

Treatment Algorithms for the Management of Lung Cancer in NSW

Guide for Clinicians

Background

The Cancer Institute New South Wales Oncology Group – Lung (NSWOG Lung) identified the need for the development of treatment algorithms for the management of lung cancer in NSW. This need was based on evidence that lung patients were often not offered treatment due to the belief that there were limited treatment options available. The Cancer Epidemiology Research Unit of the Cancer Council NSW was commissioned to develop the treatment algorithms.

The treatment algorithms were developed for both non small cell lung cancer and small cell lung cancer and are based on the NICE guidelines, with input from a range of NSW based lung cancer clinicians.

Modified versions of the treatment algorithms for consumers and general practitioners have been placed on the Cancer Institute NSW eviQ website (www.eviQ.org.au).

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1. Management Recommendations for Non-Small Cell Lung Cancer by Stage

Clinical Stage (TNM 7th Ed.)	Management For details of chemotherapy and radiotherapy protocols, refer to eviQ (www.eviq.org.au)	Supportive Care
I-IV	<p>Pre-Treatment Assessment:</p> <ol style="list-style-type: none"> 1. Confirm stage 2. Assess patient's fitness for treatment (MDT assessment: Surgeon and Respiratory Physician to assess fitness for surgery, Medical Oncologist for chemotherapy and Radiation Oncologist for radiotherapy) 3. Stabilise other conditions first 	
I (T1N0, T2N0)	<ol style="list-style-type: none"> 1. Surgery (ECOG 0-2) 2. Definitive RT (ECOG 0-2) 3. Palliative RT (ECOG 3-4, symptomatic) 4. Supportive care with symptom monitoring (ECOG 3-4, asymptomatic) 	<ul style="list-style-type: none"> • Access to clinical cancer care coordination or lung cancer nurse • Access to psychosocial and spiritual support • Look for support in community setting • GPs to play important role throughout (monitor for onset of symptoms)

<p>II (T1a,bN1, T2aN1, T3N0)</p>	<ol style="list-style-type: none"> 1. Surgery + adjuvant chemotherapy if N1. Consider chemotherapy if N0[#] (ECOG 0-2) 2. Definitive ChemoRT – concurrent or sequential (ECOG 0-2) 3. Definitive RT alone (ECOG 0-2) 4. Palliative RT (ECOG 3-4, symptomatic) 5. Supportive care with symptom monitoring (ECOG 3-4, asymptomatic) <p>[#]limited evidence for T3N0</p>	<ul style="list-style-type: none"> • Access to clinical cancer care coordination or lung cancer nurse • Access to psychosocial and spiritual support • Look for support in community setting • GPs to play important role throughout (monitor for onset of symptoms)
<p>IIIA (T1-3N2, T3N1, T4N0-1)</p>	<p>MDT assessment prior to any treatment decisions</p> <p>Treatment based on investigative findings:</p> <p>CT suspicious, PET +ve, non bulky nodes, single station N2</p> <ol style="list-style-type: none"> 1. Induction chemo then surgery +/- RT (ECOG 0-2) 2. Surgery plus adjuvant chemo +/- RT (ECOG 0-2) 3. Definitive ChemoRT –concurrent or sequential (ECOG 0-2) 4. Definitive RT (ECOG 0-2, unfit for chemotherapy) 5. Palliative RT (ECOG 3-4, symptomatic) 6. Supportive care with symptom monitoring (ECOG 3-4, asymptomatic) 	<ul style="list-style-type: none"> • Access to clinical cancer care coordination or lung cancer nurse • Access to psychosocial and spiritual support • Look for support in community setting • GPs to play important role throughout (monitor for onset of symptoms) • Early involvement of palliative care services

<p>IIIA (T1-3N2, T3N1, T4N0-1) Continued</p>	<p>CT suspicious, PET+ve, bulky nodes or multiple nodal levels</p> <ol style="list-style-type: none"> 1. Definitive ChemoRT-concurrent or sequential (ECOG 0-2) 2. Definitive RT (ECOG 0-2, unfit for chemotherapy) 3. Consider Palliative RT if definitive RT contraindicated (ECOG 0-2, chest symptoms) 4. Palliative Chemotherapy if RT contraindicated (ECOG 0-2), no chest symptoms) 5. Palliative RT (ECOG 3-4, symptomatic) 6. Supportive care with symptom monitoring (ECOG 3-4, asymptomatic) <p>Pathological Stage IIIA (Positive nodes found at surgery)</p> <ul style="list-style-type: none"> • consider adjuvant chemotherapy and adjuvant RT 	
<p>IIIB (T1-3N3, T4N2-3)</p>	<ol style="list-style-type: none"> 1. Definitive ChemoRT -concurrent or sequential (ECOG 0-2) 2. Definitive RT (ECOG 0-2, unfit for chemotherapy) 3. Consider Palliative RT if definitive RT contraindicated (ECOG 0-2, chest symptoms) 4. Palliative Chemotherapy if RT contraindicated (ECOG 0-2), no chest symptoms) 5. Palliative RT (ECOG 3-4, symptomatic) 6. Supportive care with symptom monitoring (ECOG 3-4, asymptomatic) 	<ul style="list-style-type: none"> • Access to clinical cancer care coordination or lung cancer nurse • Access to psychosocial and spiritual support • Look for support in community setting • GPs to play important role throughout (monitor for onset of symptoms) • Early involvement of palliative care services

