



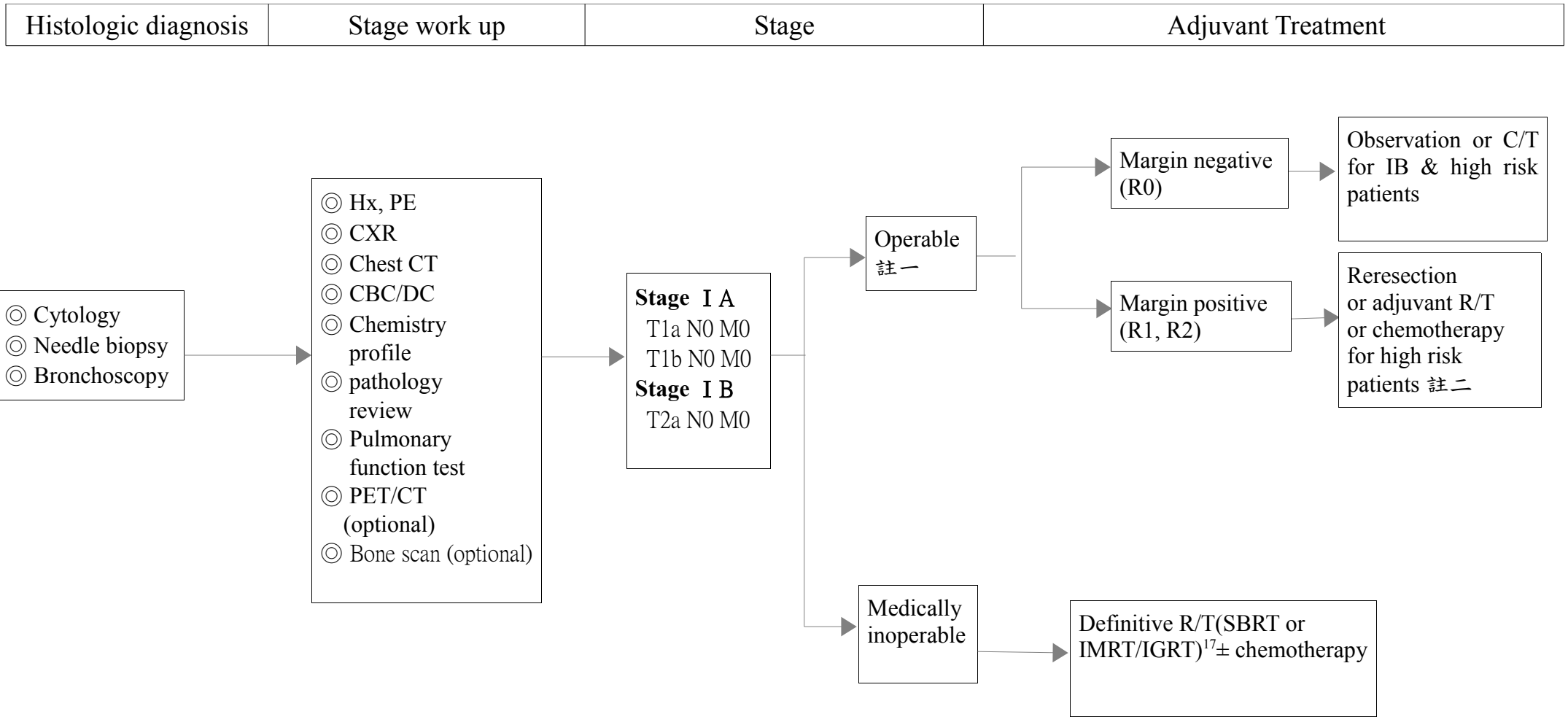
仁愛醫療財團法人  
*JEN-AI HOSPITAL*

# 非小細胞肺癌診療指引

2009年06月03日制定  
2010年03月16日一修  
2011年04月20日二修  
2012年04月18日三修  
2013年03月20日四修  
2014年02月19日五修  
2015年02月26日六修  
2016年02月17日七修  
2017年02月15日八修  
2018年02月14日九修  
肺癌醫療團隊共同制定

