

高雄榮民總醫院

乳癌診療原則

2020年03月20日第一版

乳癌醫療團隊擬訂

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

- 本共識依下列參考資料修改版本
 - NCCN Clinical Practical Guidelines in Oncology™ Breast Cancer (Version 3. 2019)

《停藥機制》

- Progression: image ,tumor marker
- SAE:: severe side effect

會議討論

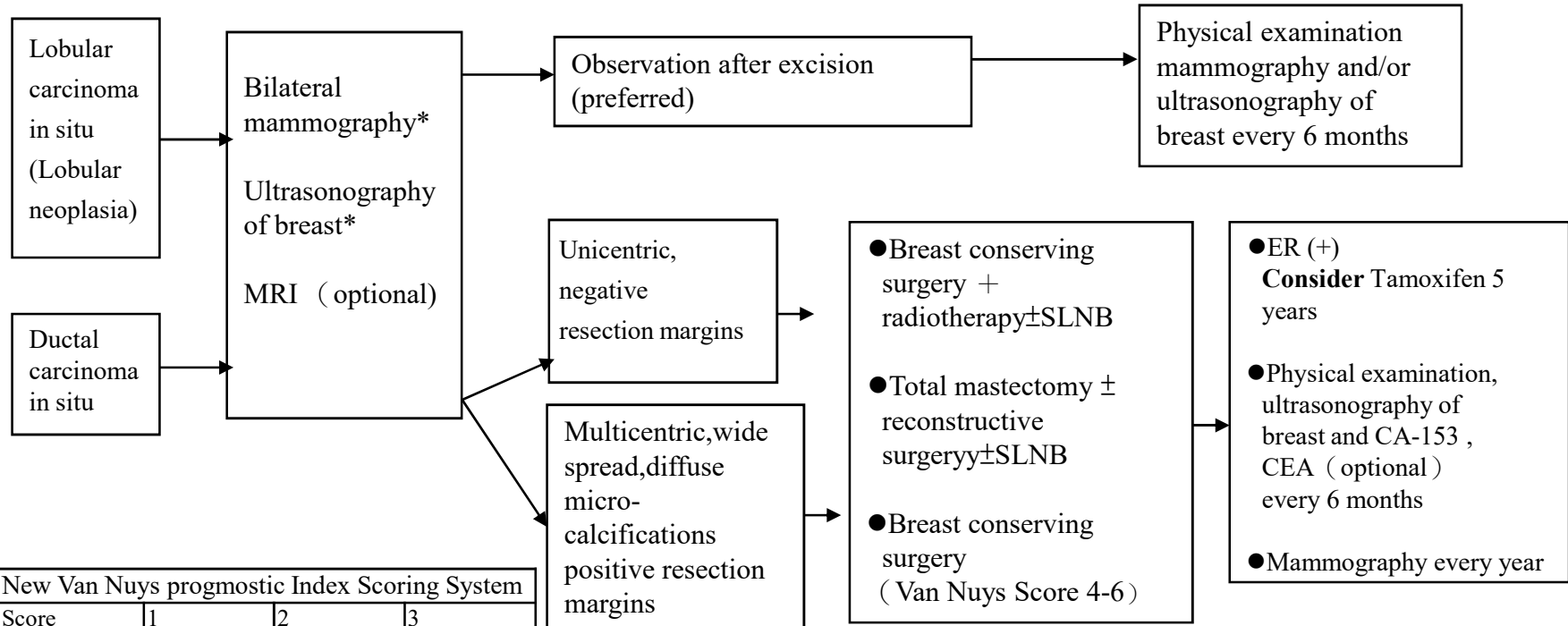
上次會議：2019/05/31

本共識與上一版的差異

上一版	新版
無。	<ol style="list-style-type: none">1. 新增乳癌治療處方<ul style="list-style-type: none">— Atezolizumab 840mg Q2WKLY (2020/2/11上線)— Ribociclib+Letrozole (2019/9/4上線)2. 經2019/12/6團隊共識會議結果：術前使用至少6個月荷爾蒙藥物視為Neoadjuvant hormone therapy，故Neoadjuvant新增Letrozole處方3. 因院內新增生物相似性藥品，將修改Herceptin、Perjeta處方名稱為Trastuzumab、Pertuzumab4. 「FEC or FLC+Taxol」、「FEC or FLC+Taxotere」此兩項處方已無使用，將其從指引處方中刪除。