**IV
(M1)**

Active treatment should begin with appropriate supportive care

Treatment based on symptoms (local or systemic)

Local Symptoms:

- Palliative RT
- Laser therapy (airway obstruction)
- Stent (airway obstruction)
- Drainage of pleural effusion +/- pleurodesis

Systemic Symptoms:

Brain metastases

- Surgery or stereotactic RT plus whole brain RT (solitary brain mets, ECOG 0-2)
- Whole brain RT (multiple brain mets, ECOG 0-2)
- Supportive care (ECOG 3-4)

Bone metastases

- RT for pain
- Fixation to prevent fracture
- Supportive care (ECOG 3-4)

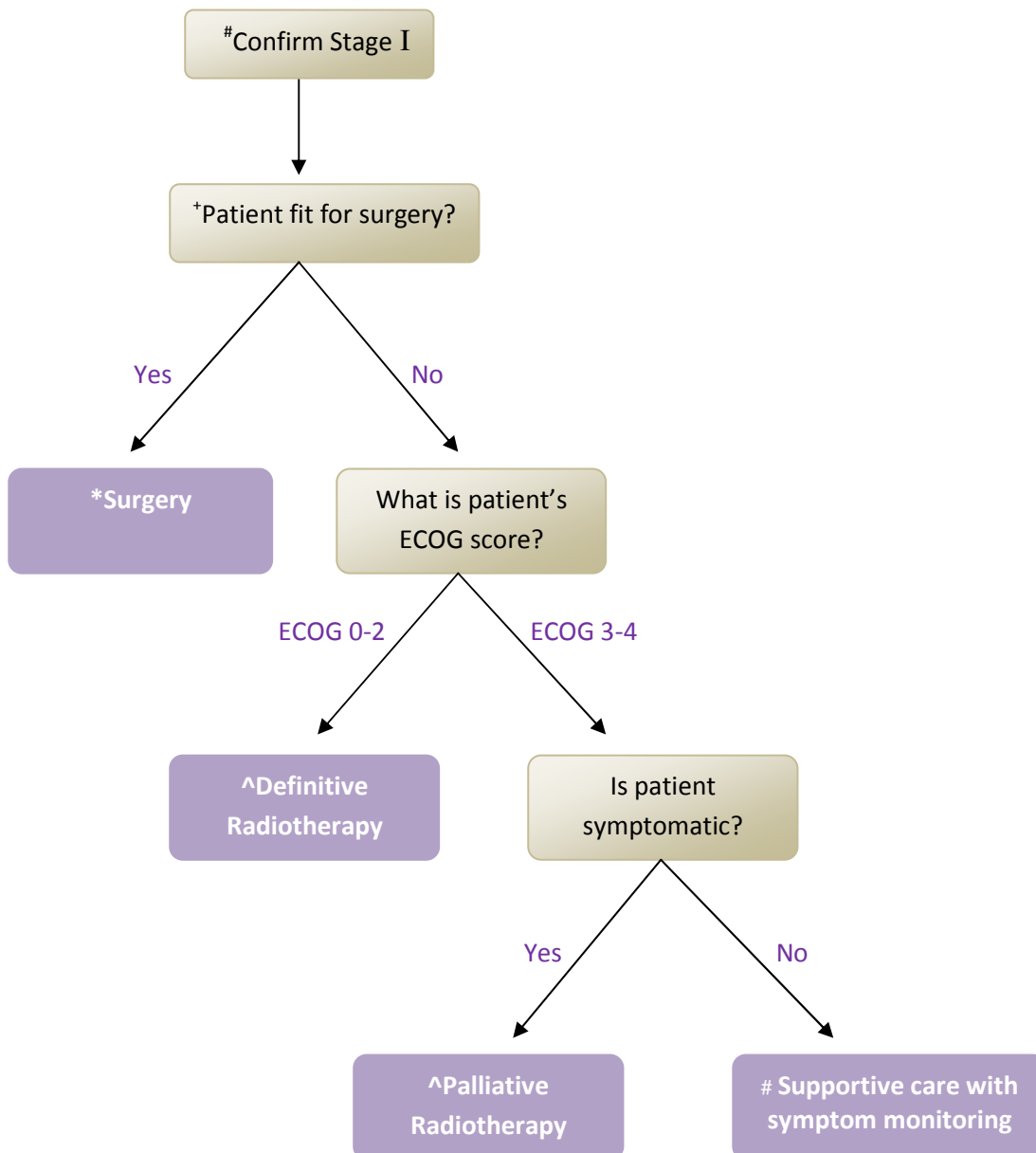
Other metastases

- Chemotherapy +/- biologic agents
- Supportive care (ECOG 3-4)

