



仁愛醫療財團法人
JEN-AI HOSPITAL

直腸癌診療指引

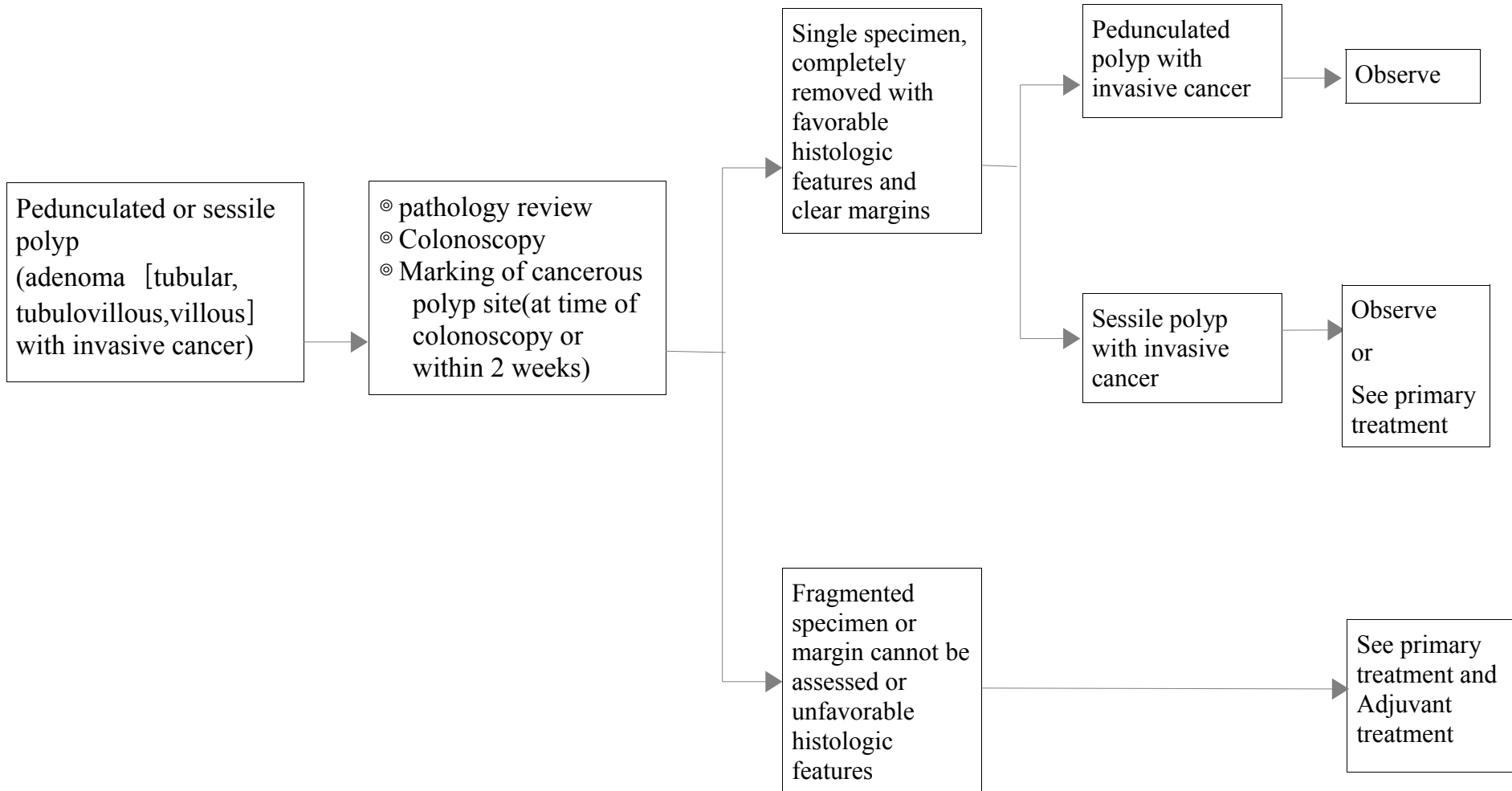
2009年06月03日制定
2010年05月11日一修
2011年05月25日二修
2012年05月30日三修
2013年03月27日四修
2014年02月26日五修
2015年02月25日六修
2016年02月24日七修
2017年02月22日八修
2018年02月21日九修

