

# 胃癌診療指引共識

## 一、參與討論同仁

主席	彭汪嘉康院長	
附設醫院	黃昱閔醫師 (消化外科)	唐瑞祥醫師 (消化內科)
	謝政毅 醫師 (血液腫瘤科)	李婉玫 副主任 (癌症中心)
	李玉婷 個管師 (癌症中心)	
萬芳醫院	謝茂志醫師 (一般外科)	呂長運 醫師 (一般外科)
	張家崙醫師 (血液腫瘤科)	胡瑾瑜個管師 (癌症中心)
雙和醫院	謝耀宇醫師 (血液腫瘤科)	林嘉琦個管師 (癌症中心)
臺北癌症中心	邱仲峰 副院長 (放射腫瘤科)	廖裕民 醫師 (血液腫瘤科)
	李佳穗 領航護理師	

二、討論日期：107 年 11 月 07 日

三、校稿人員：謝耀宇醫師 / 林嘉琦個管師

## 107 年版與上一版差異：

106 年版	107 年修訂版
<p>胃癌診療指引共識 -1 選擇性檢查</p>	<p>新增 MMR/PD-L1</p>
<p>《胃癌診療指引共識 -3》</p> <ol style="list-style-type: none"><li>1. 化學治療</li><li>2. 化學治療 或 臨床試驗 或 支持療法</li></ol>	<p>修訂</p> <ul style="list-style-type: none"><li>• 全身性治療</li></ul> <p>修訂 • 全身性治療 或 同步化放療 或 臨床試驗 或 支持療法</p>

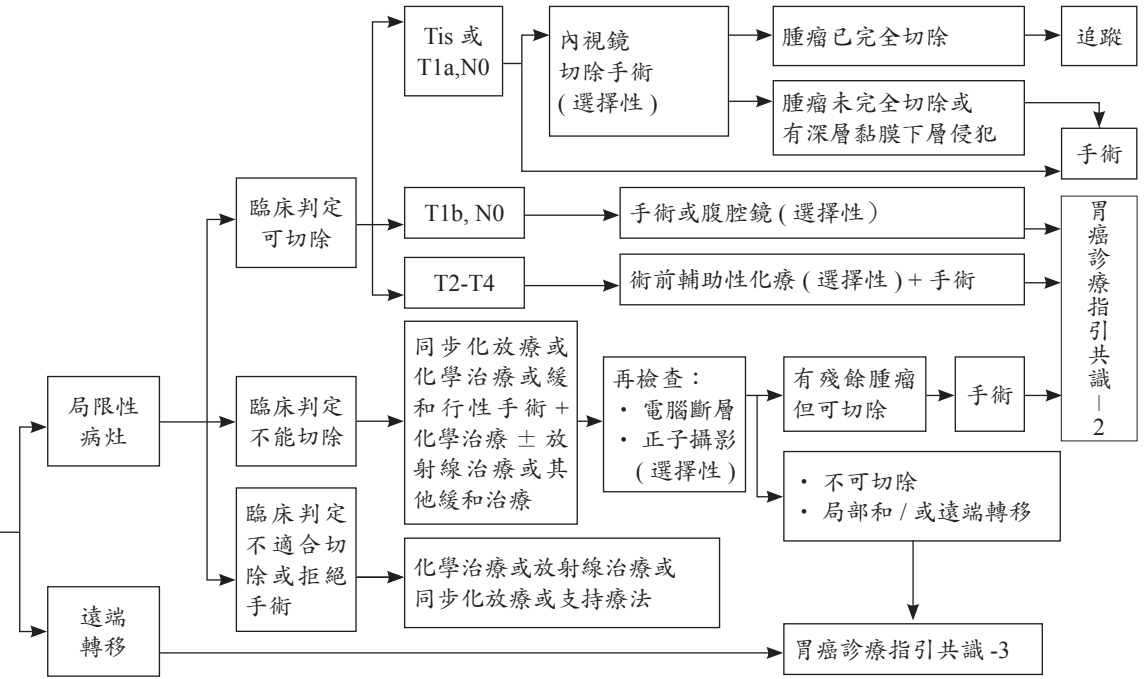
## 初步評估

## 臨床診斷

## 臨床分期

## 主要治療

- 必要檢查**
- 病史及理學檢查
  - 胸部 X 光
  - 胸腹及骨盆腔電腦斷層加顯影劑
  - 上消化道內視鏡及切片
- 選擇性檢查**
- Her2/neu (stage IV)
  - 診斷性腹腔鏡
  - MMR/PD-L1
  - 上腸胃道鉬劑攝影
  - 內視鏡超音波
  - 骨骼掃描
  - 正子攝影
  - 營養評估

