



仁愛醫療財團法人  
*JEN-AI HOSPITAL*

# 食道癌診療指引

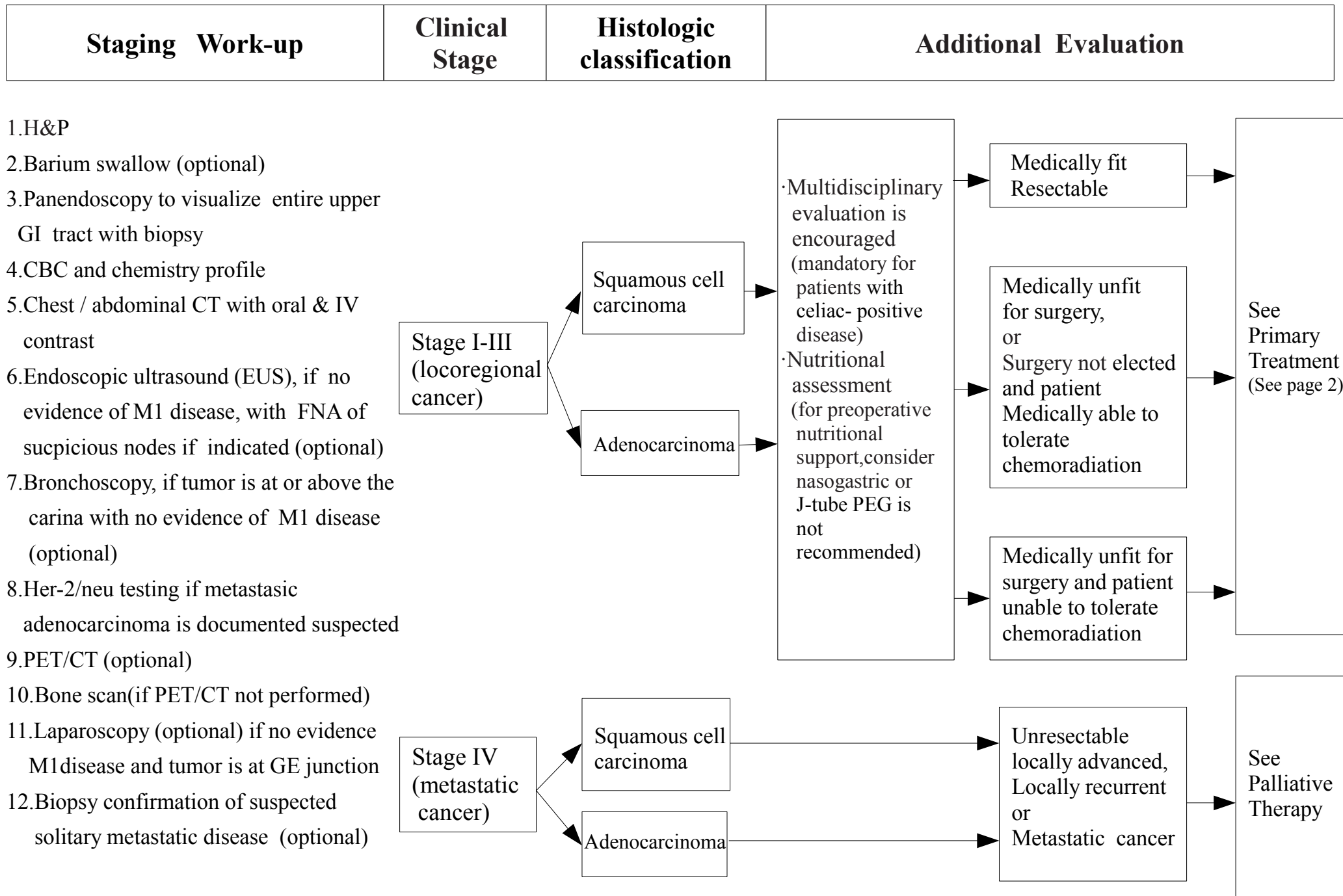
2011年02月23日制定  
2012年02月29日一修  
2013年02月21日二修  
2014年02月20日三修  
2015年02月12日四修  
2016年01月20日五修  
2017年02月16日六修  
2018年02月21日七修

肝腸胃道癌醫療團隊共同修訂

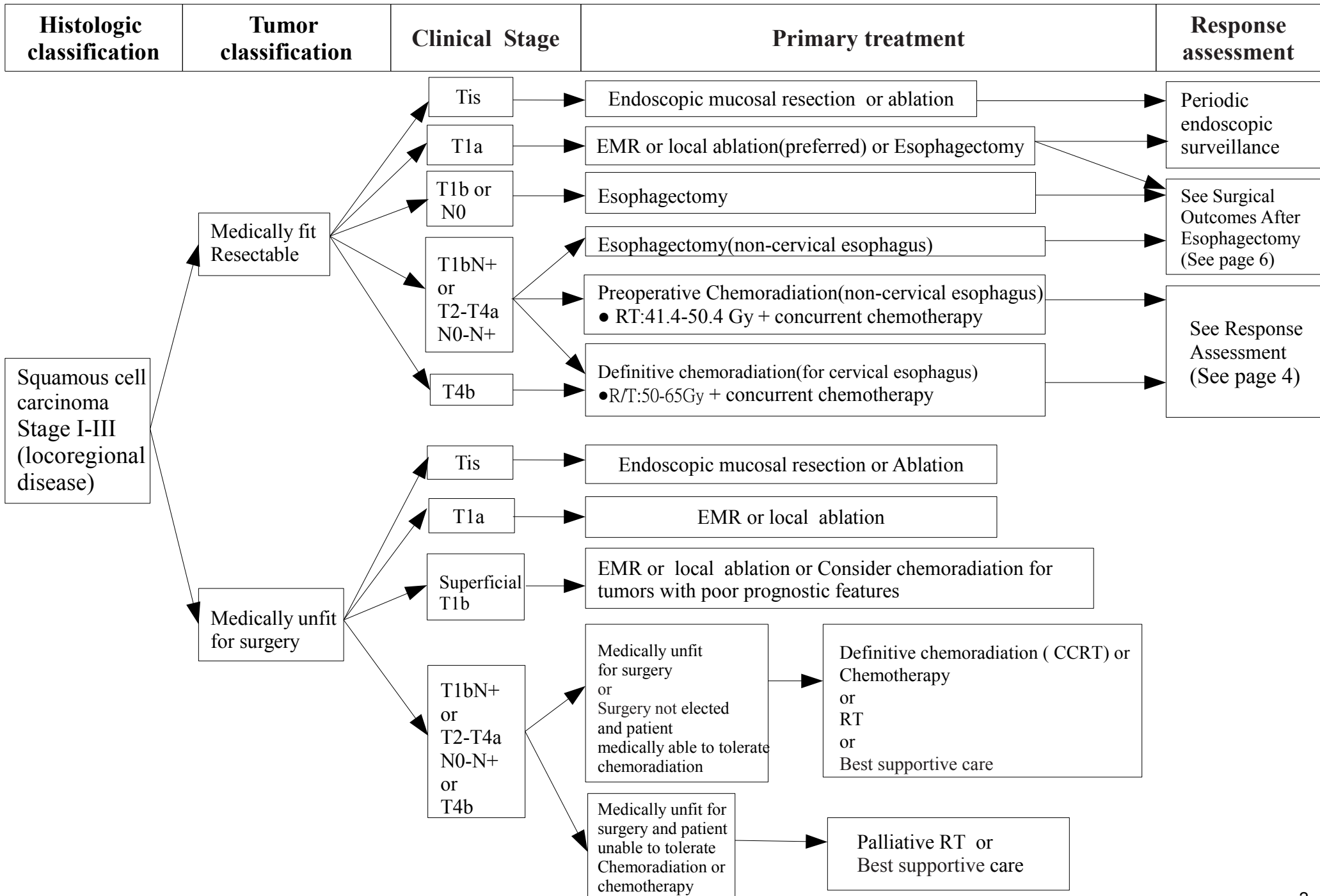
# 修訂原則

- 參與修訂科別：消化系內科、一般外科、腫瘤治療科、放射診斷科、病理科、血液暨腫瘤內科
  
- 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，則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。

