

# 高雄榮民總醫院

## 胃癌診療指引

2018年02月27日 第一版

胃癌醫療團隊擬訂

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。

# 修訂指引

- 本共識參考國家衛生研究院於2012年1月出版之胃癌臨床指引及其他參考文獻，於2018.02.27由胃癌團隊相關人員陳以書、康朥翔、江佳陵、陳文誌、蔡駢圳、孫煒智、葉昶宏、吳長哲、張國楨等人討論後共同修訂。

# 會議討論

上次會議：2017/03/07

## 本共識與上一版的差異

上一版	新版
<p>1. 原IIHC Regimen: Cisplatin+Etoposide+Mitomycin</p> <p>2. 原有化療建議處方及二線建議處方。</p> <p>3. 無</p>	<p>1. 新增IIHC Regimen: (page 9) Regimen 2:Paclitaxel Regimen 3:Paclitaxel</p> <p>2. 將化療藥物以輔助(Adjuvant)、新輔助(Neo-adjuvant)及轉移癌做分類 (page10、11、12)</p> <p>3. 註記與期別相關之主要檢查 (page 4)</p>

# 胃腺癌

高雄榮民總醫院  
臨床診療指引

2018年第一版

評估

診斷

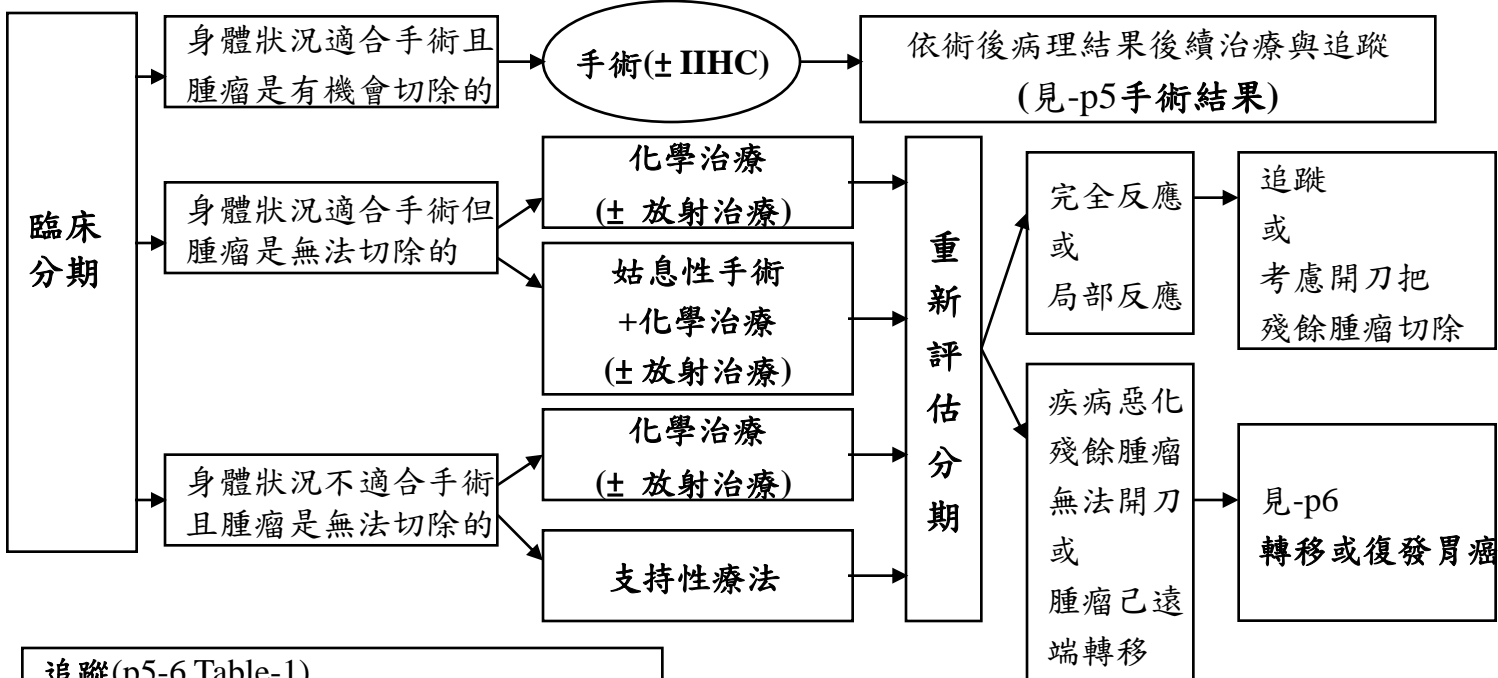
治療

追蹤

- 病史，理學檢查
- 營養及日常體能狀態
- 胸部X光
- 血液常規
- 電解質及肝腎功能
- 腫瘤指標 (CEA, Ca19-9)
- \* 腹部(胃)電腦斷層攝影