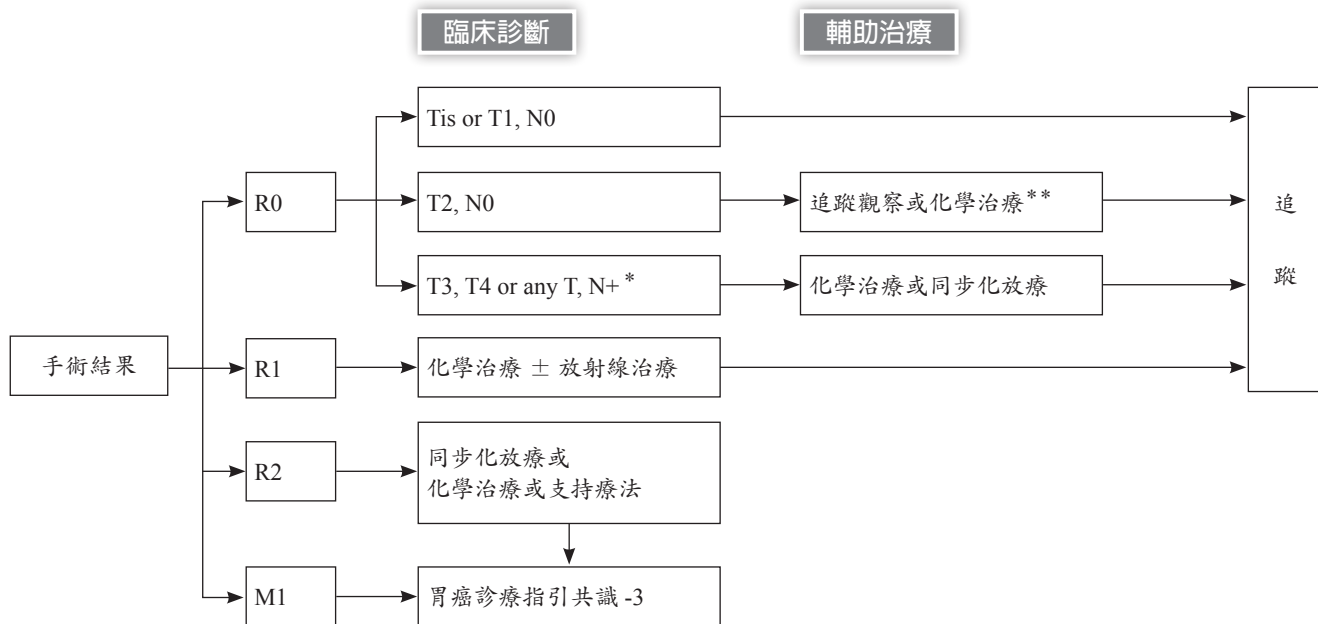


《胃癌診療指引共識 1》

癌症診療指引

註：Tis, T1, T2, T3, T4 為腫瘤大小和範圍；N0: 無淋巴轉移

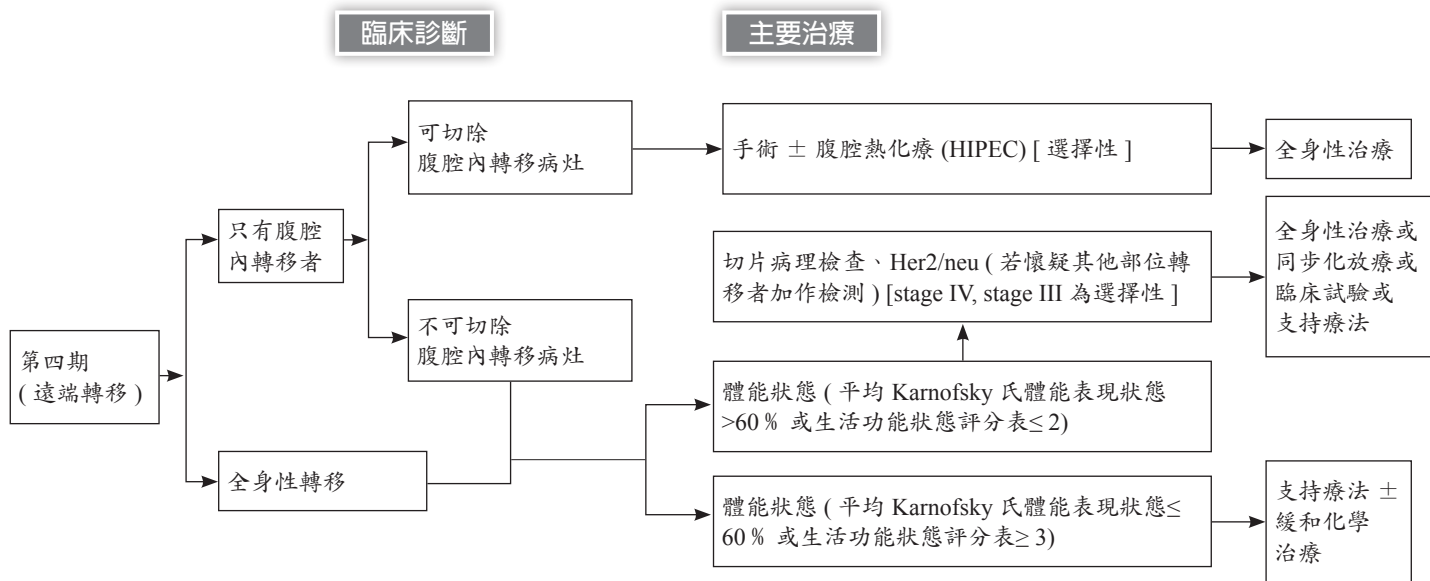
## 《胃癌診療指引共識 -2》



\* N+ : stage III 以上且 N2-3，需作 Adjuvant Chemotherapy

\*\* NCCN ( T2,N0: High risk features include poorly differentiated or higher grade cancer. Lymphovascular invasion. neural invasion or < 50 years of age .)

註：Tis,T1,T2,T3, T4 為腫瘤大小和範圍；N0: 無淋巴轉移



註 1 HIPEC 腹腔熱化療經台北市衛生局核定為新醫療技術，非屬人體試驗部分。

註 2 有出血或阻塞之病兆，可行緩和和手術 / 放射線治療 / 營養支持。

## 《胃癌治療後追蹤流程》

### (一) 手術後一至二年內

- (1) 應每三至六個月進行至少一項胸部及腹部影像學檢查及腫瘤指標追蹤。術後一年內需有至少一次內視鏡檢查，後依臨床狀況追蹤胃鏡。
- (2) 接受內視鏡切除手術者 (ESD、EMR)，術後一年內，每半年追蹤胃鏡一次，之後每年追蹤胃鏡一次。

### (二) 手術後三至五年內

- (1) 應每六至十二個月進行至少一項胸部及腹部影像學檢查及腫瘤指標追蹤。依臨床狀況追蹤胃鏡。
- (2) 接受內視鏡切除手術者 (ESD、EMR)，每年追蹤胃鏡一次。

