



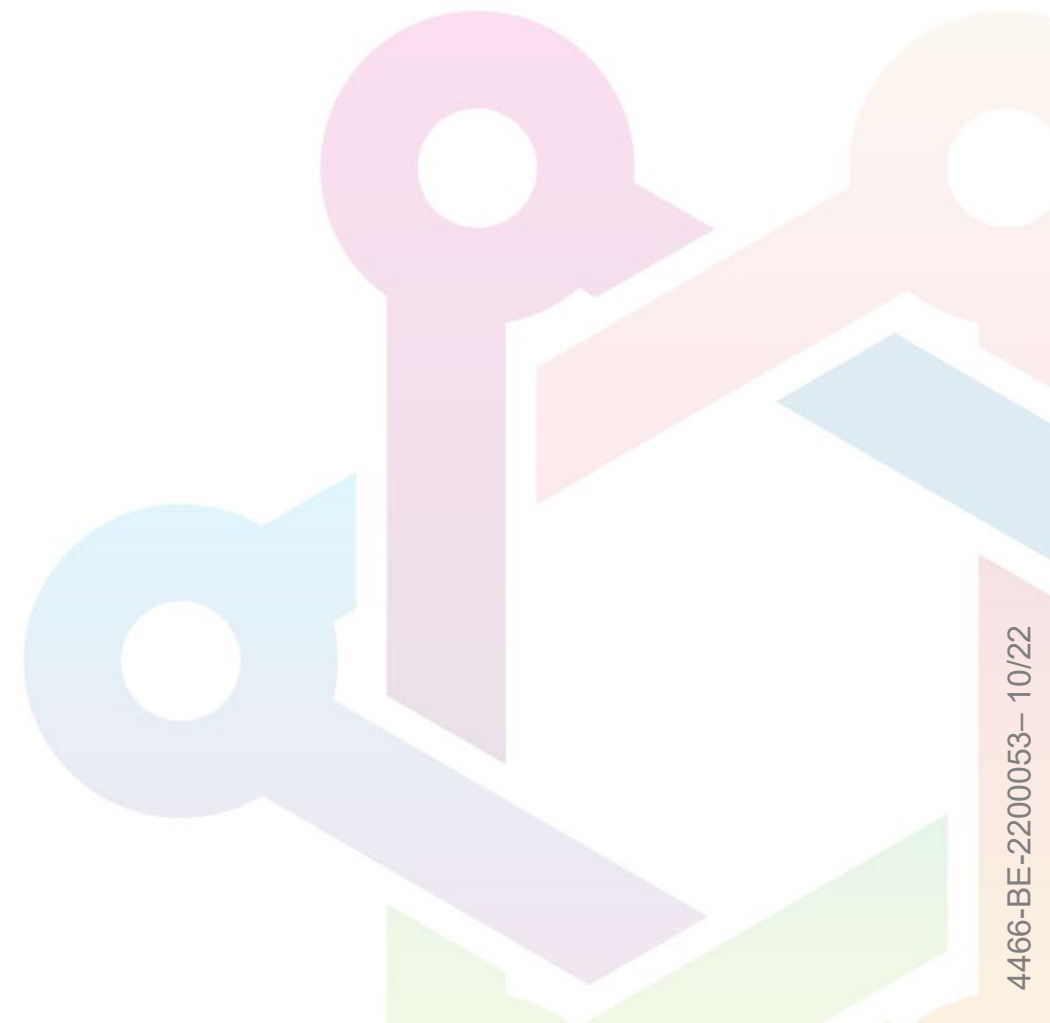
ImmunoScience Academy

Partnering for Education & Optimizing Treatment in ImmunoScience

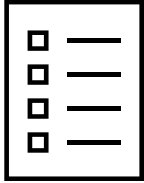
Patients with thoracic malignancy and incidental venous thromboembolism

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Clinical case: 83 year old man



Medical history

- ▶ Cataract surgery
- ▶ NIDDM
- ▶ Arterial Hypertension - Hypercholesterolemia
- ▶ Chronic renal insufficiency CKD G3a (GFR ~50ml/min/1.73 m²)
- ▶ Ex-smoker (55 pack-year)
- ▶ Chronic medication: metformin, rosuvastatin, perindopril