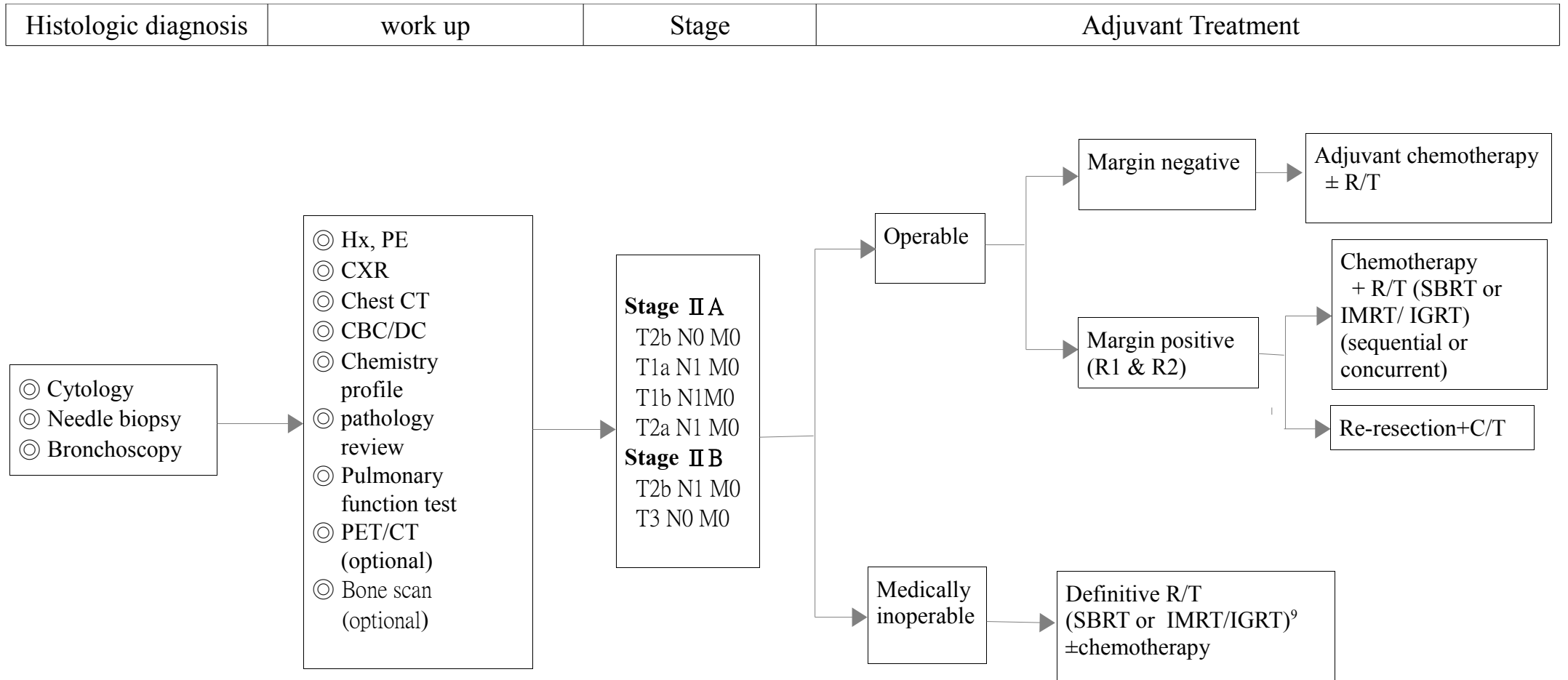
# 修訂原則

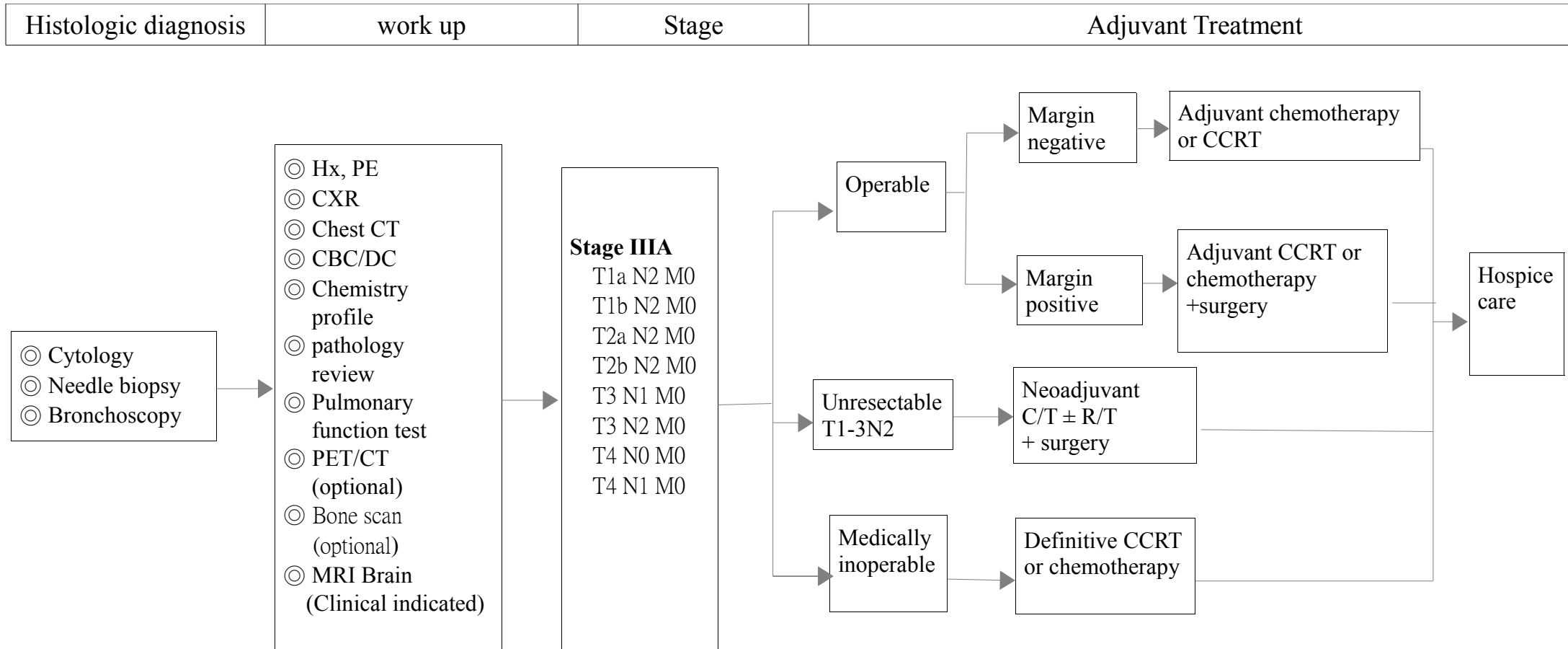
- 參與修訂科別：胸腔內科、放射診斷科、病理科、腫瘤治療科、血液暨腫瘤內科、安寧緩和團隊。
- 診療指引需符合以下原則：
  - 一、依據實證醫學精神，並於指引中註明主要參考文獻（至少為 peer review article，若引用醫院之資料庫資料需提供分析及討論紀錄。
  - 二、參酌國情並經院內共識討論，且有相關會議紀錄佐。
  - 三、定期檢視改版（至少每年一次，且明確標示制訂或修訂日期）。
  - 四、團隊共識後所訂之指引，應提送癌委會核備後公告。