### (三) 術後五年後依臨床狀況追蹤胸部及腹部影像學檢查及腫瘤指標追蹤。

1. NCCN Clinical Practice Guidelines in Oncology. Gastric Cancer. Version 2. 2018.
2. Gill RS, Al-Adra DP, Nagendran J, et al. Treatment of gastric cancer with peritoneal carcinomatosis by cytoreductive surgery and HIPEC: A systematic review of survival, mortality, and morbidity. *Journal of Surgical Oncology* 2011;104: 692–698.
3. Ung L, Chua TC, Morris DL, Cure for peritoneal metastases? An evidence-based review. *ANZ J Surg.* 2013; 83 (11) : 821-6.
4. Levine EA, Stewart JH, Shen P, Russell GB, Loggie BL, Votanopoulos KI. Intraperitoneal chemotherapy for peritoneal surface malignancy: experience with 1,000 patients. *J Am Coll Surg.* 2014 Apr;218(4):573-85.
5. Jorgensen JT, Hersom M. HER2 as a Prognostic Marker in Gastric Cancer - A Systematic Analysis of Data from the Literature. *J Cancer* 2012;3:137-144
6. Grabsch H, Sivakumar S, Gray S, et al. HER2 expression in gastric cancer: Rare, heterogeneous and of no prognostic value - conclusions from 924 cases of two independent series. *Cell Oncol* 2010;32:57-65
7. Choi KS, Jung HY, Choi KD, et al. EMR versus gastrectomy for intramucosal gastric cancer: comparison of long-term outcomes. *Gastrointest Endosc* 2011;73:942-948
8. Smalley SR, Benedetti JK, Haller DG, et al. Updated Analysis of SWOG-Directed Intergroup Study 0116: A Phase III Trial of Adjuvant Radiochemotherapy Versus Observation After Curative Gastric Cancer Resection. *Journal of Clinical Oncology* 2012;30:2327-2333.
9. Kang JH, Lee SI, Lim do H, et al. Salvage chemotherapy for pretreated gastric cancer: a randomized phase III trial comparing chemotherapy plus best supportive care with best supportive care
10. Repici A, Zullo A, Hassan C, et al. Endoscopic submucosal dissection of early gastric neoplastic lesions: a western series. *Eur J Gastroenterol Hepatol* 2013;25:1261-1264.
11. Gill RS, Al-Adra DP, Nagendran J, et al. Treatment of gastric cancer with peritoneal carcinomatosis by cytoreductive surgery and HIPEC: A systematic review of survival, mortality, and morbidity. *Journal of Surgical Oncology* 2011;104: 692–698.
12. Ung L, Chua TC, Morris DL, Cure for peritoneal metastases? An evidence-based review. *ANZ J Surg.* 2013; 83 (11) : 821-6.
13. Levine EA, Stewart JH, Shen P, Russell GB, Loggie BL, Votanopoulos KI. Intraperitoneal chemotherapy for peritoneal surface malignancy: experience with 1,000 patients. *J Am Coll Surg.* 2014 Apr;218(4):573-85.

14. Rudloff U, Langan RC, Mullinax JE, Beane JD, Steinberg SM, Beresnev T, Webb CC, Walker M, Toomey MA, Schrupp D, Pandalai P, Stojadinovic A, Avital I., Impact of maximal cytoreductive surgery plus regional heated intraperitoneal chemotherapy (HIPEC) on outcome of patients with peritoneal carcinomatosis of gastric origin: results of the GYMSSA trial. *J Surg Oncol.* 2014,110(3):275-84.
15. Kim KW, Chow O, Parikh K, Blank S, Jibara G, Kadri H, Labow DM, Hiotis SP. Peritoneal carcinomatosis in patients with gastric cancer, and the role for surgical resection, cytoreductive surgery, and hyperthermic intraperitoneal chemotherapy. *Am J Surg.* 2014, 207(1):78-83.



## 《胃癌抗癌藥物治療指引》

### Preoperative Chemoradiation Therapy

#### PREFERRED REGIMENS

##### Cisplatin + 5-FU

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Oxaliplatin	85	1	Q2W	3(RT) + 3	3
Leucovorin	400	1	Q2W	3(RT) + 3	
5-FU	400	1	Q2W	3(RT) + 3	
5-FU	800*	1-2	Q2W	3(RT) + 3	

\* Continuous infusion for 24 hours

##### Oxaliplatin + Capecitabine

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Oxaliplatin	85	1, 15, 29		1	5
Capecitabine	625 PO BID	1-5	QW	5	

##### Paclitaxel + Carboplatin

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Paclitaxel	50	1	QW	5	6
Carboplatin	AUC 2	1	QW	5	

## OTHER REGIMENS

### Cisplatin + 5-FU

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Cisplatin	100	1, 29	Q35D	1	1
5-FU	1000*	1-4, 29-32	Q35D	1	

\* Continuous infusion for 24 hours

### Oxaliplatin + Capecitabine

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Cisplatin	15	1-5	Q3W	2	2
5-FU	800*	1-5	Q3W	2	

\* Continuous infusion for 24 hours

### Cisplatin + Capecitabine

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Cisplatin	30	1	QW	5	4
Capecitabine	800 PO BID	1-5	QW	5	

### Paclitaxel + Fluoropyrimidine

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Paclitaxel	45	1	QW	5	7
5-FU	300*	1-5	QW	5	

\* Continuous infusion for 24 hour

## Postoperative Chemoradiation

### 5-FU (bolus) and Leucovorin MODIFICATIONS

#### 1 cycle before and 2 cycles after chemoradiation

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Capecitabine	650-1000 PO BID	1-14	Q4W	1 before + 2 after	8