Breast Cancer

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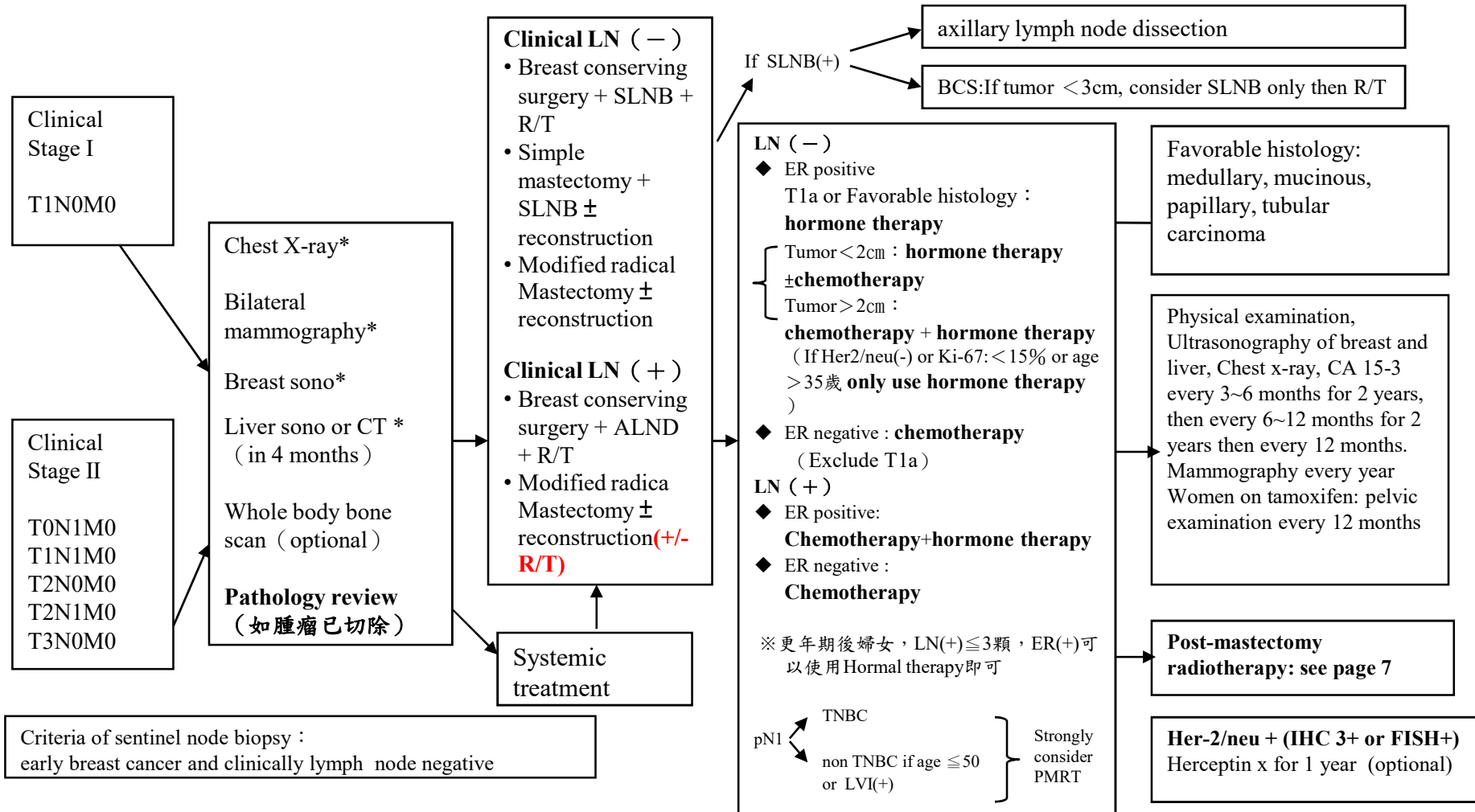
Score	1	2	3
Size	≤ m	1-6	≥ 7
Margin width	≥ m	1	< m
Pathologic classification	Non-high-Grade w/o necrosis	Non-high-Grade with necrosis	High-grade With or w/o necrosis
Age	>60	40-60	<40