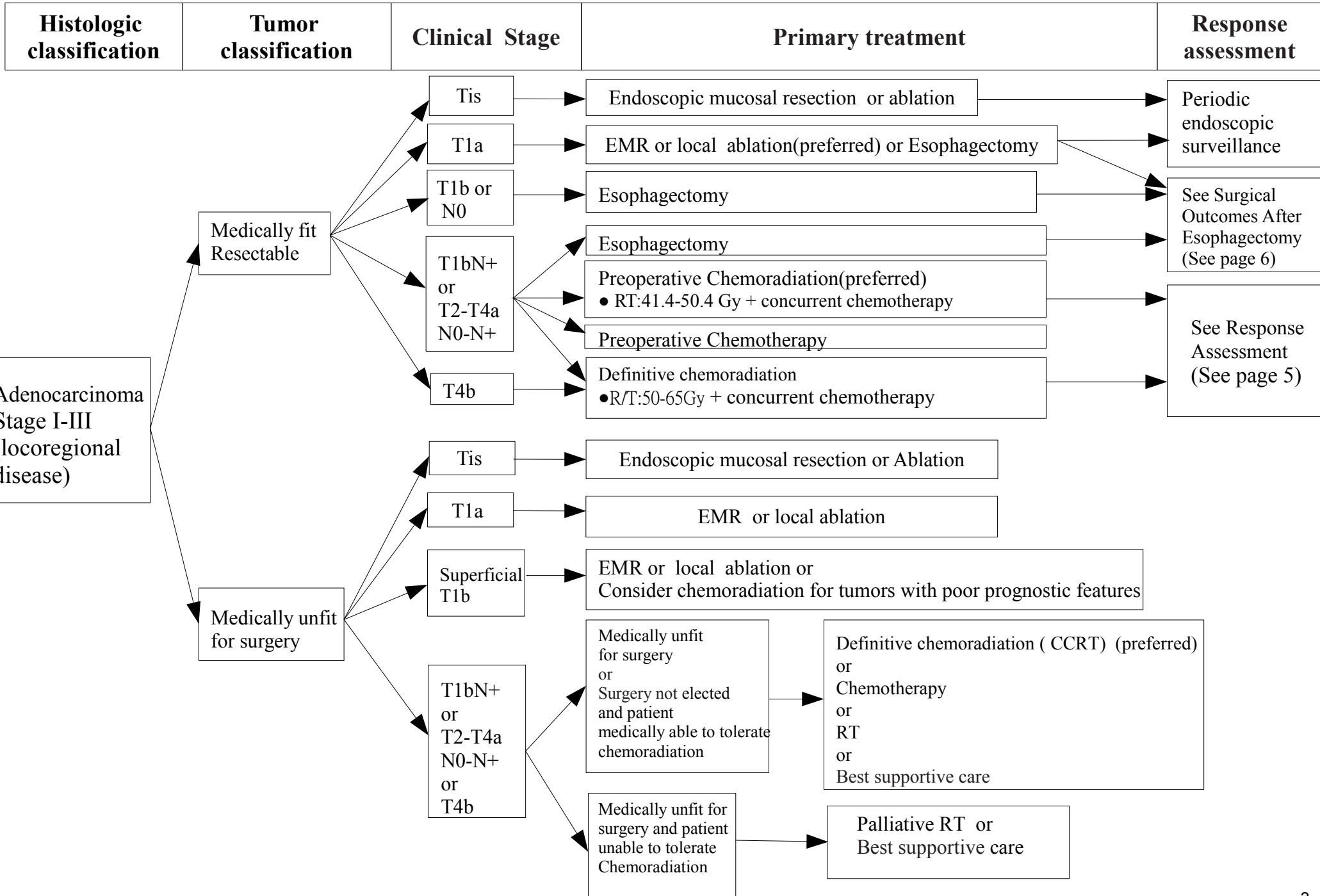
# Treatment Guidelines Esophageal Cancer