直腸癌醫療團隊共同制定

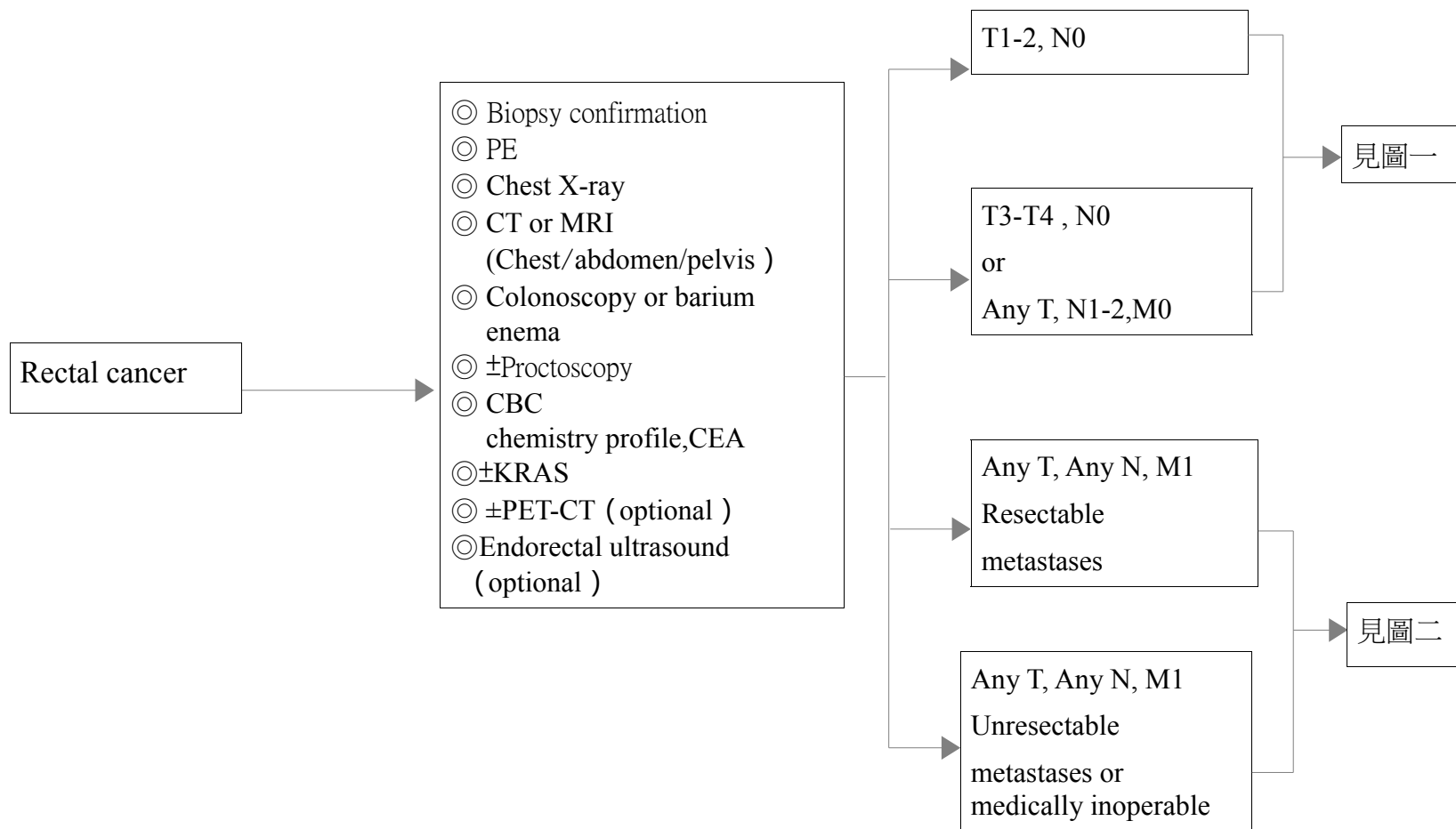
修訂原則

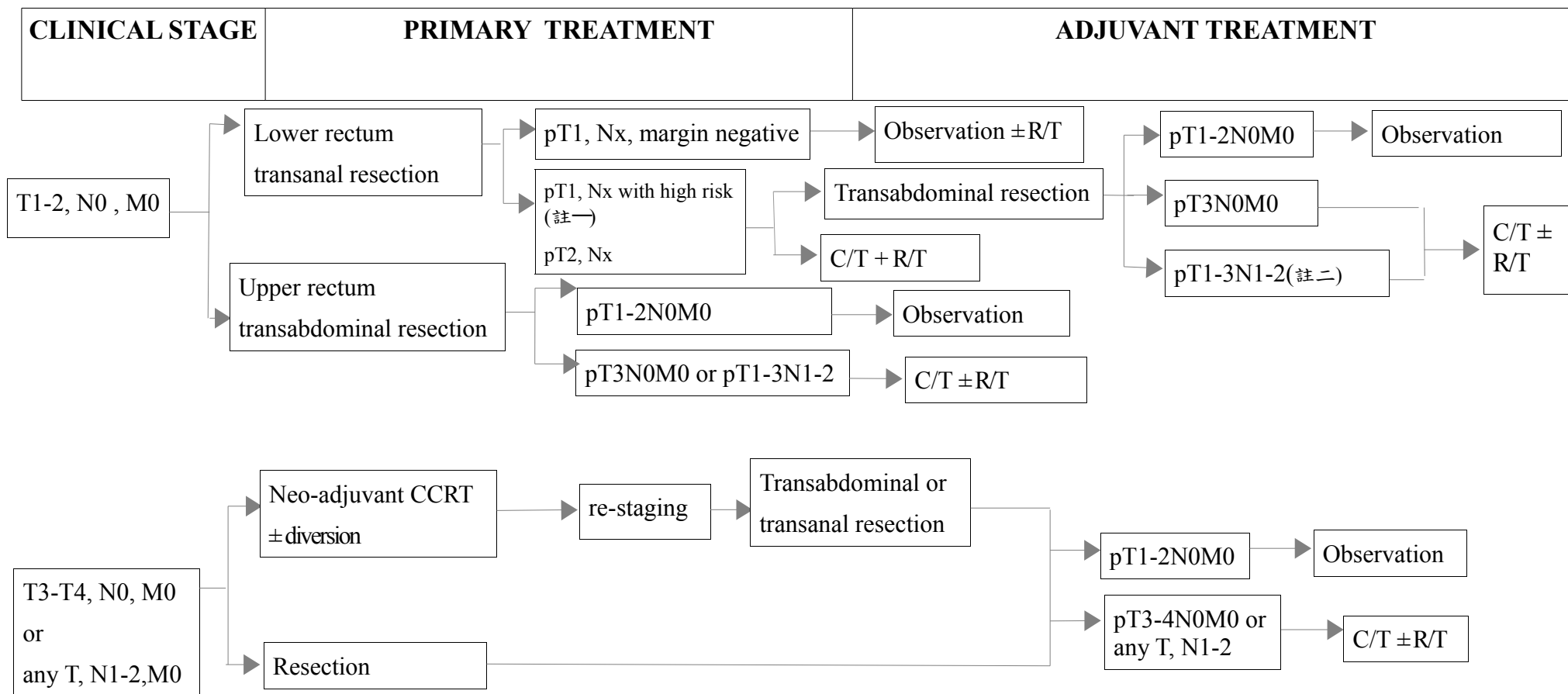
- 參與修訂科別:大腸直腸外科、一般外科、消化系內科、放射診斷科、
病理科、腫瘤治療科、血液暨腫瘤內科、安寧緩和團隊。
- 診療指引需符合以下原則：
 - 一、依據實證醫學精神，並於指引中註明主要參考文獻（至少為 peer review article，若引用醫院之資料庫資料需提供分析及討論紀錄。
 - 二、參酌國情並經院內共識討論，且有相關會議紀錄佐證。
 - 三、定期檢視改版（至少每年一次，且明確標示制訂或修訂日期）。
 - 四、團隊共識後所訂之指引，應提送癌委會核備後公告。

