

# 高雄榮民總醫院

## 食道癌診療原則

2019年01月22日第一版

食道癌醫療團隊共同擬定

注意事項：這個診療準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，直接引用這個研究資訊及診療準則並不恰當。只有你的醫師才能決定給你最恰當的治療。

# 修訂指引

- 本共識依下列參考資料修改版本

Reference: NCCN Clinical Practice Guidelines in Oncology™, Esophageal cancer, Version 2.2018

# 會議討論

上次會議：2018/05/22

本共識與上一版的差異

上一版	新版
<p>1. 原化療處方有：Cisplatin/Carboplatin + 5-FU、Cisplatin/Carboplatin+Etoposide、Taxol+ Cisplatin/Carboplatin+ 5-FU、Cisplatin + Capecitabine、MCF(Mitomycin + CDDP + 5-FU)、MCF(mitomycin+cisplatin+UFUR)、Ramucirumab + Paclitaxel、Ramucirumab only、Ufur oral Tarceva。</p> <p>2. 原 Dose prescription、Field design</p> <p>Combination with operation: 1.8-2 Gy, total 45-50.4 Gy, 25-28 fraction</p> <p>Concurrent CCRT without operation: 1.8-2 Gy, total 50.4-59.4Gy, 28-33 fractions</p> <p>RT alone: 1.8-2 Gy, total 54-64 Gy, 27-35 fractions</p>	<p>1. 經食道癌團隊成員審視診療指引，決議補入上線中的化療處方集：Taxol+Cisplatin/Carboplatin、Docetaxel+ Cisplatin /Carboplatin、Docetaxel +Cisplatin/ Carboplatin +5-FU、Gemzar、Gemzar+ Cisplatin/Carboplatin 及文獻。(Page 8.9.14)</p> <p>1-1. 新增治療處方：Afatinib、TS-1。(Page 10)</p> <p>2. 修正 Dose prescription、Field design (Page 11)</p> <p>Combination with operation:1.8-2 Gy, total 40-54 Gy</p> <p>Concurrent CCRT without operation:1.8-2 Gy, total 50-66 Gy</p> <p>RT alone:1.8-2 Gy, total 54-66 Gy</p>

# 食道癌(總表)

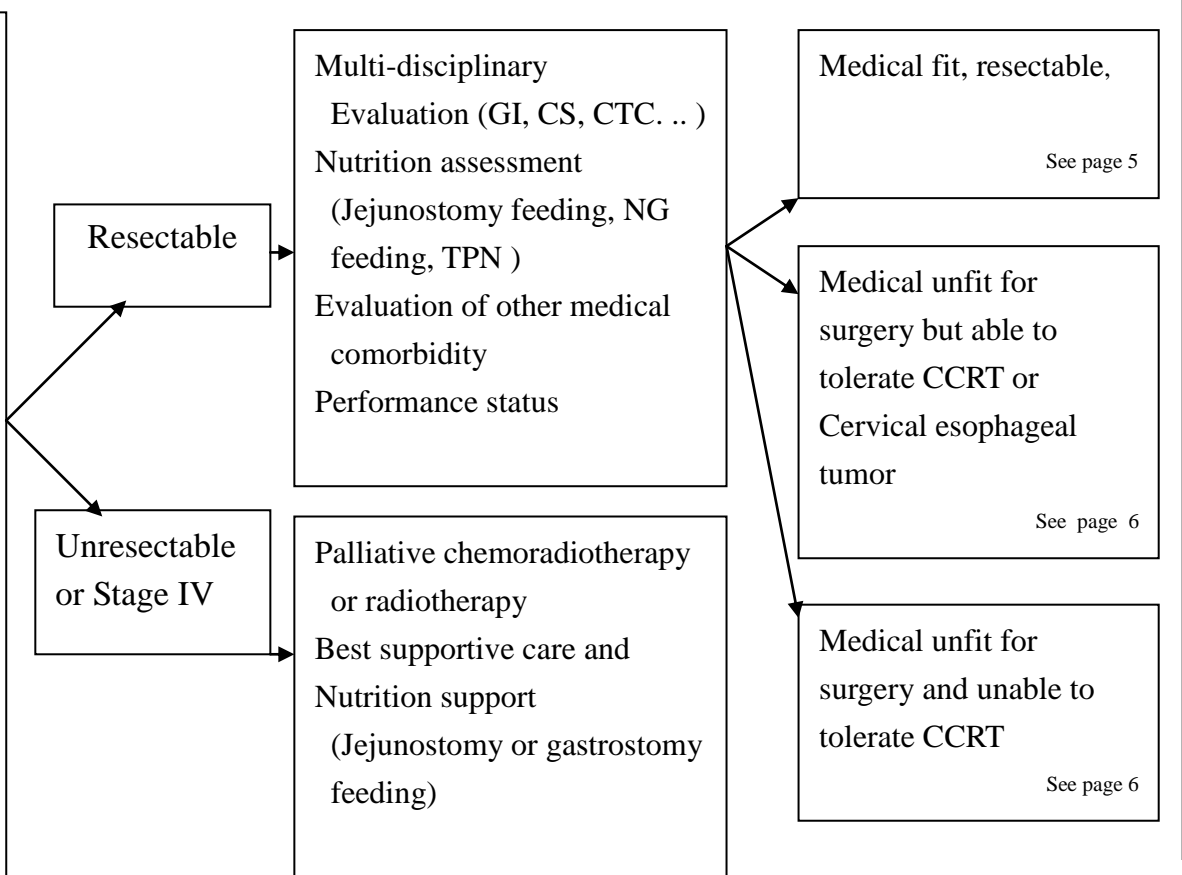
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評估	診斷	治療	追蹤
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History and physical examination  
 CBC and chemistry profile  
 Upper GI endoscopy and biopsy  
Chest/abdominal CT  
 UGI series  
Upper abdominal sonography  
Bone scan  
 Tumor markers  
**Optional :**  
 PET/CT  
 Bronchoscopy  
 Endoscopic ultrasound(EUS)  
 LN aspiration or biopsy

