

# 高雄榮民總醫院

## 口咽癌診療原則

2021年04月28日 第一版

頭頸癌醫療團隊擬訂

注意事項：這個診療原則主要作為醫師和其他保健專家診療癌症病人參考之用。假如你是一個癌症病人，直接引用這個診療原則並不恰當，只有你的醫師才能決定給你最恰當的治療。

# 會議討論

上次會議：2020/04/29

## 本共識與上一版的差異

| 上一版                                                                                                                                                                                                                                                                                                                                                                  | 新版                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"><li>1. Survey時可加上Chest CT及戒菸。</li><li>2. 有接受RT者，後續追蹤時加驗TSH、free T4。</li><li>3. P16(-)的病患，Clinical T4b不以手術為主要治療選項。</li><li>4. P16(+)的病患，若Clinical N3 or T4a，建議CCRT。</li><li>5. P16(+)的病患，若手術後無adverse feature，建議Follow-up or RT。</li><li>6. 在Recurrent, unresectable, metastatic的化療Regimen提升immunotherapy順序，並加入合併使用化療的選項。</li></ol> | <ol style="list-style-type: none"><li>1. Workup中的Multidisciplinary consultation加上會診項目Fertility/reproductive, smoking cessation。</li><li>2. Follow-up的Every 1 year排的檢查項目加上PES。</li><li>3. P16(+)的指引中，clinical staging增加T0</li><li>4. Induction CT+ CRT or RT之後，if Residual disease，分成operable及inoperable，see page 9 if inoperable。</li><li>5. [Recurrent, unresectable, metastatic]化療regimen，把immunotherapy順序往前調升，將EXTREME Regimen順序後移。</li><li>6. M1的部分，PS2、PS3增加Palliative RT 或 palliative surgery。</li></ol> |

# Oropharyngeal (P16 negative) cancer

## Clinical staging AJCC 8th

Oropharyngeal (p16 negative) cancer TNM clinical staging AJCC UICC 2017

| Primary tumor (T)                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Oropharynx (p16-)                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                     |
| T category                                                                                                                                                                                                                                                       | T criteria                                                                                                                                                                                                                                                                                                                          |
| 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.<br>Tumor invades the larynx, extrinsic muscle of tongue, medial pterygoid, hard palate, or mandible.*                                                                                                                                                                                            |
| T4b                                                                                                                                                                                                                                                              | Very advanced local disease.<br>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.                                                                                               |                                                                                                                                                                                                                                                                                                                                     |
| Regional lymph nodes (N)                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                     |
| Clinical N (cN) - Oropharynx (p16-) and hypopharynx                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                     |
| 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(-) |
| 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(+)                                                                                                                                                                                                                                                                               |
| 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(+). |                                                                                                                                                                                                                                                                                                                                     |

| Distant metastasis (M)            |                       |             |                            |
|-----------------------------------|-----------------------|-------------|----------------------------|
| Oropharynx (p16-) and hypopharynx |                       |             |                            |
| M category                        | M criteria            |             |                            |
| M0                                | No distant metastasis |             |                            |
| M1                                | Distant metastasis    |             |                            |
| Prognostic stage groups           |                       |             |                            |
| When T is...                      | And N is...           | And M is... | Then the stage group is... |
| Tis                               | N0                    | M0          | 0                          |
| T1                                | N0                    | M0          | I                          |
| T2                                | N0                    | M0          | II                         |
| T3                                | N0                    | M0          | III                        |
| T1, T2, T3                        | N1                    | M0          | III                        |
| T4a                               | N0, 1                 | 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                        |

TNM: tumor, node, metastasis; AJCC: American Joint Committee on Cancer; UICC: Union for International Cancer Control; ENE: extranodal extension.

# Oropharyngeal (P16 negative) cancer

## Pathological staging AJCC 8th

Oropharyngeal (p16 negative) cancer TNM pathological staging AJCC UICC 2017

| Primary tumor (T)                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Oropharynx (p16-)                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                   |
| T category                                                                                                                                                         | T criteria                                                                                                                                                                                                                                                                                                                                                                                        |
| 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.<br>Tumor invades the larynx, extrinsic muscle of tongue, medial pterygoid, hard palate, or mandible.*                                                                                                                                                                                                                                                          |
| T4b                                                                                                                                                                | Very advanced local disease.<br>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. |                                                                                                                                                                                                                                                                                                                                                                                                   |
| Regional lymph nodes (N)                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                   |
| Pathological N (pN) - Oropharynx (p16-) and hypopharynx                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                   |
| 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 node(s), 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                                                                                                                                                                | 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(-); 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 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(+). |                                                                                                                                                   |             |                            |
| Distant metastasis (M)                                                                                                                                                                                                                                           |                                                                                                                                                   |             |                            |
| Oropharynx (p16-) and hypopharynx                                                                                                                                                                                                                                |                                                                                                                                                   |             |                            |
| M category                                                                                                                                                                                                                                                       | M criteria                                                                                                                                        |             |                            |
| M0                                                                                                                                                                                                                                                               | No distant metastasis                                                                                                                             |             |                            |
| M1                                                                                                                                                                                                                                                               | Distant metastasis                                                                                                                                |             |                            |
| Prognostic stage groups                                                                                                                                                                                                                                          |                                                                                                                                                   |             |                            |
| When T is...                                                                                                                                                                                                                                                     | And N is...                                                                                                                                       | And M is... | Then the stage group is... |
| Tis                                                                                                                                                                                                                                                              | N0                                                                                                                                                | M0          | 0                          |
| T1                                                                                                                                                                                                                                                               | N0                                                                                                                                                | M0          | I                          |
| T2                                                                                                                                                                                                                                                               | N0                                                                                                                                                | M0          | II                         |
| T3                                                                                                                                                                                                                                                               | N0                                                                                                                                                | M0          | III                        |
| T1, T2, T3                                                                                                                                                                                                                                                       | N1                                                                                                                                                | M0          | III                        |
| T4a                                                                                                                                                                                                                                                              | N0, 1                                                                                                                                             | 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                        |

TNM: tumor, node, metastasis; AJCC: American Joint Committee on Cancer; UICC: Union for International Cancer Control; ENE: extranodal extension.



# Oropharyngeal (P16 Positive) cancer

## Pathological staging AJCC 8th

HPV related oropharyngeal carcinoma TNM clinical staging AJCC UICC 2017

| Primary tumor (T)                          |                                                                                                                                                    |             |                            |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------|
| T category                                 | T criteria                                                                                                                                         |             |                            |
| T0                                         | No primary identified                                                                                                                              |             |                            |
| 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 local disease.<br>Tumor invades the larynx, extrinsic muscle of tongue, medial pterygoid, hard palate, or mandible or beyond.* |             |                            |
| Regional lymph nodes (N) - Clinical N (cN) |                                                                                                                                                    |             |                            |
| 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                                                                                                                     |             |                            |
| Distant metastasis (M)                     |                                                                                                                                                    |             |                            |
| M category                                 | M criteria                                                                                                                                         |             |                            |
| M0                                         | No distant metastasis                                                                                                                              |             |                            |
| M1                                         | Distant metastasis                                                                                                                                 |             |                            |
| Prognostic stage groups - Clinical         |                                                                                                                                                    |             |                            |
| When T is...                               | And N is...                                                                                                                                        | And M is... | Then the stage group is... |
| T0, T1, or T2                              | N0 or N1                                                                                                                                           | M0          | I                          |
| T0, T1, or T2                              | N2                                                                                                                                                 | M0          | II                         |
| T3                                         | N0, N1, or N2                                                                                                                                      | M0          | II                         |
| T0, T1, T2, T3, or T4                      | N3                                                                                                                                                 | M0          | III                        |
| T4                                         | N0, N1, N2, or N3                                                                                                                                  | M0          | III                        |
| Any T                                      | Any N                                                                                                                                              | M1          | IV                         |

HPV: human papillomavirus; TNM: tumor, node, metastasis; AJCC: American Joint Committee on Cancer; UICC: Union for International Cancer Control.