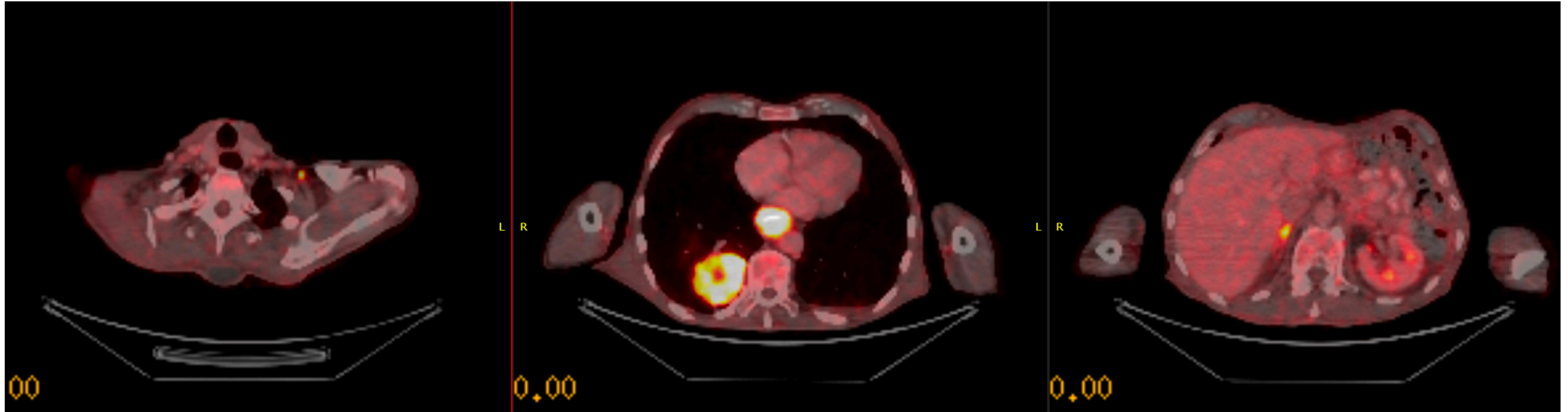


Current problem

- ▶ Anorexia and dysphagia resulting in weight loss (10% in 3 months)
 → endoscopy: stenosis of oesophagus due to extrinsic compression



Clinical case: 83 year old man



PET-CT scan

- ▶ Necrotic tumor in right lower lung. Subcarinal tumoral mass (DD adenopathy vs oesophageal tumor)
- ▶ Hypermetabolic adenopathies paratracheal right and retroclavicular left
- ▶ Right adrenal metastasis → cT3N3M1b tumour



Clinical case: 83 year old man



Transthoracic biopsy

- ▶ Necrotic NSCLC: poorly differentiated squamous cell carcinoma (TTF1 - / p63 +++).
- ▶ PD-L1 expression in 80–90% of tumor cells