CLINICAL PRESENTATION	WORK UP	FINDINGS
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CLINICAL PRESENTATION	WORK UP	CLINICAL STAGE	Management
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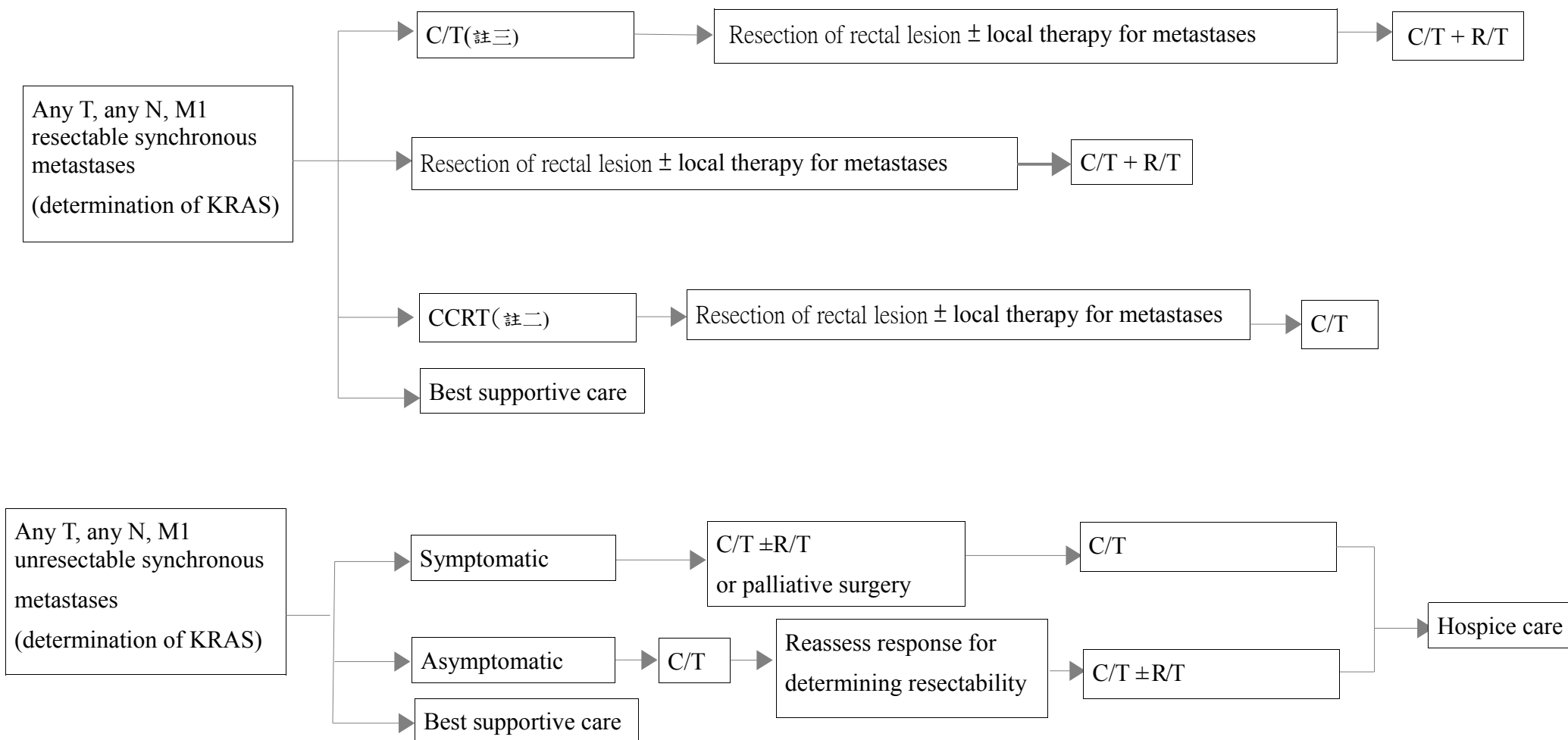