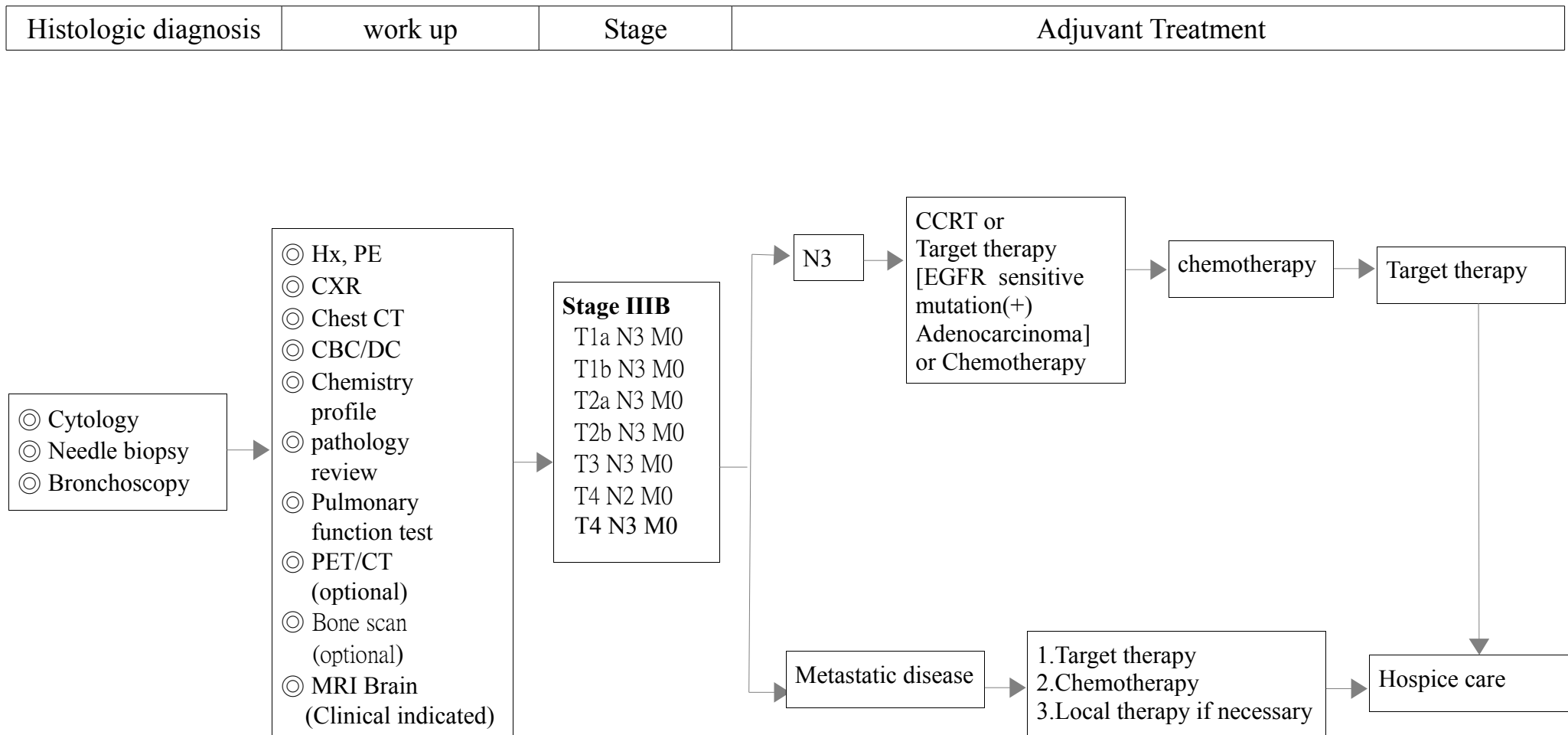


註一：Surgical exploration resection + mediastinal node dissection sampling。

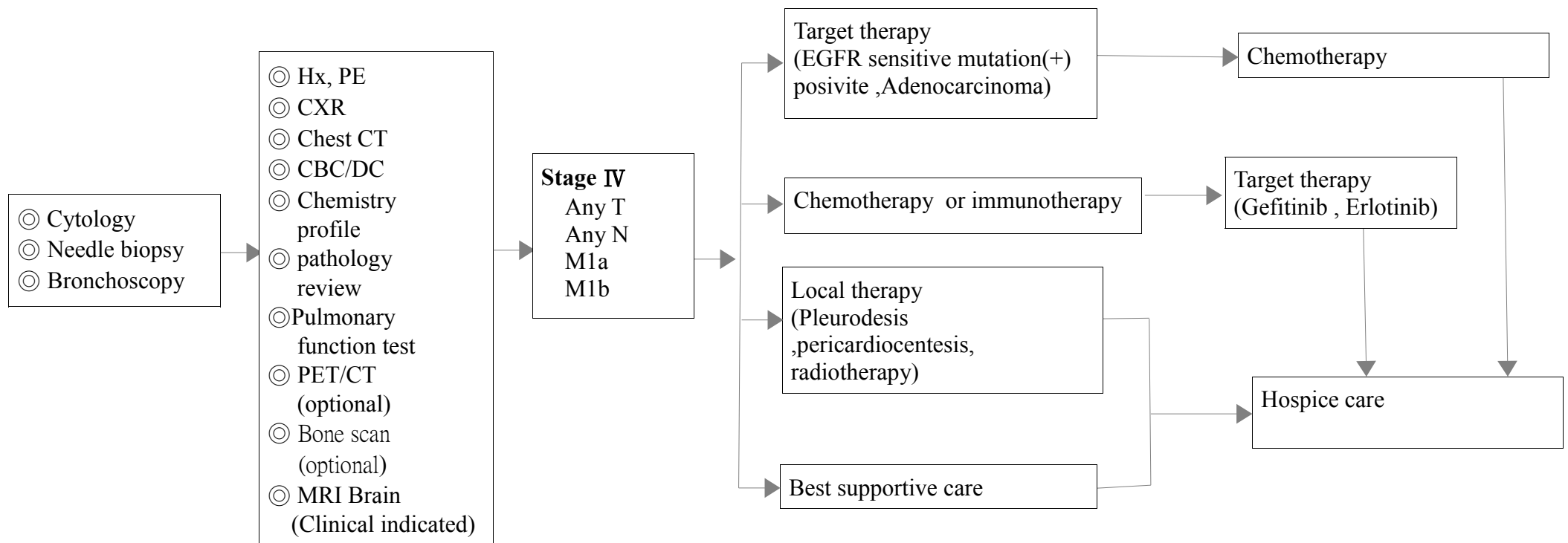
註二：High risk patients：1.poorly differentiated tumors；2.vascular invasion；3.wedge resection；4.tumors>4cm；5.visceral pleural involvement；6.incomplete lymph node sampling(Nx)。