與期別相關之主要檢查



- 1.If asymptomatic · History and physical every 3 month for 2 years · than every 6 month for 3~5 years.
2. Chemistry profile CBC, Tumor marker.
- 3.Imaging :  
 \*CXR every 3 month for 2 years · than every 6 month for 3~5 years.  
 \*Chest CT every 6 month for 2 years · than every 1 year for 3~5 years.
4. Dilatation of anastomotic stenosis (OP).
5. Upper GI endoscopy and biopsy as clinically indicated

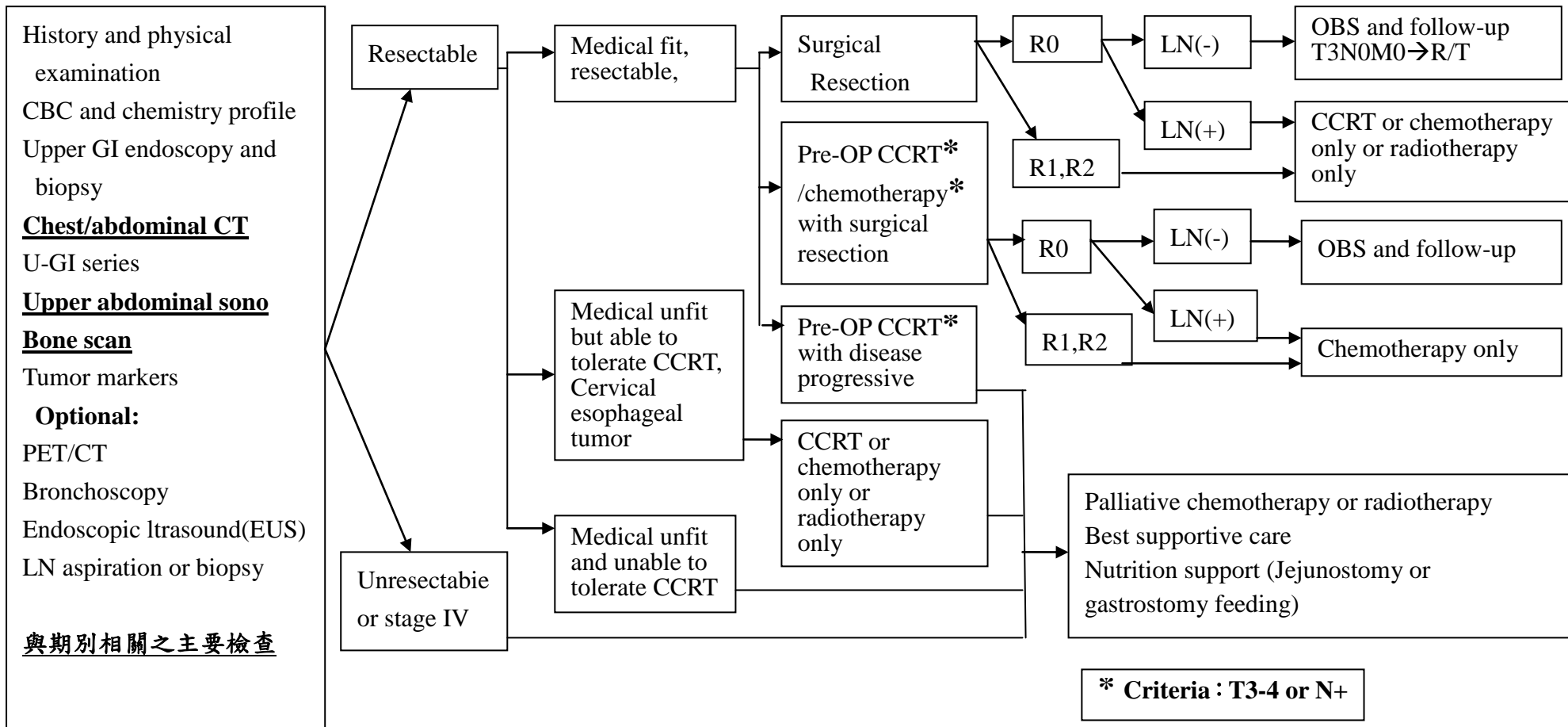
Definitive CCRT 的 RT 結束後第 3 個月  
 FOLLOW UP chest CT