Treatment

- ▶ Initiation of PD-1 inhibitor

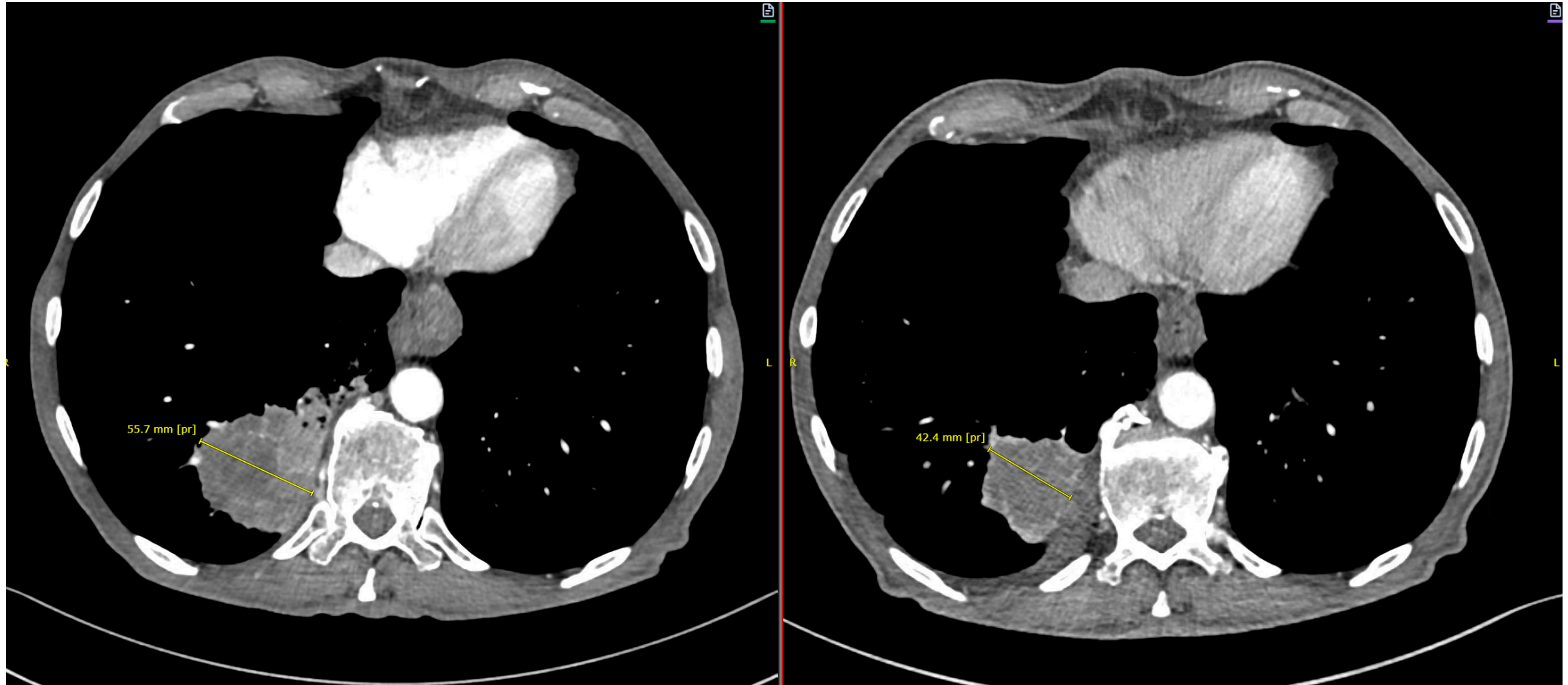


Evolution

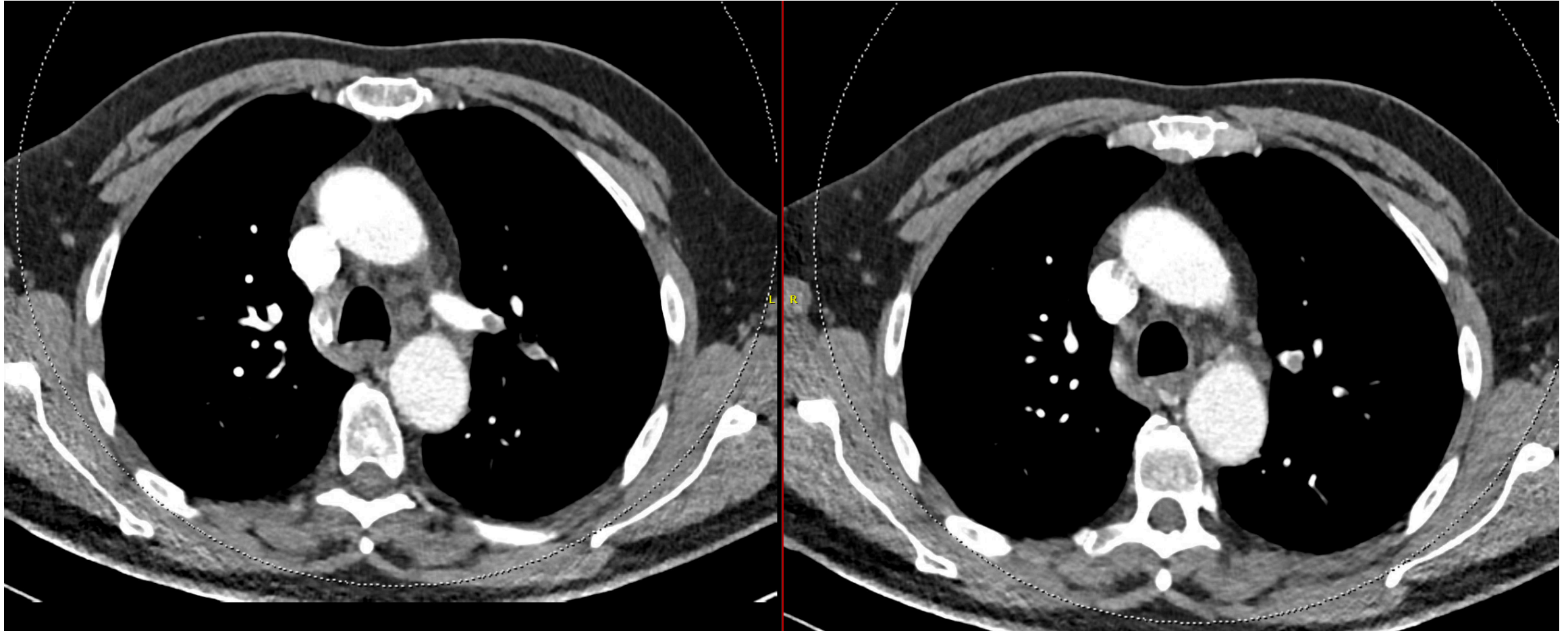
- ▶ Progressive improvement of general condition and normalisation of eating
- ▶ Increasing weight and activity