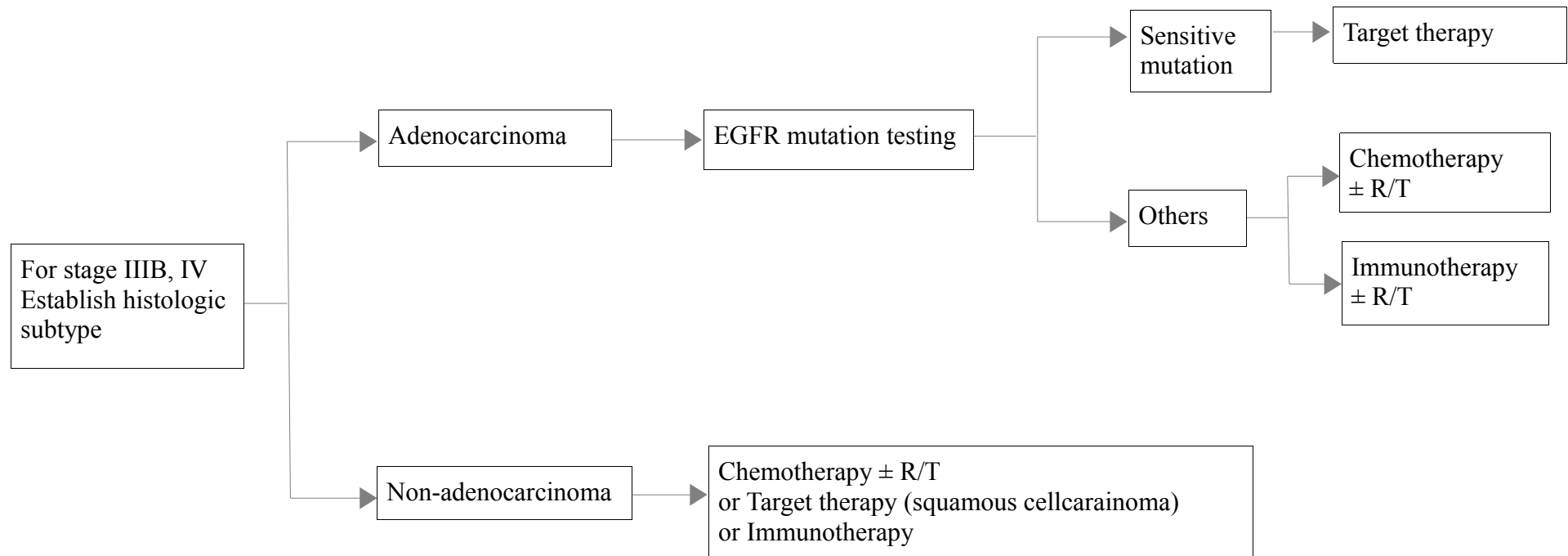




Histologic diagnosis	work up	Stage	Adjuvant Treatment
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Stage	Adjuvant Treatment
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<b>(NSCLC) 非小細胞肺癌化療處方 chemotherapy regimens</b>		
治療目的	組套編碼	處方內容
<b>CCRT</b>	NSCLCRT1	<b>Vinblastine/Cisplatin /RT<sup>6</sup></b> Vinblastine 5 mg/m <sup>2</sup> in NS 100ml IV over 10 min, weekly x 5 Cisplatin 100 mg/ m <sup>2</sup> in NS 300ml IV over 2 hour days 1, 29 Weekly Concurrent with thoracic R/T
	NSCLCRT2	<b>Etoposide/Cisplatin/RT<sup>2</sup></b> Etoposide 50 mg/m <sup>2</sup> in NS 500ml IV over 1 hour days 1-5, 29-33; Cisplatin 50 mg/ m <sup>2</sup> in NS 300ml IV over 1 hour on days 1, 8, 29, 36; Concurrent with thoracic R/T
	NSCLCRT3	<b>Pemetrexed/Carboplatin/RT<sup>26</sup></b> Carboplatin AUC 5 in NS 250ml IV over 60 minutes,day 1 Pemetrexed 500 mg/m <sup>2</sup> in NS 100ml IV over 10 minutes,day 1 every 21 days for 4 cycles Concurrent with thoracic R/T ( non-squamous )
	NSCLCRT4	<b>Pemetrexed/Cisplatin/RT<sup>27</sup></b> Cisplatin 75 mg/m <sup>2</sup> in NS 300ml IV over 2 hour,day 1 Pemetrexed 500 mg/m <sup>2</sup> in NS 100ml IV over 10 minutes,day 1, Eevery 21 days for 3 cycles Concurrent with thoracic RT (nons-quamous)
		<b>Docetaxel/Cisplatin/RT<sup>30</sup></b>

	NSCLCRT5	Docetaxel 40 mg/m <sup>2</sup> ,in NS 250 mL,IV over 1 hour,days 1,8,29,36 <sup>30</sup> Cisplatin 50 mg/m <sup>2</sup> ,in NS 300 mL,IV over 1 hour,days 1,8,29,36 Concurrent wuth Thoracic RT
	NSCLCRT7	<b>Paclitaxel/Carboplatin/RT</b> <sup>50,51</sup> Paclitaxel 45-50 mg/m <sup>2</sup> in NS 500 ml IV 1 hour,day 1 Carboplatin AUC 2 in NS 250 ml IV over 60 minutes, day1 weekly Concurrent wuth Thoracic RT