# Treatment Guidelines Esophageal Cancer

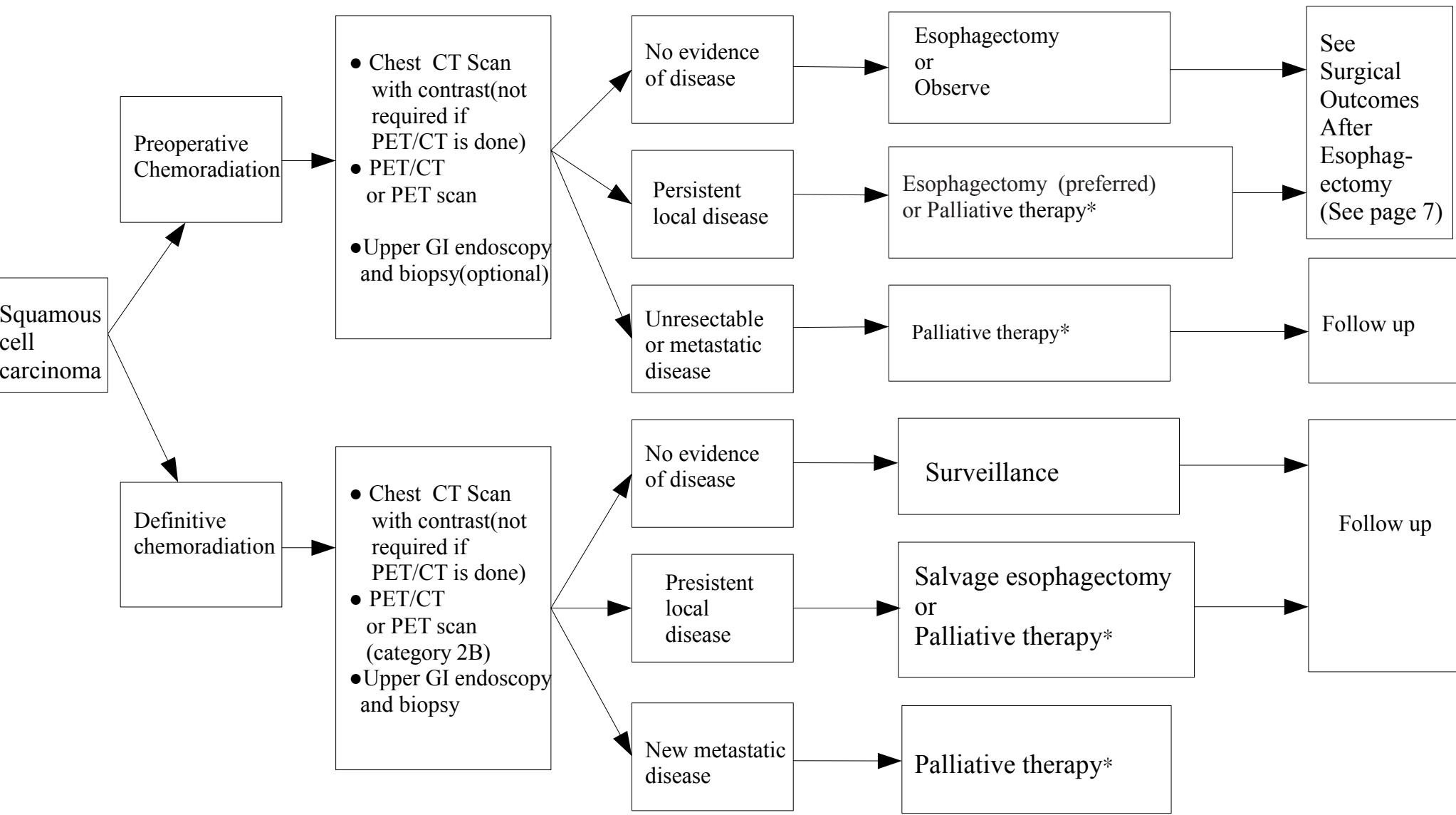


# Treatment Guidelines Esophageal Cancer



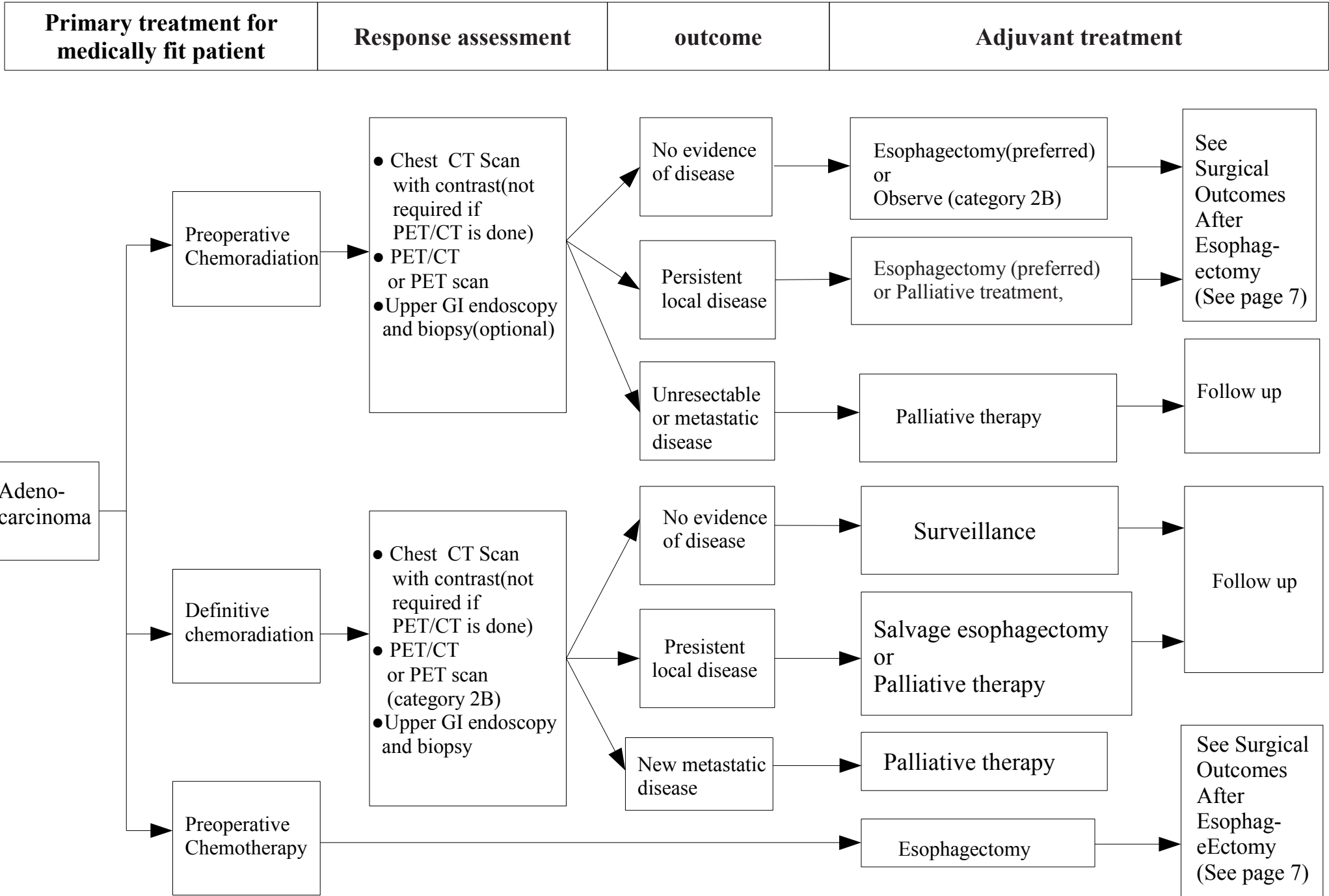
# Treatment Guidelines Esophageal Cancer

| Primary treatment for medically fit patient | Response assessment | outcome | Adjuvant treatment |
|---|---------------------|---------|--------------------|
|---|---------------------|---------|--------------------|