- Access to clinical cancer care coordination or lung cancer nurse
- Access to psychosocial and spiritual support
- Look for support in community setting
- GPs to play important role throughout (monitor for onset of symptoms)
- Early involvement of palliative care services

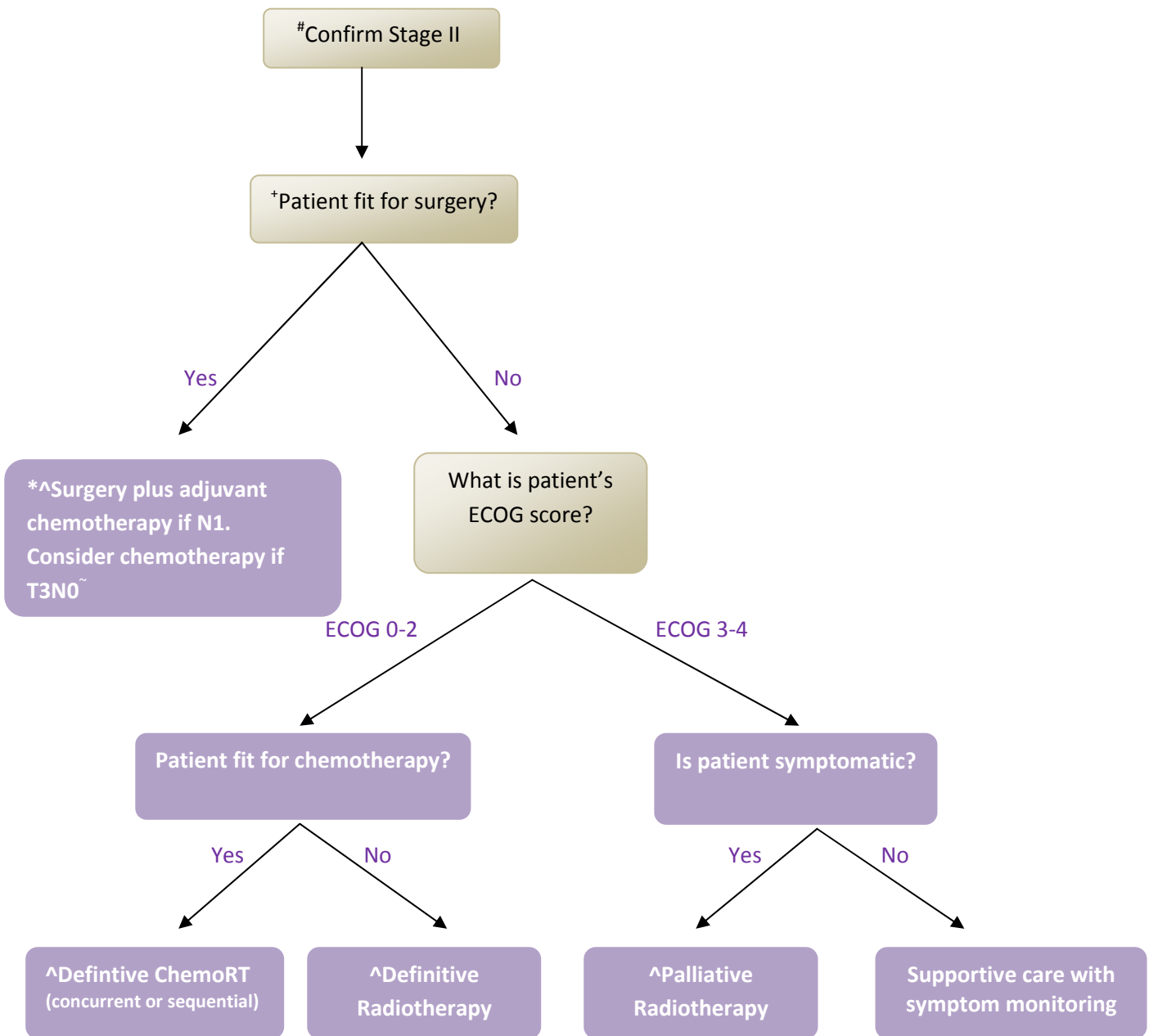
2. Flowcharts for the Management of Non-Small Cell Lung Cancer

NSCLC Clinical Stage I (T1N0, T2N0)