註一：Positive margin、lymphovascular or perineural invasion and poorly differentiated tumor

圖一

CLINICAL STAGE	PRIMARY TREATMENT	ADJUVANT TREATMENT
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註二：Capecitabine/ R/T then 5FU ± leucovorin or FOLFOX or capecitabine ± oxaliplatin (or UFUR)

註三：FOLFIRI or FOLFOX(CapeOX) ± bevacizumab, FOLFIRI ± cetuximab

圖二

FOLLOW-UP

Time	3m	6m	9m	1yr	3m	6m	9m	2yr	6m	3yr	6m	4yr	6m	5yr
History and PE	■	■	■	■	■	■	■	■	■	■	■	■	■	■
CEA	■	■	■	■	■	■	■	■	■	■	■	■	■	■
CXR	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sono	■	■	■	■	■	■	■	■	■	■	■	■	■	■
CT				■				■		■		■		■
Colonoscopy		■		■		■		■		■		■		■

備註：新診斷個案於手術前未行全大腸鏡檢，術後6個月內應施做全大腸鏡檢（或直腸鏡+下消化道雙鉬劑攝影）

直腸癌化療處方 Chemotherapy regimen		
治療目的	組套編碼	處方內容
Adjuvant	RECA1	MFOLFOX- 6^{3,57,58} Oxaliplatin 85 mg/m ² , IV over 2 hours, day 1 Leucovorin 400 mg/m ² in NS 250 mL, IV over 2 hour, days 1,2 (before 5FU) 5-FU 400 mg/m ² /day IV bolus, DAYS 1 Fluorouracil 1200 mg/m ² /day, IV CI 24 hour days 1,2 Repeat every 2 weeks
	RECA2	RECA2_Simplified biweekly infusional 5-FU/LV (sLV5FU2)¹ Leucovorin 400 mg/m ² in NS 250 mL, IV over 2 hour, days 1,2 5-FU 400 mg/m ² /day IV bolus, DAYS 1 5-FU 1200 mg/m ² /day, in NS 500 mL, IV 24 hour, days 1,2 Repeat every 2 weeks to a total of 6 months perioperative therapy
	RECA3	CapeOX^{45,59} Oxaliplatin 130 mg/m ² , in D5W 250 mL, IV over 2 hours, D1 Capecitabine 1000 mg/m ² , PO twice daily, D1-14 Repeat every 3 weeks x 24 wks to a total of 6 months perioperative therapy
	RECA4	Capecitabine¹ Capecitabine 1250 mg/m ² /day, PO in twice daily, days 1-14 Repeat every 3 weeks to a total of 6 months perioperative therapy
	RECA5	Uracil-Tegafur⁶⁰ UFUR 400 mg/day, oral daily x 2 years

CCRT	RECRT01	XRT + 5-FU/leucovorin⁴² 5-FU 400 mg/m ² IV bolus + leucovorin 20 mg/m ² IV bolus for 4 days during weeks 1 and 5 of XRT
	RECRT02	Weekly 5-FU/RT⁵¹ 5-FU 450 mg/m ² , in NS 100 mL, IV over 15min weekly during all radiotherapy
	RECRT03	XRT /UFUR/ leucovorin (Orally)(CRS)²⁸ UFUR 300 mg/m ² /day PO, days 1-28 leucovorin 60 mg/m ² /day, PO days 1-28 during entire course of RT(XRT total dose 45 Gy over 4 weeks)
	RECRT04	XRT + Capecitabine^{18,36} Capecitabine 825 mg/m ² twice daily 5 days/week + XRT x 5 weeks
Advanced Metastasis (Oxaliplatin based)	RECOPOX1	mFOLFOX^{3,57,58} Oxaliplatin 85mg/m ² , in D5W 250 mL, IV over 2 hours, day 1 Leucovorin 400 mg/m ² in NS 250 mL, IV over 2 hour, days 1,2 (before 5FU) 5-FU 400 mg/m ² /day IV bolus, DAYS 1 5-FU 1200 mg/m ² /day, in NS 500 mL, IV CI 24 hour, days 1,2 Repeat every 2 weeks
	RECPOX1-1	FOLFOX (Oxaliplatin-based)^{3,4,13} mFOLFOX 6 + Bevacizumab^{3,4,13} Bevacizumab 5mg/kg IV, day1 Oxaliplatin 85mg/m ² , in D5W 250 mL, IV over 2 hours, day 1 Leucovorin 400 mg/m ² in NS 250 mL, IV over 2 hour, days 1,2 (before 5FU) 5-FU 400 mg/m ² /day IV bolus, DAYS 1

