	80	20:45			
陳○龍	W96531	OS	楊瀟瑄/阮廷倫	Right RMT SCC, pT4aN0	2020/06/17	2020/06/29	2020/07/29	30	10:00	120	22:30			
王○水	501679	ENT	羅武嘉/阮廷倫	oral ca, s/p OP, with trismus		2020/07/14	2020/08/03	20	11:25	205	14:25	for trismus		
吳○發	632122	OS	林秉毅/楊瀟瑄	Left lower gingiva SCC p	2020/08/06	2020/08/06	2020/08/12	6	12:00	240	* 03:55			
林○基	M52614	OS	郭英雄/張惇皓	R't buccal SCC, pT4aN2t	2020/07/14	2020/07/16	2020/08/10	25	09:40	100	20:55			
								22.33333333		163.2083333				
						average		22.3 day	average	163.2 min				

附件2. 頭頸癌跨團隊根治性暨重建手術流程共識

1. 10/12開始每週多1個順位給頭頸癌combine，手術病人不等ICU床，早上8點接刀。（使用非c-arm房22或24）、（週1～週5任選1天）、（ICU床後喬，但如當天無法轉出空床，則由頭頸癌病人原病床接受ICU轉出病人）。
2. 由ENT、口外先與整外協調出開刀日期後，由主責醫師向手術控台booking，先以每週一台為限，之後是否增加提管委會滾動式檢討。
3. 適用術式：Free flap、PM flap、ALT flap。
4. 不需ICU床的combine 手術也適用。
5. 管委會每季報告、6個月觀察期。

附件3. 頭頸癌跨團隊根治性暨重建手術術前check list

1. 需有手術前團隊會議記錄或是家庭記錄
2. 通知整形外科醫師
3. 通知 OR
4. 通知 SICU
5. 通知一般病房 (有可能開刀日會跟ICU一床換一床)
6. 癌症診療計畫說明書
7. 手術同意書
8. 術前麻醉評估、備血
9. 照會其他團隊成員
營養師、復健師、牙科(可看之前staging有無照會過)

1. Leukopenia or Neutropenia: WBC < 1000/mm³ or absolute neutrophil count < 500 mm³
 - 建議停藥
 - 給予白血球生長激素
 - 下次化療調整劑量
2. Anemia: Life-threatening consequences; urgent intervention indicated
 - 建議停藥
 - 輸血
 - 下次化療調整劑量
3. Thrombocytopenia: Platelet < 25000/mm³
 - 建議停藥
 - 視出血傾向考慮輸血
 - 下次化療調整劑量

4. Liver function abnormality: AST/ALT $>20 \times$ ULN, Total bilirubin $>10 \times$ ULN
 - 建議停藥

5. Renal function abnormality: Cr $>6.0 \times$ ULN
 - 矯正其他可處理因素，如脫水、感染等
 - 處理伴隨腎功能異常產生之電解質異常或體液累積
 - 停藥或更換藥物

6. Vomiting: Life-threatening consequences; urgent intervention indicated
 - 建議停藥
 - 營養支持

7. Diarrhea: Life-threatening consequences; urgent intervention indicated

- 建議停藥
- 評估體重，尿量，電解質平衡
- 水分補充與營養支持
- 藥物症狀治療
- 查找其他腹瀉原因，糞便化驗培養

8. Mucositis: Life-threatening consequences; urgent intervention indicated

- 建議停藥
- 傷口處理及保持口腔清潔
- 止痛症狀控制
- 營養支持，管灌飲食與點滴支持

9. Skin rash: Life-threatening consequences

- 建議停藥
- 會診皮膚科

10. Neuropathy: Life-threatening consequences; urgent intervention indicated

- 建議停藥
- 查找其他原因

參考資料:

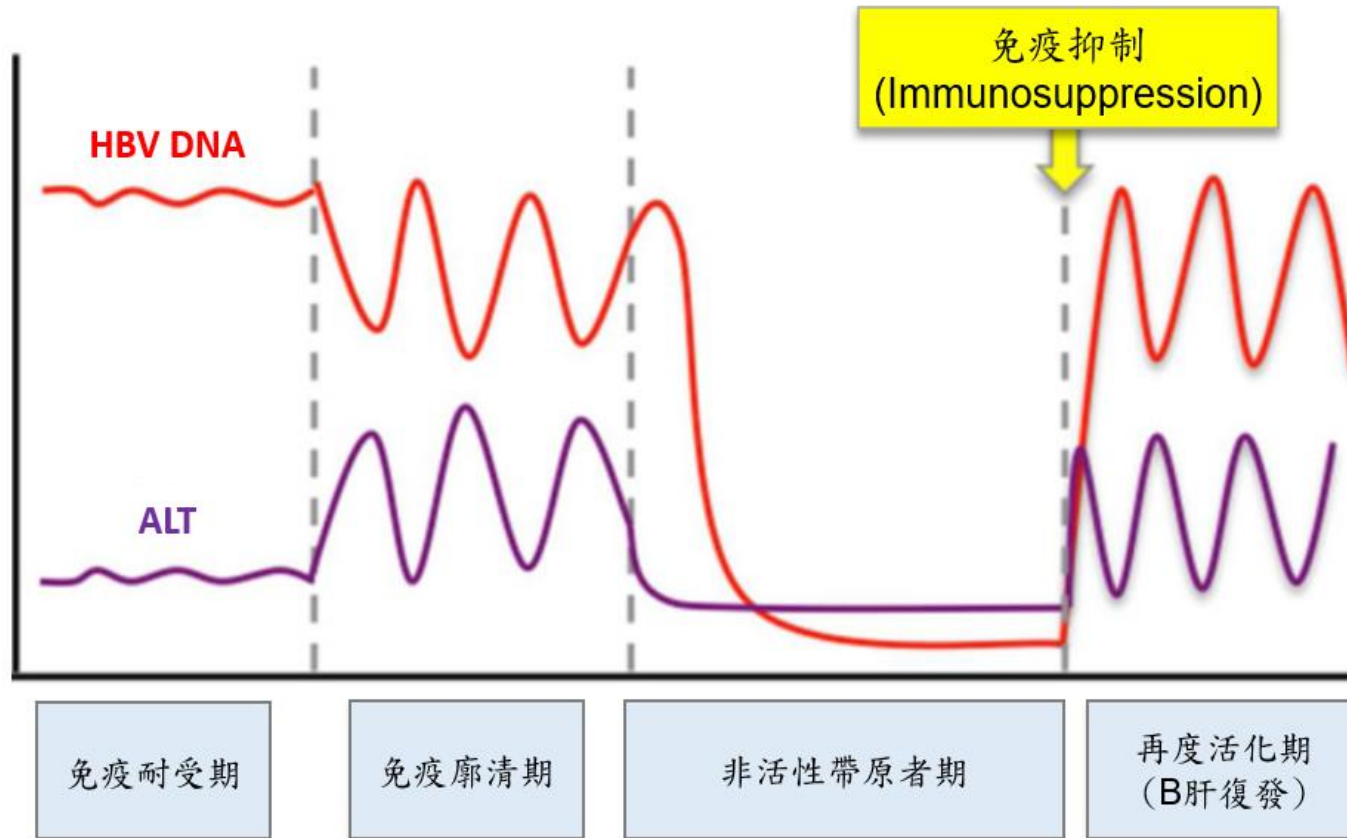
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一、簡介:

近年，隨著化學治療藥物及生物製劑的進步，免疫抑制療法(Immunosuppressive therapy)有漸增的趨勢，然而，伴隨強力免疫抑制的風險，便是患者本身潛在感染疾病的復發，其中以病毒性肝炎復發較為常見。而病毒性肝炎在台灣的盛行率偏高，可謂國病，此重要議題值得臨床醫師與病患關切。因此，在癌症病患實施化學治療前，詳細評估病人肝功能及審視病人有否有B、C型肝炎帶原及其感染狀態十分重要，並適當投與預防性肝炎抗病毒藥物，防止病人因治療造成肝炎病毒活躍，繼發肝炎急性發作，甚至因猛爆性肝炎而有生命危險。





Alissa Visram, et al. "Defining and grading HBV reactivation" AASLD, 2015





二、B型肝炎

1. 感染狀況

- a. 需從3個指標來看：**表面抗原 (HBsAg)**、**表面抗體 (Anti-HBs)**、**核心抗體 (Anti-HBcIgG)**。感染過B肝的人，不管後來成為帶原者或是恢復者，其Anti-HBcIgG都會長期呈陽性。
- b. **慢性B肝帶原者(chronic hepatitis B)**為**表面抗原呈陽性超過六個月**。在1986年實施新生兒全面施打B肝疫苗前，台灣人最常見的B肝病毒感染途徑為出生前後的母子垂直感染，年齡愈小受感染、愈容易變成慢性帶原者，因此在1986年前出生者，高達15%~20%為B肝帶原者，病毒再活化的風險最高。
- c. **康復型B肝患者(Resolved hepatitis B)**是曾經感染過B肝的非帶原者，為**HBsAg(-)**、**Anti-HBcIgG(+)**。對於這類康復型B肝患者，檢測Anti-HBsAb是人體是否對B肝病毒產生免疫力的象徵，因此若**Anti-HBsAb(+)**，屬於體內B肝病毒再活化風險較低者；反之若**Anti-HBsAb(-)**，體內B肝病毒再活化風險較高。



2. 復發定義

- a. **慢性B肝帶原者:** 復發定義為 HBV DNA上升超過標準值。在免疫抑制療法下，復發機率高達70%。
- b. **康復型B肝患者:** 復發定義為HBs Ag復陽(reversion)或是血中HBV DNA的出現。在免疫抑制療法下，復發機率約為41.5%。

3. B 肝復發病程

- a. **隱性復發期(silent reactivation):** 因免疫抑制，體內病毒量開始上升，但是血中肝指數則為正常或輕微上升。
- b. **肝炎復發期(HBV associated hepatitis):** 免疫抑制療法結束後，免疫系統逐漸恢復，並開始攻擊受感染的肝細胞，造成臨床上、生化血清學上或病理組織學上的肝炎現象。
- c. **猛爆性肝炎(fulminant hepatic failure):** 少部分病人則可能進展至嚴重肝炎情形，大量肝細胞死亡，血中HBV DNA以及肝指數大幅上升，造成肝臟生理功能停擺，出現肝功能異常、肝腦病變、凝血功能異常等症狀，死亡率可高達四成。



4. 復發風險

a. B肝復發風險與B肝感染狀態的關係:

風險高低	血清學特徵	健保是否給付預防用藥
高度風險	HBsAg(+), Anti-HBc(+), Anti-HBs(-)	是
中度風險	HBsAg(-), Anti-HBc(+), Anti-HBs(-)	否
低度風險	HBsAg(-), Anti-HBc(+), Anti-HBs(+)	否