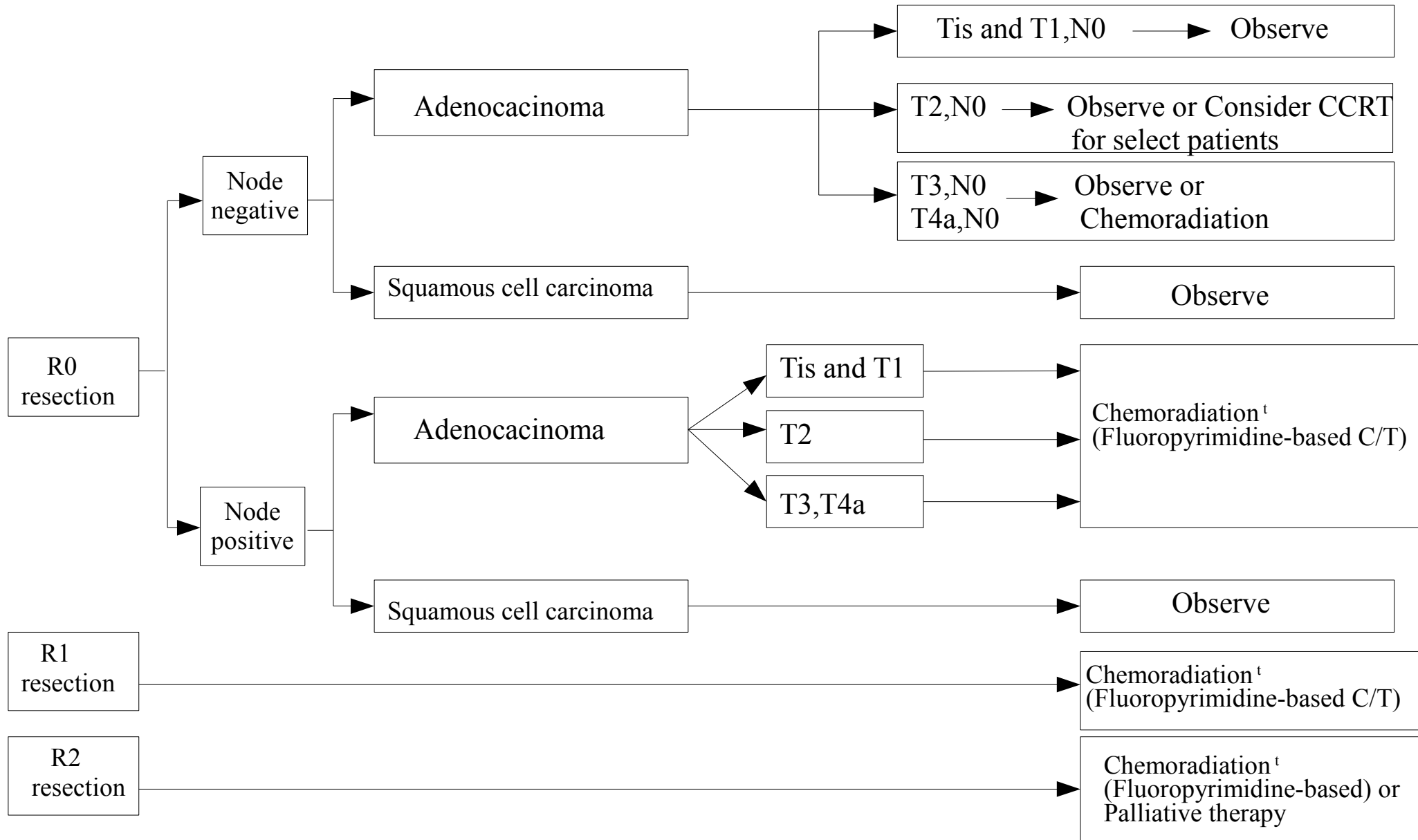
\*:Palliative therapy:chemotherapy or best supportive care

# Treatment Guidelines Esophageal Cancer



# Treatment Guidelines Esophageal Cancer

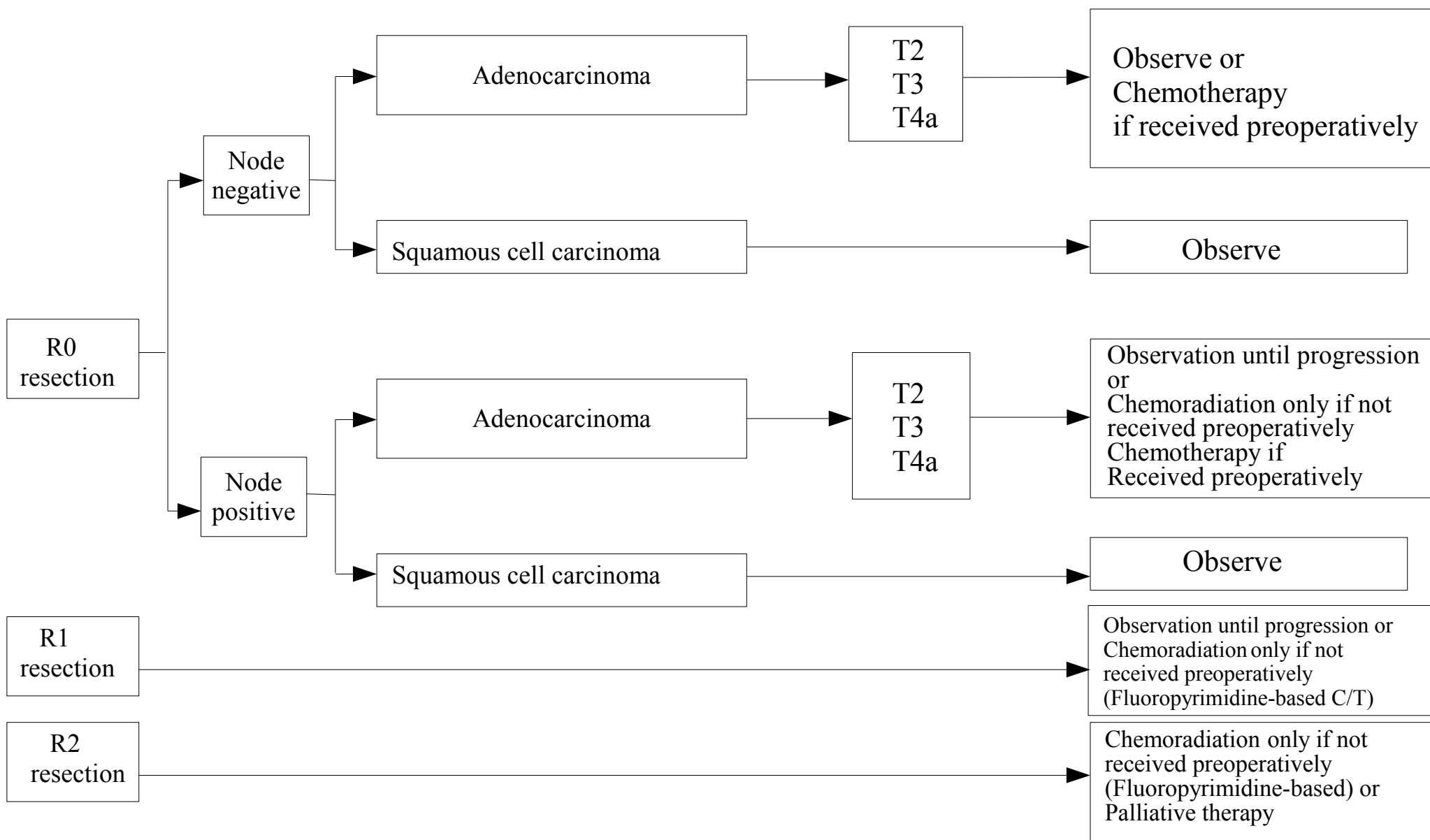
Surgical outcome (Not received preoperative chemoradiation or chemotherapy)