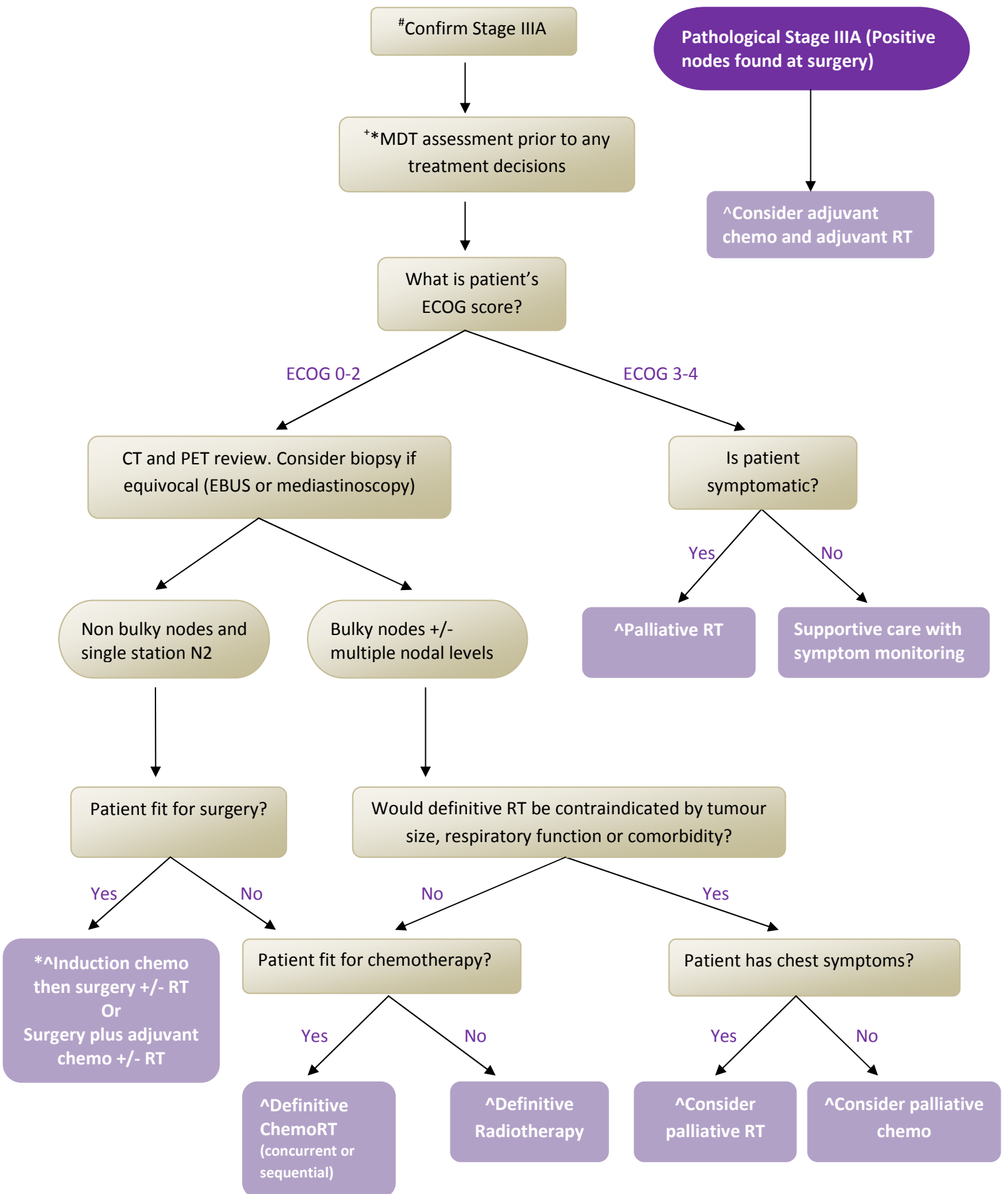
- Smoking cessation will improve survival and quality of life
- + MDT assessment: the Surgeon plus Respiratory Physician together are best to assess fitness for surgery, the Radiation Oncologist for radiation and Medical Oncologist for chemotherapy
- # Consider supportive care (including): Access to clinical cancer care coordination or lung cancer nurse; Access to psychosocial and spiritual support; Look for support in community setting; GPs need to play important role throughout
- * Stabilise other conditions before active treatment
- ^ Follow radiotherapy protocols described in EviQ <https://www.eviq.org.au/>

NSCLC Clinical Stage II (T1a,bN1, T2aN1, T3N0)