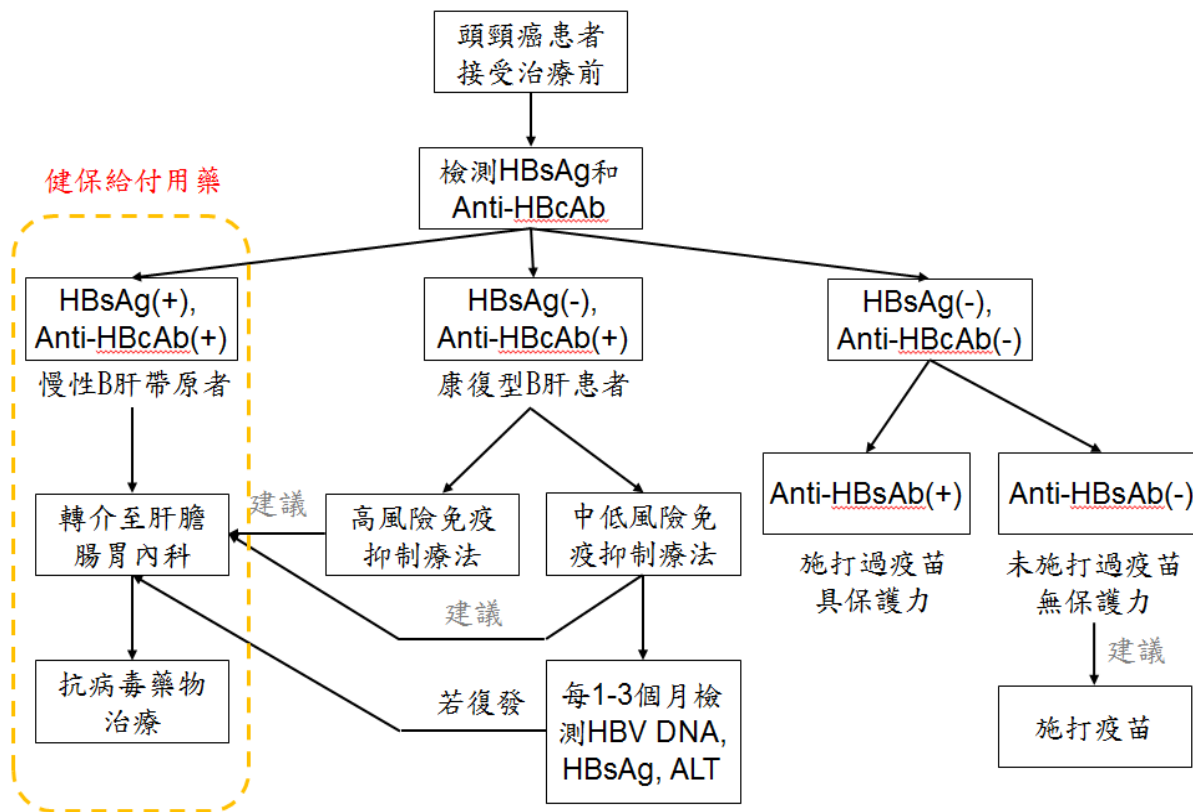
b. B肝復發風險與免疫抑制藥物種類與使用的時間的關係:

風險高低	免疫抑制藥物種類與使用時間
高度風險	接受癌症化學治療 接受 B 細胞抑制劑(如rituximab)等強效免疫抑制劑藥物。 使用中高劑量類固醇（每日 10-20 毫克以上）且治療時程大於 4 週 接受骨髓移植
中度風險	接受生物製劑或某些具免疫抑制能力的標靶藥物 (如TNF- α therapy, cytokine inhibitor, integrin inhibitor, TKI等等) 使用低劑量類固醇（每日小於 10 毫克）但治療時程大於 4 週。
低度風險	使用 任何劑量類固醇但治療時程小於 1 週 使用非類固醇的傳統免疫抑制劑。



頭頸癌臨床指引

5. 癌症治療前之B型肝炎評估與治療流程



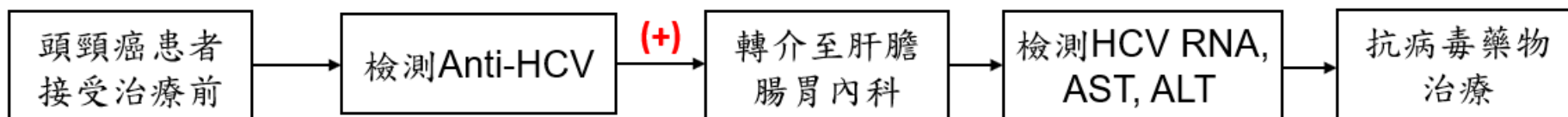
目前健保規定：慢性B型肝炎帶原者在接受癌症化學療法中，經照會消化系專科醫師同意後，可於化學療法前1週開始給付使用，直至化學療法結束後6個月，以預防B型肝炎發作。

三、C型肝炎

1. 在台灣，C型肝炎是僅次於B肝的肝病殺手，臨床上皆證實與肝硬化、肝癌有關。然而，過去C型肝炎礙於治療的副作用甚鉅，藥物交互作用(Drug-drug interaction)機率較高，病人順應性不佳，臨床治療的執行往往窒礙難行。所幸，2014年全新的口服C肝藥物問世，改寫了C肝治療的歷史，治癒C型肝炎不再是遙不可及的終點，規律服藥8-12周，治癒率可達九成以上。

為免於因免疫抑制療法造成C型肝炎的活化，應於治療前，例行接受C型肝炎抽血檢測，篩出潛藏的C型肝炎患者，給予積極治療。

2. 癌症治療前之C型肝炎評估與治療流程



目前健保規定: ALT 值異常，且 Anti-HCV 與 HCV RNA 均為陽性者。



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住院病人照護品質滿意度調查表

病房別

109.05.20 修訂

親愛的先生女士：

您好！為提高本院服務品質，營造更好的醫療服務環境，懇請您利用幾分鐘時間填寫這份問卷，以提供我們改進的方向。 敬祝 健康快樂

壹、此部份為探討您住院期間對各項目服務的滿意程度，請在適當的□內打✓。

滿意程度

很滿意 滿意 尚可 不滿意 很不滿意

5 4 3 2 1

- 1.護理人員態度親切和善
- 2.當您需要呼叫時，護理人員能儘快前來處理
- 3.護理人員會提供疾病相關的衛教知識
- 4.護理人員執行治療時能維護您的隱私，給予適當遮蔽
- 5.病房常保持安寧
- 6.床墊軟硬度合宜
- 7.提供清潔的床單、被單
- 8.整體而言，您對本次住院期間護理人員服務的整體感覺
- 9.其他建議事項(請說明)：