*與期別相關之主要檢查

Breast Cancer

Kaohsiung Veterans General Hospital
Clinical Practice Guideline 2020.01 Version

DIAGNOSIS	WORK-UP	PRIMARY TREATMENT	ADJUVANT TREATMENT	FOLLOW-UP
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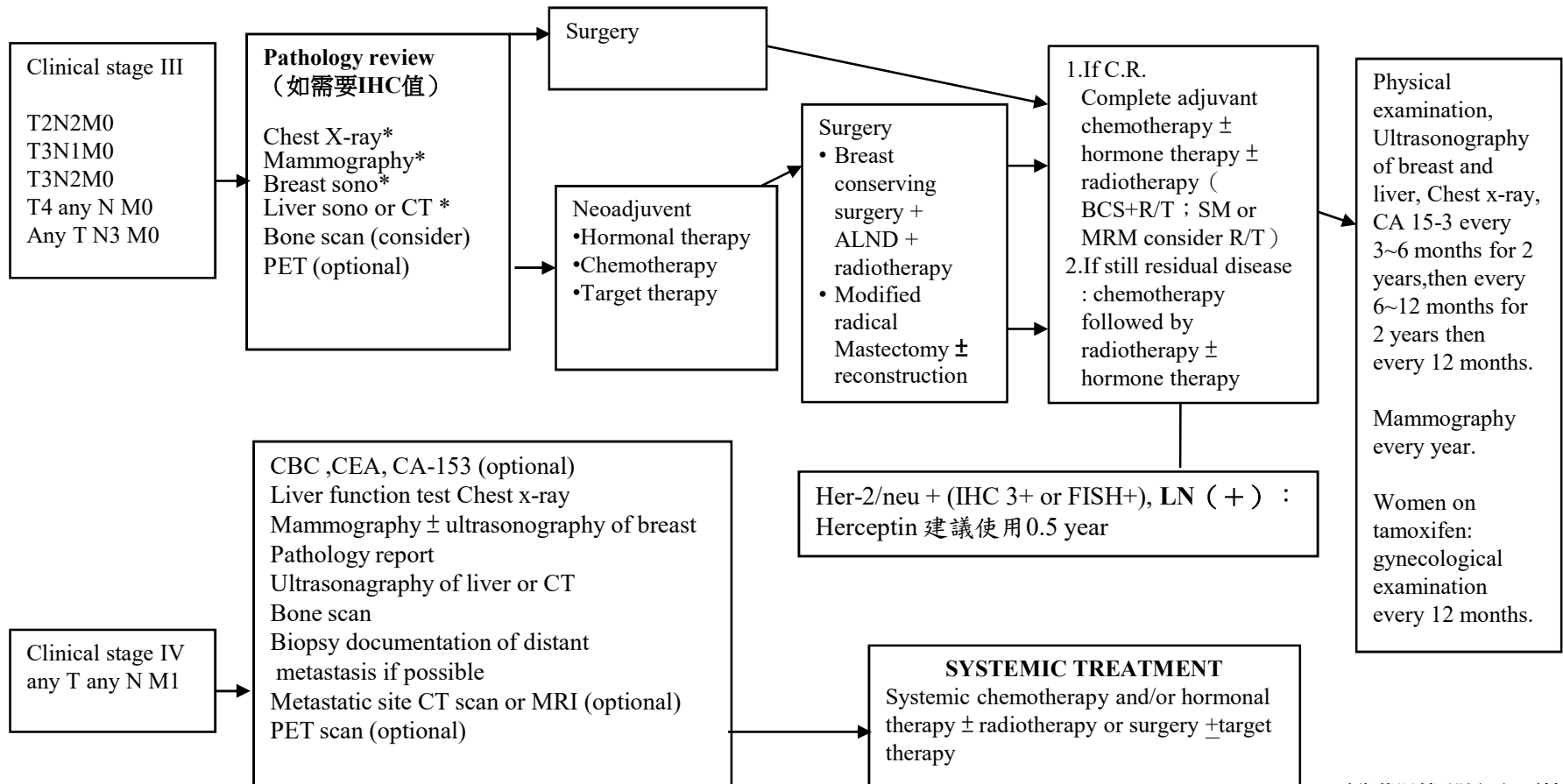
年齡 > 70歲或 ECOG功能狀態評分 ≥ 2 分，可考慮不做化學、放射治療