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評估	診斷	治療	追蹤
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\* Criteria : T3-4 or N+

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評估	診斷	治療	追蹤
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History and physical examination  
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Chest/abdominal CT  
 UGI series  
Upper abdominal sonography  
Bone scan  
 Tumor markers  
**Optional :**  
 PET/CT  
 Bronchoscopy  
 Endoscopic ultrasound (EUS)  
 LN aspiration or biopsy  
與期別相關之主要檢查

**Medical unfit for surgery, or  
 Cervical esophageal tumor**

**CCRT or chemotherapy  
 only or radiotherapy only**

**Medical unfit for surgery  
 and unable to tolerate  
 CCRT**

**Best supportive**

**Pre-OP CCRT\* with  
 Disease progressive**

**Palliative chemoradiotherapy  
 Best supportive care and  
 Nutrition support**

1.If asymptomatic ,  
 History and physical  
 every 3 month for 2  
 years , than every 6  
 month for 3~5 years.  
 2. Chemistry profile  
 CBC, Tumor marker.  
 3.Imaging :  
 \*CXR every 3 month for  
 2 years , than every 6  
 month for 3~5 years.  
 \*Chest CT every 6  
 month for 2 years , than  
 every 1year for 3~5  
 years.  
 4. Upper GI endoscopy  
 and biopsy as clinically  
 indicated