\* 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.

HPV related oropharyngeal carcinoma TNM pathologic staging AJCC UICC 2017

| Primary tumor (T)                              |                                                                                                                                                    |             |                            |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------|
| T category                                     | T criteria                                                                                                                                         |             |                            |
| T0                                             | No primary identified                                                                                                                              |             |                            |
| 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 local disease.<br>Tumor invades the larynx, extrinsic muscle of tongue, medial pterygoid, hard palate, or mandible or beyond.* |             |                            |
| Regional lymph nodes (N) - Pathological N (pN) |                                                                                                                                                    |             |                            |
| N category                                     | N criteria                                                                                                                                         |             |                            |
| NX                                             | Regional lymph nodes cannot be assessed                                                                                                            |             |                            |
| pN0                                            | No regional lymph node metastasis                                                                                                                  |             |                            |
| pN1                                            | Metastasis in four or fewer lymph nodes                                                                                                            |             |                            |
| pN2                                            | Metastasis in more than four lymph nodes                                                                                                           |             |                            |
| Distant metastasis (M)                         |                                                                                                                                                    |             |                            |
| M category                                     | M criteria                                                                                                                                         |             |                            |
| M0                                             | No distant metastasis                                                                                                                              |             |                            |
| M1                                             | Distant metastasis                                                                                                                                 |             |                            |
| Prognostic stage groups - Pathological         |                                                                                                                                                    |             |                            |
| When T is...                                   | And N is...                                                                                                                                        | And M is... | Then the stage group is... |
| T0, T1, or T2                                  | N0, N1                                                                                                                                             | M0          | I                          |
| T0, T1, or T2                                  | N2                                                                                                                                                 | M0          | II                         |
| T3 or T4                                       | N0, N1                                                                                                                                             | M0          | II                         |
| T3 or T4                                       | N2                                                                                                                                                 | M0          | III                        |
| Any T                                          | Any N                                                                                                                                              | M1          | IV                         |

HPV: human papillomavirus; TNM: tumor, node, metastasis; AJCC: American Joint Committee on Cancer; UICC: Union for International Cancer Control.

\* 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.

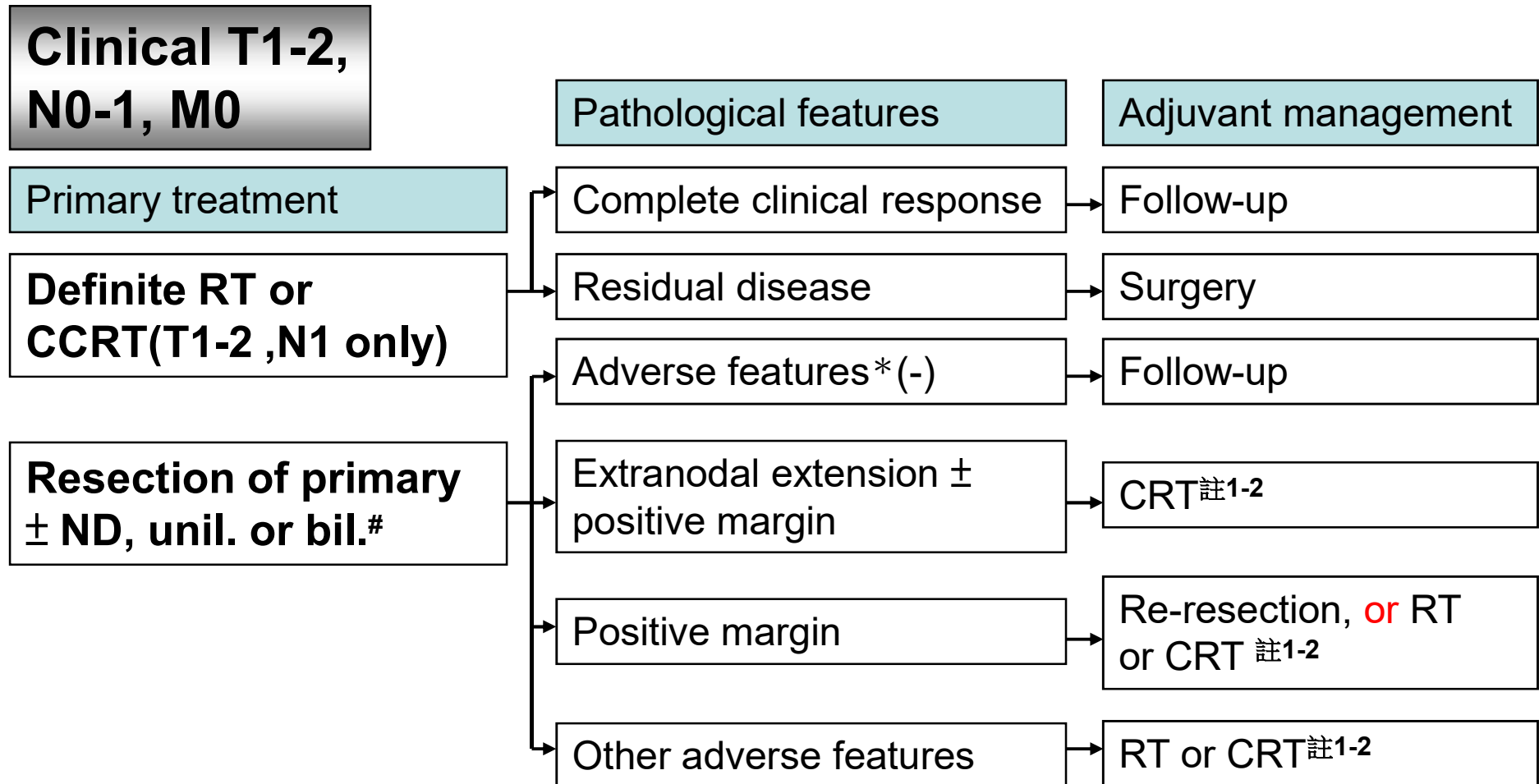
# Carcinoma of Oropharynx

高雄榮民總醫院 臨床診療指引 Ver.1 修訂於 2021.04.28 Page 1 (Ref. 1,2)