貳、在此住院期間，您認為服務態度最讓您感到滿意的醫生或護理人員是：(請寫出姓名)

您認為最不滿意的醫生或護理人員是：(請寫出姓名)

不滿意的原因為：_____

參、若您或家人有接受出院準備服務團隊的照護，敬請繼續填寫下列問卷，謝謝！

很滿意 滿意 尚可 不滿意 很不滿意 無接觸

5 4 3 2 1

- 1.醫護人員說明「出院後疾病照護及注意事項」的整體感覺
- 2.住院中接受(營養師、社工師、復健師、藥師)等專業人員提供的相關照護指導滿意程度
 - ※營養師
 - ※社工師
 - ※復健師
 - ※藥師
- 3.說明出院後安排回家、或至安養中心、護理之家等居住場所
- 4.說明回家後所需準備之用品，如：傷口、各種管路照護用物、輪椅、抽痰機、氣墊床、氧氣製造機等
- 5.說明回家後可利用的後續照顧資源及申請條件，如：居家護理、喘息服務、居家服務等
- 6.出院時間的安排
- 7.協助預約下次返診時間
- 8.提供出院後醫療諮詢服務電話及地點說明
- 9.其他建議事項(請說明)：

※若您願意我們進一步與您連繫，請留下您的資料，我們將儘快依您的建議(意見)回覆。

床號：_____ 連絡姓名：_____ 電話：_____



2020/12/25

頭頸癌生活評估量表

頭頸癌生活評估量表

我們關心您的健康，請就自身狀況回答以下問卷問題。問題答案中並沒有「對」或「錯」，請勾選最適合您的答案。您所提供的資訊內容將完全保密。

*必填

1. 為了可以掌握您的問題，請留下您的姓名

2. 您的健康行為?

每列請僅選取一個答案。

	無	已戒	不清楚	10年以下, 每天20顆/根內	10年以下, 每天20顆/根以上	超過10年, 每天20顆/根內	超過10年, 每天20顆/根以上
嚼檳榔習慣	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
吸菸習慣	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. 飲酒習慣

單選。

- 無飲酒習慣
- 沒有每天喝(每週平均<4次)
- 每天喝(每週平均<4次)
- 若有飲酒請於下列填寫種類及單位ml
- 其他: _____

2020/12/25

頭頸癌生活評估量表

4. *

每列請僅選取一個答案。

	完全沒有	有一點	相當多	非常多	不適用
1.您在戶外從事短距離步行，是否有困難?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.您進食、穿衣、洗澡或上廁所需要別人幫助嗎?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.您在從事工作或是日常活動上是否受到限制?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. 3.您有特別不舒服的症狀嗎? *

單選。

- 虛弱
- 噁心
- 嘔吐
- 便秘
- 腹瀉
- 無
- 其他: _____





2020/12/25

頭頸癌生活評估量表

6. 在過去一星期內 (過去七天內) *

每列請僅選取一個答案。

	完全沒有	有一點	相當多	非常多	不適用
5. 你會覺得情緒低落嗎?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. 您是否有覺得臉部疼痛?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. 您吞嚥時曾有困難嗎?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. 您吞嚥時曾經噁到嗎?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. 您張大嘴巴曾有困難嗎?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. 您曾覺得嘴巴乾乾的嗎?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. 在過去一星期內 (過去七天內) *

每列請僅選取一個答案。

	完全沒有	有一點	相當多	非常多	不適用
11. 您曾有嗅覺方面問題嗎?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. 您曾有味覺方面問題嗎?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. 您曾為自己的外觀感到困擾嗎?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. 您進食曾感到困擾嗎?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. 您與別人交談曾感到困擾嗎?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. 您和人交往接觸曾感到困擾嗎?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. 您外出至公共場合曾感到困擾嗎?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. 您曾有體重減輕嗎?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2020/12/25

頭頸癌生活評估量表

8. 16. 您如何評定過去一星期內 (過去七天內) 您整體的健康?

單選。

	1	2	3	4	5	6	7	
非常差	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	極好

9. 17. 您如何評定過去一星期內 (過去七天內) 您整體的生活品質?

單選。

	1	2	3	4	5	6	7	
非常差	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	極好

10. 謝謝您的回答!

Google 並未認可或建立這項內容。

Google 表單



可信任之專業教學活動 (EPA, Entrustable Professional Activity)

耳鼻喉頭頸外科 EPA

負責委員：廖立人

1.標題					
耳鼻喉頭頸部(含口腔)腫瘤評估與處置					
2.任務描述					
病人以頸部(含口腔)腫瘤至門診求診		限制：限於成人門診及住院病人			
		完成訓練必須			
		1. 頸部(含口腔)腫瘤切片案例			
		2. 協助下完成淋巴或頸部種腫塊手術案例			
		3. 淋巴腺轉移(AJCC-TNM)分期系統案例			
		4. 完成頭頸癌診斷計畫書案例			
3.任務失敗時可能造成的風險					
頸部(含口腔)腫瘤造成延遲診斷、錯誤診斷、治療及錯估治療的併發症，降低治療存活效果、或增加併發症以及治療後之生活品質					
4.對應之核心能力					
Patient Care PC1 唾液腺疾病 PC2 呼吸消化道病變 PCA1 頸部腫塊	Medical Knowledge MK1 上呼吸消化道惡性腫瘤	Professionalism PROF1 專業價值	Interpersonal & Communication Skills ICS1 人際關係及溝通技巧 ICSN1 健康照護團隊溝通 ICSN2 以病患和家屬為中心的照護	Practice-based learning and improvement PBLI1 終身學習及持續自省能力 PBLIN2 自主學習	System-based Practice SBP1 病人安全 SBP2 資源利用