Clinical case: 83 year old man

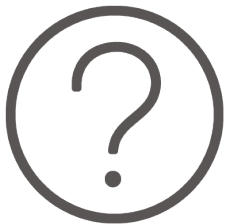


Clinical case: 83 year old man



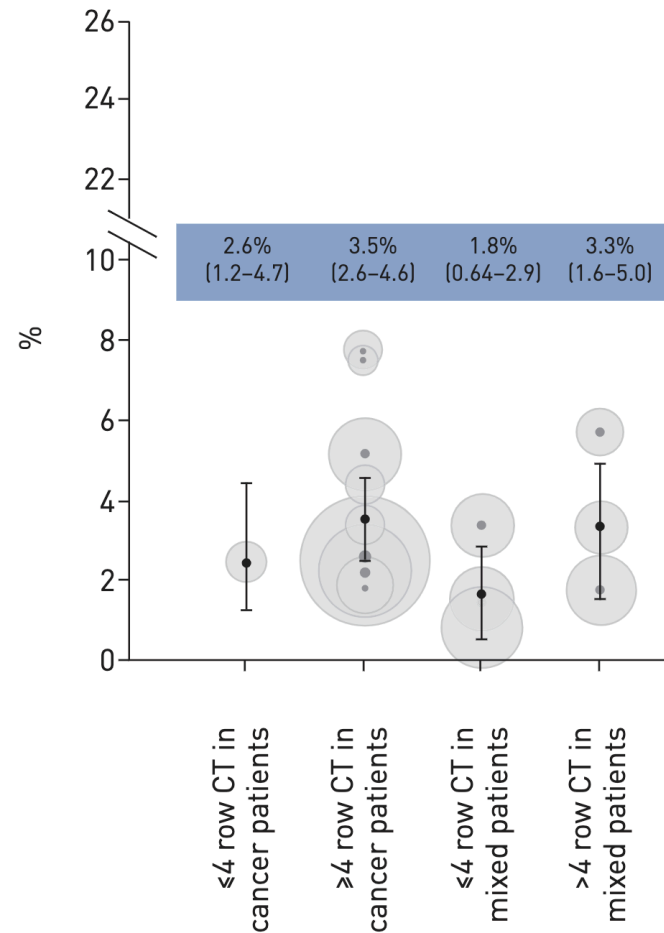
Clinical case: 83 year old man – polling question