| WORK-UP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | STAGING & TREATMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | FOLLOW-UP                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• History &amp; PE</li> <li>• Biopsy &amp; Pathology</li> <li>• Image</li> <li>→ MRI* or CT of H&amp;N* or PET</li> <li>→ WBBS (if PET/CT not done)/ Abd. Sono/ CXR</li> <li>→ ± Chest CT* (if PET/CT not done)</li> <li>→ ± Neck sono</li> <li>→ ± EUA with endoscopy/ PES</li> <li>• Dental evaluation</li> <li>→ Panorex ± teeth extraction</li> <li>• Multidisciplinary consultation</li> <li>(± Fertility/reproductive, ± smoking cessation)</li> <li>± Swallowing evaluation</li> <li>• p16 status</li> </ul> <p>(*與癌症期別相關之主要檢查)</p> | <ul style="list-style-type: none"> <li>• (P16-)[T1-2, N0-1, M0]<br/>詳見 Page 2</li> <li>• (P16-)[T3-4a, N0-1, M0]<br/>詳見 Page 3</li> <li>• (P16-)[T1-4a, N2-3, M0]<br/>詳見 Page 4</li> <li>• (P16+)[T0-2, N0-1, M0]<br/>(single node ≤ 3cm)<br/>詳見 Page 5</li> <li>• (P16+)[T0-2, N1-2, M0]<br/>(single node &gt; 3cm, 2 or more nodes ≤ 6cm) or [T3, N0-2, M0]<br/>詳見 Page 6</li> <li>• (P16+)[T0-3, N3, M0] or [T4, N0-3, M0]<br/>詳見 Page 7</li> <li>• Tonsil Page 8</li> <li>• Very advanced stage<br/>詳見 Page 9, 10</li> </ul> | <ul style="list-style-type: none"> <li>• [Post-Tx within 3-6 months]<br/>→ Baseline MRI or CT (PET)</li> <li>→ Every 1-2 months: PE</li> <li>• [2nd year after Tx]<br/>→ Every 2-3 months: PE</li> <li>• [3-5 years after Tx]<br/>→ Every 4-8 months: PE</li> <li>• [5 years after Tx]<br/>→ Every 12 months: PE</li> <li>• Every year:<br/>H &amp; N MRI or CT, CxR, Bone scan &amp; Abd. Sono, Neck Sono, PES, ± TSH、free T4(if RT, 6-12 months) as clinically indicated</li> </ul> |

# Carcinoma of Oropharynx(P16-)

高雄榮民總醫院 臨床診療指引 Ver.1 修訂於 2021.04.28 Page 2 (Ref. 1,2)

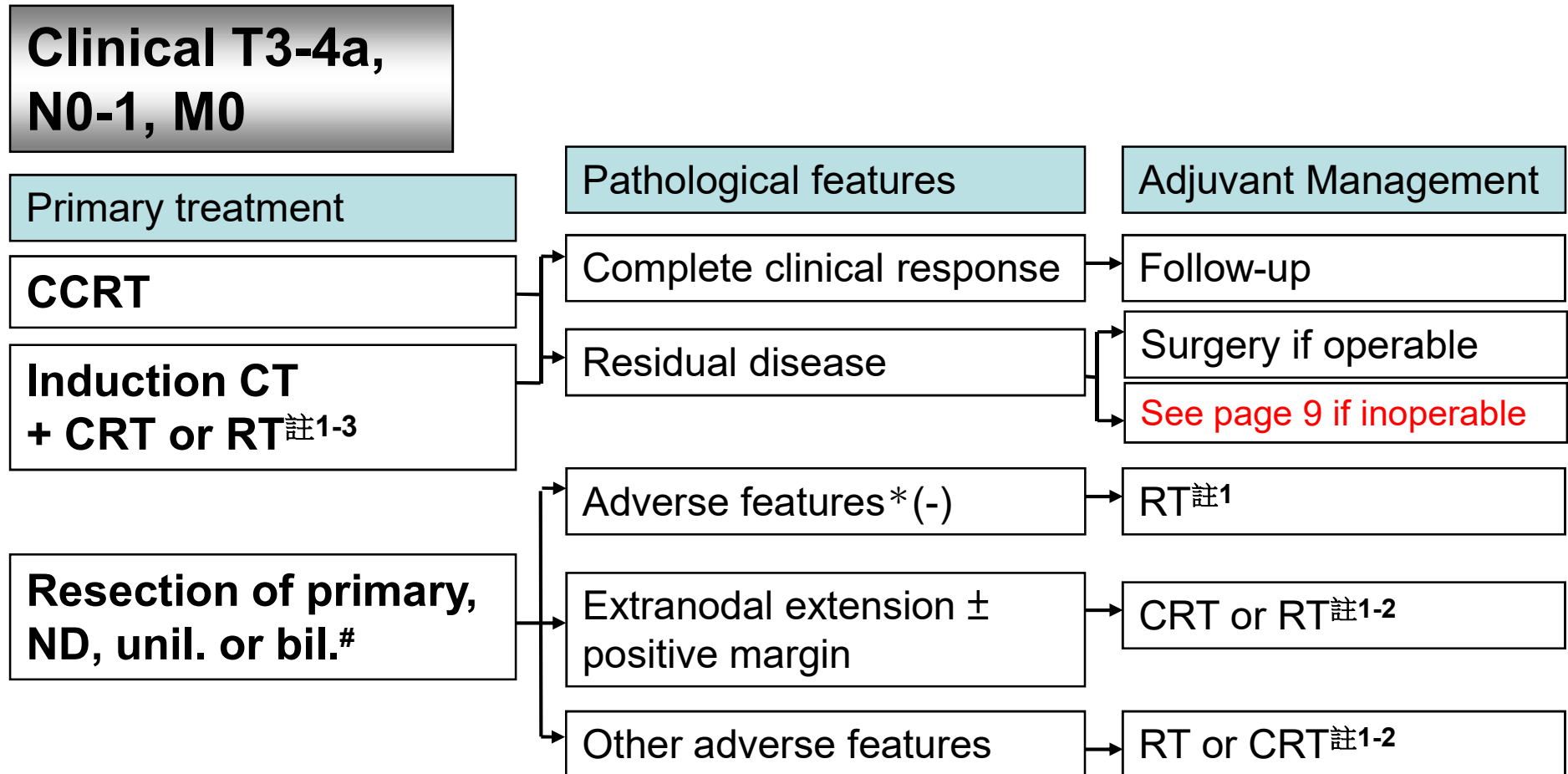


# 依cN status而定,可考慮Elective neck dissection或close follow-up

\* Adverse features : Extranodal extension, positive or close margins, pT3 or pT4 primary, N2 or N3 nodal disease, nodal disease in levels IV or V, perineural invasion, vascular embolism lymphatic invasion

# Carcinoma of Oropharynx(P16-)

高雄榮民總醫院 臨床診療指引 Ver.1 修訂於 2021.04.28 Page 3 (Ref. 1,2)