- 上消化道內視鏡及生檢 (Biopsy)

- 必要時評估→
- \* 正子攝影
- 內視鏡超音波
- 腹腔鏡
- 上消化道攝影

\*與期別相關之主要檢查



- 追蹤(p5-6 Table-1)
- 手術(p7-8 Table-2)
- IHC(p9 Table-3)
- 化學治療( p10-13 table-4.1,4.2,4.3,4.4)
- 標靶治療(p14 table-5)
- 放射治療(p15 table-6)

# 胃腺癌

高雄榮民總醫院  
臨床診療指引

2018年第一版

評估	診斷	治療	追蹤
----	----	----	----

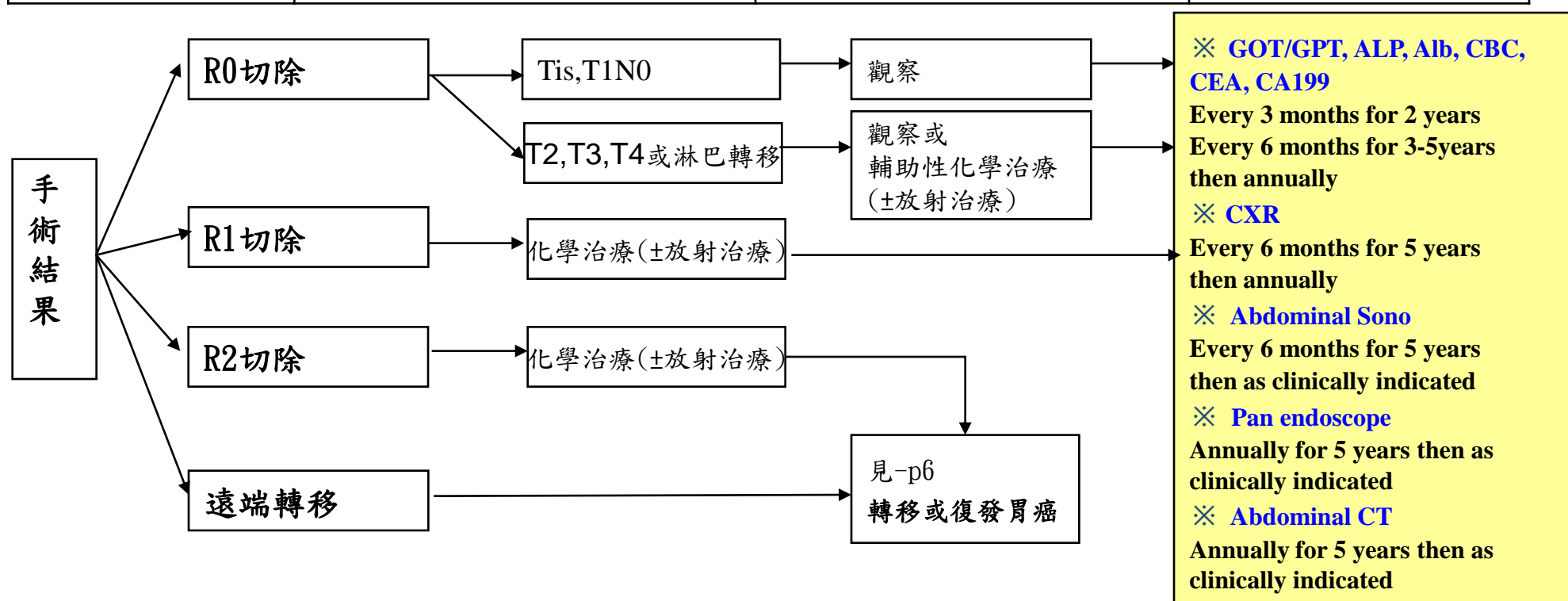
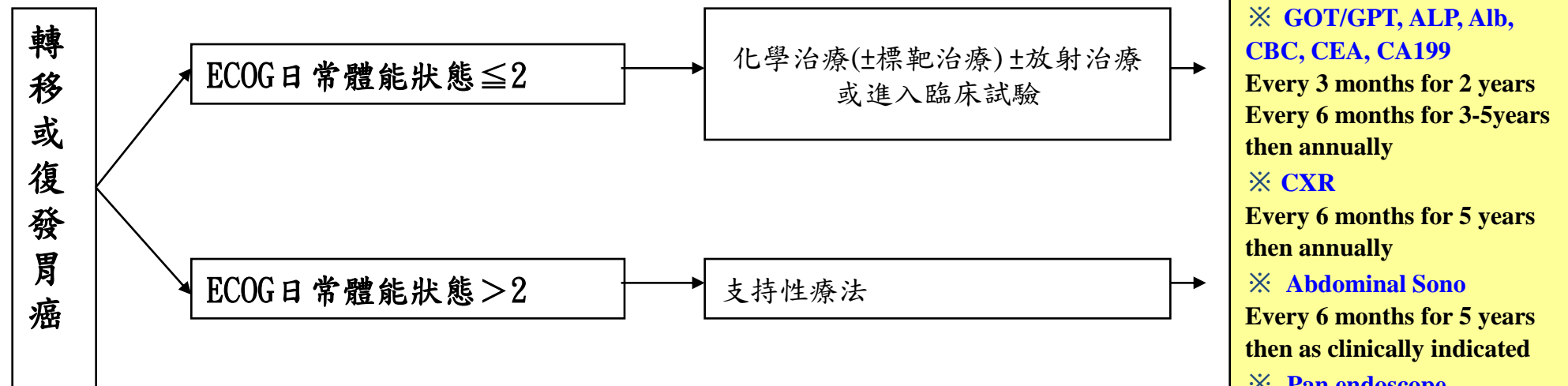