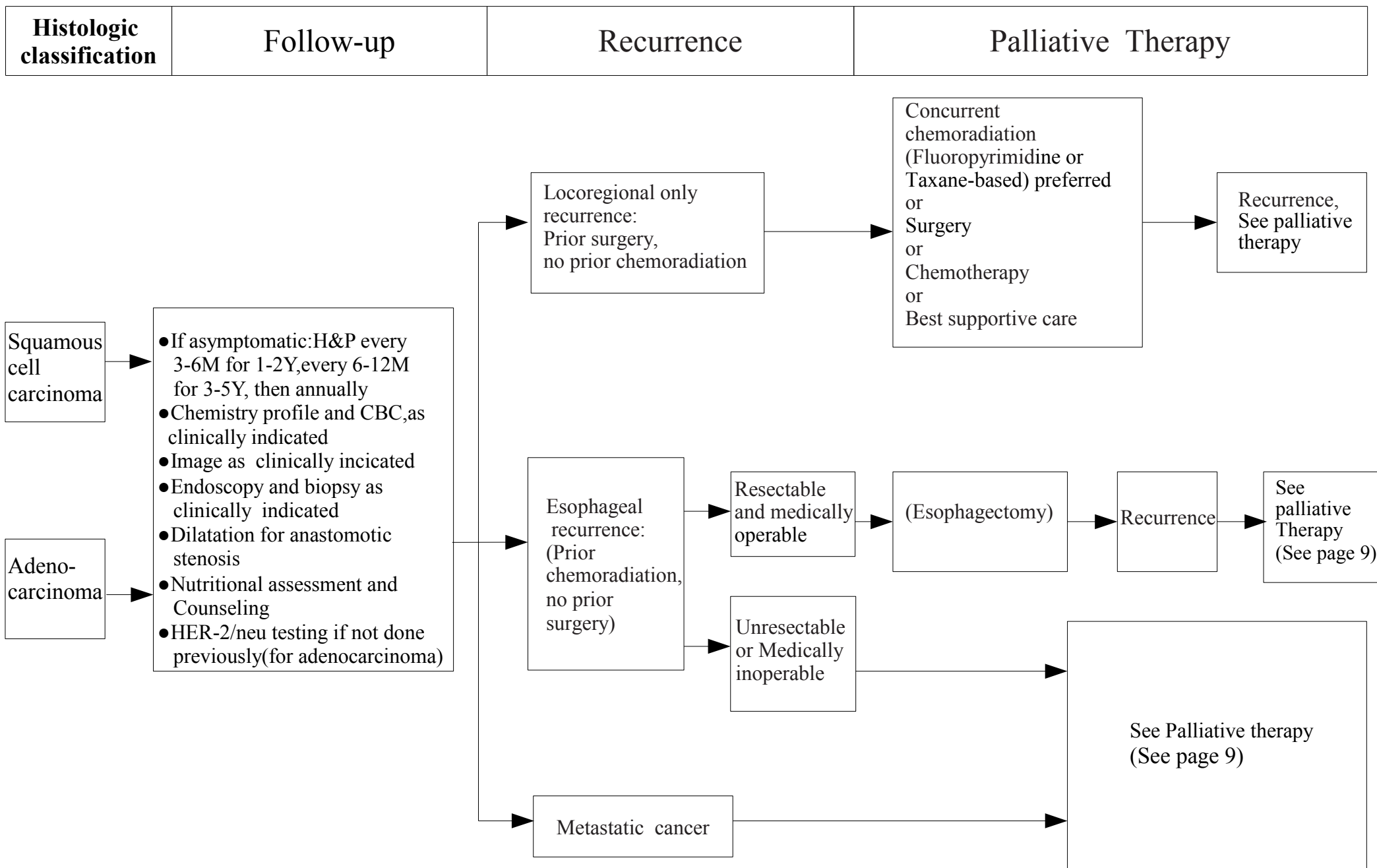


# Treatment Guidelines Esophageal Cancer

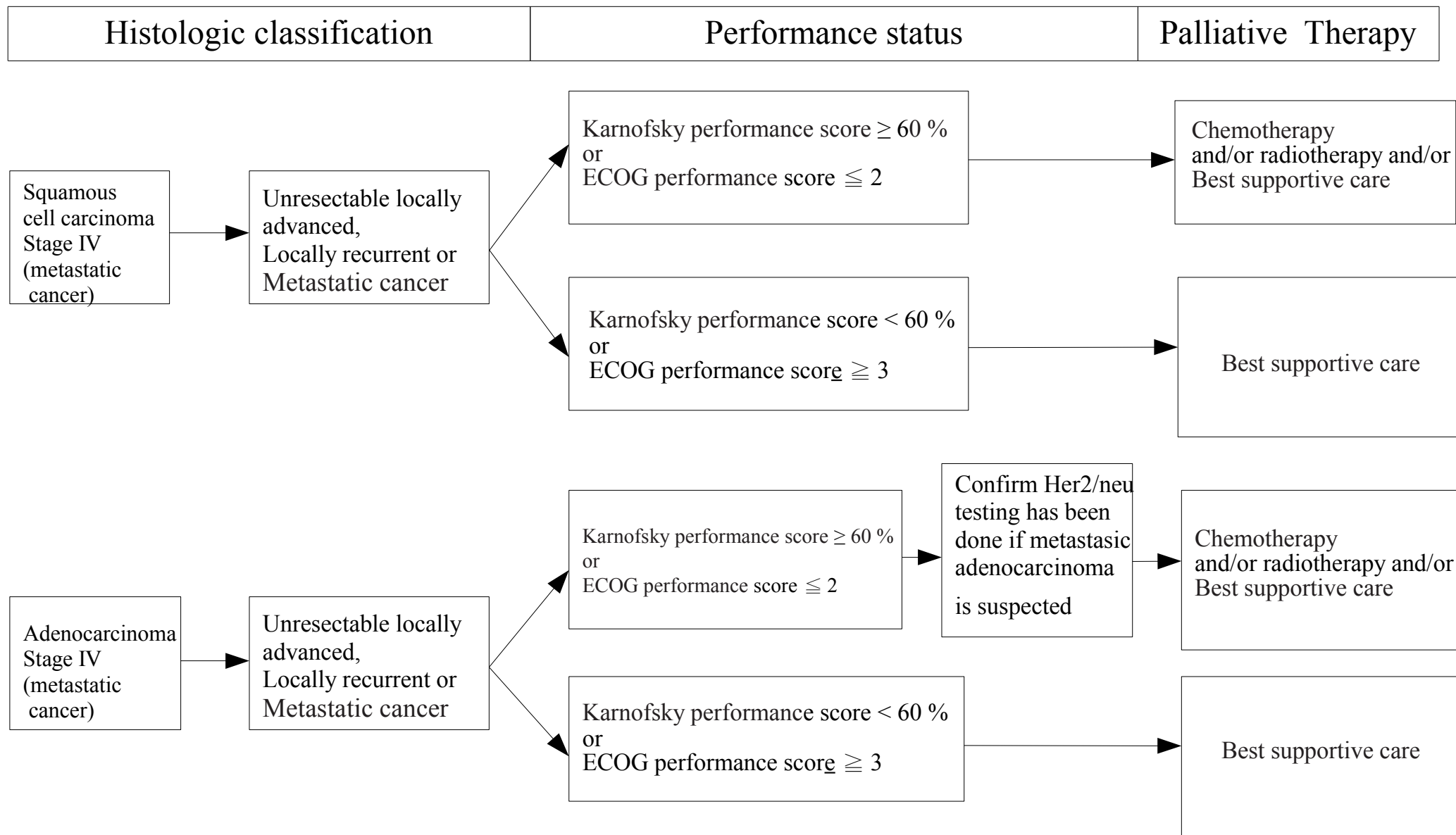
Surgical outcome (Received preoperative chemoradiation or chemotherapy )