#### 2 cycle before and 4 cycles after chemoradiation

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Leucovorin	400	1	Q2W	2 before + 4 after	9
5-Fu	400	1	Q2W	2 before + 4 after	
5-Fu	2400*	1	Q2W	2 before + 4 after	

\* Continuous infusion for 46 hours

#### With radiation

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
5-FU	225*	1-5 or 1-7	QW	5	10

\* Continuous infusion for 24 hours

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Capecitabine	825 PO BID	1-5 or 1-7	QW	3	11

## Postoperative Chemotherapy

(for patients who have undergone primary D2 lymph node dissection)

### Oxaliplatin + Capecitabine

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Oxaliplatin	130	1	Q3W	8	12
Capecitabine	1000 PO BID	1-14	Q3W	8	

### Cisplatin + Capecitabine

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Cisplatin	60	1	Q3W	6	13
Capecitabine	1000 PO BID	1-14	Q3W	6	

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
UFUR	300-350/day PO	1-28			39

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
TS-1	40-75 PO	1-28 (1-14)	Q42D (Q3W)		40

### Cisplatin + 5-FU

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Cisplatin	60	1	Q3W	6	37
5-FU	1200	1-4	Q3W	6	

## Systemic therapy for metastatic or locally advanced cancer

(where local therapy is not indicated)

### FIRST-LINE THERAPY

#### Trastuzumab (with chemotherapy)

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Trastuzumab	8 → 6 mg/kg	1	Q3W		14

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Trastuzumab	6 → 4 mg/kg	1	Q2W		14

### PREFERRED REGIMENS

#### Fluoropyrimidine + Cisplatin

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Cisplatin	100	1	Q4W	6	17
5-FU	1000*	1-5	Q4W	6	

\* Continuous infusion for 24 hours

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Cisplatin	50	1	Q2W		18, 19
Leucovorin	200	1	Q2W		
5-FU	2000*	1	Q2W		

\* Continuous infusion for 24 hours

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Cisplatin	80	1	Q3W		20
Capecitabine	1000 PO BID	1-4	Q3W		

### Oxaliplatin + Fluoropyrimidine

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Oxaliplatin	85	1	Q2W		21
Leucovorin	400	1	Q2W		
5-FU	400	1	Q2W		
5-FU	1200*	1-2	Q2W		

\* Continuous infusion for 24 hours

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Oxaliplatin	85	1	Q2W		18
Leucovorin	200	1	Q2W		
5-FU	2600*	1	Q2W		

\* Continuous infusion for 24 hours

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Oxaliplatin	130	1	Q3W		22
Capecitabine	1000 PO BID	1-14	Q3W		

### High dose FL

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Leucovorin	150	1	QW	6	38
5-FU	2600*	1	QW	6	

\* Continuous infusion for 24 hours

### OTHER REGIMENS

#### Paclitaxel + Cisplatin/Carboplatin

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Paclitaxel	200*	1	Q3W		23
Cisplatin	75	2	Q3W		

\* Continuous infusion for 24 hours

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Paclitaxel	175	1	Q3W		41
Cisplatin	70	1	Q3W		

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Paclitaxel	90	1	Q2W		24
Cisplatin	50	1	Q2W		

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Paclitaxel	200	1	Q3W		25
Carboplatin	AUC 5	1	Q3W		

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Paclitaxel	175	1	Q3W		42
Carboplatin	AUC 5	1	Q3W		

### Docetaxel + Cisplatin

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Docetaxel	75	1	Q3W	Max 6	26, 27
Cisplatin	70	1	Q3W	Max 6	

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Docetaxel	85	1	Q3W		26, 27
Cisplatin	75	1	Q3W		

### Fluoropyrimidine

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Leucovorin	400	1	Q2W		19
5-FU	400	1	Q2W		
5-FU	1200*	1-2	Q2W		

\* Continuous infusion for 24 hours

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
5-FU	800*	1-5	Q4W		28

\* Continuous infusion for 24 hours



藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Capecitabine	1250 PO BID	1-14	Q3W	Max 6	29

### Taxane

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Docetaxel	75 or 100	1	Q3W		30, 31

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Docetaxel	75 or 100	1	Q3W		30, 31

