Managing Crucial Patient Conversations

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Prescribing information is available at this meeting and can be accessed from the links at the end of this deck.
This is a promotional meeting funded and organised by AstraZeneca for UK HCPs only.

GB-56041
Date of preparation: June 2024

THINK AGAIN LUNG SUMMIT

Disclosures

Mr Alessandro Brunelli: I have received honoraria for my participation in advisory boards from AstraZeneca, BMS, MSD, Roche, Medtronic, Medela, and Ethicon, and for my participation in the 2024 Think Again Lung Summit from AstraZeneca.

Dr Spyros Gennatas: I have received honoraria for my participation in the 2024 Think Again Lung Summit from AstraZeneca.

Ms Emma Halkyard: I have received honoraria from Takeda, AstraZeneca, Roche, Daiichi Sankyo, and Janssen, and for my participation in the 2024 Think Again Lung Summit from AstraZeneca.

References go here

IMFINZI™ ▼ (durvalumab) and TAGRISSO® (osimertinib) therapeutic indications in NSCLC:

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IMFINZI™ (durvalumab) as monotherapy is indicated for[1,2]:

- The treatment of locally advanced, unresectable NSCLC in adults whose tumours express PD-L1 on ≥1% of tumour cells and whose disease has not progressed following platinum-based chemoradiation therapy

TAGRISSO® (osimertinib) as monotherapy is indicated for[3,4]:

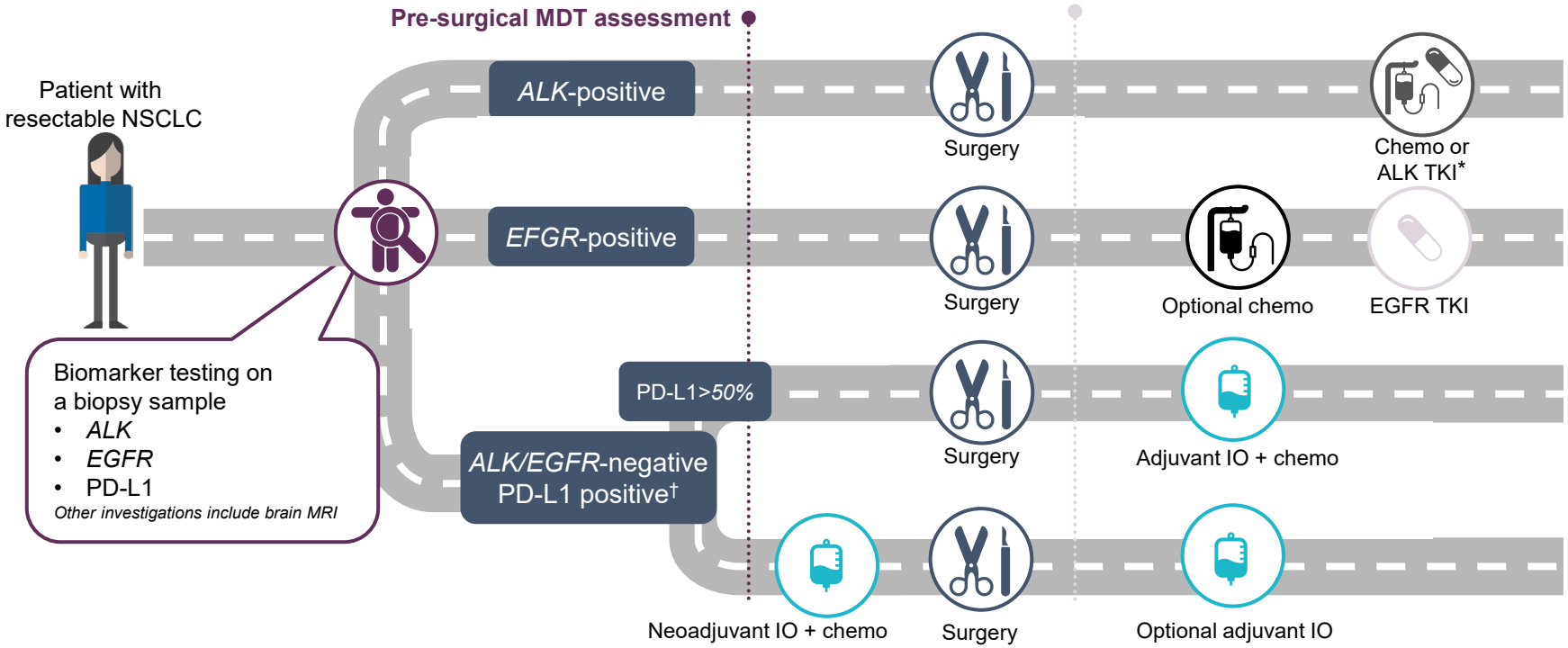
- The adjuvant treatment after complete tumour resection in adult patients with Stage IB-IIIA non-small cell lung cancer (NSCLC) whose tumours have epidermal growth factor receptor (EGFR) exon 19 deletions or exon 21 (L858R) substitution mutations
- The first-line treatment of adult patients with locally advanced or metastatic NSCLC with activating EGFR mutations
- The treatment of adult patients with locally advanced or metastatic EGFR T790M mutation-positive NSCLC