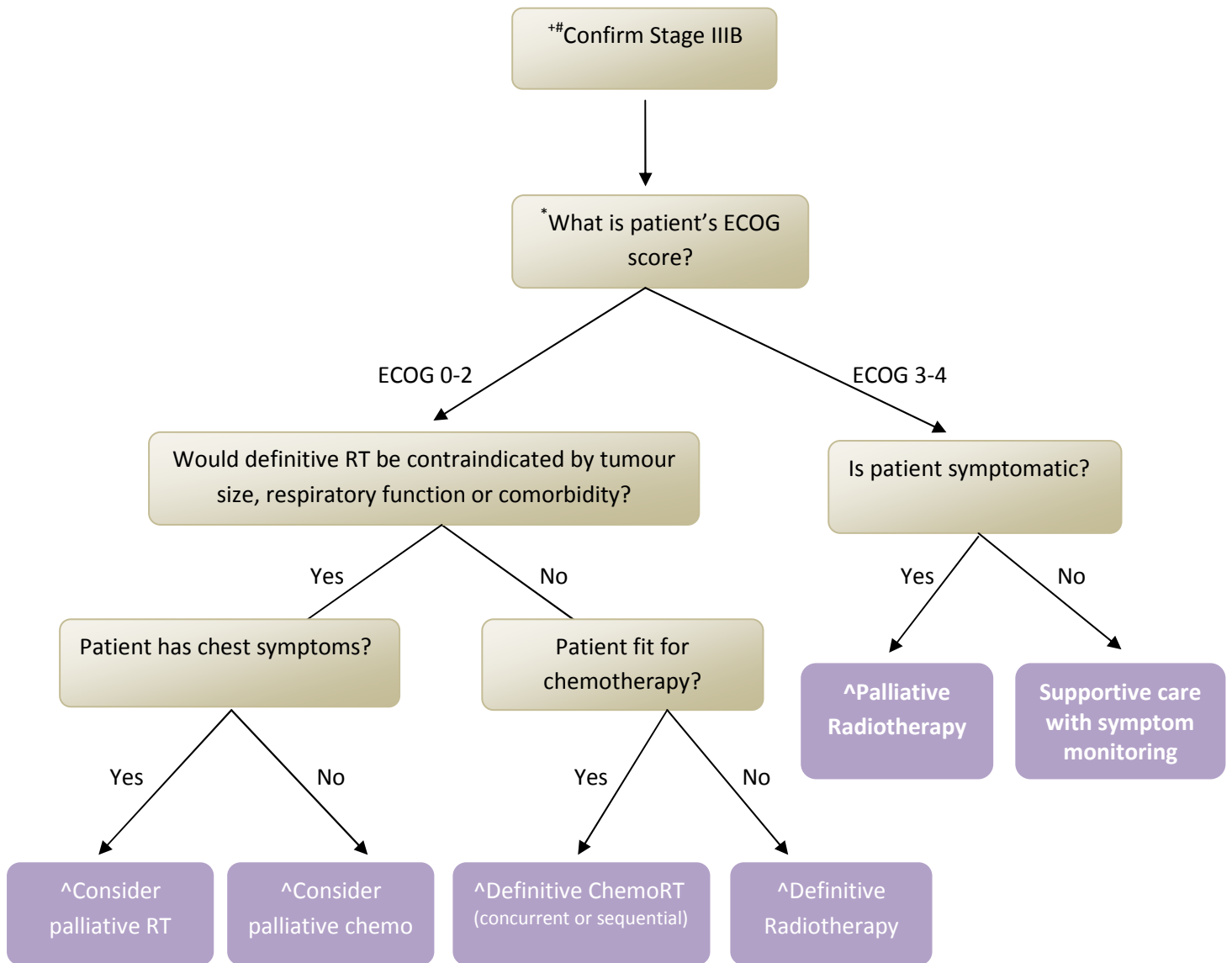


- Smoking cessation will improve survival and quality of life
- + MDT assessment: the Surgeon plus Respiratory Physician together are best to assess fitness for surgery, the Radiation Oncologist for radiation and Medical Oncologist for chemotherapy
- # Consider supportive care (including): Access to clinical cancer care coordination or lung cancer nurse; Access to psychosocial and spiritual support; Look for support in community setting; GPs need to play important role throughout
- * Stabilise other conditions before active treatment
- ^ Follow chemotherapy and radiotherapy protocols described in EviQ <https://www.eviq.org.au/>
- ~ Limited evidence for T3N0

NSCLC Clinical Stage IIIA (T1-3N2, T3N1, T4N0-1)