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DIAGNOSIS	WORK-UP	PRIMARY TREATMENT	ADJUVANT TREATMENT	FOLLOW-UP
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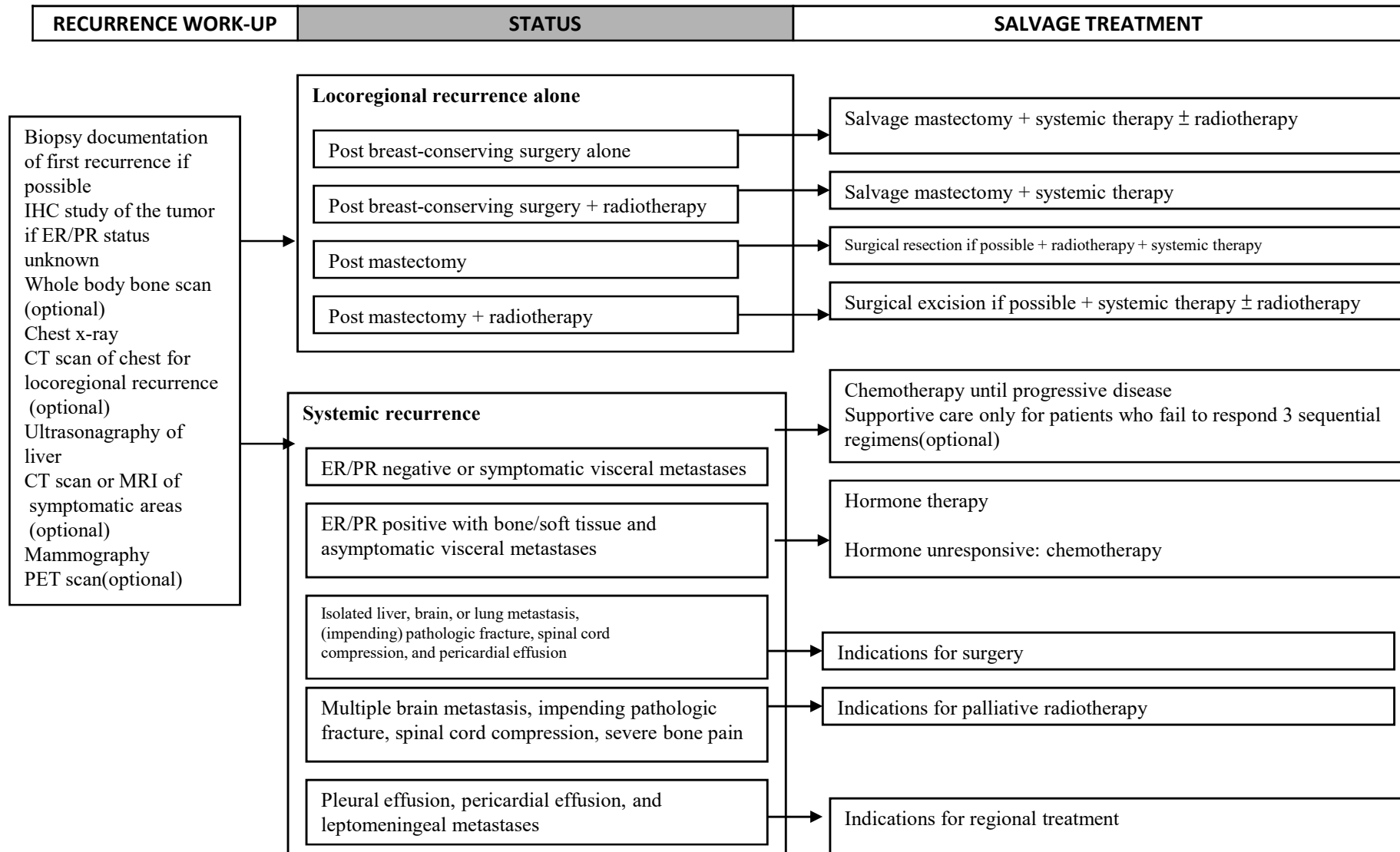


*與期別相關之主要檢查

年齡 > 70 歲或 ECOG 功能狀態評分 ≥ 2 分，可考慮不做化學、放射治療

Breast Cancer

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Breast Cancer

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住院放置人工血管術前一天
篩選具心臟毒性用藥／評估CRS分數