# Neck dissection level 依cN status而定。

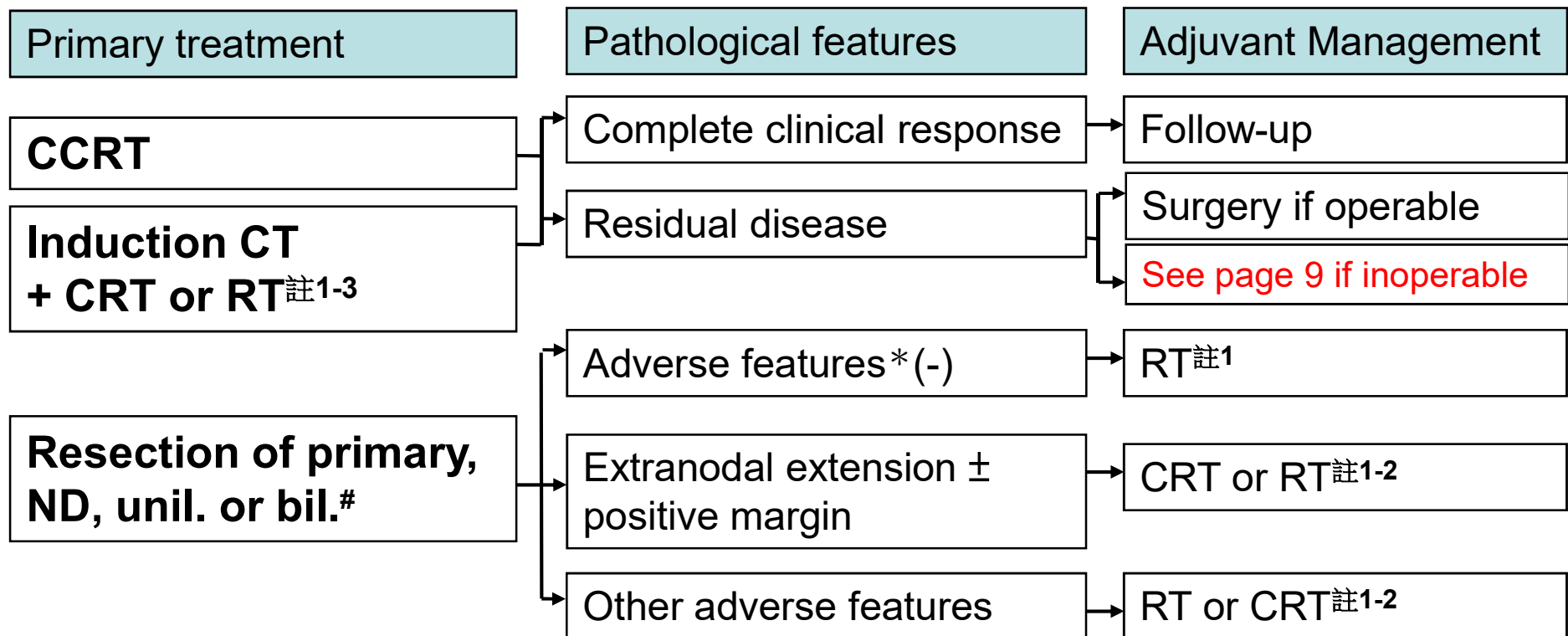
\* Adverse features : Extranodal extension, positive or close margins, pT3 or pT4 primary, N2 or N3 nodal disease, nodal disease in levels IV or V, perineural invasion, vascular embolism lymphatic invasion



# Carcinoma of Oropharynx(P16-)

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## Clinical T1-4a, N2-3, M0

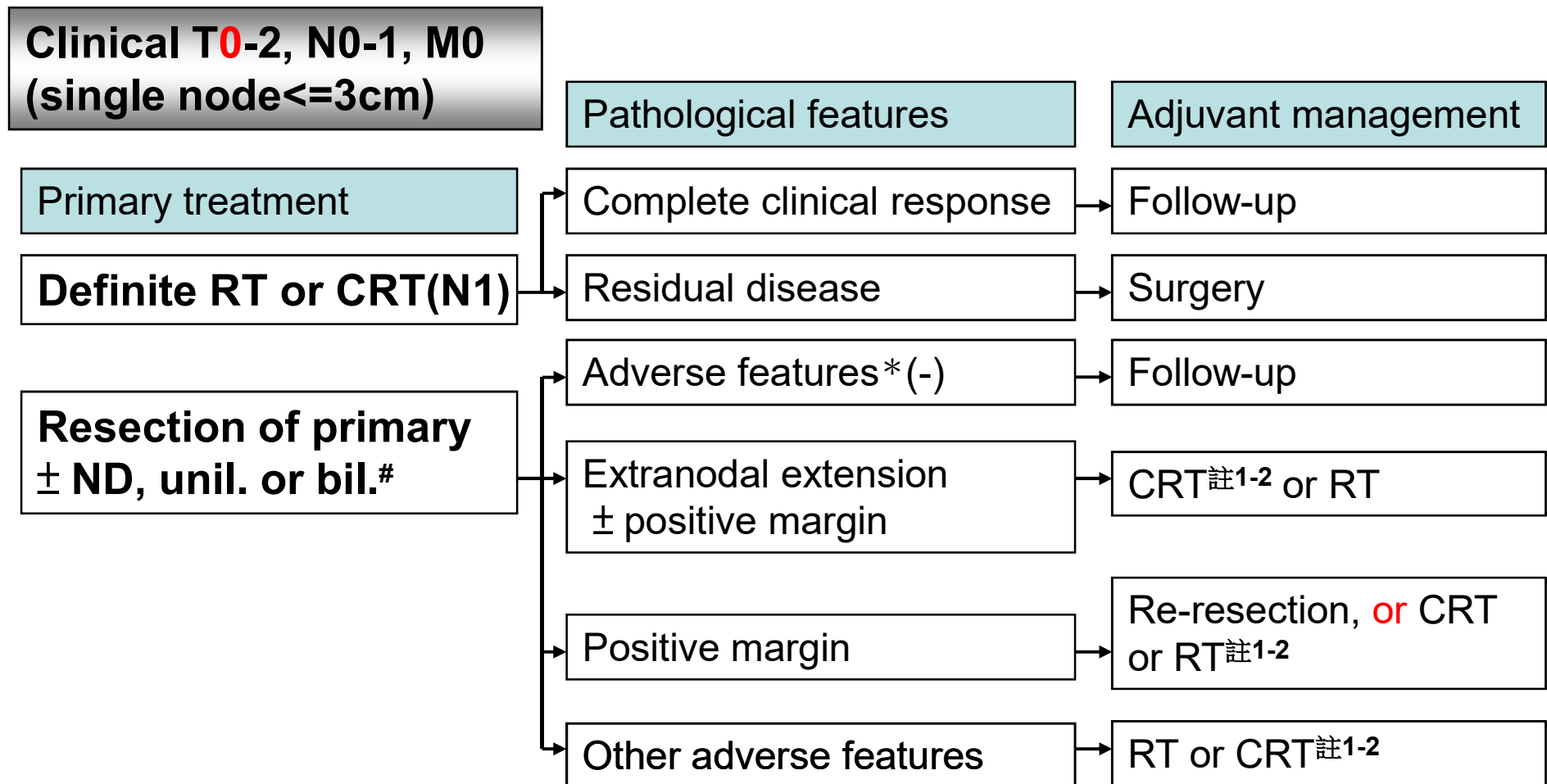


# Neck dissection level 依primary部位及cN status而定。

\* Adverse features : Extranodal extension, positive or close margins, pT3 or pT4 primary, N2 or N3 nodal disease, nodal disease in levels IV or V, perineural invasion, vascular embolism lymphatic invasion