<b>CCRT followed by Chemotherapy</b>	NSCLCRT6	<b>Docetaxel/Cisplatin/RT</b> <sup>15</sup> Docetaxel 20 mg/m <sup>2</sup> in NS 250 ml IV over 1 hour,day 1 Cisplatin 20 mg/m <sup>2</sup> in NS 300 mL IV over 1 hour,day 1 weekly for 4-6 courses concurrent with Thoracic RT <b>Followed by</b> <b>Docetaxel / Cisplatin</b>
	NSCLCHE1	Docetaxel 75 mg/m <sup>2</sup> in NS 250 ml IV over 1 hour,day 1 Cisplatin 75 mg/m <sup>2</sup> in NS 300 mL,IV over 2 hour,day 1 Repeat every 21 days
	NSCLCRT2	<b>Etoposide/Cisplatin/RT</b> <sup>2,51</sup> Etoposide 50 mg/m <sup>2</sup> in NS 500 ml IV over 1 hour days 1-5, 29-33 Cisplatin 50 mg/ m <sup>2</sup> in NS 300 ml IV over 1 hour on days 1, 8, 29, 36; Concurrent with thoracic R/T
	NSCLCHE2	<b>Followed by</b> <b>Etoposide/Cisplatin</b> Etoposide 50 mg/m <sup>2</sup> in NS 500 ml IV over 1 hour days 1-5, 29-33

		Cisplatin 50 mg/ m2 in NS 300 ml IV over 1 hour on days 1, 8, 29, 36 x 2 additional cycles
	NSCLCRT7	<b>Paclitaxel/Carboplatin/RT<sup>4,51</sup></b> Paclitaxel 45-50 mg/m2 in NS 500 ml IV 1 hour,day 1 Carboplatin AUC 2 in NS 250 ml IV over 60 minutes, day1 weekly Concurrent wuth Thoracic RT
	NSCLCHE3	<b>Followed by Paclitaxel/Carboplatin</b> Paclitaxel 200 mg/m2 in NS 500 ml IV 3 hour,day 1 Carboplatin AUC 6 in NS 250 ml IV over 60 minutes, day1 Repeat every 21 days for 2 cycles
<b>CCRT followed by RT</b>	NSCLCCHE3	<b>Vinblastine/Cisplatin<sup>6</sup></b> Vinblastine 5 mg/m <sup>2</sup> in NS 100ml IV over 10 min, days 1, 8, 15,22,29 Cisplatin 100 mg/m2 in NS 300ml IV over 2 hour, days 1, 29 <b>Followed by Thoracic R/T</b>
	NSCLCCHE4	<b>Paclitaxel/Carboplatin<sup>4</sup></b> Paclitaxel 200 mg/m2 in NS 500 ml,IV over 3 hour,day 1 Carboplatin AUC 6 in NS 250 ml,IV over 60 min,day 1 Repeat every 3 weeks for 2 cycles <b>followed by Thoracic R/T</b>
<b>Neoadjuvant Adjuvant</b>	NSCLCNA01	<b>Cisplatin/ Vinorelbine<sup>23</sup></b> Cisplatin 50 mg/m <sup>2</sup> in NS 50 ml IV 10 minutes,days 1,8,15,22 Vinorelbine 25 mg/m <sup>2</sup> in NS 300 ml , IV 2 hour ,days 1, 8