NSCLC, non-small cell lung cancer; PD-L1, programmed cell death ligand-1; URTI, upper respiratory tract infection.

1. EMC. IMFINZI SmPC. Available at: https://www.medicines.org.uk/emc/product/9495 (Accessed June 2024); 2. EMC Northern Ireland. IMFINZI SmPC. Available at: https://www.emcmedicines.com/en-gb/northernireland/medicine?id=ebfb0ef2-3f0b-4d5d-8e7b-353a0176b147&type=smpc (Accessed June 2024); 3. EMC. Tagrisso SmPC. Available at: https://www.medicines.org.uk/emc/product/7615/smpc (Accessed June 2024). 4. EMC Northern Ireland. Tagrisso SmPC. Available at: https://www.emcmedicines.com/en-gb/northernireland/medicine?id=31fc5f4c-3e57-45dc-a9ab-39ea9213601c&type=smpc (Accessed June 2024).

The treatment landscape of resectable NSCLC is rapidly evolving[1–3]

Biomarker testing before treatment initiation is essential to inform treatment decision-making[1]



*Alectinib is not approved for adjuvant use in GB and received positive CHMP opinion from the EMA.[2,3]

ALK, anaplastic lymphoma kinase; EGFR, epidermal growth factor receptor; EMA, European Medicines Agency; IO, immunotherapy; MDT, multidisciplinary team; MRI, magnetic resonance imaging; NSCLC, non-small cell lung cancer; PD-L1; programmed death-ligand 1; TKI, tyrosine kinase inhibitor.

1. National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Non-Small Cell Lung Cancer v.5.2024. National Comprehensive Cancer Network, Inc. 2024. Available at: https://www.nccn.org. (Last accessed June 2024); 2. Alecensa (Alectinib) Summary of Product Characteristics. Available at: https://www.medicines.org.uk/emc/product/2438 (last accessed June 2024); 3. European Medicines Agency. 2024. Alecensa - CHMP positive opinion. Available at: https://www.ema.europa.eu/en/medicines/human/variation/alecensa (last accessed June 2024).

“Personalised Care”[1,2]

What’s important to the patient?

- (How do we know this?)

Shared Decision Making

- (What we’ve always done, but…)

Genomic testing – to inform the treatment plan

Experience of care

Key worker role

Supporting through transitions of care

1. NHS. The NHS Long Term Plan. 2019. Available at: https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf (Accessed June 2024); 2. NHS. Implementing a timed lung cancer diagnostic pathway. 2023. Available at: https://www.england.nhs.uk/long-read/implementing-a-timed-lung-cancer-diagnostic-pathway/ (Accessed June 2024).