# Treatment Guidelines Esophageal Cancer



# Treatment Guidelines Esophageal Cancer



# Esophageal Cancer protocol

## 食道癌化療處方 Chemotherapy regimen

| 治療目的   | 組套編碼                  | 處方內容   |
|--|-----------------------|--|
| <p><b>Definite CCRT</b><br/>                     (for unresectable non-metastatic disease)</p> | <p><b>ESORTD1</b></p> | <p><b>PF(Cisplatin/Fluorouracil) + RT<sup>27</sup></b><br/>                     Cisplatin 75-100 mg/m<sup>2</sup>/day IV over 1 hour, on day 1<br/>                     Fluorouracil 750-1000 mg/m<sup>2</sup>/day IV continuous infusion 24 hours, days 1-4<br/>                     Repeat cycled every 28 days for 2-4 cycles<br/>                     2 cycles with radiation followed by 2 cycles without radiation</p>   |
|  | <p><b>ESORTD6</b></p> | <p><b>Oxaliplatin + Fluorouracil + RT<sup>28</sup></b><br/>                     Oxaliplatin 85 mg/m<sup>2</sup> IV over 2 hours, day 1<br/>                     Leucovorin 400 mg/m<sup>2</sup> IV over 2 hours, day 1<br/>                     Fluorouracil 400 mg/m<sup>2</sup> IV push, day 1<br/>                     Fluorouracil 800 mg/m<sup>2</sup>/day IV continuous infusion 24 hours, days 1,2<br/>                     Cycled every 14 days for 3 cycles with radiation followed by 3 cycles without radiation</p> |

# Esophageal Cancer protocol

## 食道癌化療處方 Chemotherapy regimen

| 治療目的  | 組套編碼                  | 處方內容  |
|---|-----------------------|---|
| <p><b>Definite CCRT</b><br/>(for unresectable non-metastatic disease)</p> | <p><b>ESORTD2</b></p> | <p><b>TC(Cisplatin/Paclitaxel )+ RT<sup>31</sup></b><br/>Paclitaxel 60 mg/m<sup>2</sup> IV over 1 hour, day 1,8,15,22<br/>Cisplatin 75 mg/m<sup>2</sup> IV over 2 hours, day 1<br/>Given for 1 cycle<br/>Concurrent with radiotherapy</p>       |
|   | <p><b>ESORTD3</b></p> | <p><b>DC(Cisplatin/Docetaxel) + RT<sup>32</sup></b><br/>Docetaxel 20-30 mg/m<sup>2</sup> IV over 1 hour, days 1<br/>Cisplatin 20-30 mg/m<sup>2</sup> IV over 1 hour, days 1<br/>Weekly for 5 weeks<br/>Concurrent with radiotherapy</p>         |
|   | <p><b>ESORTD4</b></p> | <p><b>XELOX(Capecitabine/Oxaliplatin) + RT<sup>29</sup></b><br/>Oxaliplatin 85 mg/m<sup>2</sup> IV over 2 hours, days 1, 15, 29<br/>Capecitabine 625 mg/m<sup>2</sup> PO bid, days 1-5, Weekly for 5 weeks<br/>Concurrent with radiotherapy</p> |
|   | <p><b>ESORTD5</b></p> | <p><b>Paclitaxel + Carboplatin + RT<sup>30</sup></b><br/>Paclitaxel 50 mg/m<sup>2</sup> IV over 1 hour, day 1<br/>Carboplatin AUC 2 IV over 1 hour, day 1<br/>Weekly for 5 weeks<br/>Concurrent with radiotherapy</p>                           |

# Esophageal Cancer protocol

## 食道癌化療處方 Chemotherapy regimen

| 治療目的  | 組套編碼                  | 處方內容  |
|---|-----------------------|---|
| <p><b>Neoadjuvant<br/>CCRT</b><br/>(for resectable<br/>disease)</p> | <p><b>ESORTN1</b></p> | <p><b>PF(Cisplatin + 5-FU)/RT<sup>33</sup></b><br/>Cisplatin 75 mg/m<sup>2</sup>/day IV over 2 hours, days 1, 29<br/>Fluorouracil 750-1000 mg/m<sup>2</sup>/day IV continuous infusion 24 hours, days 1-4, 29-32<br/>Concurrent with radiotherapy<br/><b>followed by surgery</b></p>  |
|   | <p><b>ESORTN2</b></p> | <p><b>Carboplatin + Paclitaxel + RT<sup>30</sup></b><br/>Paclitaxel 50 mg/m<sup>2</sup> IV over 1 hour, day 1<br/>Carboplatin AUC 2 IV over 1 hour, day 1<br/>Weekly for 5 weeks<br/>Concurrent with radiotherapy<br/><b>followed by surgery</b></p>  |
|   | <p><b>ESORTN3</b></p> | <p><b>Oxaliplatin + Fluorouracil + RT<sup>28</sup></b><br/>Oxaliplatin 85 mg/m<sup>2</sup> IV over 2 hours, day 1<br/>Leucovorin 400 mg/m<sup>2</sup> IV over 2 hours, day 1<br/>Fluorouracil 400 mg/m<sup>2</sup> IV push, day 1<br/><br/>Fluorouracil 800 mg/m<sup>2</sup>/day IV continuous infusion 24 hours, days 1, 2<br/>Cycled every 14 days for 3 cycles with radiation<br/>followed by 3 cycles without radiation</p> |
|   | <p><b>ESORTN4</b></p> | <p><b>XELOX(Capecitabine/Oxaliplatin) + RT<sup>29</sup></b><br/>Oxaliplatin 85 mg/m<sup>2</sup> IV over 2 hours, days 1, 15, 29<br/>Capecitabine 625 mg/m<sup>2</sup> PO bid, days 1-5, Weekly for 5 weeks<br/>Concurrent with radiotherapy</p>   |

# Esophageal Cancer protocol

## 食道癌化療處方 Chemotherapy regimen

| 治療目的                            | 組套編碼          | 處方內容  |
|---------------------------------|---------------|---|
| <b>Neoadjuvant<br/>Adjuvant</b> | <b>ESONA1</b> | <b>ECF<sup>38</sup></b><br>Epirubicin 50 mg/m <sup>2</sup> IV over 15 min, day 1<br>Cisplatin 60 mg/m <sup>2</sup> IV over 2 hours, day 1<br>Fluorouracil 1000 mg/m <sup>2</sup> /day IV continuous infusion 24 hours, days 1-4<br>Cycled every 21 days<br><b>3 cycles preoperatively and 3 cycles postoperatively</b>            |
|                                 | <b>ESONA2</b> | <b>mECF(Epirubicin/Oxaliplatin/Capecitabine)<sup>39</sup></b><br>Epirubicin 50 mg/m <sup>2</sup> IV over 15 min, day 1<br>Oxaliplatin 130 mg/m <sup>2</sup> IV over 2 hours, day 1<br>Capecitabine 625 mg/m <sup>2</sup> PO BID, days 1-21<br>Cycled every 21 days<br><b>3 cycles preoperatively and 3 cycles postoperatively</b> |
|                                 | <b>ESONA3</b> | <b>mECF(Epirubicin/Cisplatin/Capecitabine)<sup>39</sup></b><br>Epirubicin 50 mg/m <sup>2</sup> IV over 15 min, day 1<br>Cisplatin 60 mg/m <sup>2</sup> IV over 2 hours, day 1<br>Capecitabine 625 mg/m <sup>2</sup> PO BID, days 1-21<br>Cycled every 21 days<br><b>3 cycles preoperatively and 3 cycles postoperatively</b>      |