會診心臟內科醫師

後續追蹤

使用以下藥物，必須於首次治療前評估心臟功能：

- Trastuzumab
- Pertuzumab
- TDM-1
- Lapatinib

心臟功能評估項目：

- Echo
- NT-proBNP
- High sensitivity Troponin-I

• Trastuzumab治療中，每3個月追蹤滿一年。

• Epirubicin療程結束後，每6個月追蹤，滿2年。

使用以下藥物，評估以下危險因子，大於5分者必須於首次治療前評估心臟功能：

- Epirubicin

Table 2 Cardiotoxicity Risk Score (CRS)

Medication-related risk^a

- High (risk score 4)
- Intermediate (risk score 2)
- Low (risk score 1)
- Rare (risk score 0)

Examples^b

Anthracyclines; trastuzumab; cyclophosphamide; 5-fluorouracil
Pertuzumab; vinblastine; capecitabine; ponatinib
Bevacizumab; imatinib
Carboplatin; fludarabine; paclitaxel; rituximab

Patient-related risk factors (1 point per item)

- Cardiomyopathy or heart failure
- Coronary artery disease or equivalent (including peripheral artery disease)
- Hypertension
- Diabetes mellitus
- Prior or concurrent anthracyclines
- Prior or concurrent chest irradiation
- Age <15 years or >65 years
- Female gender

Overall risk by CRS and intensity of monitoring

- >6 Very high
- 5-6 High
- 3-4 Intermediate
- 1-2 Low
- 0 Very low

INDICATIONS FOR POST-MASTECTOMY RADIOTHERAPY

1. skin involvement (skin nodule, ulceration, dermal lymphatic involvement)
2. Chest wall involvement
3. positive axillary lymph nodes ≥ 4 , lymph nodes positive 1-3 (Strongly consider*)
4. positive or close surgical margin
5. tumor $\geq 5\text{cm}$, lymph nodes negative (optional), lymph nodes positive recommendation
6. gross multicentric disease (tumor in more than one quadrant and serpet at least 4cm by clinical or pathology)
7. for breast conservative treatment (if DCIS Van Nuys Score ≥ 7)

*乳房切除術(modified radical mastectomy)後之放射治療：

1. T3N+, T4或腋下淋巴結被癌細胞侵犯超過四顆(含)以上者
2. 手術範圍邊緣仍被癌細胞侵犯者
3. 腋下淋巴結被癌細胞侵犯一至三顆者，應與醫師討論是否需輔助性放射治療。年齡小於50歲、血管淋巴侵犯或三陰性患者，強烈建議接受輔助性放射治療
4. 若手術前接受過化學治療者應以化學治療前的疾病狀態及術後病理來考慮是否需輔助性放射治療。若為病理險是腫瘤完全消失(pCR)，可考慮不需術後放射治療。
5. T3N0, 手術界邊陽性或小於1mm，建議照射胸廓，是否加上局部淋巴區則依臨床判斷。
6. 如果病情需要應以術後放射治療與化學治療，通常以化學治療為先。

BASIC REQUIREMENTS OF RADIOTHERAPY

- Radiation fields should include ipsilateral chest wall, internal mammary chain and supraclavicular fossa
- Excluding heart from radiation fields
- Central lung distance of the tangential fields $< 3\text{ cm}$
- No axillary irradiation if axillary clearance is adequate

Excision biopsy with no prior suspicion for malignancy

- Exact tumor size and type of tumor
- Tumor histological and/or nuclear grade
- Margin status (exact distance in mm)
- Status of lymphovascular permeation
- ER and PR study

Ductal carcinoma in situ with wide excision only

- Nuclear grade
- Status of tumor necrosis
- Tumor size
- Margin status (exact distance in mm)
- ER/PR study

Invasive carcinoma with wide excision and axillary lymph node dissection or modified radical mastectomy

- Exact tumor size and type of tumor
- Tumor histological grade
- Margin status (exact distance in mm)
- Status of multifocality and multicentricity
- Presence of DCIS and status of extensive intraductal component
- Status of peritumoral LVI
- Number of involved and total axillary lymph nodes with extranodal extension, total number of axillary nodes examined should not be less than 10.
- If any involvement of skin
- ER and PR study Her-2/neu
- Ki-67