		5-FU 1200 mg/m ² /day,in NS 500 mL,IV CI 24 hour, days 1,2 Repeat every 2 weeks
	RECPOX1-2	mFOLFOX 6 + Aflibercept ^{4,64} Aflibercept 4mg/kg IV, day 1 With Oxaliplatin 85mg/m ² ,in D5W 250 mL,IV over 2 hours,day 1 Leucovorin 400 mg/m ² IV infusion to match duration of Irinotecan infusion,day 1 5-FU 400 mg/m ² ,IV bolus ,day 1 5-FU 1200 mg/m ² /day in N/S 500 mL IV CI 24 hours,day 1,2 (total 2400 mg/m ² over 46-48 hour) Repeat every 2 weeks
	RECPOX1-3	mFOLFOX 6 + Cetuximab ^{4,61} Cetuximab 400 mg/m ² IV over 2 hours first infusion, then 250 mg/m ² ,IV over 60 minutes weekly Or Cetuximab 500 mg/m ² IV over 2 hours, day 1, every 2 weeks With Oxaliplatin 85mg/m ² in D5W 250 mL IV over 2 hours,day 1 Leucovorin 400 mg/m ² /day infusion to match duration of Irinotecan infusion,day 1 5-FU 400 mg/m ² ,IV bolus ,day 1 5-FU 1200 mg/m ² /day in N/S 500 mL IV CI 24 hours,day 1,2 (total 2400 mg/m ² over 46-48 hour) Repeat every 2 weeks
	RECPOX1-4	mFOLFOX 6 + Panitumumab(KRAS/NRAS WT gene only) ^{4,62} Panitumumab 6mg/kg IV 60 minutes, day 1 With Oxaliplatin 85mg/m ² in D5W 250 mL IV over 2 hours,day 1 Leucovorin 400 mg/m ² /day in NS 250ml IV over 2 hours ,day 1 5-FU 400 mg/m ² ,IV bolus ,day 1 5-FU 1200 mg/m ² /day in N/S 500 mL IV CI 24 hours,day 1,2 (total 2400 mg/m ² over 46-

		48 hour) Repeat every 2 weeks
	RECPOX2	CapeOX⁶³ Oxaliplatin 130mg/m ² ,in D5W 250 mL, IV over 2 hours,day 1 Capecitabine 850-1000 mg/ m ² PO twice daily, days 1-14 Repeat every 3 weeks
	RECPOX2-1	CapeOX⁶³ + Bevacizumab^{3,14,46} Bevacizumab 7.5mg/kg IV,day1 Oxaliplatin 130mg/m ² ,in D5W 250 mL, IV over 2 hours,day 1 Capecitabine 850-1000 mg/ m ² PO twice daily, days 1-14 Repeat every 3 weeks
Advanced Metastasis (Irinotecan based)	RECPIRI1	FOLFIRI (Irinotecan-based)¹ Irinotecan 180 mg/ m ² ,,in NS 250 mL, IV over 90 minutes , day 1 Leucovorin 400 mg/m2 in NS 250 mL,IV over 2 hour,days 1,2 (before 5FU) 5-FU 400 mg/m2 ,IV bolus ,day 1 5-FU 1200 mg/m ² /day, IV CI 24 hour, days 1,2 Repeat every 2 weeks
	RECPIRI1-1	FOLFIRI + Bevacizumab^{1,16} Bevacizumab 5mg/kg, IV, every 2 weeks Irinotecan 180 mg/ m ² ,in NS 250 mL,IV over 30-90 minutes , day 1 Leucovorin 400 mg/m2 in NS 250 mL,IV over 2 hour,days 1,2 (before 5FU) 5-FU 400 mg/m2 ,IV bolus ,day 1