Genomics in lung cancer

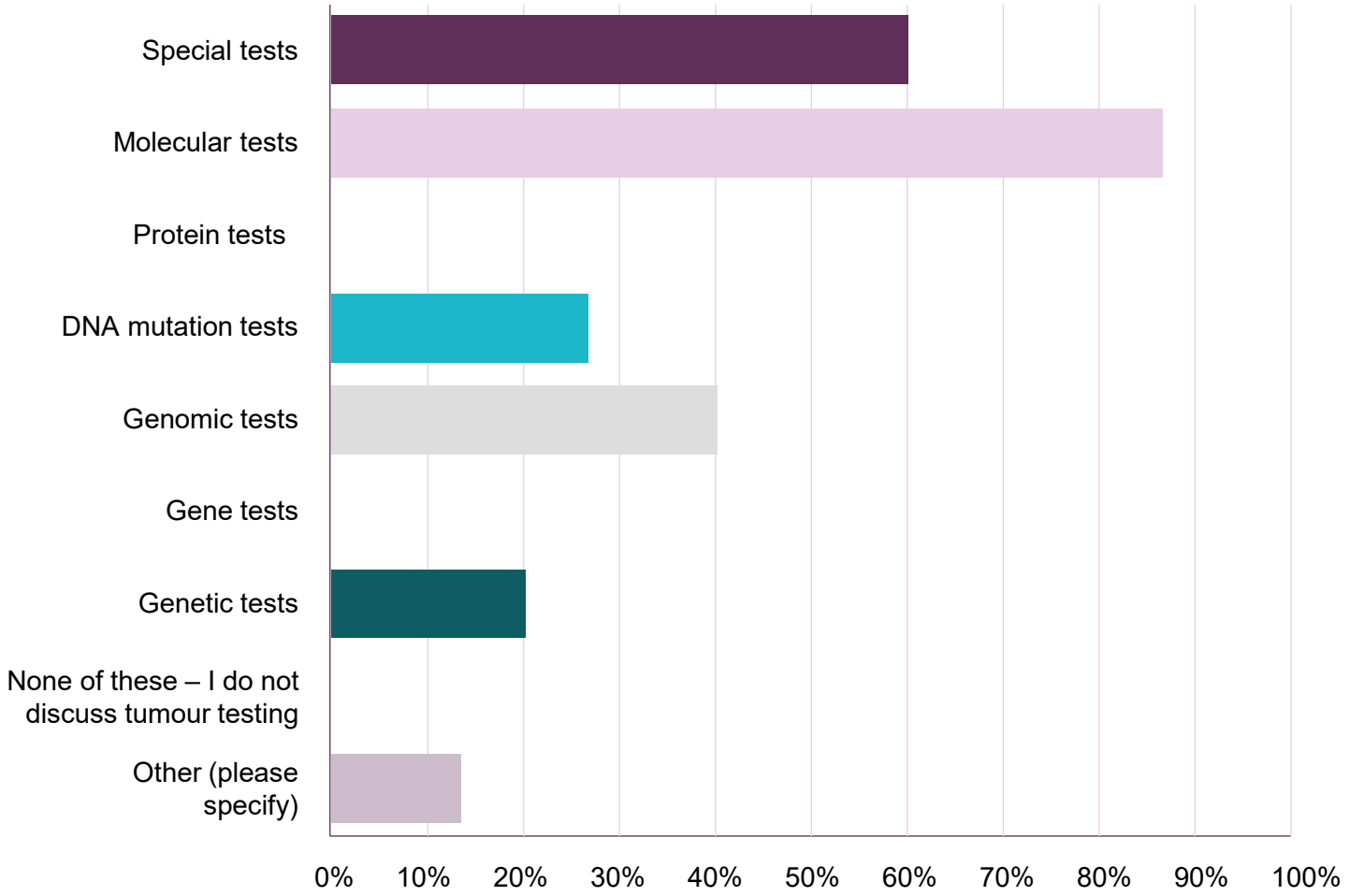
- **Supporting conversations – inside and outside the clinic**
- **Enabling understanding, navigating the pathway, co-ordinating tests**
- **Bridging the gap**

Questions for the room….