7.期待學員能夠獨立操作的時機

第二年結束前應可達 Level 3

擔任總值班醫師開始時預期為 Level 4

擔任總值班醫師一年後預期為 Level 5

訓練結束前應可達 Level 5

Level 1	只能觀察，不能操作(在場)
Level 2	需在教師直接指導下執行(在場)
Level 3	需協助時立即找得到教師指導(在附近)
Level 4	可獨立執行，僅需事後督導
Level 5	可指導別人



EPA: 耳鼻喉頭頸部(含口腔)腫瘤評估與處置	
次核心能力	里程碑
PC1 唾液腺疾病	<ul style="list-style-type: none"> <input type="checkbox"/> (PC1.4.1)能為病患準確完成癌症(TNM)分期。 <input type="checkbox"/> (PC1.4.2)能依據臨床、影像學及病理學資訊正確診斷，並知道常見唾液腺腫瘤的組織病理特徵。 <input type="checkbox"/> (PC1.4.3)能依據部位、分期及病患等因素，為特定唾液腺癌患者訂定適當治療計畫。 <input type="checkbox"/> (PC1.4.4)能在監督下完成手術。 <input type="checkbox"/> (PC1.4.5)能察覺常見的併發症，並有能力治療及(或)訂定治療計畫。 <input type="checkbox"/> (PC1.3.2)描述唾液腺腫塊的鑑別診斷，能在臨床上區分腫瘤與非腫瘤病因。 <input type="checkbox"/> (PC1.2.1)取得焦點病史及理學檢查結果，包括完整的頭頸部檢查，頭部及顱神經檢查，並安排適當的實驗室、細針穿刺(FNA)及影像學檢查。 <input type="checkbox"/> (PC1.2.2)了解造成唾液腺炎疾病的原因。 <input type="checkbox"/> (PC1.1.2)了解正常唾液腺功能。
PC2 呼吸消化道病變	<ul style="list-style-type: none"> <input type="checkbox"/> (PC2.4.1)能判讀實驗室，功能性及影像學檢查結果。 <input type="checkbox"/> (PC2.4.2)能依據臨床、影像學及病理學資訊正確診斷，並知道常見呼吸消化道腫瘤的組織病理特徵。 <input type="checkbox"/> (PC2.4.3)能依據病變及病患因素，為特定聲帶病變患者訂定適當治療計畫。 <input type="checkbox"/> (PC2.4.4)能執行喉顯微鏡檢查並穩定完整地觀察到前連合(anterior commissure)。 <input type="checkbox"/> (PC2.4.5)能察覺常見的併發症，並有能力治療及(或)訂定治療計畫。 <input type="checkbox"/> (PC2.3.1)能安排實驗室，功能性及影像學檢查；能執行軟式及硬式內視鏡檢查。 <input type="checkbox"/> (PC2.3.2)了解聲帶病變的鑑別診斷；能在臨床上區分腫瘤及非腫瘤病因。 <input type="checkbox"/> (PC2.3.5)能為咽喉構造正常病人順利執行食道鏡檢查並做切片。 <input type="checkbox"/> (PC2.2.2)了解正常的喉部及食道功能；了解造成喉部炎症疾病的原因。
PCA1 頸部腫塊	<ul style="list-style-type: none"> <input type="checkbox"/> (PCA1.4.1)知道腫瘤/淋巴腺轉移(TNM)分期系統，並能對特定病人訂出TNM分期。 <input type="checkbox"/> (PCA1.4.2)全面了解所有主要上消化道(UADT)癌症的頸部淋巴腺引流模式。 <input type="checkbox"/> (PCA1.4.3)為特定癌症患者制定適當的治療計畫。 <input type="checkbox"/> (PCA1.4.4)能在監督下完成手術。 <input type="checkbox"/> (PCA1.4.5)能察覺並有能力處理常見的併發症或制訂治療計畫。 <input type="checkbox"/> (PCA1.3.2)能廣泛描述頸部淋巴腺的鑑別診斷。 <input type="checkbox"/> (PCA1.2.1)執行焦點病史詢問及理學檢查(包括詳細的頭部、顱神經檢查及喉鏡檢查)；安排適當的實驗室檢查、細針穿刺(FNA)及影像學檢查。
MK1 上呼吸消化道惡性腫瘤	<ul style="list-style-type: none"> <input type="checkbox"/> (MK1.4.1)能對應解剖學知識與理學檢查、影像學檢查結果之間的關係。 <input type="checkbox"/> (MK1.4.2)了解上呼吸消化道癌症的分子基礎知識；明瞭常見部位良性、惡性腫瘤的鑑別診斷。 <input type="checkbox"/> (MK1.4.3)明瞭大部分常見上呼吸消化道癌症的分期系統(staging system)，並能準確地使用臨床和影像學檢查結果進行分期。 <input type="checkbox"/> (MK1.4.5)了解腫瘤病理學的預後指標，包括分子標記。