- ▶ Incidental finding of segmental emboli in LUL. What would you do?
 1. Continue current treatment. No anticoagulation
 2. Stop immunotherapy. No anticoagulation
 3. Continue current treatment. Start anticoagulation with DOAC
 4. Stop immunotherapy. Start anticoagulation with DOAC
 5. Other suggestion



Incidental PE detected on “routine” chest CT

Weighted pooled frequencies of incidental PE



- ▶ Incidental PE is an unexpected finding on a CT scan performed for an indication other than suspected PE
- ▶ Interobserver agreement for incidental PE is high¹
- ▶ In cancer pts the incidence frequency is 3.6%¹
- ▶ In lung cancer pts treated with immunotherapy up to 8.4% incidental PE²
- ▶ Clinically suspected and incidental VTE have worse OS compared to patients without VTE³
- ▶ Similar survival in suspected vs incidental PE (HR 1.2)³



Risk of recurrent venous thromboembolism and major hemorrhage in cancer-associated incidental pulmonary embolism among treated and untreated patients: a pooled analysis of 926 patients

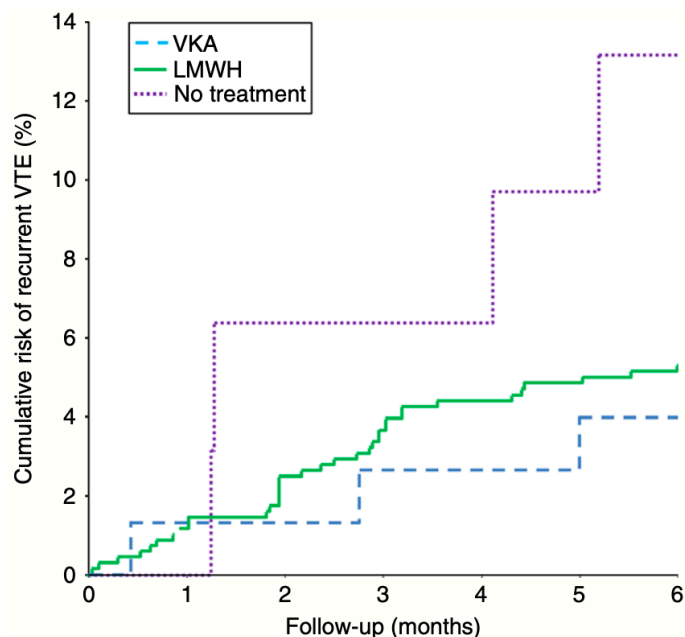


Fig. 2. Cumulative risk of recurrent venous thromboembolism related to management. VKA, vitamin K antagonist; LMWH, low molecular weight heparins. Based on a competing risk analysis.

6-month risk	Recurrent VTE	Major bleeding	All cause mortality
LMWH	6.2 %	3.9 %	37 %
Vit K antagonist	6.4 %	13 %	28 %
No treatment	12 %	6.4 %	47%



Unsuspected (incidental) PE in lung cancer patients: impact of anticoagulation therapy