# Carcinoma of Oropharynx (P16+)

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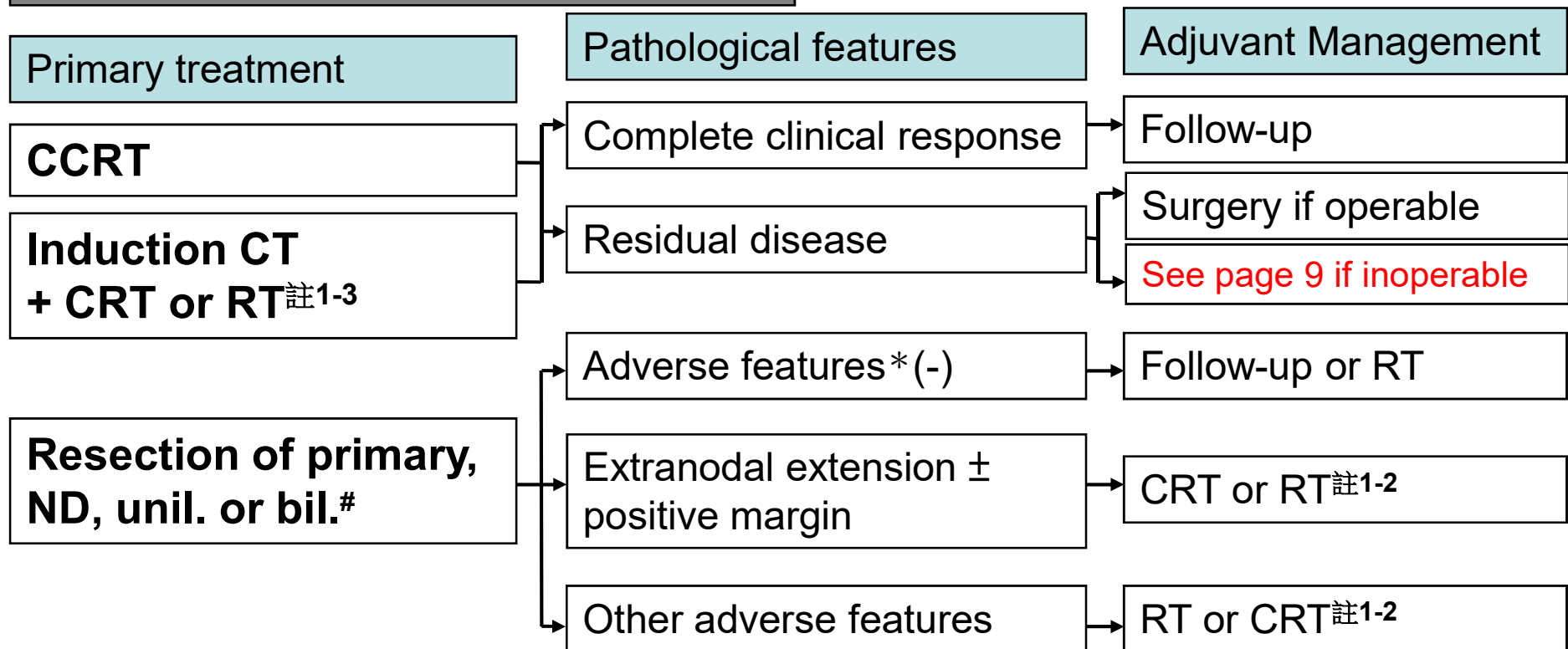
# 依cN status而定,可考慮Elective neck dissection或close follow-up

\* Adverse features : Extranodal extension, positive or close margins, nodal disease in levels IV or V, perineural invasion, lymphovascular invasion

# Carcinoma of Oropharynx (P16+)

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**Clinical T<sub>0</sub>-2, N1-2, M0 (single node >3cm, 2 or more nodes ≤6cm) or T3, N0-2, M0**



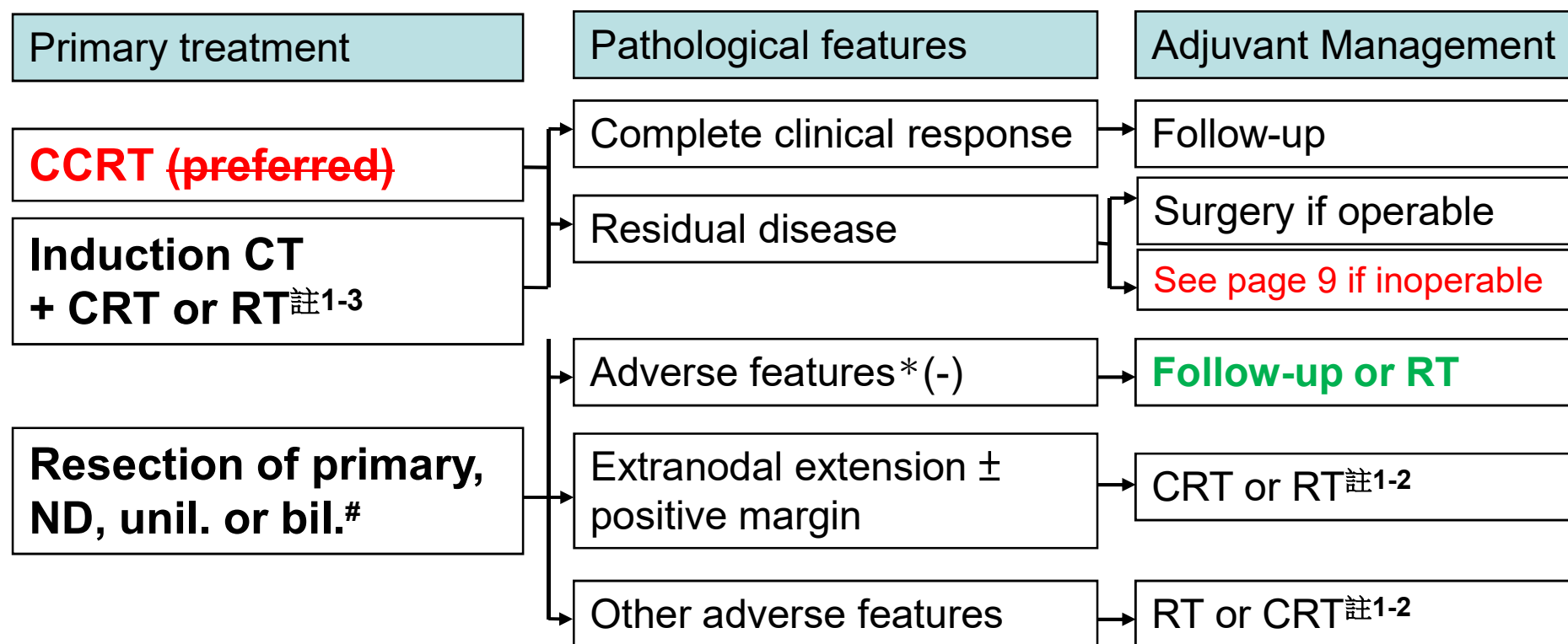
# Neck dissection level 依cN status而定。

\* Adverse features : Extranodal extension, positive or close margins, nodal disease in levels IV or V, perineural invasion, lymphovascular invasion

# Carcinoma of Oropharynx (P16+)

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**Clinical T0-3, N3, M0 or T4, N0-3, M0**