1. Do you regularly have conversations with patients about genomic testing?
2. Do you feel confident in your knowledge of which tests are required for your patient?
3. Do you agree that specialist nurses should be able to engage in conversations about cancer genomic testing?

Speaker's clinical expertise.

Which phrases do you use when talking about tumour testing in lung cancer?



Data provided courtesy of speaker.

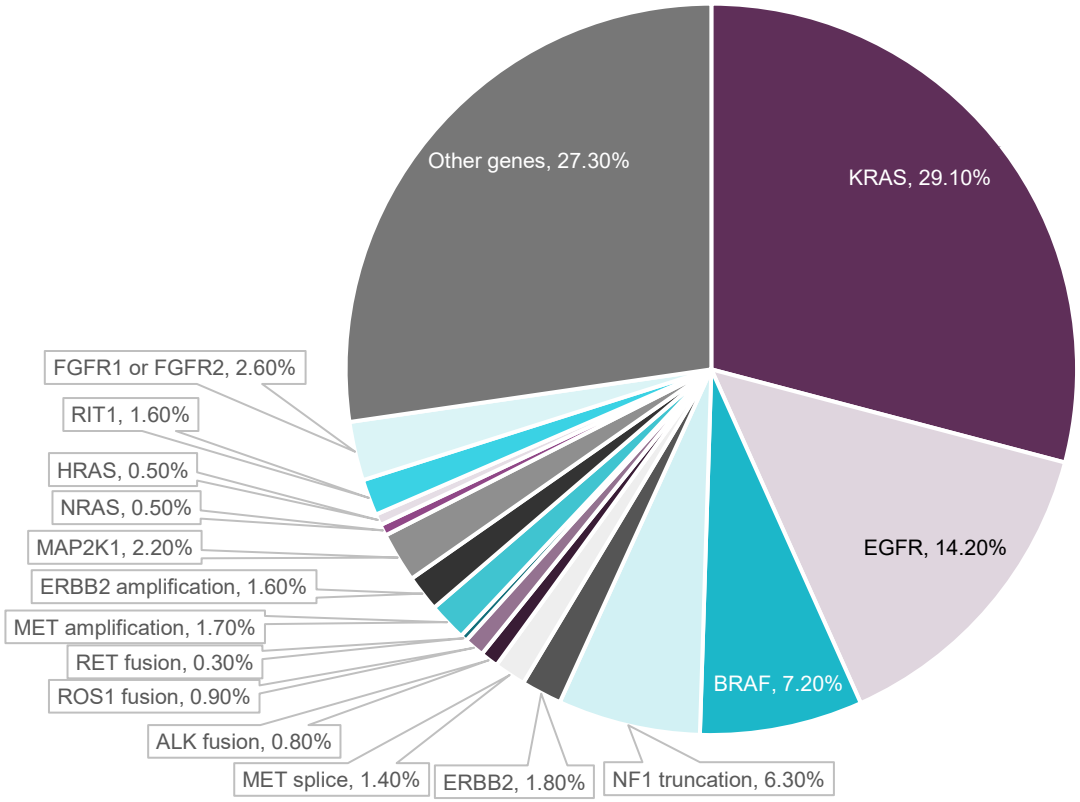
Do you wish to undertake cancer-related genomics education to increase your understanding?