# Esophageal Cancer protocol

## 食道癌化療處方 Chemotherapy regimen

| 治療目的                            | 組套編碼          | 處方內容  |
|---------------------------------|---------------|---|
| <b>Neoadjuvant<br/>Adjuvant</b> | <b>ESONA4</b> | <b>mECF(Epirubicin/Oxaliplatin/Fluorouracil)<sup>39</sup></b><br>Epirubicin 50 mg/m <sup>2</sup> IV over 15 min, day 1<br>Oxaliplatin 130 mg/m <sup>2</sup> IV over 2 hours, day 1<br>Fluorouracil 1000 mg/m <sup>2</sup> /day IV continuous infusion 24 hours, days 1-4<br>Cycled every 21 days<br><b>3 cycles preoperatively and 3 cycles postoperatively</b> |
|                                 | <b>ESONA5</b> | <b>Fluorouracil/Cisplatin<sup>40</sup></b><br>Cisplatin 75-80 mg/m <sup>2</sup> IV over 2 hours, day 1<br>Fluorouracil 800 mg/m <sup>2</sup> /day IV continuous infusion 24 hours, days 1-5<br>Cycled every 28 days<br><b>for 2-3 cycles preoperatively and 3-4 cycles postoperatively for a total of 6 cycles</b>  |
|                                 |               | <b>Paclitaxel /Capecitabin<sup>80</sup></b><br>Paclitaxel 45-50 mg/m <sup>2</sup> IV, day 1<br>Capecitabine 625-825 mg/m <sup>2</sup> PO BID, days 1-5<br>Weekly for 5 weeks  |



# Esophageal Cancer protocol

## 食道癌化療處方 Chemotherapy regimen

| 治療目的  | 組套編碼           | 處方內容   |
|---|----------------|--|
| <b>Adjuvant<br/>CCRT</b><br>( 1 cycle before<br>chemoradiation<br>followed by<br>chemoradiation<br>followed by 2 cycles<br>after<br>chemoradiation) | <b>ESORTA1</b> | <b>Leucovorin/Fluorouracil<sup>34</sup></b><br><b>(1 cycle before chemoradiation and 2 cycles after chemoradiation)</b><br>Leucovorin 400 mg/m <sup>2</sup> IV over 2 hours, days 1, 15<br>Fluorouracil 400 mg/m <sup>2</sup> IV push, days 1, 15<br>Fluorouracil 600 mg/m <sup>2</sup> /day IV continuous infusion 22 hours, days 1-2 & 15-16<br>Cycled every 28 days |
|   | <b>ESORTA2</b> | <b>Fluorouracil/RT (with radiation)<sup>36</sup></b><br>Fluorouracil 200-250 mg/m <sup>2</sup> /day IV continuous infusion 24 hours, days 1-5<br>Weekly for 5 weeks<br>Concurrent radiotherapy   |
|   | <b>ESORTA3</b> | <b>Capecitabine/RT (with radiation)<sup>37</sup></b><br>Capecitabine 625-825 mg/m <sup>2</sup> PO BID, days 1-5<br>Weekly for 5 weeks<br>Concurrent radiotherapy   |
|   | <b>ESORTA4</b> | <b>Capecitabine<sup>35</sup></b><br><b>(1 cycle before chemoradiation and 2 cycles after chemoradiation)</b><br>Capecitabine 750-1000 mg/m <sup>2</sup> PO BID, days 1-14<br>Cycled every 28 days  |

# Esophageal Cancer protocol

## 食道癌化療處方 Chemotherapy regimen

| 治療目的                                    | 組套編碼                   | 處方內容   |
|---|------------------------|--|
| <p><b>Recurrent/<br/>Metastatic</b></p> | <p><b>ESOP01-1</b></p> | <p><b>mDCF(Docetaxel/Cisplatin/Fluorouracil)<sup>42</sup></b><br/>                     Docetaxel 40 mg/m<sup>2</sup> IV over 1 hour, day 1<br/>                     Leucovorin 400 mg/m<sup>2</sup> IV over 2 hours, day 1<br/>                     Fluorouracil 400 mg/m<sup>2</sup> IV, day 1<br/>                     Fluorouracil 1000 mg/m<sup>2</sup>/day IV continuous infusion 24 hours, days 1,2<br/>                     Cisplatin 40 mg/m<sup>2</sup> IV over 1 hour, day 3<br/>                     Cycled every 14 days</p> |
|   | <p><b>ESOP01-2</b></p> | <p><b>mDCF(Docetaxel/Carboplatin/Flourouracil)<sup>44</sup></b><br/>                     Docetaxel 75 mg/m<sup>2</sup> IV over 1 hour, day 1<br/>                     Carboplatin AUC 6 IV over 1hour, day 2<br/>                     Fluorouracil 1200 mg/m<sup>2</sup>/day IV continuous infusion 24 hours, days 1-3<br/>                     Cycled every 21 days</p>   |
|   | <p><b>ESOP01-3</b></p> | <p><b>mDCF(Docetaxel/Oxaliplatin/Fluorouracil)<sup>43</sup></b><br/>                     Docetaxel 50 mg/m<sup>2</sup> IV over 1 hour, day 1<br/>                     Oxaliplatin 85 mg/m<sup>2</sup> IV over 2 hours, day 1<br/>                     Fluorouracil 1200 mg/m<sup>2</sup>/day IV continuous infusion 24 hours, days 1,2<br/>                     Cycled every 14 days</p>   |

# Esophageal Cancer protocol

## 食道癌化療處方 Chemotherapy regimen

| 治療目的                             | 組套編碼            | 處方內容  |
|----------------------------------|-----------------|---|
| <b>Recurrent/<br/>Metastatic</b> | <b>ESOP5</b>    | <b>ECF(Epirubicin/Cisplatin/Fluorouracil)<sup>45</sup></b><br>Epirubicin 50 mg/m <sup>2</sup> IV over 15 min, day 1<br>Cisplatin 60 mg/m <sup>2</sup> IV over 2 hours, day 1<br>Fluorouracil 1000 mg/m <sup>2</sup> /day IV continuous infusion 24 hours, days 1-4<br>Cycled every 21 days      |
|                                  | <b>ESOP05-1</b> | <b>mECF(Epirubicin/Cisplatin/Capecitabine)<sup>46</sup></b><br>Epirubicin 50 mg/m <sup>2</sup> IV over 15 min, day 1<br>Cisplatin 60 mg/m <sup>2</sup> IV over 2 hours, day 1<br>Capecitabine 625 mg/m <sup>2</sup> PO BID, days 1-21<br>Cycled every 21 days                                   |
|                                  | <b>ESOP05-2</b> | <b>mECF(Epirubicin/Oxaliplatin/Capecitabine)<sup>46</sup></b><br>Epirubicin 50 mg/m <sup>2</sup> IV over 15 min, day 1<br>Oxaliplatin 130 mg/m <sup>2</sup> IV over 2 hours, day 1<br>Capecitabine 625 mg/m <sup>2</sup> PO BID on days 1-21<br>Cycled every 21 days                            |
|                                  | <b>ESOP05-3</b> | <b>mECF(Epirubicin/Oxaliplatin/Fluorouracil)<sup>46</sup></b><br>Epirubicin 50 mg/m <sup>2</sup> IV over 15 min, day 1<br>Oxaliplatin 130 mg/m <sup>2</sup> IV over 2 hours, day 1<br>Fluorouracil 1000 mg/m <sup>2</sup> /day IV continuous infusion 24 hour, days 1-4<br>Cycled every 21 days |