SBP1 病人安全	<ul style="list-style-type: none"> <input type="checkbox"/> (SBP1.4.1)維護病患照護品質及理想的病人照護系統。 <input type="checkbox"/> (SBP1.4.2)分析 M&M 會議中的發現，並提供回饋意見，改善病人安全。 <input type="checkbox"/> (SBP1.3.1)持續使用工具來防止不良事件(如核對清單[checklist]及簡報[briefings])。 <input type="checkbox"/> (SBP1.3.2)辨認潛在的病人安全問題(手術室中的患者擺位，吸入性(aspiration)風險)以及防止這些問題的方法。 <input type="checkbox"/> (SBP1.2.2)了解並應用行政管理系統(chain of command)訂定及執行病患的照護計劃(從資淺住院醫師、資深住院醫師到主治醫師)。
SBP2 資源利用	<ul style="list-style-type: none"> <input type="checkbox"/> (SBP2.4.1)提供合乎成本效益的照護，(如管理住院日數(length of stay)，手術效率等)。 <input type="checkbox"/> (SBP2.4.2)領導跨領域團隊照護病患。 <input type="checkbox"/> (SBP2.3.3)能運用科技及其他醫院/診所的資源於病人照護。 <input type="checkbox"/> (SBP2.2.2)能注意到患者照護過程中的社會經濟問題(socio-economic issues)，並在訂定患者照護計劃時列入考量。
PBL1 終身學習及持續自省能力	<ul style="list-style-type: none"> <input type="checkbox"/> (PBL1.4.1)持續將實證醫學資訊納入日常照護領域。 <input type="checkbox"/> (PBL1.4.2)能在一項計劃中組織教育性的活動。 <input type="checkbox"/> (PBL1.3.1)基於持續的自我反省，改善臨床思維及作為。 <input type="checkbox"/> (PBL1.2.1)持續尋求並整合應用回饋意見，提高工作表現。
PBLIN2 自主學習	<ul style="list-style-type: none"> <input type="checkbox"/> (PBLIN2.4.1)將文獻的批判性分析應用於病人照護。 <input type="checkbox"/> (PBLIN2.3.1)對學術，專業，個人需求，優勢和局限性的自我反思。 <input type="checkbox"/> (PBLIN2.3.2)分析及解讀自我經驗。 <input type="checkbox"/> (PBLIN2.2.2)對回饋意見的反應適當。 <input type="checkbox"/> (PBLIN2.1.2)承認自己的錯誤。
PROF1 專業素養	<ul style="list-style-type: none"> <input type="checkbox"/> (PROF1.4.1)能分析並管理複雜且具挑戰性的倫理問題。 <input type="checkbox"/> (PROF1.4.2)在醫病價值觀及信仰衝突矛盾的狀況下，仍能達成相互同意的照護計劃。 <input type="checkbox"/> (PROF1.3.2)展現對所有患者的敏感性(sensitivity)及責任心(responsiveness)。 <input type="checkbox"/> (PROF1.2.1)明瞭病患照護中的相關倫理議題，包括自主(autonomy)、臨終照護(end-of-life care)和研究倫理(research ethics)。 <input type="checkbox"/> (PROF1.2.2)了解臨床工作中個人能力的限制，並於需要時尋求協助。 <input type="checkbox"/> (PROF1.2.3)能了解並妥善處理有關疲勞(fatigue)及睡眠剝奪(sleep deprivation)的問題。 <input type="checkbox"/> (PROF1.2.4)準時完成文書工作及被指派的行政業務。
ICS1 人際關係及溝通技巧	<ul style="list-style-type: none"> <input type="checkbox"/> (ICS1.4.1)與各專科及照護系統建立良好工作關係。 <input type="checkbox"/> (ICS1.4.2)組織及協助家庭成員/照護團隊會議。 <input type="checkbox"/> (ICS1.3.1)與照會耳鼻喉頭頸外科之單位保持有效聯繫。 <input type="checkbox"/> (ICS1.3.2)作為醫療團隊中工作有效率的一員。 <input type="checkbox"/> (ICS1.3.3)運用各種溝通方式(如電子郵件，個人行動裝置，大眾傳播媒體)時能合乎醫學倫理，並尊重患者隱私。 <input type="checkbox"/> (ICS1.2.3)確保病歷能及時、準確及完整地完成。
ICSN1 健康照護團隊溝通	<ul style="list-style-type: none"> <input type="checkbox"/> (ICSN1.4.1)協商並處置照護者之間的衝突。 <input type="checkbox"/> (ICSN1.4.2)在危機時仍能有效溝通。 <input type="checkbox"/> (ICSN1.3.1)以專業的方式解決與其他健康照護者之間的意見分歧。



背景

頭頸部鱗狀細胞癌（HNSCC）在上消化道中的位置相當獨特，該位置是SARS-Cov2的高感染與傳播位置。由於SARS-Cov2（COVID-19中的致病性病毒）的大流行，國外某些地區域內的大型醫療機構已不堪重負，因為醫療系統的資源有限，除了COVID-19患者可能無法獲得適當的醫療服務，也限制了包括頭頸癌（HNSCC）中高風險患者的治療。在某些醫院系統中，手術室，加護病房（ICU）可能已經滿載，進而限制了頭頸癌患者，檢查檢和診斷及手術治療能量。雖然建議可提供虛擬看診，由於遠距醫療，虛擬醫療軟硬體並未廣泛使用，因此只能為需要評估的癌症患者提供有限的檢查。這種大流行期間，許多耳鼻喉科，牙科和其他專科診所的臨床醫生可能已經關閉，也限制了對頭頸癌的轉介造成就醫延遲。

COVID-19的特徵包括¹：

1. SARS-Cov2具有高度傳染性，和傳播能力
2. 根據美國的最新數據，COVID-19的死亡率為1-2%
3. 然而頭頸部鱗狀細胞癌是一種致命疾病，如果不治療，其死亡率可能會達40-50%
4. 頭頸部鱗狀細胞癌可出現在上呼吸道黏膜，診斷和治療通常（工作人員，患者和醫護人員）需要暴露在病毒的威脅下。
5. 由於吞嚥困難和/或氣道可能受損，許多HNSCC患者在治療後仍保持較高的噴濺風險。這些患者可能需要鼻胃管，經皮胃造口術管和/或氣管切開術管，可能會使醫療保健提供者接觸到霧化病毒。
6. 目前仍缺乏使用SARS-Cov2快速抗體測試的機會，加上使用SARS-Cov2測試PCR檢查的機會有限，使頭頸癌患者的診斷和治療更加複雜。
7. 由於無症狀、輕微症狀或有症狀的患者可能具有明顯的傳染性。基於症狀的篩查可能不足以檢測SARS-Cov2感染患者，因此建議對所有要進行手術或治療的患者，治療前進行PCR檢測。