Table-1 術後追蹤建議表

# 胃腺癌

高雄榮民總醫院  
臨床診療指引

2018年第一版



- ※ GOT/GPT, ALP, Alb, CBC, CEA, CA199  
Every 3 months for 2 years  
Every 6 months for 3-5years  
then annually
- ※ CXR  
Every 6 months for 5 years  
then annually
- ※ Abdominal Sono  
Every 6 months for 5 years  
then as clinically indicated
- ※ Pan endoscope  
Annually for 5 years then as  
clinically indicated
- ※ Abdominal CT  
Annually for 5 years then as  
clinically indicated

分數	ECOG
0	無症狀
1	有症狀，但可以正常活動，對生活無影響
2	可以照顧自己但無法工作，躺在床上的時間 < 50%的工作時間
3	躺在床上的時間 > 50%的工作時間
4	長期完全臥床
5	死亡

# 胃腺癌

高雄榮民總醫院  
臨床診療指引

2018年第一版

Table-2 手術建議表(1)

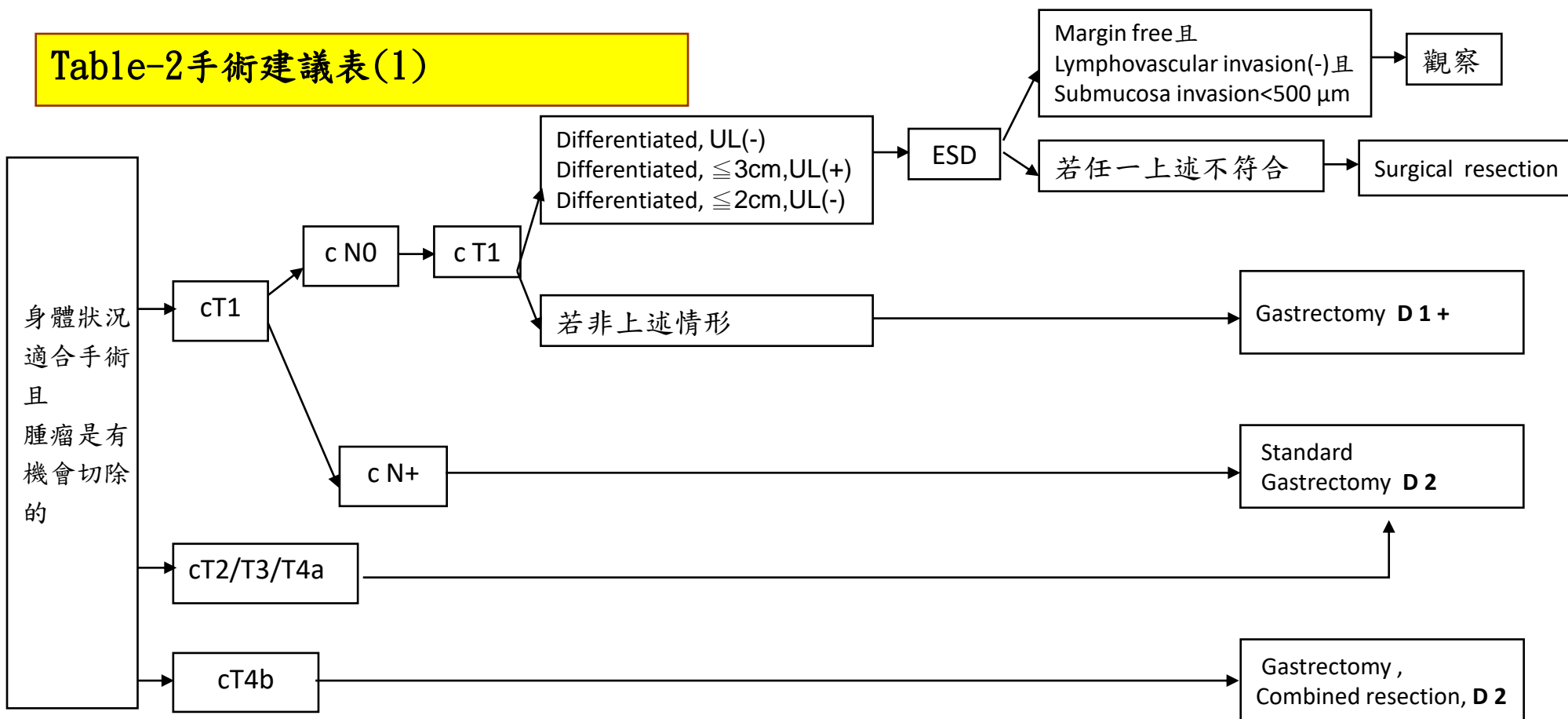
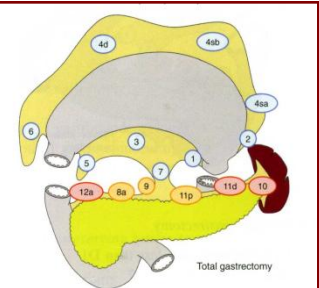
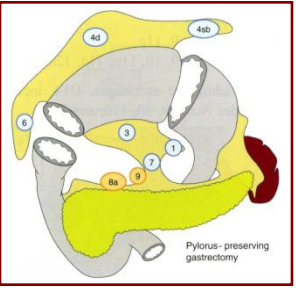
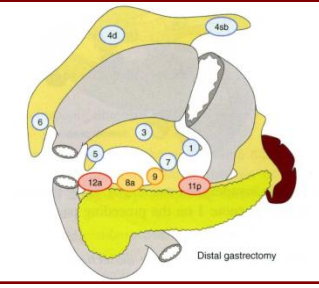
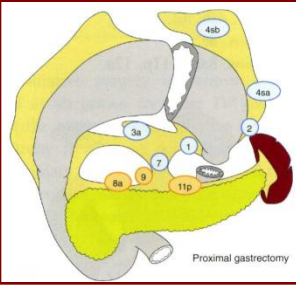


Table-2 手術建議表(2)