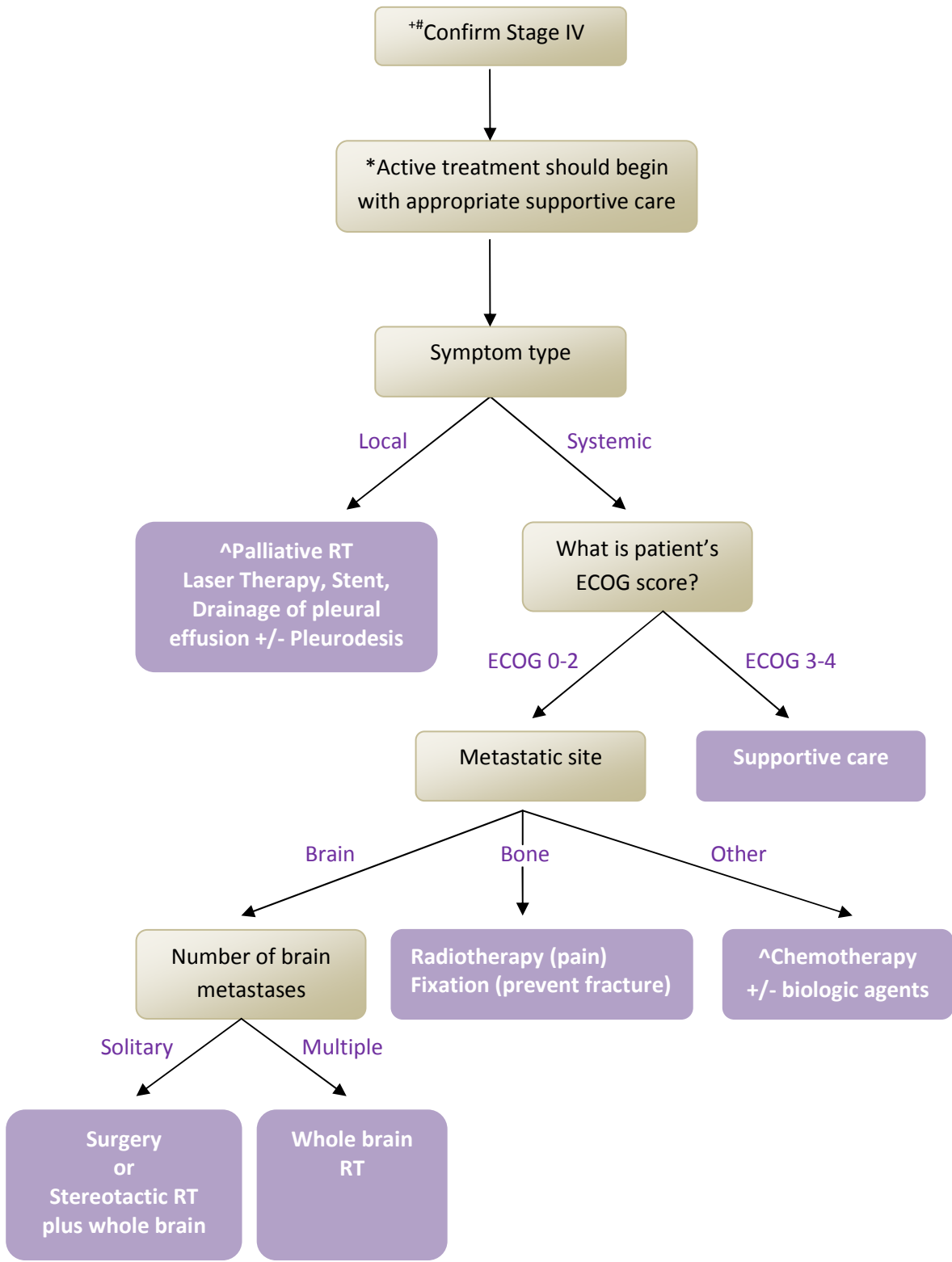


NSCLC Clinical Stage IIIB (T1-3N3, T4N2-3)



- Smoking cessation will improve survival and quality of life
- + MDT assessment: the Surgeon plus Respiratory Physician together are best to assess fitness for surgery, the Radiation Oncologist for radiation and Medical Oncologist for chemotherapy
- # Consider supportive care (including): Access to clinical cancer care coordination or lung cancer nurse; Access to psychosocial and spiritual support; Look for support in community setting; GPs need to play important role throughout
- * Stabilise other conditions before active treatment
- ^ Follow chemotherapy and radiotherapy protocols described in EviQ <https://www.eviq.org.au/>

NSCLC Clinical Stage IV (M1)



- Smoking cessation will improve survival and quality of life
- + MDT assessment: the Surgeon plus Respiratory Physician together are best to assess fitness for surgery, the Radiation Oncologist for radiation and Medical Oncologist for chemotherapy
- # Consider supportive care (including): Access to clinical cancer care coordination or lung cancer nurse; Access to psychosocial and spiritual support; Look for support in community setting; GPs need to play important role throughout
- * Stabilise other conditions before active treatment