基於對於SARS-Cov2爆發大流行的擔心，同時持續為癌症患者提供基於指引的照護，需要預先準備頭頸癌症在國內爆發大流行下，醫療和護理有關的指引。多團隊案例討論會議仍是溝通病患治療方向的重要管道，多團隊案例討論會議改採虛擬網路開會方式；除非有明顯的臨床原因需要延遲，否則不要推遲或中斷SARS-CoV-2陰性患者的頭頸癌治療²。

診治頭頸癌病患有以下建議：

1. 醫療及護理人員防護¹

建議在接受COVID-19評估的患者中使用電動空氣淨化呼吸器（powered air purifying respirator, PAPR），N95口罩及面罩。避免不必要的內視鏡檢查，不建議使用霧化器治療，以降低通過霧化顆粒傳播的風險。

2. 手術考量³

進行頭頸部手術仍是腫瘤患者治療重要選項；在黏膜頭頸部手術中使用電動工具已知會導致霧化，提高傳染的風險，不建議使用。

3. 放射線治療及化學治療考量¹

為了減少門診就診的頻率，可以考慮將靜脈注射方案轉換為口服方案，並縮短放射治療的時間。

對於被診斷為COVID-19的患者，應根據治療的總體目標，患者當前的腫瘤狀態和醫療合併症以及治療耐受性來決定是否延遲或修改治療方案。其他注意及建議事項整理於表1。

表1 頭頸腫瘤在COVID-19大流行下相關建議⁴:

預防病毒傳播

1. 避免不必要的流程和身體檢查
2. 所有可能產生氣溶膠的醫療措施使用全套個人防護裝備(PPE)。

對新患者進行虛擬診療

3. 在患者評估之前進行虛擬多學科診察
4. 虛擬多團隊案例討論會議
5. 面對面諮詢僅限於必須進行身體檢查的情況

照顧/治療後監測

6. 盡可能進行虛擬的後續追蹤
7. 編排團隊、由輪替的小組成員進行患者診治

術前篩檢診查

8. 病人在手術前要自我隔離14日無發病
9. SARS-Cov2陽性患者，僅在緊急情況下進行手術
10. 對於SARS-Cov2感染未明患者，應在手術前立即進行SARS-Cov2檢查。

手術治療

11. 對於初期喉癌、HPV相關之口咽癌儘可能以放射治療、化療為第一線療法，而非手術治療
12. 延遲超過4週以上，預期腫瘤會惡化的情況下，盡早為患者進行手術
13. 限制手術團隊人數，將手術室人員限制為基本團隊成員
14. 在手術時，盡量減少團隊成員移動進出手術室
15. 在大流行情況和有限的資源範圍內，應慎重考慮發動重建手術
16. 手術團隊可以在麻醉插管/拔管過程中待在手術室外面等待

參考資料

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4. Wu V, Noel CW, Forner D, Zhang ZJ, Higgins KM, Enepekides DJ, et al. Considerations for head and neck oncology practices during the coronavirus disease 2019 (COVID-19) pandemic: Wuhan and Toronto experience. *Head & neck* 2020;42(6):1202-1208.

Updated on 2017-1-16

Pharynx-1:T1-4aN0-N2 Unresectable^{1,2}加入Chemotherapy can be given for disease control during preRT waiting period.

Pharynx-2 :T4b or N3 CCRT2.3 /RT or cetuximab/RT³加入Chemotherapy can be given for disease control during pre-RT waiting period.

Updated on 2018-11-19

Oral-3:依照NCCN整頁修訂，CCRT or Definitive RT (only for lip)

Oral-4:依照NCCN整頁修訂

原本本院指引pharynx部分，依照NCCN建議將pharynx部分分成Oropharynx及hypopharynx and larynx合併

Orph-1:依照NCCN建議work up部分加入Nutrition, speech and swallowing evaluation/therapy as indicated

Orph-2~4:依據NCCN建議，且將P16(+)及P16(-)治療合併呈現在本院指引

Pharynx-1:work up部分加入Nutrition, speech and swallowing evaluation/therapy as indicated and Consider pulmonary function tests for conservation surgery candidates

Pharynx-2:依照NCCN修訂，No adverse features→本院建議observation or RT

Pharynx-3:依照NCCN修訂，No adverse features→本院建議observation or RT

Pharynx-4:依照NCCN修訂，T1-2,N+;T3,any N，經團隊討論也可only RT

Naso:work up: 建議加上Consider Epstein-Barr virus (EBV)/DNA testinge、Consider ophthalmologic and endocrine evaluation as clinically indicated、Nutrition,speech and swallowing evaluation/therapy as indicated

Updated on 2018-11-19

Naso 1: 依照NCCN建議修訂: M1 → Platinum-based combination chemotherapy → RT to primary and neck or Chemo/RT as clinically indicated

Sali-work up: 依照NCCN建議work up部分加入Nutrition, speech and swallowing evaluation/therapy as indicated

Sali-1: Parotidectomy with complete resection of tumor ± neck dissection for high-grade and/or T3-4 tumors

Follw-A: 依照NCCN新增

ADV1~4: 依照NCCN建議新增

Updated on 2019-05-13

Oral-1:CLINICAL STAGING:T4b, any N, or unresectable nodal disease 加上 Unfit for surgery