Type of Gastrectomy with lymph node dissection		
Gastrectomy	Extent of LN dissection	圖表
Total gastrectomy	D1 :Nos 1-7 D1+:D1+Nos 8a,9,11p D2 :D1+Nos 8a,9,10,11p,11d,12a For tumor invading the esophagus D1+Includes No,110 <sup>1</sup> D2 includes Nos.19,20,110,and 111	 
Distal gastrectomy	D1 :Nos 1,3,4sb,4d,5,6,7 D1+:D1+Nos 8a, 9 D2 :D1+Nos 8a,9,11p,12a	 
Pylorus-preserving gastrectomy	D1 :Nos 1,3,4sb,4d,6,7 D1+:D1+Nos 8a, 9	
Proximal gastrectomy	D1 :Nos 1,2,3a,4sa,4sb,7 D1+:D1+Nos 8a, 9,11p	



**Table-3 IIHC 適應症建議表**

## **Hyperthermic IntraPeritoneal Chemotherapy (HIPEC)**

※ Indication :  $\geq$  T4a

※ Regimen 1: (41-42°C for 20-60 minutes )

**Cisplatin 90 mg**

**Etoposide 90 mg**

**Mitomycin C 30 mg**

**Reference :No 4-7/strength of Evidence :Level I**

※ Regimen 2: (41-42°C for 20-60 minutes)

**Paclitaxel 80mg/m<sup>2</sup>**

※ Regimen 3:

**Paclitaxel 20mg/m<sup>2</sup>/week**

**Reference :No 27/strength of Evidence :Level IIA**

**No 28/strength of Evidence :Level IIB**

Table-4.1 化學治療處方建議表：輔助化療

Adjuvant chemotherapy	Schedule	Reference (No)/ strength of Evidence
<b>TS-1</b> 40-60mg bid(ACTS-GC trial) (po 4 weeks on, 2 weeks off/or po 2 weeks on, 1 weeks off) BSA $\geq 1.5\text{m}^2$ : 60mg bid, 1.25 $\text{m}^2$ - 1.5 $\text{m}^2$ : 50mg bid, <1.25 $\text{m}^2$ : 40mg bid	Q42 d /cycle For 12 months	No.8 /Level I
<b>UFUR</b> 2# po bid (NSAS-GC trial)	For 16 months	No.9 /Level I
<b>Oxaliplatin</b> 130 mg/ $\text{m}^2$ , IV,D1 【 XO 】 (CLASSIC trial) <b>Xeloda</b> 2#po QAM(Day1-14) ,3# PM (Day1-14) (825-1000mg/ $\text{m}^2$ )	Q21 d x 8-12cycles	No.10 /Level I
<b>Oxaliplatin</b> 130mg/ $\text{m}^2$ , IV, D1 【 EOX】 <b>Epirubicin</b> 50mg/ $\text{m}^2$ , IV, D1 <b>Xeloda</b> 625mg/ $\text{m}^2$ bid X 3 weeks	Q21 d x 8 cycles	No.11 / Level I

# 胃腺癌

高雄榮民總醫院  
臨床診療指引

2018年第一版

Table-4.2 化學治療處方建議表：新輔助化療

<b>Neoadjuvant chemotherapy</b>	<b>Schedule</b>	<b>Reference (No)/ strength of Evidence</b>
<b>Oxaliplatin</b> 130 mg/m <sup>2</sup> , IV,D1 【 XO 】 (CLASSIC trial) <b>Xeloda</b> 2#po QAM(Day1-14) ,3# PM (Day1-14) (825-1000mg/m <sup>2</sup> )	Q21 d	No.26 /Level IIB
<b>Oxaliplatin</b> 130mg/m <sup>2</sup> , IV, D1 【 EOX】 <b>Epirubicin</b> 50mg/m <sup>2</sup> , IV, D1 <b>Xeloda</b> 625mg/m <sup>2</sup> bid X 3 weeks	Q21 d	No.11 / Level I