癌別：乳癌2018年

最近改版		2020/03/20		
Neoadjuvant	處方內容	Chemotherapy formula	schedule	Reference (No) /strength of evidence
		EC or LC (Epirubicin 90mg/m ² or Lipo-Dox 35mg/m ² + cyclophosphamide 500mg/m ²)	4-6 cycles	No 16 / Level I
		Taxol 80 mg/m ²	QWKLY	No 27,28,29/Level I
		Docetaxel 75mg/m ²	Q3WKLY	No 31 / Level I
		Trastuzumab 2~8 mg/kg	QWKLY or Q3WKLY	No 53 / Level I
		Trastuzumab SC	Q3WKLY	No 22 / Level I
		Trastuzumab + Pertuzumab (maintenance)	Q3WKLY	No 21 / Level I
		Trastuzumab + Pertuzumab (loading)	Q3WKLY	No 21 / Level I
		Bevacizumab	(D1 & D15)	No 19,56 / Level I
		Trastuzumab SC + Pertuzumab (maintenance)	Q3WKLY	No 67/ Level I
		Trastuzumab SC + Pertuzumab (loading)	Q3WKLY	No 67/Level I
		Letrozole 2.5 mg	1tab (QD) x14 day	No 47 / Level I
		Adjuvant	處方內容	Carboplatin AUC x5mg+ Docetaxel 75mg/m ²
Carboplatin AUC 4~6+ 5-FU 1000mg/m ²	Q3WKLY (新增2015/9/11			No 54,59 / Level I
Cisplatin 50mg/m ²	Q3WKLY			No 24 / Level I
Cisplatin 50mg/m ² + 5-FU 500mg/m ²	Q3WKLY			No 57 / Level I
Gemcitabine 1250mg/m ²	Q3WKLY			No 25 / Level I
Lipo-Dox 50mg/m ²	Q3WKLY			No 16,60 / Level I
Mitoxantrone 12mg/m ²	Q3WKLY (刪2019/2/22)			No 17 / Level I
Taxol 80mg/m ² + Gemcitabine 800mg/m ²	QWKLY Q3WKLY (刪2017/10/6)			No 26 / Level I
Taxol 80mg/m ² + Cisplatin 50mg/m ²	Q3WKLY			No 57 / Level I
Taxol 80mg/m ²	QWKLY			No 27,28,29/ Level I
Taxol 175mg/m ²	Q3WKLY			No 29 / Level I
Docetaxel 60mg/m ² + Cisplatin 50mg/m ²	Q3WKLY			No 30 / Level I
Docetaxel 75mg/m² + Gemcitabine 1000mg/m²	Q3WKLY (刪2017/10/6)			No 17 / Level I
Docetaxel 75mg/m ²	Q3WKLY			No 31 / Level I
TC (Docetaxel 75mg/m ² + Cyclophosphamide 500mg/m ²)	Q3WKLY			No 32 / Level I
Vinorelbine 25~30mg/m	D1 or D8	No 33 / Level I		

		Docetaxel 75mg/m ² x1 + Xeloda 2.5tab x14 day	Q3WKLY+14 day	No 34 / Level I
		Afinitor 5mg	2tab QD × 14 day	No 35,36 / Level I
		Xeloda 500mg	2tab Bid × 14 day	No 37 / Level I
		Cyclophosphamide	2tab QD × 14 day	No 38 / Level I
		Methotrexate	2tab (BIW) x14 day	No 62 / Level I
		Ufur	3cap (Bid) x14 day	No 61 / Level I
		Vinorelbine 30mg + Vinorelbine 20mg	2 cap1 + 1cap (QW) x 14 day	No 39 / Level I
		Bleomycin 50mg	once	No 65 / Level I
		FEC (5-FU500mg/m ² , Epirubicin75mg/m, cyclophosphamide 500mg/m ²)	2-6 cycles	No 2 / Level I
		FLC (5-FU 500mg/m ² , Lipo-Dox 35g/m ² , cyclophosphamide 500mg/m ²)	2-6 cycles	No 16 / Level I
		FEC or FLC + Taxol (Q3W) (QW)	2-4 cycles (Q3W) or 2-12 cycles (QW) (刪2020/3/20)	No 7 / Level I
		FEC or FLC + Taxotere (taxotere 75mg/m ²)	2-4 cycles (Q3W) (刪2020/3/20)	No 9 / Level I
		CMF (Cyclophosphamide 2tab/m ² + Methotrexate g/m ² + Fluorouracil 500~600mg/m ²)	6-12 cycles	No 2 / Level I
		EC or LC (Epirubicin 90mg/m ² or Lipo-Dox 35mg/m ² + cyclophosphamide 500mg/m ²)	6 cycles	No 16 / Level I
		TEC (Docetaxel 75mg/m ² + Epirubicin 75mg/m ² + cyclophosphamide 500mg/m ²)	6 cycles	No 3 / Level I
		Mitoxantrone 10mg/m ² + Leucovorine 170mg/m ² + 5-FU 600mg/m ² + Cisplatin 60 mg/m ²	Q3WKLY	No 66 / Level I
		IAIC for Epiricin 60mg	once	No 64 / Level I
		Eribulin:1.4mg/ m ²	on days 1 and 8, 21-day cycle	No 40 / Level I
		Bevacizumab + Paclitaxel	(D1 & D8& D15) (刪 2019/2/22)	No 19 / Level I
Hormone therapy	最新改版	2020/03/20		
	處方內容	Faslodex 250mg	Q28D	No 41 / Level I
		Goserelin 3.6mg	Q28D	No 42,43 / Level I
		Leuprorelin 3.75mg	Q28D	No 44 / Level I
		Anastrozole 1mg	1tab (QD) x14 day	No 45 / Level I
		Exemestane 25mg	1tab (QD) x14 day	No 46 / Level I
		Letrozole 2.5 mg	1tab (QD) x14 day	No 47 / Level I
		Palbociclib + Letrozole	1tab (QD) x21 day	No 20,48 / Level I
		Ribociclib + Letrozole	3cap (QD) x21天	No 69 / Level I
		Tamoxifen 10mg	1tab (BID) x28 day	No 49 / Level I
		Toremifene	1tab (QD) x28 day	No 63 / Level I