		<p><b>Repeat cycle every 28 days for 4 cycles</b></p> <p><b>Or</b></p> <p>Oral Vinorelbine 60 mg/m<sup>2</sup> day 1, 8, 15, 22</p> <p>Cisplatin 50 mg/m<sup>2</sup> in NS 300 ml IV 2 hour ,days 1, 8</p> <p><b>Repeat cycle every 28 days for 4 cycles</b></p>
	NSCLCNA02	<p><b>Cisplatin/Vinorelbine<sup>1,7</sup></b></p> <p>Vinorelbine 25-30 mg/m<sup>2</sup> in NS 50 mL,IV 6-10 min,day 1.8</p> <p>Cisplatin 75-80 mg/m<sup>2</sup> in NS 300 mL,IV2 hr,day 1</p> <p><b>Repeat cycle every 21 days x 4 cycles</b></p> <p><b>Or</b></p> <p>Oral Vinorelbine 60-80 mg/m<sup>2</sup>,orally,days 1,8</p> <p>Cisplatin 75-80 mg/m<sup>2</sup> in NS 300 mL,IV2 hr,day 1</p> <p><b>Repeat cycle every 21 days x 4 cycles</b></p>
	NSCLCNA03	<p><b>Cisplatin/Etoposide<sup>1</sup></b></p> <p>Cisplatin 100 mg/m<sup>2</sup> in NS 500 ml IV over 2 hour,day 1<sup>1</sup></p> <p>Etoposide 100 mg/m<sup>2</sup> in NS 500 ml IV over 1 hour,days 1-3, every 28 days for 4 cycles</p>
	NSCLCNA04	<p><b>Cisplatin/Gemcitabine<sup>52</sup></b></p> <p>Cisplatin 75 mg/m in NS 100ml IV 2 hour on day 1</p> <p>Gemcitabine 1250 mg/m<sup>2</sup> in NS 100ml IV 30 minutes ,days 1, 8, Repeat cycle every 21 days for 4 cycles</p>
	NSCLCNA05	<p><b>Docetaxel /Cisplatin<sup>10,51</sup></b></p> <p>Docetaxel 75 mg/m<sup>2</sup> in NS 250 ml IV over 1 hour,day 1</p>

		Cisplatin 75 mg/m <sup>2</sup> in NS 300 mL,IV over 2 hour,day 1 Repeat cycle every 21 days for 4 cycles
	NSCLCNA06	<b>Pemetrexed/Cisplatin</b> <sup>51,53</sup> Pemetrexed 500 mg/m <sup>2</sup> in NS 100ml IV over 10 minutes,day 1 Cisplatin 75 mg/m <sup>2</sup> in NS 300 mL,IV over 2 hour,day 1 Repeat cycle every 21 days for 4 cycles (nons-quamous)
	NSCLCNA07	<b>Paclitaxel/Carboplatin</b> <sup>51,54</sup> Paclitaxel 200 mg/m <sup>2</sup> in NS 500 ml IV 3 hour,day 1 Carboplatin AUC 6 in NS 250 ml IV over 60 minutes, day1 Repeat cycle every 21 days
<b>Adjuvant</b>	NSCLCA05	Uracil-Tegafur 250 mg/day, PO for 24 months <sup>25</sup>
<b>Metastatic Recurrent</b>	NSCLCP1	<b>Gemcitabine/Cisplatin</b> <sup>12</sup> Gemcitabine 1000 mg/m <sup>2</sup> in NS 100 ml IV 30 minutes ,days 1,8 Cisplatin 60 mg/m <sup>2</sup> in NS 300 ml IV over 2 hour,on day 1 Repeat every 21days
	NSCLCP2	<b>Gemcitabine/Carboplatin</b> <sup>11</sup> Gemcitabine 1250 mg/m <sup>2</sup> in NS 100 ml IV 30 minutes,days 1 ,8 Carboplatin AUC 5 in NS 250 ml IV over 60 minutes,day 1 Repeat every 21days <sup>11</sup>
	NSCLCP3	<b>Docetaxel/Cisplatin</b> <sup>10</sup>

		Docetaxel 75 mg/m <sup>2</sup> in NS 250 ml IV over 1 hour,day 1 Cisplatin 75 mg/m <sup>2</sup> in NS 300 ml IV over 2 hour, day 1 Repeat every 21days <sup>10</sup>
	NSCLCP21	<b>Weekly Docetaxel/Cisplatin<sup>55</sup></b> Docetaxel 25 mg/m <sup>2</sup> in NS 250 ml IV over 1 hour, day 1,8,15 Cisplatin 75 mg/m <sup>2</sup> in NS 300 ml IV over 2 hour, day 1 Repeat cycle every 21days
	NSCLCP4	<b>Docetaxel/Carboplatin<sup>16</sup></b> Docetaxel 75 mg/m <sup>2</sup> in NS 250 ml IV over 1 hour, day 1 Carboplatin AUC 6 in NS 250 ml IV over 1 hour, day 1 Repeat every 21days
	NSCLCP22	<b>Weekly Docetaxel/Carboplatin<sup>55</sup></b> Docetaxel 25 mg/m <sup>2</sup> in NS 250 ml IV over 1 hour ,day 1,8,15 Carboplatin AUC 6 in NS 250 ml IV over 1 hour, day 1 Repeat cycle every 28days
	NSCLCP5	<b>Pemetrexed/Cisplatin<sup>20</sup></b> Pemetrexed 500 mg/m <sup>2</sup> in NS 250 ml IV over 10 minutes, day 1 Cisplatin 75 mg/m <sup>2</sup> in NS 300 ml IV over 2 hour, day 1 Repeat every 21days
	NSCLCP6	<b>Pemetrexed/Carboplatin<sup>56</sup></b>