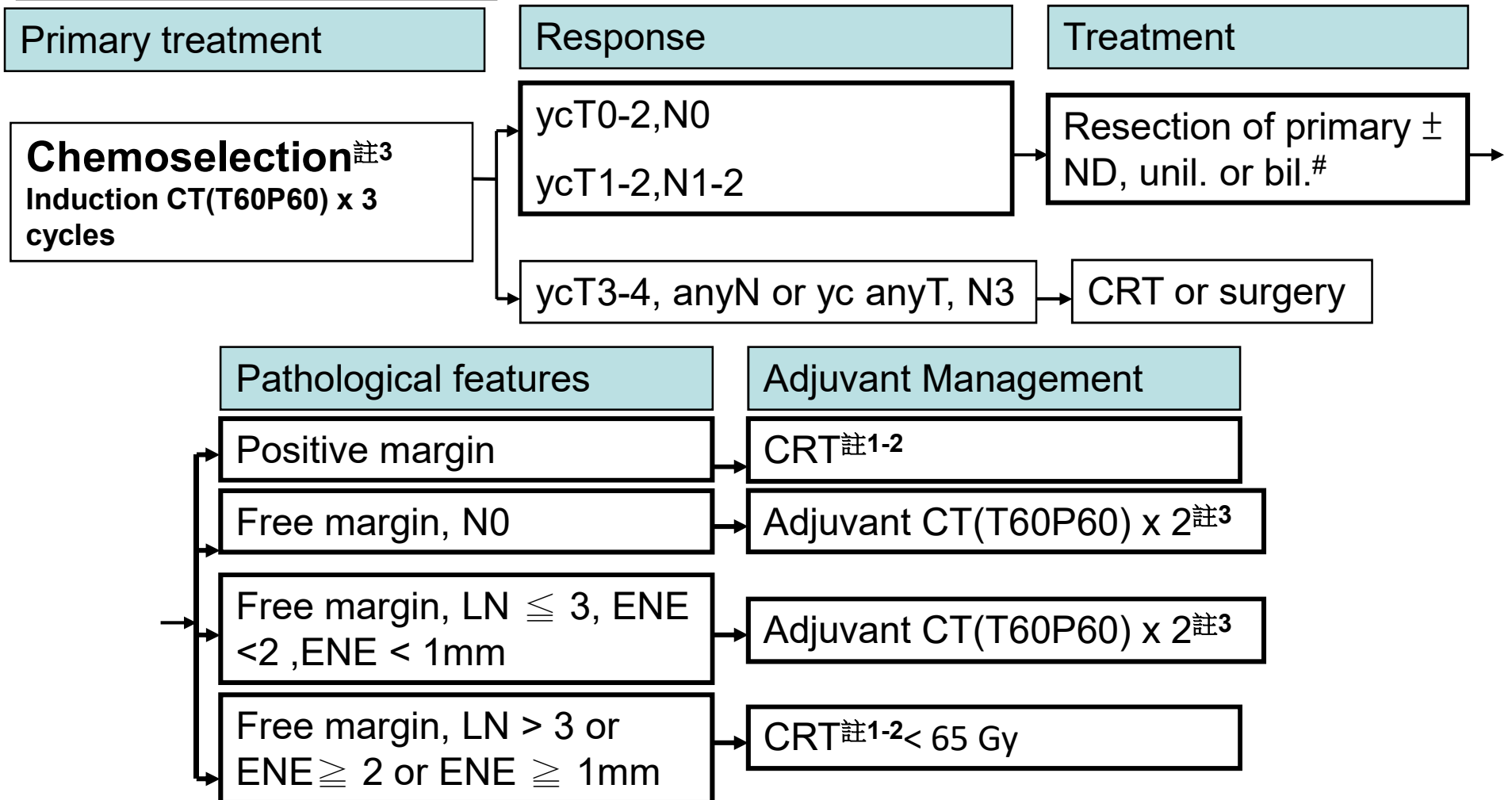
# Neck dissection level 依primary部位及cN status而定。

\* Adverse features : Extranodal extension, positive or close margins, nodal disease in levels IV or V, perineural invasion, lymphovascular invasion

# Carcinoma of Oropharynx (Tonsil)

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## Clinical any T, any N



# Neck dissection level 依primary部位及cN status而定。



# Carcinoma of Oropharynx

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P16(-), Clinical T4b, any N or unresectable **primary**/nodal disease or inoperable patient status

## Management

PS 0-1

CCRT or RT<sup>註1-2</sup>

Induction CT<sup>註3</sup> + RT or CRT<sup>註1-2</sup>

PS 2

Definite RT<sup>註1</sup> ± CT<sup>註2</sup>

PS 3

Palliative RT<sup>註1</sup>

Single agent palliative CT<sup>註3</sup>

Best supportive care

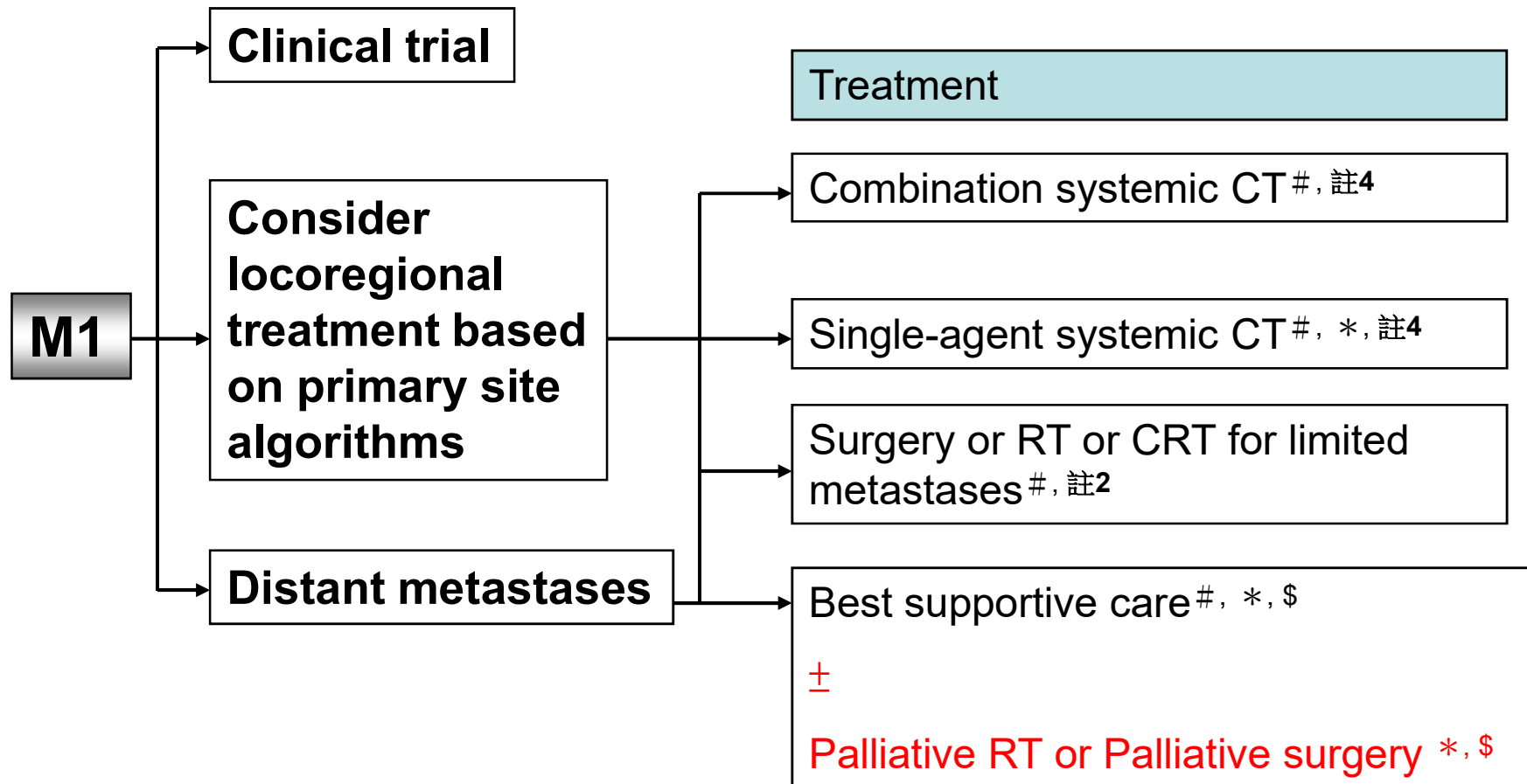
ECOG Performance Status 0-1<sup>註6</sup>