Oral-2:T1-2,N0,依照NCCN建議修改 Resection of primary + SLN biopsy後面接 Neck dissection if SLN pN+ or SLN identification unsuccessful及SLN0，後面路徑沒有更改。

Oral-3:Clinical staging T1-2,N1-3;T3-4改成T4a。

ORPH-1: Clinical staging 第三列P16(-) AnyT改成T1-4,N2-3

ORPH-2:Transoral or open resection of primary± neck dissection依照NCCN改成 Resection of Primary and ipsilateral or bilateral neck dissection。For T1-2,N1 only RT+systemic therapy改成 T2 only

ORPH-3:Transoral or open resection of primary± neck dissection依照NCCN改成 Resection of Primary and ipsilateral or bilateral neck dissection。

ORPH-4: Clinical staging P16(-) anyT改成T1-4。Transoral or open resection of primary± neck dissection依照NCCN改成 Resection of Primary and ipsilateral or bilateral neck dissection。

Naso-1:AnyT,anyN,M1新增加RT or surgery in select patients with oligometastatic disease。

SALI-1:T1,T2建議 Adenoid cystic;Intermediate or high grade一定要RT。

Updated on 2020-05-04

【Oral-1.ORPH-1.Pharynx-1.Naso-1.SALI-1】的Work up:新增Smoking cessation counseling、Fertility/reproductive counseling

【 Oral-3】:新增One positive node without adverse features→RT or Observation

【 ORPH-2】:只留P16(-)T3-4a,N0-1走這條治療路徑。

【 ORPH-3】:

(1)原先是T2 only:CCRT，修改成T1-2,N1 only:RT1 + systemic therapy

(2) Resection of primary and ipsilateral or bilateral neck dissection→Adverse features¹ →Extranodal extension ± positive margin →P16(-):Systemic therapy/RT，P16(+):可CCRT or RT

【 ORPH-4】:

(1)期別整併為P16(+),T1-2,N1(single node>3cm/or 2 or more ipsilateral nodes ≤6 cm), cN2-3,T3-4,N0-3。

(2)Resection of primary and ipsilateral or bilateral neck dissection→p16(-):N2a-b, N3 ;P16(+):原本是N1-N3，改成N0-N3(unilateral)。

(3)Resection of primary and ipsilateral or bilateral neck dissection→P16(-)N2c P16(+)N2-N3(bilateral) →Resection of primary and bilateral neck dissection(增加and字眼)。

Updated on 2020-05-04

【 FOLL-A 2 OF 2 】 :

(1)Residual primary , persistent disease or progression→assess extent of disease or distant metastases:Consider CT of primary and neck and/or MRI with contrast (4–8 wk) Consider FDG-PET/ CT →If diagnosis confirmed or progression修改成Confirmed residual or persistent disease or progression 。

(2)If response →assess extent of disease or distant metastases:FDG-PET/CT at minimum 12 wk→ FDG- PET/CT negative:Observation; FDG- PET/CT equivocal:Observation or repeat FDG PET/ CT at 3–6 mo ;FDG- PET/CT Postive:CT or MRI with contrast→Biopsy Or Resection of primary (if feasible) and/or neck dissection if nodal disease in neck (if feasible) 。

(3)CT of primary and neck and/or MRI with contrast/ or PET(optional) at 8–12 wk→ Imaging positive→Neck dissection or刪除 FNA or 加上Consider字眼 FDG-PET imaging at 12 wk 。

【 ADV-2 】 :PS 0-1→Systemic therapy加上Combination or Single-agent

【 ADV-3 】 :Locoregional recurrence without prior RT →Resectable →Concurrent systemic therapy/RT1刪除Induction systemic therapy改成 combination systemic therapy (category 3) followed by RT or systemic therapy/RT 。

【 ADV-4 】 : If locoregional failure, consider locoregional treatment based on disease extent and symptoms→PS 0-1 →systemic therapy/RT前加上concurrent→刪除臨床試驗(本院無) 。

分期:依據AJCC 8th updata V.3 檢視修訂分期。

Updated on 2020-12-28

【 Oral-3 】:新增N3 →詳見(ADV-1)

【 Oral-4 】:新增T4b or M1 →詳見(ADV-1)

【 ORPH-2 】:P16(+)T1-2, N0-1刪除(single node≤3cm) , 刪除治療T1-2,N1才可CCRT。

【 ORPH-3 】:P16(+)T3-4,N0-1 , 刪除single node≤3cm

【 ORPH-4 】:

(1)P16(+),刪除T1-2,N1(single node>3cm/or 2 or more ipsilateral nodes ≤6 cm), cN2-3 , T3改成T1-4,N0-3。

(2)Resection of primary and ipsilateral or bilateral neck dissection後面看N+的部分刪除 , 直接接有無危險因子。

(3)新增T4b or M1 →詳見(ADV-1)

【 Pharynx-2 】: T1-2,N0新增CCRT在首次治療

【 Pharynx-3 】: T1-2,N+,T3-T4a,any N後面若有危險因子 , 本Consider Systemic therapy/RT , 建議刪除Consider。

【 Pharynx-4 】:CR後接DefinitiveRT or Consider systemic therapy/RT , 刪除Consider。

【 Salivary Gland 】:指引原本只有一頁 , 因修訂指引及版面問題分成三頁。

【 SALI-2 】:

(1)T1-2 , 新增J備註:If incidental N+ disease is present go to SALI-3。

(2)新增M1 →詳見(ADV-1)

【 SALI-4 】:此頁新增 , follow up若病人recurrence→Distant metastases →刪除Clinical trial preferred選項。

新增頭頸癌【高危險群病人及高風險之臨床醫療照護 , 標準作業程序】臨床指引

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