Table-4.3 化學治療處方建議表：轉移癌

Chemotherapy for unresectable/recurrent disease	Schedule	Reference (No)/ strength of Evidence
<b>TS-1</b> 40-60mg bid(口服21days休14days) ( <b>SPIRITS trial</b> ) <b>Cisplatin</b> 60 mg/m <sup>2</sup> , IV, D8	Q35d /cycle For 12 months	No.12 /Level I
<b>TS-1</b> 40-60mg bid (po 4 weeks on, 2 weeks off/or po 2 weeks on, 1 weeks off) BSA $\geq 1.5\text{m}^2$ : 60mg bid, 1.25m <sup>2</sup> - 1.5m <sup>2</sup> : 50mg bid, <1.25m <sup>2</sup> : 40mg bid	Q42 d /cycle For 12 months	No.8 /Level I
<b>UFUR</b> 2# po bid	For 16 months	No.13 /Level I
<b>Oxaliplatin</b> 130mg/m <sup>2</sup> , IV, D1 【 <b>EOX</b> 】 <b>Epirubicin</b> 50mg/m <sup>2</sup> , IV, D1 <b>Xeloda</b> 625mg/m <sup>2</sup> bid X 3 weeks	Q21 d x 8 cycles	No.11 /Level I
<b>Oxaliplatin</b> 130 mg/m <sup>2</sup> , IV,D1 【 <b>XO</b> 】 <b>Xeloda</b> 2#po QAM(Day1-14) ,3# PM (Day1-14) (825-1000mg/m <sup>2</sup> )	Q21 d x 8-12cycles	No.1, 14 /Level II
<b>Cisplatin</b> 80 mg/m <sup>2</sup> , IV, D1 【 <b>FP</b> 】 <b>5-FU</b> 800mg/m <sup>2</sup> , IV, D1-5	Q21 d x 8-12cycles	No.15 /Level II

# 胃腺癌

高雄榮民總醫院  
臨床診療指引

2018年第一版

Table-4.4 化學治療（二線）處方建議表

<b>Chemotherapy for unresectable/recurrent disease</b>	<b>Schedule</b>	<b>Reference (No)/ strength of Evidence</b>
<b>Irinotecan</b> 150 mg/m <sup>2</sup> , IV, D1	Q14d /cycle Until progression	No.20, 21 /Level I
<b>Docetaxel</b> 60 – 75 mg/m <sup>2</sup> , IV, D1	Q21d /cycle Until progression	No.21, 22 /Level I
<b>Paclitaxel</b> 80 mg/m <sup>2</sup> , IV, D1, D8, D15	Q28d/cycle Until progression	No.23 /Level I
<b>Ramucirumab</b> 8 mg/kg, IV, D1	Q14d/cycle Until progression	No. 24 /Level I
<b>Ramucirumab</b> (8 mg/kg, IV, D1, D15) + <b>Paclitaxel</b> (80 mg/m <sup>2</sup> , IV, D1, D8, D15)	Q28d/cycle Until progression	No. 25 /Level I

Table-5 標靶治療處方建議表

Trastuzumab 6-8mg/kg(D1)+CDDP 80mg/m<sup>2</sup>(D1)+Xeloda 1000mg/m<sup>2</sup> BID(D1-14)

Trastuzumab 6-8mg/kg(D1)+CDDP 80mg/m<sup>2</sup>(D1)+5-FU 800mg/m<sup>2</sup> BID(D1-5)

Trastuzumab 6-8mg/kg(D1)+Carboplatin AUC4-6(D1)+Xeloda 1000mg/m<sup>2</sup> BID(D1-14)

Trastuzumab 6-8mg/kg(D1)+Carboplatin AUC4-6(D1)+5-FU 800mg/m<sup>2</sup> BID(D1-5)

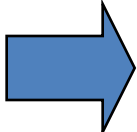
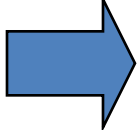
(Ref. No 16/Level I)