ECOG Performance Status 2

ECOG Performance Status 3

# Carcinoma of Oropharynx

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# ECOG Performance Status 0-1 註6

\* ECOG Performance Status 2

\$ ECOG Performance Status 3

# Carcinoma of Oropharynx

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註1

## Principles of Radiotherapy

### Definitive Radiotherapy

- Primary and gross adenopathy : 66 - 72 Gy (2.0-2.2 Gy/fraction)
- Low to intermediate risk : 44 - 64 Gy (2.0 Gy/fractions) in 3D RT, 54- 63 Gy (1.6-1.8 Gy/fractions)

### Postoperative Radiotherapy

- Preferred interval between operation and radiotherapy is  $\leq 6$  weeks.
- High risk(adverse feature) : 60- 66 Gy (2.0 Gy/fraction)
- Low to intermediate risk : 44 – 64 Gy (2.0 Gy/fractions) in 3D RT, 54- 63 Gy (1.6-1.8 Gy/fractions)

### CCRT or RT

- RT alone if old age, impaired renal function, poor condition or refused chemotherapy

### Palliative RT

- Indicated in : relieve local symptoms, prevent debilitation such as spinal cord compression and pathological fracture, achieve durable locoregional control.

# Carcinoma of Oropharynx

註2 高雄榮民總醫院 臨床診療指引 Ver.1 修訂於 2021.04.28 Page 12 (Ref. 6-10)

## Principles of Chemotherapy

### Concurrent with RT

#### **Regimen 1: q3w CDDP ± Cetuximab<sup>註5</sup> + RT**

- Cisplatin (80-100mg/ m<sup>2</sup>) q3w during R/T
- Cetuximab(400mg/ m<sup>2</sup>) loading dose first week, then Cetuximab(250mg/ m<sup>2</sup>) maintain dose D1 + Cisplatin (80-100mg/ m<sup>2</sup>) q3w D2 during R/T

#### **Regimen 2: Weekly CDDP ± Cetuximab<sup>註5</sup> + RT**

- Cisplatin (30-40mg/ m<sup>2</sup>) weekly during R/T
- Cetuximab(400mg/ m<sup>2</sup>) loading dose first week, and then Cisplatin (30-40mg/ m<sup>2</sup>) weekly D1 + Cetuximab(250mg/ m<sup>2</sup>) maintain dose D2 during R/T

#### **Regimen 3: q3w Carboplatin<sup>註5</sup> ± Cetuximab<sup>註5</sup> + RT**

- Carboplatin (AUC x 5mg) q3w during R/T
- Cetuximab(400mg/ m<sup>2</sup>) loading dose first week, then Cetuximab(250mg/ m<sup>2</sup>) maintain dose D1 + Carboplatin (AUC x 5mg) q3w D2 during R/T

#### **Regimen 4: Weekly Cetuximab<sup>註5</sup> + RT**

- Cetuximab(400mg/ m<sup>2</sup>) loading dose first week, then Cetuximab(250mg/ m<sup>2</sup>) maintain dose during RT

#### **Regimen5 : Carboplatin + 5-FU + Hydroxyurea (CCr < 60) + RT**

- Carboplatin (AUC x 1.25mg) D1-D4
- Fluorouracil (5-FU) (850mg/m<sup>2</sup>) D1-D4
- Hydroxyurea 1CAP BID D1-D5

#### **Regimen6 : Cisplatin + 5-FU + Hydroxyurea + RT**

- Cisplatin(20mg/ m<sup>2</sup>) D1-D4
- Fluorouracil (5-FU) (850mg/m<sup>2</sup>) D1-D4
- Hydroxyurea 1CAP BID D1-D5

# Carcinoma of Oropharynx

註3

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## Regimens of Chemotherapy

Induction, adjuvant, 建議2-3cycles

### **Regimen 1 : q3-4 weeks T + P ± F ± weekly Cetuximab<sup>註5</sup>**

- Taxotere(60 mg/ m<sup>2</sup>) D1
- Cisplatin(60-75 mg/ m<sup>2</sup>) D1
- Fluorouracil (5-FU) (600-750mg/m<sup>2</sup>) D2-D5
- Cetuximab (400mg/ m<sup>2</sup>) loading dose first week, then Cetuximab (250mg/ m<sup>2</sup>) maintain dose

### **Regimen 2: q3-4 weeks Platinum ± F ± weekly Cetuximab<sup>註5</sup>**

- Cisplatin(80-100mg/ m<sup>2</sup>) D1 or Cisplatin (20mg/ m<sup>2</sup>) D1-D5 or Carboplatin (AUC x 5mg) D1
- Fluorouracil (5-FU) (600-1000mg/m<sup>2</sup>) D2-D5
- Cetuximab(400mg/m<sup>2</sup>) loading dose first week, then weekly Cetuximab (250mg/ m<sup>2</sup>)

# Carcinoma of Oropharynx

註3

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## Regimens of Chemotherapy

Induction, adjuvant, 建議2-3cycles

### Regimen 3: weekly Cetuximab註5

- Cetuximab (400mg/ m<sup>2</sup>) loading dose first week, then Cetuximab (250mg/ m<sup>2</sup>) maintain dose

### Regimen 4: oral Fluorouracil

- Ufur cap (tegafur 100mg+uracil 224mg) 2# BID-TID  
(Salvage or palliative CT中作為取代iv-formed 5-FU之替代藥物)

### Regimen 5: weekly Methotrexate

- Methotrexate (40-60mg/ m<sup>2</sup>)

# Carcinoma of Oropharynx

註4

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## Regimens of Chemotherapy

Recurrent, unresectable, metastatic

### **Regimen 1 (First line): q3 weeks Pembrolizumab<sup>註5</sup> ± Platinum ± F**

- Pembrolizumab(200mg) D1 (if CPS  $\geq 1$ )
- Cisplatin(80-100mg/m<sup>2</sup>) D1 or Cisplatin (20mg/ m<sup>2</sup>) D1-D5 or Carboplatin (AUC x 5mg) D1
- Fluorouracil (5-FU) (600-1000 mg/m<sup>2</sup>) D2-D5

### **Regimen 2 (First line): q3 weeks Pembrolizumab<sup>註5</sup>**

- Pembrolizumab(200mg) D1 (if CPS  $\geq 1$ )

### **Regimen 3 (Subsequent line): q2 weeks Nivolumab<sup>註5</sup>**

- Nivolumab(3mg/kg) D1

### **Regimen 4 (Subsequent line): q3 weeks Pembrolizumab<sup>註5</sup>**

- Pembrolizumab(200mg) D1 (if disease progression on or after platinum therapy)