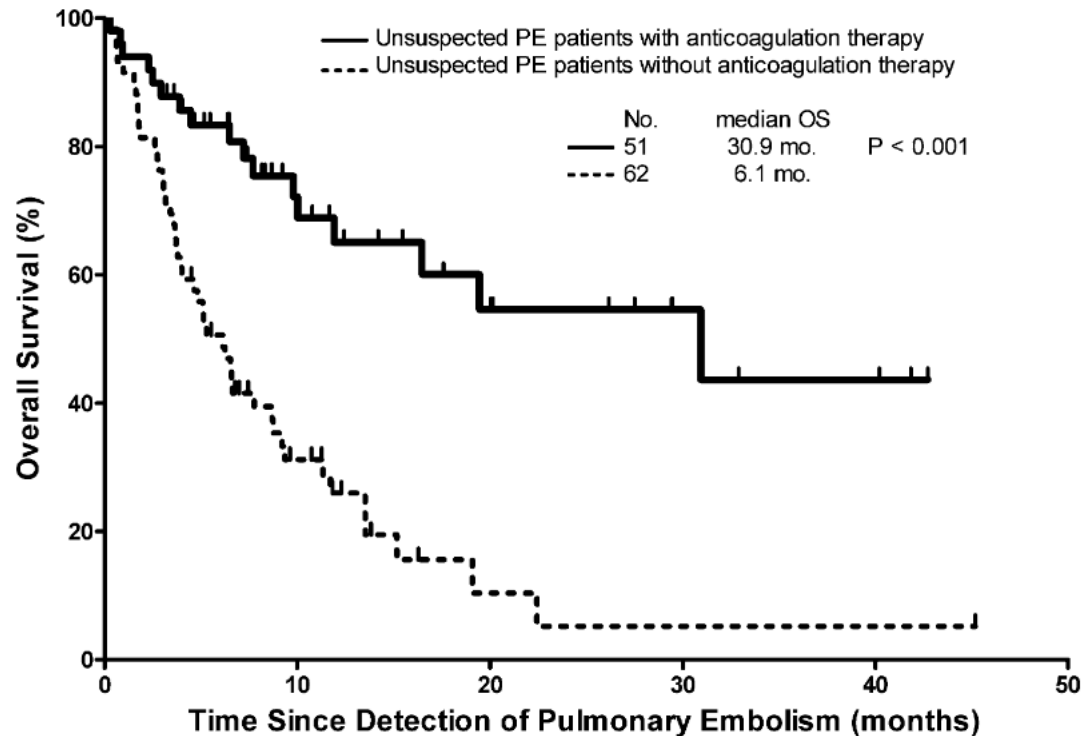


Fig. 2. Overall survival curves for patients with or without anticoagulation therapy among 113 lung cancer patients with unsuspected pulmonary emboli.

- ▶ Korean retrospective analysis on 8014 lung cancer patients
- ▶ Incidence of PE: 2.2% (n 180)
 - 37% suspected PE (→ 99% antico)
 - 63% incidental PE (→ 45% antico)
- ▶ Multivariate analysis in incidental PE: lack of anticoagulation is associated with 4-fold increase of mortality (HR 4.1; CI 2.3 – 7.6)



Venous Thromboembolism Prophylaxis and Treatment in Patients With Cancer: ASCO Clinical Practice Guideline Update

Recommendation 4.7. Incidental PE and deep vein thrombosis should be treated in the same manner as symptomatic VTE, given their similar clinical outcomes compared with patients with cancer with symptomatic events (Type: informal consensus; Evidence quality: low; Strength of recommendation: moderate)

Antithrombotic Therapy for VTE Disease



Second Update of the CHEST Guideline and Expert Panel Report

Recommendation 4. In patients who are incidentally found to have asymptomatic PE, we suggest the same initiation and treatment phase anticoagulation as for comparable patients with symptomatic PE (weak recommendation, moderate-certainty evidence).



2022 ESC Guidelines on cardio-oncology developed in collaboration with the European Hematology Association (EHA), the European Society for Therapeutic Radiology and Oncology (ESTRO) and the International Cardio-Oncology Society (IC-OS)