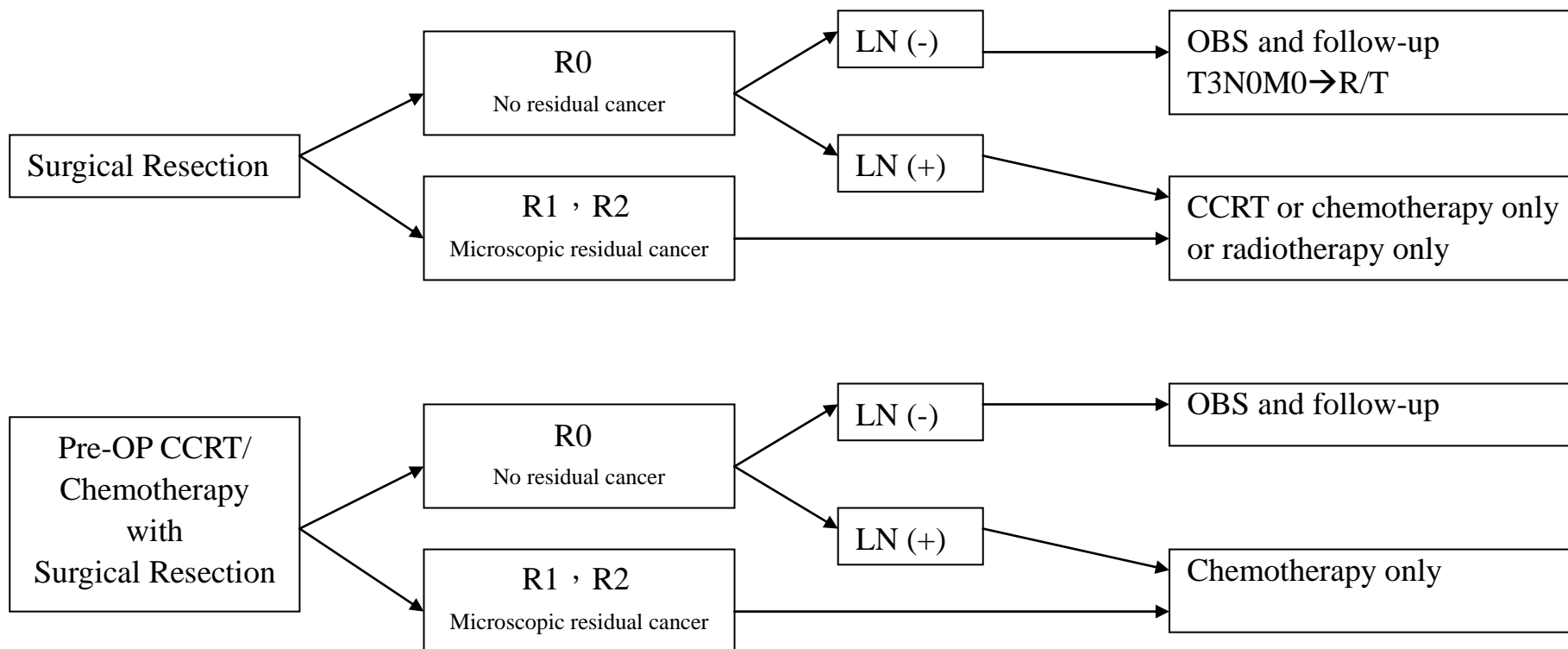
Definitive CCRT 的 RT 結束後第 3 個月  
 FOLLOW UP chest CT

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Surgical outcomes after esophagectomy/ Clinical pathologic findings	Tumor classification	Postoperative treatment
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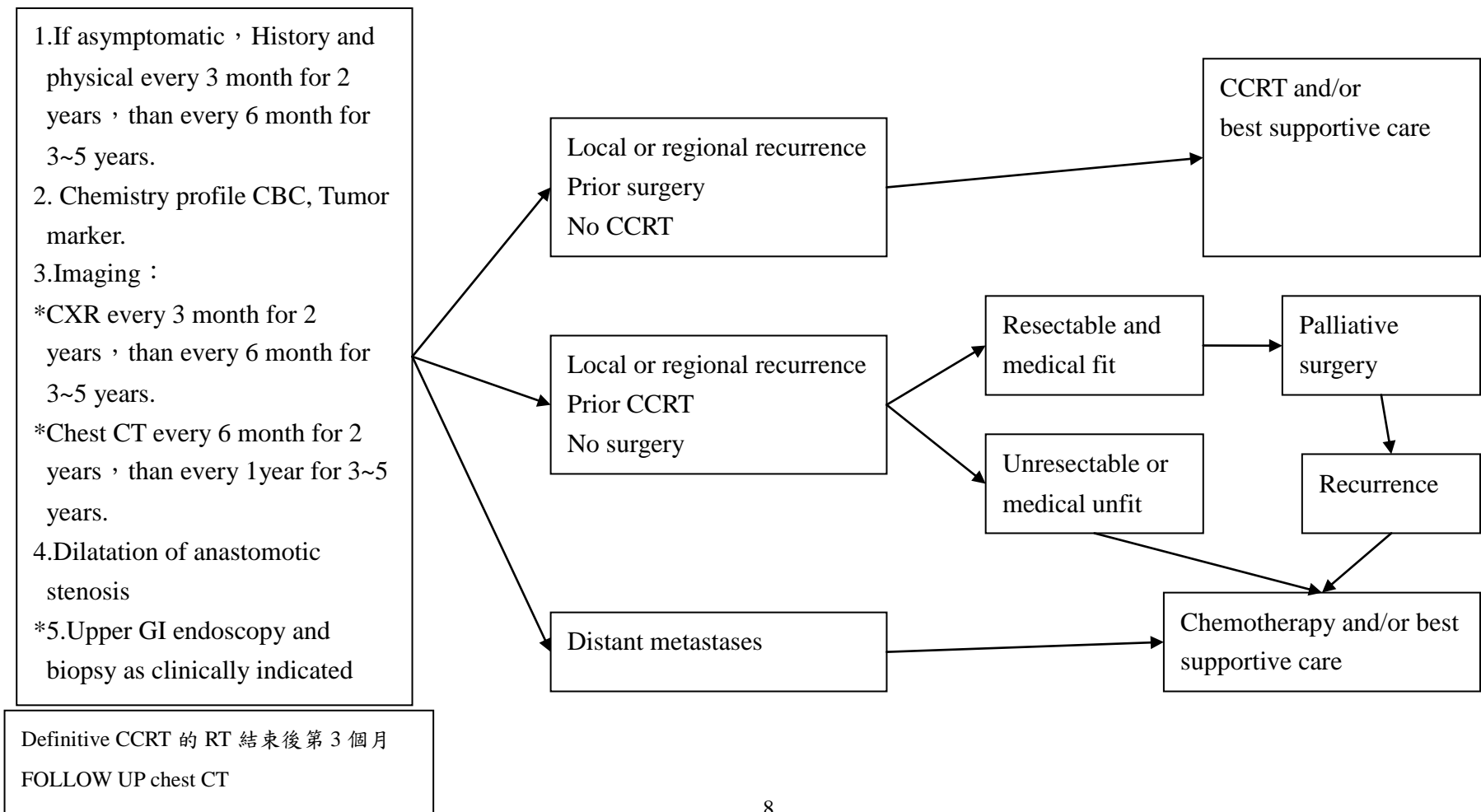