### **Regimen 5: q3-4 weeks Platinum ± F ± weekly Cetuximab<sup>註5</sup>**

- Cisplatin(80-100mg/ m<sup>2</sup>) D1 or Cisplatin (20mg/ m<sup>2</sup>) D1-D5 or Carboplatin (AUC x 5mg) D1
- Fluorouracil (5-FU) (600-1000 mg/m<sup>2</sup>) D2-D5
- Cetuximab(400mg/ m<sup>2</sup>) loading dose first week, then weekly Cetuximab (250mg/ m<sup>2</sup>)



# Carcinoma of Oropharynx

註4

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## Regimens of Chemotherapy

### Recurrent, unresectable, metastatic

#### Regimen 6: q3-4 weeks T ± Platinum ± weekly Cetuximab註5

- Taxotere(60 mg/ m<sup>2</sup>) D1
- Cisplatin(60-75 mg/ m<sup>2</sup>) D1 or Carboplatin (AUC x 5mg) D1
- Cetuximab(400mg/ m<sup>2</sup>) loading dose first week, then weekly Cetuximab (250mg/ m<sup>2</sup>)

#### Regimen 7: cisplatin+ epirubicin+ 5-FU+ Leucovorin

- Cisplatin (60 mg/ m<sup>2</sup>) D1
- Epirubicin (50 mg/ m<sup>2</sup>) D1
- Fluorouracil (5-FU) (2000 mg/m<sup>2</sup>) D1

#### Regimen 8: q2 weeks Bevacizumab

- Bevacizumab (200 mg/ m<sup>2</sup>) D1

#### Regimen 9: weekly Gemcitabine

- Gemcitabine (1000 mg/m<sup>2</sup>) D1

# Carcinoma of Oropharynx

註5

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## 特殊用藥健保給付規定

### Taxotere

- 頭頸部癌，限局部晚期且無遠端轉移之頭頸部鱗狀細胞癌且無法手術切除者。
- 與Cisplatin 及5-FU 併用，作為放射治療前的引導治療，限使用四個療程。

### Cetuximab

- 限與放射線療法合併使用於局部晚期之口咽癌、下咽癌及喉癌患者，使用總療程以接受8次輸注為上限，需經事前審查核准後使用，且符合下列條件之一：
  - 1.年齡  $\geq 70$  歲
  - 2.Ccr  $< 50\text{ml/min}$
  - 3.聽力障礙者 (聽力障礙定義為500Hz、1000Hz、2000Hz 平均聽力損失大於25 分貝)
  - 4.無法耐受platinum-based 化學治療
- 限無法接受局部治療之復發及/或轉移性頭頸部鱗狀細胞癌，且未曾申報 cetuximab 之病患使用。使用總療程以18週為限，每9週申請一次，需無疾病惡化情形方得繼續使用。

### Carboplatin

- 限腎功能不佳 (CCr  $< 60$ ) 或曾作單側或以上腎切除之惡性腫瘤患者使用。

# Carcinoma of Oropharynx

註5

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## 特殊用藥健保給付規定

### Pembrolizumab、Nivolumab

• 先前已使用過 platinum 類化學治療失敗後，又有疾病惡化的復發或轉移性頭頸部鱗狀細胞癌成人患者。本類藥品與 cetuximab 僅能擇一使用，且治療失敗時不可互換。

• 符合下列條件：

1. 病人身體狀況良好( $ECOG \leq 1$ )
2. NYHA (the New York Heart Association) Functional Class I 或 II
3. GOT<60U/L及GPT<60U/L，且T-bilirubin<1.5mg/dL；Creatinine<1.5mg/dL，且 eGFR>60mL/min/1.73m<sup>2</sup>
4. PD-L1 表現量 TPS  $\geq 50\%$

• 初次申請以12 週為限，申請時需檢附以下資料：病理或細胞檢查報告、生物標記(PD-L1)表現量檢測報告、病人身體狀況良好( $ECOG \leq 1$ )及心肺與肝腎功能之評估資料、符合 i-RECIST 定義之影像檢查及報告(上述影像檢查之給付範圍不包括PET)、先前已接受過之治療與完整用藥資料、使用免疫檢查點抑制劑之治療計畫(treatment protocol)。

• 用藥後每 12 週評估一次，以 i-RECIST 或 mRECIST 標準評定反應，依下列原則給付：

- I. 有療效反應者(PR 及 CR)得繼續使用；
- II. 出現疾病惡化(PD)或出現中、重度或危及生命之藥物不良反應時，應停止使用；
- III. 疾病呈穩定狀態者(SD)，可持續再用藥 4 週，並於 4 週後再次評估，經再次評估若為 PR、CR 者，得再繼續使用 12 週。若仍為 SD 或已 PD 者，應停止使用。

# Carcinoma of Oropharynx

註5

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## 特殊用藥健保給付規定

### Pembrolizumab、Nivolumab

• 先前已使用過 platinum 類化學治療失敗後，又有疾病惡化的復發或轉移性頭頸部鱗狀細胞癌成人患者。本類藥品與 cetuximab 僅能擇一使用，且治療失敗時不可互換。

• 符合下列條件：

1. 病人身體狀況良好( $ECOG \leq 1$ )
2. NYHA (the New York Heart Association) Functional Class I 或 II
3. GOT $<60$ U/L及GPT $<60$ U/L，且T-bilirubin $<1.5$ mg/dL；Creatinine $<1.5$ mg/dL，  
且 eGFR $>60$ mL/min/1.73m<sup>2</sup>
4. PD-L1 表現量 TPS $\geq 50\%$

• 初次申請以12 週為限，申請時需檢附以下資料：病理或細胞檢查報告、生物標記(PD-L1)表現量檢測報告、病人身體狀況良好( $ECOG \leq 1$ )及心肺與肝腎功能之評估資料、符合 i-RECIST 定義之影像檢查及報告(上述影像檢查之給付範圍不包括PET)、先前已接受過之治療與完整用藥資料、使用免疫檢查點抑制劑之治療計畫(treatment protocol)。

• 用藥後每 12 週評估一次，以 i-RECIST 或 mRECIST 標準評定反應，依下列原則給付：

- I. 有療效反應者(PR 及 CR)得繼續使用；
- II. 出現疾病惡化(PD)或出現中、重度或危及生命之藥物不良反應時，應停止使用；
- III. 疾病呈穩定狀態者(SD)，可持續再用藥 4 週，並於 4 週後再次評估，經再次評估若為 PR、CR 者，得再繼續使用 12 週。若仍為 SD 或已 PD 者，應停止使用。

# Carcinoma of Oropharynx

註6

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## Eastern Cooperative Oncology Group (ECOG) Performance Status

| Grade | Description                                                                         | Suggestion    |
|-------|-------------------------------------------------------------------------------------|---------------|
| 0     | Normal activity fully ambulatory (無症狀)                                              | 按照標準化療評估及療程。  |
| 1     | Symptoms, but nearly fully ambulatory (有症狀，完全步行，但對生活無影響)                            | 按照標準化療評估及療程。  |
| 2     | Some bed time, but needs to be in bed less than 50% of normal daytime (躺在床上的時間<50%) | 按照標準化療評估及療程。  |
| 3     | Needs to be in bed more than 50% of normal daytime (躺在床上的時間>50%)                    | 可視情況考慮停止化學治療。 |
| 4     | Unable to get out of bed (長期完全臥床)                                                   | 建議停止化學治療。     |
| 5     | Dead                                                                                |               |

# Carcinoma of Oropharynx

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