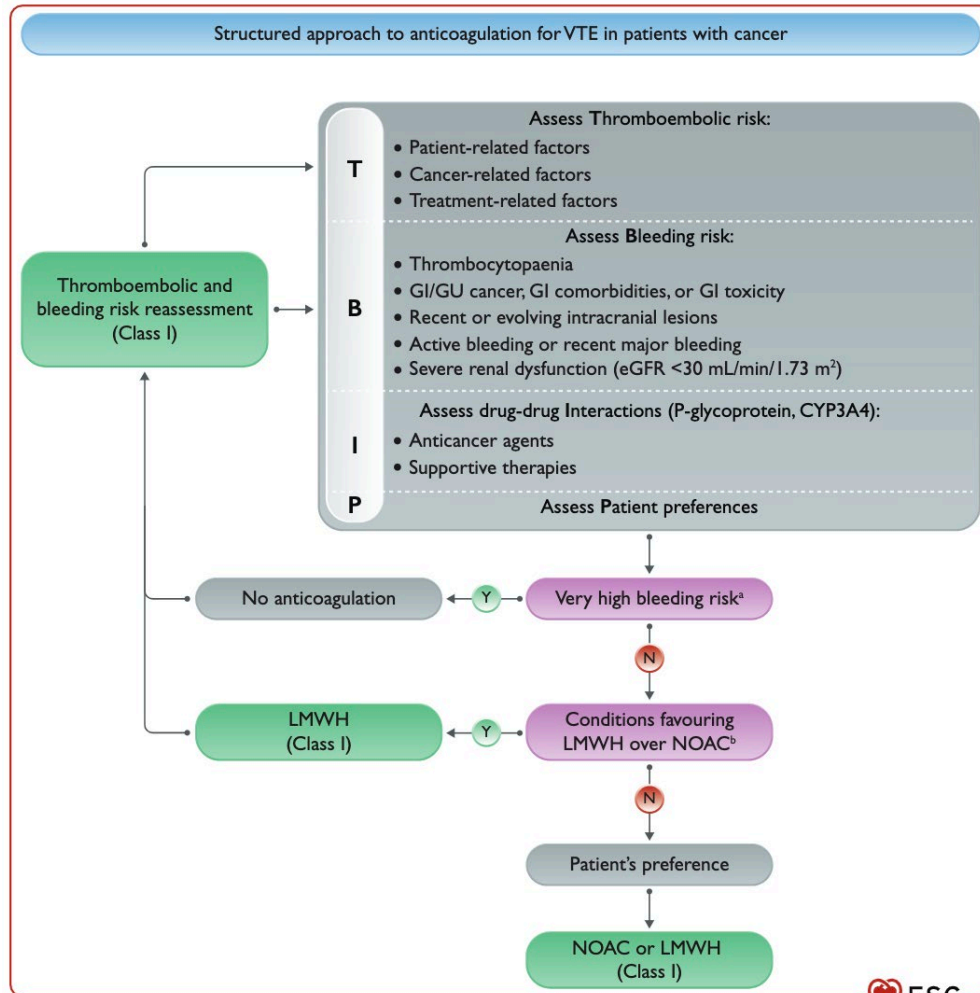


Figure 36 Structured approach to anticoagulation for venous thromboembolism in patients with active cancer. CrCl, creatinine clearance; eGFR, estimated glomerular filtration rate; GI, gastrointestinal; GU, genitourinary; LMWH, low-molecular-weight heparins; N, no; NOAC, non-vitamin K antagonist oral anticoagulants; VTE, venous thromboembolism; Y, yes. ^a**Very high bleeding risk:** active or recent major bleeding (<1 month); recent/evolving intracranial lesions; platelet count <25 000/μL. According to the International Society on Thrombosis and Haemostasis,⁵²⁹ major bleeding is defined as: fall in haemoglobin level ≥ 2 g/dL, transfusion of ≥2 units of red blood cells, fatal bleeding, or bleeding in a critical area (intracranial, intraspinal, intraocular, pericardial, intra-articular, intramuscular with compartment syndrome, or retroperitoneal). ^b**Conditions favouring LMWH:** unoperated GI/GU cancer; GI comorbidities or toxicity; severe renal dysfunction (CrCl < 15 mL/min); NOAC major drug–drug interactions, platelet count < 50 000/μL.



Clinical case: 83 year old man – polling question

- ▶ Would your treatment be the same if only an incidental (isolated) subsegmental PE was found?
 1. Yes
 2. No



Isolated subsegmental PE

- ▶ Risk of **false positive diagnosis**:
 - i.e. only 51% of subsegmental PE in pts suspected of PE were confirmed by experienced thoracic radiologist¹
- ▶ Risk of **overdetection** of PE's that were never going to cause harm:
 - i.e. 3-month outcome in 91 pts with PE isolated to subsegmental pulmonary arteries:²
 - 76% were treated with antico → 1 recurrent subsegmental PE and 5 major bleedings
 - 24% with no antico → no recurrent VTE
- ▶ Cochrane Library Review of “Anticoagulant treatment for subsegmental pulmonary embolism”³
 - **Key results:** There is no evidence from randomised controlled trials on the effectiveness and safety of anticoagulation therapy vs control in patients with isolated subsegmental pulmonary embolism (SSPE) or incidental SSPE. We cannot draw any conclusions.