		<p>Pemetrexed 500 mg/m<sup>2</sup> in NS 100 ml IV over 10 minutes, day 1 Carboplatin AUC 5 in NS 250 ml IV over 60 minutes, day 1 Repeat every 21days</p>
	NSCLCP7	<p><b>Paclitaxel/Cisplatin<sup>18</sup></b> Paclitaxel 175 mg/m<sup>2</sup> in NS 500 ml IV over 3 hour, day 1 Cisplatin 75 mg/m<sup>2</sup> in NS 300 ml IV over 2 hour, day 1 Repeat every 21 days<sup>18</sup></p>
	NSCLCP8	<p><b>Paclitaxel/Carboplatin<sup>19</sup></b> Paclitaxel 175-225 mg/m<sup>2</sup> in NS 500 ml IV over 3 hour, days 1 Carboplatin AUC 6 in NS 250 ml IV over 60 minutes, day 1 Repeat every 21days</p>
	NSCLCP9	<p><b>Weekly Paclitaxel/Carboplatin<sup>5</sup></b> Paclitaxel 80 mg/m<sup>2</sup> in NS 500 ml IV over 1 hour, day 1,8,15 Carboplatin AUC 6 in NS 250 ml IV over 60 minutes ,day 1 Repeat every 28days</p>
	NSCLCP10	<p><b>Vinorelbine/Cisplatin<sup>12</sup></b> Vinorelbine 25 mg/m<sup>2</sup> in NS 50 ml IV 6-10 minutes, days 1,8 Cisplatin 40 mg/m<sup>2</sup> in NS 300 ml IV over 1 hour, day 1 Repeat every 21days <b>Or</b> Vinorelbine 60mg/m<sup>2</sup> PO,days 1,8</p>

		Cisplatin 40 mg/m <sup>2</sup> in NS 300 ml IV over 1 hour, day 1 Repeat every 21days
	NSCLCP11	<b>Vinorelbine/Carboplatin<sup>22</sup></b> Vinorelbine 30 mg/m <sup>2</sup> in NS 50 ml IV 6-10 minutes ,days 1,8 Carboplatin AUC 5 in NS 250 ml IV over 60 minutes, day 1 Repeat every 21days <b>Or</b> Vinorelbine 80mg/m <sup>2</sup> ,PO,days 1,8 Carboplatin AUC 5 in NS 250 ml IV over 60 minutes, day 1 Repeat every 21days
	NSCLCP12	<b>Docetaxel<sup>37</sup></b> Docetaxel 75 mg/m <sup>2</sup> in NS 250 ml IV over 1 hour IV, day 1 Repeat every 21days (goal 4-6 cycles)
	NSCLCP23	<b>Docetaxel<sup>35</sup></b> Docetaxel 25 mg/m <sup>2</sup> in NS 250 ml IV over 1 hour ,day 1, weekly
	NSCLCP13	<b>Pemetrexed (non-squamous histology)<sup>3</sup></b> Pemetrexed 500 mg/m <sup>2</sup> in NS 100 ml IV 10 minutes ,day 1 Repeat every 21days
	NSCLCP14	<b>Gemcitabine</b> Gemcitabine 1000 mg/m <sup>2</sup> in NS 100 ml IV 30 minutes, days 1, 8, 15



		Repeat every 28days
<b>Metastatic Recurrent</b>	NSCLCP15	<b>Gemcitabine/Docetaxel</b> <sup>51,57</sup> Gemcitabine 1000 mg/m <sup>2</sup> in NS 100 ml IV 30 minutes, days 1 Docetaxel 85 mg/m <sup>2</sup> in NS 250 ml IV over 1 hour ,day 1 Biweekly for a maximum of 8 cycles
	NSCLCP16	<b>Gemcitabine/Vinorelbine</b> <sup>51,58</sup> Vinorelbine 25mg/m <sup>2</sup> in NS 50ml IV 6-10 minutes,days 1,8 Gemcitabine 1000 mg/m <sup>2</sup> in NS 100 ml IV 30 minutes, day 1,8 Repeat every 21days
	NSCLCP19	<b>Uracil-Tegafur/Cisplatin</b> <sup>29</sup> Uracil-Tegafur 400 mg/m <sup>2</sup> /days 1-14 Cisplatin 80 mg/m <sup>2</sup> in NS 300 ml IV over 2hours, day 1 Repeat every 21 days
	NSCLCP20	<b>PO Vinorelbine</b> <sup>36,59</sup> Vinorelbine 80mg/m <sup>2</sup> , oral , day 1 、 8 , Repeat every 21 days 備註 A low dose of 60 mg/m <sup>2</sup> was adminutesistered for the first two courses and was uncreased to 80mg/m <sup>2</sup> for the subsequent adminutesistrations.
	NSCLCP26	<b>Cisplatin/Etoposide</b> <sup>60</sup> Etoposide 100mg/m <sup>2</sup> /day in NS 500ml IV over 1 hour,day 1-3 Cisplatin 100mg/m <sup>2</sup> in NS 300ml IV over 2 hour,day 1