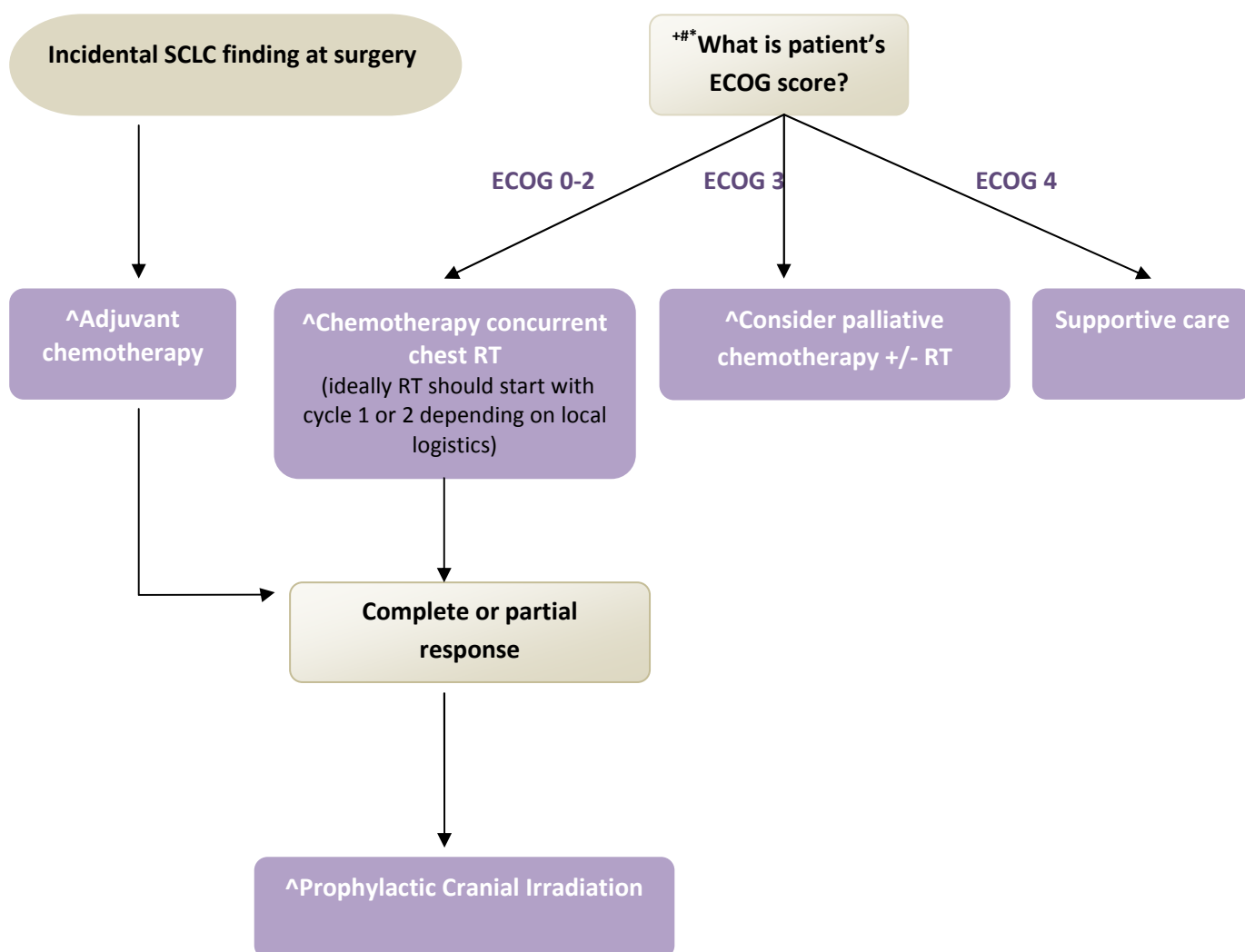
3. Management of Small Cell Lung Cancer by Stage

VA Staging	Management For details of chemotherapy and radiotherapy protocols, refer to eviQ (www.eviq.org.au)	Supportive Care
Limited	<ol style="list-style-type: none"> 1. Chemotherapy concurrent chest radiotherapy (ideally RT should start with cycle 1 or 2 depending on local logistics and prophylactic cranial irradiation for complete or partial responders) 2. Palliative chemotherapy +/-radiotherapy (ECOG 3) 3. Supportive care (ECOG 4) 	<ul style="list-style-type: none"> • Access to clinical cancer care coordination or lung cancer nurse • Access to psychosocial and spiritual support • Look for support in community setting • GPs to play important role throughout
Extensive	<ol style="list-style-type: none"> 1. Palliative chemotherapy +/- radiotherapy; and prophylactic cranial irradiation for complete or partial responders 2. Palliative chemotherapy +/-radiotherapy (ECOG 3) 3. Supportive care (ECOG 4) 	<ul style="list-style-type: none"> • Access to clinical cancer care coordination or lung cancer nurse • Access to psychosocial and spiritual support • Look for support in community setting • GPs to play important role throughout