1.使用條件：Her-2/neu免疫染色3+, 或2+且FISH positive for amplification

2.使用劑量：8 mg/kg IV loading dose, 6 mg/kg IV every 3 weeks

3.若病患於治療中發生疾病復發、惡化或產生無法忍受之毒性，則停用藥物。

Table-6 放射治療處方建議表

<p>※ <b>Protocol of adjuvant chemoradiotherapy</b></p>	<p>※.For R0 resection <math>\geq</math> stage IIA                  ※ For R1 resection and R2 resection</p>
<p> <b>Radiation therapy:</b>                  Target volume: tumor/ gastric bed and pertinent nodal group                  Dose: 45-50.4 Gy /(1.8 Gy/day)  <b>Chemotherapy regimen:</b>                  5-FU (400 mg/m<sup>2</sup> per day) and leucovorin (20 mg/m<sup>2</sup> per day) on the first four and the last three days of RT. <b>Reference :No 17/strength of Evidence :level 1</b></p>	
<p>※ <b>Protocol of chemoradiation as the primary treatment</b></p>	<p>※ For medically fit patients but unresectable cancer without distant metastasis                  ※ For medically unfit patients without distant metastasis</p>
<p> <b>Radiation therapy:</b>                  Target volume: tumor/ gastric bed and pertinent nodal group                  Dose: 45-50.4 Gy /(1.8 Gy/day)  <b>Chemotherapy regimen:</b>                  5-FU (400 mg/m<sup>2</sup> per day) and leucovorin (20 mg/m<sup>2</sup> per day) on the first four and the last three days of RT. <b>Reference :No 17/strength of Evidence :level 1</b></p>	

# 胃腺癌

高雄榮民總醫院  
臨床診療指引

2018年第一版

## Table-7 癌症藥物停藥準則

影像學檢查，腫瘤有變大或轉移變多，應停止或改變治療方式。



## Reference

1. NCCN Clinical Practice Guideline in Oncology, Gastric cancer , V.1.2016
2. 國家衛生研究院 胃癌臨床診療指引2012年第1版
3. 日本胃癌診療指引2010年第3版
4. Yan TD, Black D, Sugarbaker PH, et al. A systematic review and meta-analysis of the randomized controlled trials on adjuvant intraperitoneal chemotherapy for resectable gastric cancer. *Ann Surg Oncol* 2007;14:2702-2713.
5. Yonemura Y, de Aretxabala X, Fujimura T, et al. Intraoperative chemohyperthermic peritoneal perfusion as an adjuvant to gastric cancer: final results of a randomised controlled study. *Hepatogastroenterol* 2001; 48:1776–82.
6. Deng-Hai Mi, Zheng Li, Ke-Hu Yang et al. Surgery combined with intraoperative hyperthermic intraperitoneal chemotherapy (IHIC) for gastric cancer: a systematic review and meta-analysis of randomised controlled trials. *Int J Hyperthermia*. 2013;29(2):156-67
7. Kang LY et al. Intraoperative hyperthermic intraperitoneal chemotherapy as adjuvant chemotherapy for advanced gastric cancer patients with serosal invasion. *J Chin Med Assoc*. 2013 Aug;76(8):425-31.
8. Sakuramoto S, Sasako M, Yamaguchi T, et al. Adjuvant chemotherapy for gastric cancer with S-1, an oral fluoropyrimidine. *N Engl J Med*. 2007;357:1810–20.
9. T.Nakajima,T.Kinoshita,A.Nashimoto et al:Randomized controlled trail of adjuvant uracil –tegafur versus surgery alone for serosa –negative ,locally advanced gastric cancer .*British Journal of Surgery* 2007, vol. 94:1468-1476.
10. Sung Hoon Noh, Sook Ryun Park, Han-Kwang Yang et al: Adjuvant capecitabine plus oxaliplatin for gastric cancer after D2 gastrectomy (CLASSIC): 5-year follow-up of an open-label, randomised phase 3 trial. *Lancet Oncol* 2014 Nov;15(12):1389-96
11. K Sumpter,C Harper-Wynne,D cunningham et al:Report of two protocol planned interim analyses in a randomised multicentre phase III study comparing capecitabine with fluorouracil and oxaliplatin with cisplatin in patients with advanced oesophagogastric cancer receiving ECF.*British journal of Cancer*2005, vol.92:1976-1983.