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Follow-up	Recurrence	Palliative therapy
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## 化學治療處方

Published C/T regimens(neoadjuvant/adjuvant/CCRT/metastasis)	Schedule	
Cisplatin 60-75mg/m <sup>2</sup> , IV ,D1 / Carboplatin AUC 4-6 mg, IV ,D1 ( Ccr <60 ) Fluorouracil, 600-1000 mg/m <sup>2</sup> , IV ,D1-4 (Reference No.22)	Q28 D x 4-6 cycles	Performance status (ECOG) ≤ 2 or Kamofsky Performance score ≥ 60
Cisplatin 60-75 mg/m <sup>2</sup> , IV ,D1 / Carboplatin AUC 4-6 mg, IV ,D1 ( Ccr <60 ) Etoposide 60-100 mg/m <sup>2</sup> , IV ,D1-3 (Reference No.23)	Q21 D x 4-6 cycles	Performance status (ECOG) ≤ 2 or Kamofsky Performance score ≥ 60
Taxol 140-175 mg/m <sup>2</sup> , IV ,D1 Cisplatin 20 mg/m <sup>2</sup> , IV ,D1-5 / Carboplatin AUC 1mg, IV ,D1-5 ( Ccr <60 ) Fluorouracil,600-750 mg/m <sup>2</sup> , IV ,D1-5 (Reference No.24)	Q28D 4-6 cycles	Performance status (ECOG) ≤ 2 or Kamofsky Performance score ≥ 60
<b>Taxol 160-200 mg/m<sup>2</sup>, IV ,D1</b> <b>Cisplatin 60-80 mg/m<sup>2</sup>, IV ,D1 / Carboplatin AUC 4-6mg, IV ,D ( Ccr &lt;60 )</b> <b>(Reference No.38)</b>	<b>Q21D</b> <b>4-6 cycles</b>	Performance status (ECOG) ≤ 2 or Kamofsky Performance score ≥ 60
<b>Docetaxel 60-85mg/m<sup>2</sup>, IV ,D1</b> <b>Cisplatin 60-85mg/m<sup>2</sup>, IV ,D1 / Carboplatin AUC4-6 mg, IV ,D1 ( Ccr &lt;60 )</b> <b>(Reference No.31)</b>	<b>Q21D x 4-6 cycles</b>	Performance status (ECOG) ≤ 2 or Kamofsky Performance score ≥ 60