4. Flowcharts for the Management of Small Cell Lung Cancer

SCLC Limited Stage

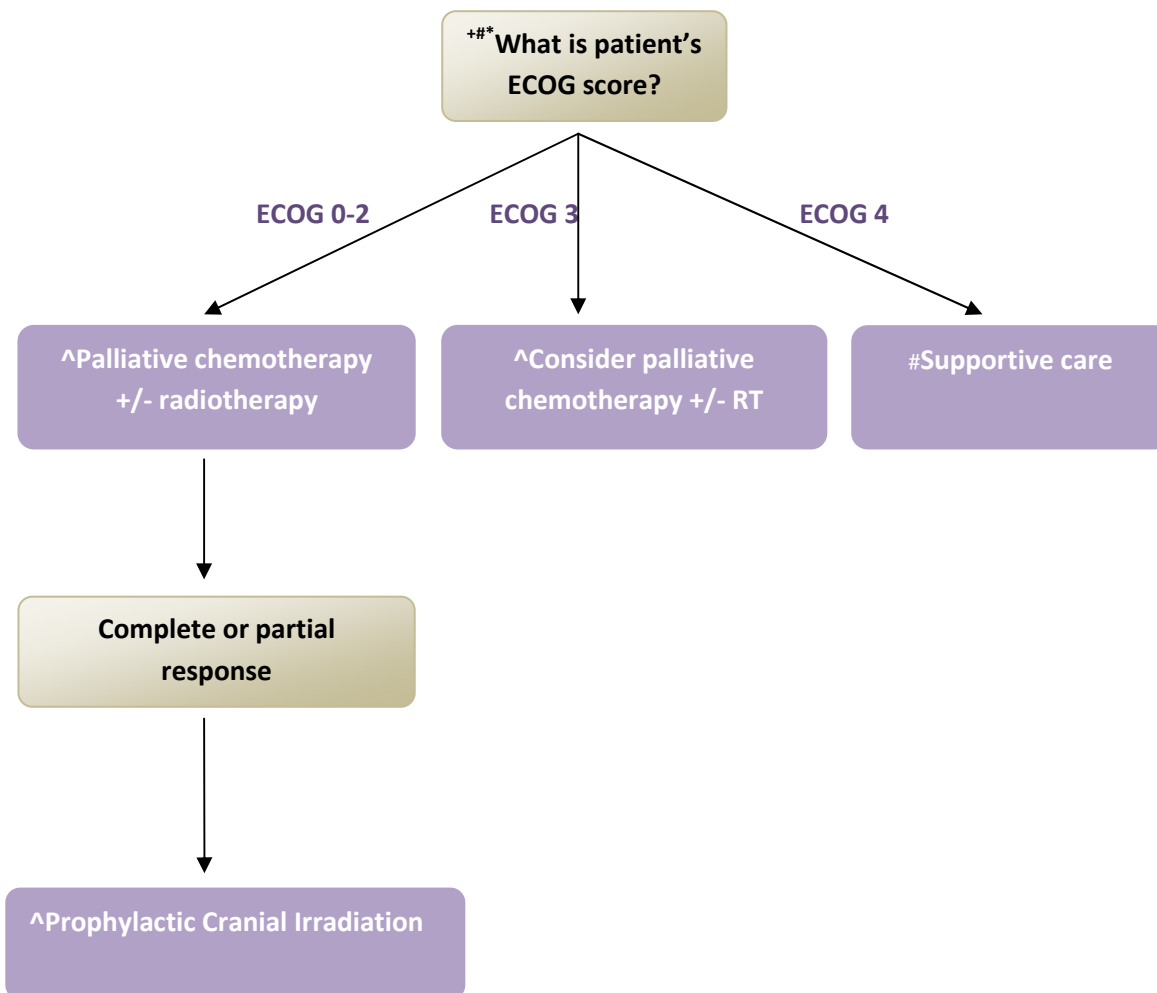
(Confined to one hemithorax, includes: ipsilateral hilar lymph nodes, mediastinal lymph nodes and ipsilateral Supraclavicular Fossa, lymph nodes, ipsilateral pleural effusion, not cytologically positive)



- Smoking cessation will improve survival and quality of life
- + MDT assessment: the Radiation Oncologist is best to assess fitness for radiotherapy and Medical Oncologist for chemotherapy
- # Consider supportive care (including): Access to clinical cancer care coordination or lung cancer nurse; Access to psychosocial and spiritual support; Look for support in community setting; GPs need to play important role throughout
- * Stabilise other conditions before active treatment
- ^ Follow chemotherapy and radiotherapy protocols described in EviQ <https://www.eviq.org.au/>

SCLC Extensive Stage

(anything beyond limited stage)



- Smoking cessation will improve survival and quality of life
- + MDT assessment: the Radiation Oncologist is best to assess fitness for radiotherapy and Medical Oncologist for chemotherapy
- # Consider supportive care (including): Access to clinical cancer care coordination or lung cancer nurse; Access to psychosocial and spiritual support; Look for support in community setting; GPs need to play important role throughout
- * Stabilise other conditions before active treatment
- ^ Follow chemotherapy and radiotherapy protocols described in EviQ <https://www.eviq.org.au/>