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Paclitaxel	80	1	QW	4	32

### Irinotecan + 5-FU

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Irinotecan	180	1	Q2W		33
Leucovorin	400	1	Q2W		
5-FU	400	1	Q2W		
5-FU	1200*	1-2	Q2W		

\* Continuous infusion for 24 hours

### DCF modifications

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Docetaxel	50	1	Q2W		34
Oxaliplatin	85	1	Q2W		
5-FU	1200*	1-2	Q2W		

\* Continuous infusion for 24 hours

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Docetaxel	40	1	Q2W		35
Leucovorin	400	1	Q2W		
5-FU	400	1	Q2W		
5-FU	1000*	1-2	Q2W		
Cisplatin	40	3	Q2W		

\* Continuous infusion for 24 hours

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Docetaxel	75	1	Q3W		36
Carboplatin	AUC 6	2	Q3W		
5-FU	1200*	1-3	Q2W		

\* Continuous infusion for 24 hours

### ECF modifications

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Epirubicin	50	1	Q3W		15, 16
Cisplatin	60	1	Q3W		
Capecitabine	625 PO BID	1-21	Q3W		

藥品名	劑量 mg/m <sup>2</sup>	給藥日	頻率	週期	參考文獻
Epirubicin	50	1	Q3W		15, 16
Oxaliplatin	130	1	Q3W		
Capecitabine	625 PO BID	1-21	Q2W		

## 參考文獻

1. Tepper J, Krasna MJ, Niedzwiecki D, et al. Phase III trial of trimodality therapy with cisplatin, fluorouracil, radiotherapy, and surgery compared with surgery alone for esophageal cancer: CALGB 9781. *J Clin Oncol* 2008;26:1086-1092.
2. Bedenne L, Michel P, Bouche O, et al. Chemoradiation followed by surgery compared with chemoradiation alone in squamous cancer of the esophagus: FFCO 9102. *J Clin Oncol* 2007;25:1160-1168
3. Conroy T, Galais MP, Raoul JL, et al. Definitive chemoradiotherapy with FOLFOX versus fluorouracil and cisplatin in patients with oesophageal cancer (PRODIGE5/ ACCORD17): final results of a randomised, phase 2/3 trial. *Lancet Oncol* 2014;15:305-314
4. Lee SS, Kim SB, Park SI, et al. Capecitabine and cisplatin chemotherapy (XP) alone or sequentially combined chemoradiotherapy containing XP regimen in patients with three different settings of stage IV esophageal cancer. *Jpn J Clin Oncol* 2007;37:829-835
5. Javle MM, Yang G, Nwogu CE, et al. Capecitabine, oxaliplatin and radiotherapy: a phase IB neoadjuvant study for esophageal cancer with gene expression analysis. *Cancer Invest* 2009;27:193-200
6. van Hagen P, Hulshof MC, van Lanschot JJ, et al. Preoperative chemoradiotherapy for esophageal or junctional cancer. *N Engl J Med* 2012;366:2074-2084.
7. Ajani JA, Winter K, Okawara GS, et al. Phase II trial of preoperative chemoradiation in patients with localized gastric adenocarcinoma (RTOG 9904): quality of combined modality therapy and pathologic response. *J Clin Oncol* 2006;24:3953-3958.
8. Jansen EP, Boot H, Saunders MP, et al. A phase I-II study of postoperative capecitabine-based chemoradiotherapy in gastric cancer. *Int J Radiat Oncol Biol Phys* 2007;69:1424-1428.
9. NCCN. [GAST-F 7 of 12] gastric cancer: version 2, 2018.
10. Leong T, Joon DL, Willis D, et al. Adjuvant chemoradiation for gastric cancer using epirubicin, cisplatin, and 5-fluorouracil before and after three-dimensional conformal radiotherapy with concurrent infusional 5-fluorouracil: a multicenter study of the Trans-Tasman Radiation Oncology Group. *Int J Radiat Oncol Biol Phys* 2011;79:690-695.