Docetaxel 60-75mg/m <sup>2</sup> , IV ,D1 Cisplatin 60-75mg/m <sup>2</sup> , IV ,D1 / Carboplatin AUC4-6 mg, IV ,D1 ( Ccr <60 ) Fluorouracil,600-750 mg/m <sup>2</sup> , IV ,D1-5 / Fluorouracil,800-1200 mg/m <sup>2</sup> , IV ,D1-3 (Reference No.26,33)	Q21D x 4-6 cycles	Performance status (ECOG) ≤ 2 or Kamofsky Performance score ≥ 60
Gemzar 1000mg/m <sup>2</sup> , IV ,D1.8 (Reference No.32)	Q21~28D 4-6 cycles	Performance status (ECOG) ≤ 2 or Kamofsky Performance score ≥ 60
Gemzar 800-1000mg/m <sup>2</sup> , IV ,D1.8 Cisplatin 60-80mg/m <sup>2</sup> , IV ,D1 / Carboplatin AUC4-6 mg, IV ,D1 ( Ccr <60 ) (Reference No.32)	Q21~28D 4-6 cycles	Performance status (ECOG) ≤ 2 or Kamofsky Performance score ≥ 60
Cisplatin 60 mg/m <sup>2</sup> , IV ,D1/ Carboplatin AUC 4-6 mg, IV ,D1 ( Ccr <60 ) Xeloda 2.5TAB/ m <sup>2</sup> , PO,D1-14 (Reference No.27)	Q21 D x 4-6 cycles	Performance status (ECOG) ≤ 2 or Kamofsky Performance score ≥ 60
Mitomycin 5- 7 mg/m <sup>2</sup> , IV ,D1 Cisplatin 50-60 mg/m <sup>2</sup> , IV ,D1,/ Carboplatin AUC 4-6 mg, IV ,D1, ( Ccr <60 ) Fluorouracil,480~600 mg/m <sup>2</sup> /d, IV (Reference No.28)	MitomycinQ42D Cisplatin Q21D 5-FU QD MCF x 4-6 cycles	Performance status (ECOG) ≤ 2 or Kamofsky Performance score ≥ 60
Mitomycin 5- 7 mg/m <sup>2</sup> , IV ,D1 Cisplatin 45-60 mg/m <sup>2</sup> , IV ,D1/ Carboplatin AUC 4-6 mg, IV ,D1 ( Ccr <60 ) Ufur 3CAP/m <sup>2</sup> , PO,D1-14 (Reference No.28)	MitomycinQ42D Cisplatin Q21D Ufur QD MCU x 4-6 cycles	Performance status (ECOG) ≤ 2 or Kamofsky Performance score ≥ 60
Ramucirumab 8 mg/kg, IV, D1 (Reference No.34)	Q14D	Performance status (ECOG) ≤ 2 or Kamofsky Performance score ≥ 60
Ramucirumab (8 mg/kg, IV, D1, D15) Paclitaxel (50~80 mg/m <sup>2</sup> , IV, D1, D8, D15) (Reference No.35)	Q28D	Performance status (ECOG) ≤ 2 or Kamofsky Performance score ≥ 60

Ufur 3CAP/m <sup>2</sup> , PO,D1-14  (Reference No.39)	QD x1year	Performance status (ECOG) ≤2 or Kamofsky Performance score ≥ 60
Tarceva 150mg 1TAB, PO, QD  (Reference No.29)	QD until disease progression	Performance status (ECOG) ≤2 or Kamofsky Performance score ≥ 60
Afatinib 40mg/day, PO, QD  (Reference No.36)	QD until disease progression	Performance status (ECOG) ≤2 or Kamofsky Performance score ≥ 60
TS-1(BSA >1.5) 120mg/day, PO BID, D1-28 (吃四週休二週或吃二週休一週) TS-1(BSA 1.25-1.5) 100mg/day, PO BID, D1-28  (Reference No.37)	Q42D x1year	Performance status (ECOG) ≤2 or Kamofsky Performance score ≥ 60

備註：

【1】依據影像學檢查發現疾病 progression disease 或【2】依據達到 Grade 3：Severe or advance Side effect，即先停藥，再視病患情況決定繼續治療或改變處方。

# 食道癌

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## Radiotherapy (Reference No.15-21)

### Dose prescription

Combination with operation (Pre-operative or post operative RT)	1.8-2 Gy, total 40-54 Gy
Concurrent CCRT without operation	1.8-2 Gy, total 50-66 Gy
RT alone	1.8-2 Gy, total 54-66 Gy

When the radiation dosage reach 45 Gy , the stomach area should be blocked.

### Field design

Preoperative RT or CCRT :

GTV = primary and involved regional nodes; CTV for primary = GTV + 3-4 cm proximal/distal and 1 cm radial, CTV for involved nodes includes 0.5-1.5 cm margin, CTV for elective nodes depends on location of primary; PTV = CTV + 0.5-1 cm.

Postoperative RT : depended by operative findings and pathological report.

Dose limitation :

Spinal cord :  $D_{max} \leq 46$  Gy at 1.8-2 Gy/fraction

Lung :  $V_{20} \leq 25\%$  ,  $V5 \leq 50\%$  。

Heart :  $V_{40} \leq 33-50\%$  ,  $Mean \leq 32\%$  。

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