		<p>5-FU 1200 mg/m²/day,in NS 500 mL,IV CI 24 hour, days 1,2</p> <p>Repeat every 2 weeks</p>
	RECPIR11-2	<p>FOLFIRI + Cetuximab^{1,5}</p> <p>Cetuximab 500 mg/m² IV over 2 hours, day 1, every 2 weeks</p> <p>Or</p> <p>Cetuximab 400 mg/m² IV over 2 hours first infusion, then 250 mg/m² IV over 60 minutes weekly</p> <p>With</p> <p>Irinotecan 180 mg/ m² ,in NS 250 mL,IV over 90 minutes , day 1</p> <p>Leucovorin 400 mg/m² in NS 250 mL,IV over 2 hour,days 1,2</p> <p>5-FU 400 mg/m² ,IV bolus ,day 1</p> <p>5-FU 1200 mg/m² /day,in NS 500 mL,IV CI 24 hour,days 1,2</p> <p>Repeat every 2 weeks</p>
Advanced Metastasis (Irinotecan based)	RECPIR11-3	<p>mFOLFIRI+ Ziv-Aflibercept^{1,64}</p> <p>Ziv-Aflibercept 4mg/kg IV, day 1</p> <p>With</p> <p>Irinotecan 180mg/m² ,in NS 250 mL,IV over 90 min,day 1</p> <p>Leucovorin 400 mg/m² /day,in NS 250 mL,IV over 2 hour,days 1,2</p> <p>5-FU 400 mg/m² ,IV bolus ,day 1</p> <p>5-FU 1200 mg/m² /day ,in NS 500 mL,IV CI 24 hourse,day 1,2</p> <p>Repeat every 2 weeks</p>
	RECPIR11-4	<p>mFOLFIRI+ Panitumumab(KRAS/NRAS WT gene only)^{1,65}</p> <p>Panitumumab 8mg/kg IV 60 minutes, day 1</p> <p>With</p> <p>Irinotecan 180mg/m² ,in NS 250 mL,IV over 90 min,day 1</p> <p>Leucovorin 400 mg/m² /day,in NS 250 mL,IV over 2 hour,days 1,2</p> <p>5-FU 400 mg/m² ,IV bolus ,day 1</p> <p>5-FU 1200 mg/m² /day ,in NS 500 mL,IV CI 24 hourse,day 1,2(total 2400 mg/m² over 46-48 hour)</p>

		Repeat every 2 weeks
	RECPIR11-5	<p>FOLFIRI+Ramucirumab⁶⁹ Ramucirumab 8mg/kg IV 60 minutes, day 1 With Irinotecan 180mg/m² ,in NS 250 mL,IV over 90 min,day 1 Leucovorin 400 mg/m² /day, IV infusion to match duration of Irinotecan infusion,day 1 5-FU 400 mg/m² ,IV bolus ,day 1 5-FU 1200 mg/m² /day ,in NS 500 mL,IV CI 24 hourse,day 1,2(total 2400 mg/m² over 46-48 hour) Repeat every 2 weeks</p>
	RECPIR12 RECPIR12-1	<p>Cetuximab (KRAS /NRAS WT only)± irinotecan ^{8,29,66} RECPIR12 irinotecan ^{21,32} Irinotecan 180 mg/ m²,in NS 250 mL IV over 90 minutes , day 1 Repeat every 2 weeks RECPIR12-1irinotecan ^{8,66}/Cetuximab²⁹ Irinotecan 180 mg/ m²,in NS 250 mL,IV over 90 minutes ,day 1 Cetuximab 500 mg/m² IV every 2 weeks Repeat every 2 weeks</p>
Advanced Metastasis (5-FU based)	RECPFU1	<p>Weekly 5-FU/leucovorin (5FU-based)¹⁰ Leucovorin 500 mg/ m², in NS 250 mL,IV over 2 hours, days 1 5-FU 2600 mg/ m², in NS 500 mL,IV 24 hour, day 1 Repeat every week</p>
	RECPFU2	<p>Simplified biweekly infusional 5-Fu/LV(sLV5FU2)¹ Leucovorin 400 mg/ m² ,in NS 250 mL,IV over 2 hours on day 1,2 5-FU 400 mg/m² ,IV bolus ,day 1 5-FU 1200 mg/ m² IV ,in NS 500 mL,24-hour,day 1,2 Repeat every 2 weeks</p>