11. Lee HS, Choi Y, Hur WJ, et al. Pilot study of postoperative adjuvant chemoradiation for advanced gastric cancer: adjuvant 5-FU/ cisplatin and chemoradiation with capecitabine. *World J Gastroenterol* 2006;12:603-607.
12. Noh SH, Park SR, Yang HK, 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; 15:1389-1396.
13. Lee J, Lim do H, Kim S, et al. Phase III trial comparing capecitabine plus cisplatin versus capecitabine plus cisplatin with concurrent capecitabine radiotherapy in completely resected gastric cancer with D2 lymph node dissection: the ARTIST trial. *J Clin Oncol* 2012;30:268-273.
14. Bang YJ, Van Cutsem E, Feyereislova A, 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* 2010;376:687-697.
15. Cunningham D, Starling N, Rao S, et al. Capecitabine and oxaliplatin for advanced esophagogastric cancer. *N Engl J Med* 2008;358:36-46
16. Sumpter K, Harper-Wynne C, Cunningham D, 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. *Br J Cancer* 2005;92:1976-1983.
17. Lorenzen S, Schuster T, Porschen R, et al. Cetuximab plus cisplatin-5-fluorouracil versus cisplatin-5-fluorouracil alone in first-line metastatic squamous cell carcinoma of the esophagus: a randomized phase II study of the Arbeitsgemeinschaft Internistische Onkologie. *Ann Oncol* 2009;20:1667-1673.
18. Al-Batran S-E, Hartmann JT, Probst S, et al. Phase III trial in metastatic gastroesophageal adenocarcinoma with fluorouracil, leucovorin plus either oxaliplatin or cisplatin: a study of the Arbeitsgemeinschaft Internistische Onkologie. *J Clin Oncol* 2008;26:1435-1442.
19. Bouche O, Raoul JL, Bonnetain F, et al. Randomized multicenter phase II trial of a biweekly regimen of fluorouracil and leucovorin (LV5FU2), LV5FU2 plus cisplatin, or LV5FU2 plus irinotecan in patients with previously untreated metastatic gastric cancer: a Federation Francophone de Cancerologie Digestive Group Study--FFCD 9803. *J Clin Oncol* 2004;22:4319-4328.
20. Kang YK, Kang WK, Shin DB, et al. Capecitabine/cisplatin versus 5-fluorouracil/cisplatin as first-line therapy in patients with

- advanced gastric cancer: a randomised phase III noninferiority trial. *Ann Oncol* 2009;20:666-673.
21. Enzinger PC, Burtness B, Hollis D, et al. CALGB 80403/ ECOG 1206: A randomized phase II study of three standard chemotherapy regimens (ECF, IC, FOLFOX) plus cetuximab in metastatic esophageal and GE junction cancer [abstract]. *J Clin Oncol* 2010;28 (Suppl 15):Abstract 4006.
  22. 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.
  23. Ilson DH, Forastiere A, Arquette M, et al. A phase II trial of paclitaxel and cisplatin in patients with advanced carcinoma of the esophagus. *Cancer J* 2000;6:316-323.
  24. Petrasch S, Welt A, Reinacher A, et al. Chemotherapy with cisplatin and paclitaxel in patients with locally advanced, recurrent or metastatic oesophageal cancer. *Br J Cancer* 1998;78:511-514.
  25. Gadgeel SM, Shields AF, Heilbrun LK, et al. Phase II study of paclitaxel and carboplatin in patients with advanced gastric cancer. *Am J Clin Oncol* 2003;26:37-41.
  26. Kim JY, Do YR, Park KU, et al. A multi-center phase II study of docetaxel plus cisplatin as first-line therapy in patients with metastatic squamous cell esophageal cancer. *Cancer Chemother Pharmacol* 2010;66:31-36.
  27. Ajani JA, Fodor MB, Tjulandin SA, et al. Phase II multi-institutional randomized trial of docetaxel plus cisplatin with or without fluorouracil in patients with untreated, advanced gastric, or gastroesophageal adenocarcinoma. *J Clin Oncol* 2005;23:5660-5667.
  28. Ohtsu A, Shimada Y, Shirao K, et al. Randomized phase III trial of fluorouracil alone versus fluorouracil plus cisplatin versus uracil and tegafur plus mitomycin in patients with unresectable, advanced gastric cancer: The Japan Clinical Oncology Group Study (JCOG9205). *J Clin Oncol* 2003;21:54-59.
  29. Hong YS, Song SY, Lee SI, et al. A phase II trial of capecitabine in previously untreated patients with advanced and/ or metastatic gastric cancer. *Ann Oncol* 2004;15:1344-1347.
  30. Albertsson M, Johansson B, Friesland S, et al. Phase II studies on docetaxel alone every third week, or weekly in combination with gemcitabine in patients with primary locally advanced, metastatic, or recurrent esophageal cancer. *Med Oncol* 2007;24:407-412.