# Esophageal Cancer protocol

## 食道癌化療處方 Chemotherapy regimen

| 治療目的                             | 組套編碼          | 處方內容  |
|----------------------------------|---------------|---|
| <b>Recurrent/<br/>Metastatic</b> | <b>ESOP02</b> | <b>DC(Docetaxel + Cisplatin)</b> <sup>47,48</sup><br>Docetaxel 70-85 mg/m <sup>2</sup> IV over 1 hour, day 1<br>Cisplatin 70-75 mg/m <sup>2</sup> IV over 2 hours, day 1<br>Repeat cycled every 21 days   |
|                                  | <b>ESOP03</b> | <b>TC(Cisplatin + Paclitaxel)</b> <sup>49</sup><br>Paclitaxel 135-200 mg/m <sup>2</sup> IV over 3 hours, day 1<br>Cisplatin 75 mg/m <sup>2</sup> IV over 2 hours, day 2<br>Repeat cycled every 21 days  |
|                                  | <b>ESOP04</b> | <b>TCarbo(Carboplatin + Paclitaxel)</b> <sup>50</sup><br>Paclitaxel 200 mg/m <sup>2</sup> IV over 3 hours, day 1<br>Carboplatin AUC 5 IV over 1 hour, day 1<br>Repeat cycled every 21 days  |
|                                  | <b>ESOP07</b> | <b>PF(Cisplatin + Fluorouracil)(for unresectable non-metastatic disease)</b> <sup>51</sup><br>Cisplatin 75-100 mg/m <sup>2</sup> IV over 2 hours, day 1<br>Fluorouracil 750-1000 mg/m <sup>2</sup> /day IV continuous infusion 24 hours, days 1-4<br>Repeat cycled every 28 days    |
|                                  | <b>ESOP09</b> | <b>Fluorouracil + Oxaliplatin</b> <sup>52</sup><br>Oxaliplatin 85 mg/m <sup>2</sup> IV over 2 hours, day 1<br>Leucovorin 400 mg/m <sup>2</sup> IV over 2 hours, day 1<br>Fluorouracil 1200 mg/m <sup>2</sup> /day IV continuous infusion 24 hours, days 1,2<br>Cycled every 14 days |

# Esophageal Cancer protocol

## 食道癌化療處方 Chemotherapy regimen

| 治療目的                             | 組套編碼          | 處方內容  |
|----------------------------------|---------------|---|
| <b>Recurrent/<br/>Metastatic</b> | <b>ESOP02</b> | <b>DC(Docetaxel + Cisplatin)</b> <sup>47,48</sup><br>Docetaxel 70-85 mg/m <sup>2</sup> IV over 1 hour, day 1<br>Cisplatin 70-75 mg/m <sup>2</sup> IV over 2 hours, day 1<br>Repeat cycled every 21 days   |
|                                  | <b>ESOP03</b> | <b>TC(Cisplatin + Paclitaxel)</b> <sup>49</sup><br>Paclitaxel 135-200 mg/m <sup>2</sup> IV over 3 hours, day 1<br>Cisplatin 75 mg/m <sup>2</sup> IV over 2 hours, day 2<br>Repeat cycled every 21 days  |
|                                  | <b>ESOP04</b> | <b>TCarbo(Carboplatin + Paclitaxel)</b> <sup>50</sup><br>Paclitaxel 200 mg/m <sup>2</sup> IV over 3 hours, day 1<br>Carboplatin AUC 5 IV over 1 hour, day 1<br>Repeat cycled every 21 days  |
|                                  | <b>ESOP07</b> | <b>PF(Cisplatin + Fluorouracil)(for unresectable non-metastatic disease)</b> <sup>51</sup><br>Cisplatin 75-100 mg/m <sup>2</sup> IV over 2 hours, day 1<br>Fluorouracil 750-1000 mg/m <sup>2</sup> /day IV continuous infusion 24 hours, days 1-4<br>Repeat cycled every 28 days    |
|                                  | <b>ESOP09</b> | <b>Fluorouracil + Oxaliplatin</b> <sup>52</sup><br>Oxaliplatin 85 mg/m <sup>2</sup> IV over 2 hours, day 1<br>Leucovorin 400 mg/m <sup>2</sup> IV over 2 hours, day 1<br>Fluorouracil 1200 mg/m <sup>2</sup> /day IV continuous infusion 24 hours, days 1,2<br>Cycled every 14 days |

# Esophageal Cancer protocol

## 食道癌化療處方 Chemotherapy regimen

| 治療目的  | 組套編碼          | 處方內容   |
|---|---------------|--|
| <b>Recurrent/<br/>Metastatic</b>                | <b>ESOP08</b> | <b>Fluorouracil + Irinotecan(only for adenocarcinoma)<sup>53</sup></b><br>Irinotecan 180 mg/m <sup>2</sup> IV over 90 min, day 1<br>Leucovorin 400 mg/m <sup>2</sup> IV over 2 hours, day 1<br><br>Fluorouracil 1200 mg/m <sup>2</sup> /day IV continuous infusion 24 hours, days 1,2<br>Cycled every 14 days  |
|   | <b>ESOP10</b> | <b>Ramucirumab + Paclitaxel<sup>54</sup> (2<sup>nd</sup> line preferred regimen)</b><br>Ramucirumab 8 mg/kg IV over 1 hour, days 1,15<br>Paclitaxel 80 mg/m <sup>2</sup> IV over 1 hour, days 1,8,15<br>Cycled every 28 days   |
| <b>Target therapy<br/>with<br/>Chemotherapy</b> |               | If HER-2/neu overexpressing adenocarcinoma<br><b>Trastuzumab with chemotherapy<sup>55</sup> (First-line therapy)</b><br>Trastuzumab 8 mg/kg IV loading dose on day 1 of Cycle 1, then<br>Trastuzumab 6 mg/kg IV every 21 days<br>Or<br>Trastuzumab 6 mg/kg IV loading dose on day 1 of Cycle 1, then<br>Trastuzumab 4 mg/kg IV 90 min, every 14 days |
|   | <b>ESOP11</b> | <b>Ramucirumab<sup>56</sup></b><br>Ramucirumab 8 mg/kg IV over 1 hour, day 1<br>Cycled every 14 days   |

# Radiotherapy

| Treatment type                   | RT technique                   | Total dose  | Fraction size / # Fractions |
|----------------------------------|--------------------------------|---|-----------------------------|
| Preoperative or Postoperative RT | Conventionally Fractionated RT | 41.4-50.4Gy(preoperative )<br>45-50.4Gy(post-operative)   | 1.8-2Gy/<br>fraction        |
| Definitive RT                    | Conventionally Fractionated RT | 45Gy to mediastinum<br>50.4-59.4 Gy to nodal area<br>64.8-70.2 Gy to primary tumor (residual tumor) | 1.8-2Gy/<br>fraction        |

註：實際治療分次劑量 x 總治療次數，應與處方劑量差異在±1Gy之內。

註：放射治療詳細流程請參照 食道癌放射治療標準政策與執行規範。