	RECP02	Capecitabine ⁴⁷ Capecitabine 850-1250 mg/m ² /day, PO twice daily, days 1-14 Repeat every 3 weeks
	RECP02 RECP02-1	Capecitabine ⁴⁷ ± Bevacizumab ⁴⁶ ± Bevacizumab 7.5mg/kg IV, day 1 Capecitabine 850-1250 mg/m ² /day, PO twice daily, days 1-14 Repeat every 3 weeks
	RECP05	Uracil-Tegafur ⁶⁰ Uracil-Tegafur 400mg/day PO daily
Advanced Metastasis (Other regimens)	RECP01	IROX ¹⁹ Oxaliplatin 85mg/m ² ,in D5W 250 mL,IV over 2 hours, days 1 Followed by Irinotecan 200mg/m ² ,in NS 250 mL,IVover 90minutes, days 1 Repeat every 3 weeks
	RECP03	FOLFOXIRI ¹⁵ ± Bevacizumab ²² ± Bevacizumab 5mg/kg IV, day 1 Irinotecan 165mg/m ² ,in NS 250 mL,IV over 90minutes,day 1, Ooxaliplatin 85mg/m ² ,in D5W 250 mL,IV over 2 hours,day 1, Leucovorin 400 mg/m ² in NS 250 mL,IV over 2 hour days 1,2 (before 5FU) 5-FU 400 mg/m ² ,IV bolus ,day 1 Ffluorouracil 1600 mg/ m ² /day IV CI 24 hour, days 1,2 Repeat every 2 weeks
	RECP04	Cetuximab (KRAS /NRAS WT only) ^{29,48} Cetuximab 400 mg/m ² first infusion, then 250 mg/m ² IV weekly Or Cetuximab 500 mg/m ² IV over 2 hours, day 1,every 2 weekly

	RECP09	Regorafenib ⁶⁷ Regorafenib 160mg , po once daily 1-21,Q28D
	RECP10	Panitumumab (KRAS /NRAS WT only) ⁶⁸ Panitumumab 6mg/kg IV 60 minutes every 2 weekly
		Pembrolizumab Pembrolizumab 2 mg/kg every 3 weeks
		Nivolumab Nivolumab 3 mg/kg every 2 weekl or Nivolumab 240 mg/kg IV every 2 weeks

直腸癌 Radiation therapy⁶

Treatment type	RT technique	Total dose	Fraction size / # Fractions	Note
Pre-operation CCRT ² (for sphincter preservation)	Conventionally Fractionated RT IGRT	45-50Gy to lymphatic drainage 54-60Gy to primary tumor	1.8-2Gy/ fraction	Surgery:4-8 weeks following the completion of radiation
Post-operation CCRT ^{30,33} (pT3-4 N0 & any TN4)	Conventionally Fractionated RT IGRT	45-50Gy to lymphatic drainage 54-60Gy to tumor bed	1.8-2Gy/ fraction	Perineal wound should be included within the fields
Palliative treatment for unresectable or inoperable disease	Conventionally Fractionated RT IGRT	50-65Gy to primary tumor	1.8-2Gy/ fraction	

註：實際治療分次劑量 × 總治療次數，應與處方劑量差異在±1Gy 內。

註：放射治療詳細流程請參照 直腸癌放射治療標準政策與執行規範。