12. Wasaburo Koizumi, Hiroyuki Narahara, Takuo Hara et al.: S-1 plus cisplatin versus S-1 alone for first-line treatment of advanced gastric cancer (SPIRITS trial): a phase III trial. *Lancet oncology* .2008 vol.3.215-221.
13. N.F. Aykan & E. Idlevich: The role of UFT in advanced gastric cancer. *Annals of Oncology* 2008, vol.19.1045-1052.
14. Kim GM, Jeung HC, Rha SY et al. A randomized phase II trial of S-1 oxaliplatin versus capecitabine-oxaliplatin in advanced gastric cancer. *Eu J Cancer* 2012;48:518-526.
15. Park SC and Chun HJ. Chemotherapy for advanced gastric cancer: Review and update of current practices. *Gut and Liver* 2013, vol 7. 385-393.
16. Yung-Jue Bang, Eric Van Cutsem, Andrea Feyereislova et al.: Trastuzumab in combination with chemotherapy versus chemotherapy alone for treatment of HER2-positive advanced gastric or gastro-oesophageal junction cancer (ToGA): a phase 3, open-label, randomised controlled trial. *Lancet*.2012.vol.376.687-697.
17. Macdonald JS; Smalley SR; Benedetti J; Hundahl SA; Estes NC; Stemmermann GN; Haller DG; Ajani JA; Gunderson LL; Jessup JM; Martenson JA: Chemoradiotherapy after surgery compared with surgery alone for adenocarcinoma of the stomach or gastroesophageal junction [Intergroup trial 0016]. *N Engl J Med* 2001 Sep 6;345(10):725-30.
18. Chikara Kunisaki, MD, PhD, Hirochika Makino, MD, PhD, Jun Kimura, MD et al. Impact of lymphovascular invasion in patients with stage I gastric cancer. *Surgery* 2010;147:204-11.
19. Chunyan Du . Ye Zhou . Kai Huang . Guangfa Zhao . Hong Fu . Yingqiang Shi. Defining a high-risk subgroup of pathological T2N0 gastric cancer by prognostic risk stratification for adjuvant therapy. *J Gastrointest Surg*(2011) 15:2153-2158.
20. Peter C. Thuss-Patience et al. Survival advantage for irinotecan versus best supportive care as second-line chemotherapy in gastric cancer – A randomised phase III study of the Arbeitsgemeinschaft Internistische Onkologie (AIO) *Eur J Cancer*. 2011 Oct;47(15):2306-14

21. Jung Hun Kang et al. Salvage Chemotherapy for Pretreated Gastric Cancer: A Randomized Phase III Trial Comparing Chemotherapy Plus Best Supportive Care With Best Supportive Care Alone. *J Clin Oncol* 30:1513-1518; 2012
22. Hugo E R Ford et al. Docetaxel versus active symptom control for refractory oesophagogastric adenocarcinoma (COUGAR-02): an open-label, phase 3 randomised controlled trial. *Lancet Oncol* 2014; 15: 78–86.
23. Shuichi Hironaka et al. Randomized, Open-Label, Phase III Study Comparing Irinotecan With Paclitaxel in Patients With Advanced Gastric Cancer Without Severe Peritoneal Metastasis After Failure of Prior Combination Chemotherapy Using Fluoropyrimidine Plus Platinum: WJOG 4007 Trial. *J Clin Oncol* 31:4438-4444; 2013.
24. Charles S Fuchs et al. Ramucirumab monotherapy for previously treated advanced gastric or gastro-oesophageal junction adenocarcinoma (REGARD): an international, randomised, multicentre, placebo-controlled, phase 3 trial. *Lancet* 2014; 383: 31–39
25. Hansjochen Wilke et al. Ramucirumab plus paclitaxel versus placebo plus paclitaxel in patients with previously treated advanced gastric or gastro-oesophageal junction adenocarcinoma (RAINBOW): a double-blind, randomised phase 3 trial. *Lancet Oncol* 2014; 15: 1224–35.
26. Kim GM, Jeung HC, Rha SY, et al. A randomized phase II trial of S-1-oxaliplatin versus capecitabine-oxaliplatin in advanced gastric cancer. *Eur J Cancer* 2012;48:518-526.
27. Hironori Yamaguchi et al. Breakthrough therapy for peritoneal carcinomatosis of gastric cancer: Intraperitoneal chemotherapy with taxanes. *World Journal of Gastrointestinal Oncology* 2015;7(11):285-291.
28. Motohiro Imano et al, Phase II Study of Single Intraperitoneal Chemotherapy Followed by Systemic Chemotherapy FOR Gastric Cancer with Peritoneal Metastasis. *J Gasyrointest Surg* 2012;16:2190-2196.