Target therapy	最近改版	2019/02/22		
	處方内容	Docetaxel 75mg/m ² + Herceptin 6-8 mg/kg	Q3WKLY (删2018/9/7)	No 17 / Level I
		Perjeta 420~840mg + Herceptin 6-8 mg/kg + Docetaxel 75mg/m ²	Q3WKLY (删2018/9/7)	No 17 / Level I
		Kadcyla 3.6 mg/kg	Q3WKLY	No 50 / Level I
		Tykerb 250mg + Xeloda 500mg	5 tab (QD) +2tab (Bid x14 day	No 51 / Level I
		Tykerb 250mg	5 tab (QD) x14 day	No 52 / Level I
		Trastuzumab 2~8 mg/kg	QWKLY or Q3WKLY	No 53 / Level I
		Trastuzumab SC	Q3WKLY	No 22 / Level I
		Trastuzumab + Pertuzumab (maintenance)	Q3WKLY	No 21 / Level I
		Trastuzumab + Pertuzumab (loading)	Q3WKLY	No 21 / Level I
		Trastuzumab SC + Pertuzumab (maintenance)	Q3WKLY	No 67 / Level I
		Trastuzumab SC + Pertuzumab (loading)	Q3WKLY	No 67 /Level I
Metastasis First line prescription	最近改版	2019/02/22		
	處方内容	Taxol 80 mg/m	QWKLY	No 29 / Level I
		Docetaxel 75mg/m ²	Q3WKLY	No 55 / Level I
		EC or LC (Epirubicin 90mg/m ² or Lipo-Dox 35mg/m ² + cyclophosphamide 500mg/m ²)	_6_ cycles	No 16 / Level I
		Bevacizumab + Paclitaxel	(D1 & D8& D15)- (删 2019/2/22)	No 19 / Level I
		Faslodex 250mg	Q28D	No 41 / Level I
		Goserelin 3.6mg	Q28D	No 42,43 / Level I
		Leuprorelin 3.75mg	Q28D	No 44 / Level I
		Letrozole 2.5 mg	1tab (QD) x14 day	No 47 / Level I
		Tamoxifen 10mg	1tab (BID) x28 day	No 49 / Level I
		Bevacizumab	(D1 & D15)	No 19,56 / Level I
		Perjeta 420~840mg + Herceptin 6-8 mg/kg + Docetaxel 75mg/m ²	Q3WKLY (删2018/9/7)	No 17 / Level I
		Kadcyla 3.6 mg/kg	Q3WKLY	No 50 / Level I
		Trastuzumab 2~8 mg/kg	QWKLY or Q3WKLY	No 53 / Level I
Atezolizumab 840mg	Q2WKLY	No 68 / Level I		

Reference for Neoadjuvant / Adjuvant Chemotherapy Regimens

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