		Repeat every 21 days
	NSCLCP29 NSCLCP30 NSCLCP31 NSCLCP32	<p><b>AVAPERL</b><sup>44,45,61</sup></p> <p><b>Induction phase--Bevacizumab/Pemetrexed/Cisplatin or Carboplatin</b></p> <p><b><u>NSCLCP29 Induction phase-- Bevacizumab/Pemetrexed/Cisplatin</u></b>                  Bevacizumab 7.5 mg/kg,in NS 100ml,IV 90 min,day 1                  Pemetrexed 500 mg/m<sup>2</sup> in NS 100ml,IV over 10 min,day 1                  Cisplatin 75 mg/m<sup>2</sup>,in NS 300ml,IV over 2 hours,day 1                  Repeat cycle every 21 days for 4 cycles</p> <p><b>Or</b></p> <p><b><u>NSCLCP30 Induction phase Bevacizumab/Pemetrexed/Carboplatin</u></b>                  Bevacizumab 7.5 mg/kg,in NS 100ml,IV 90 min,day 1                  Pemetrexed 500 mg/m<sup>2</sup> in NS 100ml,IV over 10 min,day 1                  Carboplatin AUC 6,in NS 250ml,IV over 90 min,day 1                  Repeat cycle every 21 days for 4 cycles</p> <p><b>Followed by</b></p> <p><b>Maintenance phase_Bevacizumab±Pemetrexed</b></p> <p><b><u>NSCLCP31 Maintenance Bevacizumab+Pemetrexed</u></b>                  Bevacizumab 7.5 mg/kg,in NS 100ml,IV 90 min,day 1                  Pemetrexed 500 mg/m<sup>2</sup> in NS 100ml,IV over 10 min,day 1                  Repeat cycle every 21 days until disease progression or unacceptable toxicity</p> <p><b>Or</b></p> <p><b><u>NSCLCP32 Maintenance Bevacizumab</u></b>                  Bevacizumab 7.5 mg/kg,in NS 100ml,IV 90 min,day 1</p>

		Repeat cycle every 21 days until disease progression or unacceptable toxicity
NSCLCP33 NSCLCP34	<b>NSCLCP33 Bevacizumab/Carboplatin/Paclitaxel<sup>46</sup></b> Bevacizumab 15 mg/kg,in NS 100ml,IV 90 min,day 1 Paclitaxel 200 mg/m <sup>2</sup> ,in NS 500ml,IV over 3 hours,day 1 Carboplatin AUC 6,in NS 250ml,IV over 90 min,day 1 Repeat every 3 weeks for 6 cycles <b>NSCLCP34 Maintenance bevacizumab<sup>46</sup></b> Bevacizumab 15 mg/kg,in NS 100ml,IV 90 min,day 1 Repeat cycle every 21 days until disease progression or unacceptable toxicity	
NSCLCP17 NSCLCP18 NSCLCP24 NSCLCP25	<b>NSCLCP17 Gefitinib</b> 250 mg PO daily <sup>62-63</sup> <b>NSCLCP18 Erlotinib</b> 150 mg PO daily <sup>64</sup> <b>NSCLCP24 Afatinib</b> 40mg po daily <sup>65</sup> <b>NSCLCP25 Crizotinib</b> 250mg Orally twice daily <sup>66</sup>	
NSCLCP35	<b>Pembrolizumab<sup>67</sup></b> Pembrolizumab 2mg/kg in NS100ml IV over 30 minutes Repeat every 3 weeks until disease progression or unacceptable toxicity	

## (NSCLC)非小細胞肺癌 Radiation therapy<sup>32,33</sup>

Treatment type	RT technique	Total dose	Fraction size / # Fractions
Definite R/T (operable stage & medically inoperable) (IA-III A) <sup>17</sup>	SBRT	60-70Gy to primary tumor 48-50Gy Hypofractionated 50-55Gy Hypofractionated 60-70Gy Hypofractionated	4-10 fractions in 2-3wks In 4 fractions In 5 fractions In 8-10 fractions
	Conventionally Fractionated RT (IMRT)	45-50Gy to mediastinum 60-65Gy to primary tumor	1.8-2Gy/ fraction
Definite R/T±C/T CCRT(III A-III B) <sup>13</sup>	Conventionally Fractionated RT (IMRT)	45-50Gy to mediastinum 54Gy to known nodal area 65Gy to primary tumor	1.8-2Gy/ fraction
Adjuvant R/T±C/T (For nodal metastasis: <b>Pathologic stage N2+</b> ) <sup>8,17</sup>	Conventionally Fractionated RT (IMRT)	50Gy-54Gy to known nodal area <sup>14,21</sup> 54-60Gy to extracapsular nodal extension or microscopic positive margins 60-70Gy Gross tumor	1.8-2Gy/ fraction
Preoperative RT	Conventionally Fractionated RT (IMRT)	45-50Gy	1.8-2Gy/ fraction
Palliative RT	Conventionally Fractionated RT (IMRT)	45-50Gy	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 肺癌放射治療標準政策與執行規範。