31. Ford HE, Marshall A, Bridgewater JA, 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.
32. Ajani JA, Ilson DH, Daugherty K, et al. Activity of taxol in patients with squamous cell carcinoma and adenocarcinoma of the esophagus. *J Natl Cancer Inst* 1994;86:1086-1091.
33. Guimbaud R, Louvet C, Ries P, et al. Prospective, randomized, multicenter, phase III study of fluorouracil, leucovorin, and irinotecan versus epirubicin, cisplatin, and capecitabine in advanced gastric adenocarcinoma: A French Intergroup (Fédération Francophone de Cancérologie Digestive, Fédération Nationale des Centres de Lutte Contre le Cancer, and Groupe Coopérateur Multidisciplinaire en Oncologie) Study. *J Clin Oncol* 2014;32:3520-3526.
34. Shah MA, Janjigian YY, Stoller R, et al. Randomized multicenter phase II study of modified docetaxel, cisplatin, and fluorouracil (DCF) versus DCF plus growth factor support in patients with metastatic gastric adenocarcinoma: a study of the US Gastric Cancer Consortium. *J Clin Oncol* 2015;33:3874-3879.
35. Shankaran V, Mulcahy MF, Hochster HS, et al. Docetaxel, oxaliplatin, and 5-fluorouracil for the treatment of metastatic or unresectable gastric or gastroesophageal junction (GEJ) adenocarcinomas: Preliminary results of a phase II study. *Gastrointestinal Cancers Symposium 2009:Abstract 47*
36. Elkerem YM, Elsaid A, AL-Batran S, Pauligk C. Final results of a phase II trial of docetaxel-carboplatin-FU in locally advanced gastric carcinoma [abstract] [abstract]. Presented at the 2008 Gastrointestinal Cancers Symposium 2008. Abstract 38.
37. T. M. Kim, J. S. Kim, et al. Adjuvant 5-FU/cisplatin (FP) chemotherapy in curatively resected stage IIIA-IV M0 gastric cancer. *Journal of Clinical Oncology* 2005; 23: 4214-4214.
38. Lin YC, Liu HE, et al. Clinical benefit and response in patients with gastric cancer to weekly 24-hour infusion of high-dose 5-fluorouracil (5-FU) and leucovorin (LV). *Anticancer Res.* 1999;19(6C):5615-20.
39. Product Information: UFUR Capsule. tegafur, uracil oral capsules. 2015.
40. Product Information: TS-1 capsules. Tegafur, Gimeracil, Oteracil potassium oral capsules. 2015.
41. Kim Y, Kim M, Lee SH, et al. Paclitaxel and cisplatin combination chemotherapy for advanced gastric cancer failed to 5-fluorouracil-based chemotherapy. *Journal of Clinical Oncology* 2010; 28(15).
42. Prithviraj GK, Baksh K, Fulp W, et al. Carboplatin and paclitaxel as first-line treatment of unresectable or metastatic esophageal or gastric cancer. *Dis Esophagus.* 2015 Nov-Dec;28(8):782-7.

## 一、治療範圍

1. 胃部腫瘤
2. 手術後殘餘腫瘤或腫瘤原發部位
3. 腹腔內淋巴轉移病灶
4. 腹腔淋巴轉移高風險範圍

## 二、治療劑量 / 次數

1. 術後無殘餘：48Gy(45.0-50.4Gy) / 次數 27 次 (25-28 次)
2. 術後有殘餘：53Gy(50.0-55.8Gy) / 次數 28 次 (25-31 次)

## 三、治療方式：

使用強度調控放射治療技術，包含弧形及螺旋放射規劃，可考慮搭配影像導引治療，治療選擇可使用同步照射高與低危險部位的方式或先給予整個照射部位部份劑量照射後，再針對高危險部位加強劑量。

## 四、參考文獻：

1. NCCN clinical practice guidelines in oncology-Gastric cancer. version 2.2018.
2. Willett CG, et al. Principles and Practice of Radiation Oncology. 5th edition; Philadelphia: Lippincott Williams & Wilkins; 2007. pp. 1318-1335.
3. RTOG 0114 Protocol Information Randomized Phase II Comparison of Two Cisplatin-Paclitaxel Containing Chemoradiation Regimens in Resected Gastric Cancers 4.2011.