80% would like to undertake training but don't know where to access this

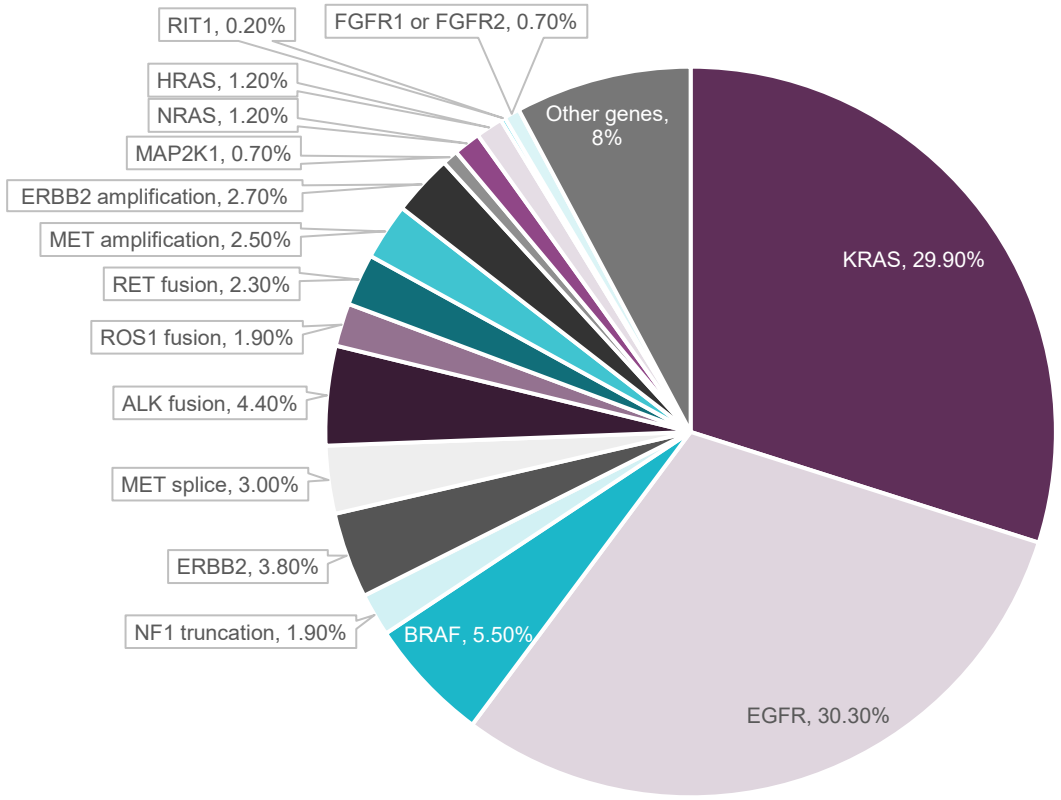
Data provided courtesy of speaker.

Molecular targets in NSCLC

Early stage[1–4]
(n=741)



Metastatic[1,5,6]
(n=5262)



ALK, anaplastic lymphoma kinase; BRAF, v-raf murine sarcoma viral oncogene homolog B1; EGFR, epidermal growth factor receptor; ERBB2, erythroblastic oncogene B; FGFR, fibroblast growth factor receptor; HRAS, Harvey rat sarcoma viral oncogene homolog; KRAS, Kirsten rat sarcoma viral oncogene homolog; MAP2K1, mitogen-activated protein kinase kinase 1; MET, mesenchymal–epithelial transition factor; NF1, neurofibromin; NRAS, neuroblastoma RAS viral oncogene homolog; RET, rearranged during transfection; RIT1, Ras-like-without-CAAX-1; ROS1, c -ros oncogene 1.

1. Skoulidis, F., Heymach, J.V. *Nat Rev Cancer. 20*19, 495–509; 2. Hoadley KA, et al. *Cell.* 2018;173(2):291–304; 3. Imielinski M, et al. *Cell.* 2012;150(6):1107–1120; 4. Scheel AH, et al. *Oncoimmunology.* 2016;5(5):e1131379; 5. Jordan EJ, et al. *Cancer Discov.* 2017;7(6):596–609; 6. Basu A, et al. *Cell.* 2013;154(5):1151–1161.

Case-Based Scenario

Stage II and III patients – conversation about neoadjuvant treatment

or

Neoadjuvant vs adjuvant treatment depending on the molecular profile of the tumour and patient preferences

Mr Alessandro Brunelli

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Case study 1: A 59-year-old male

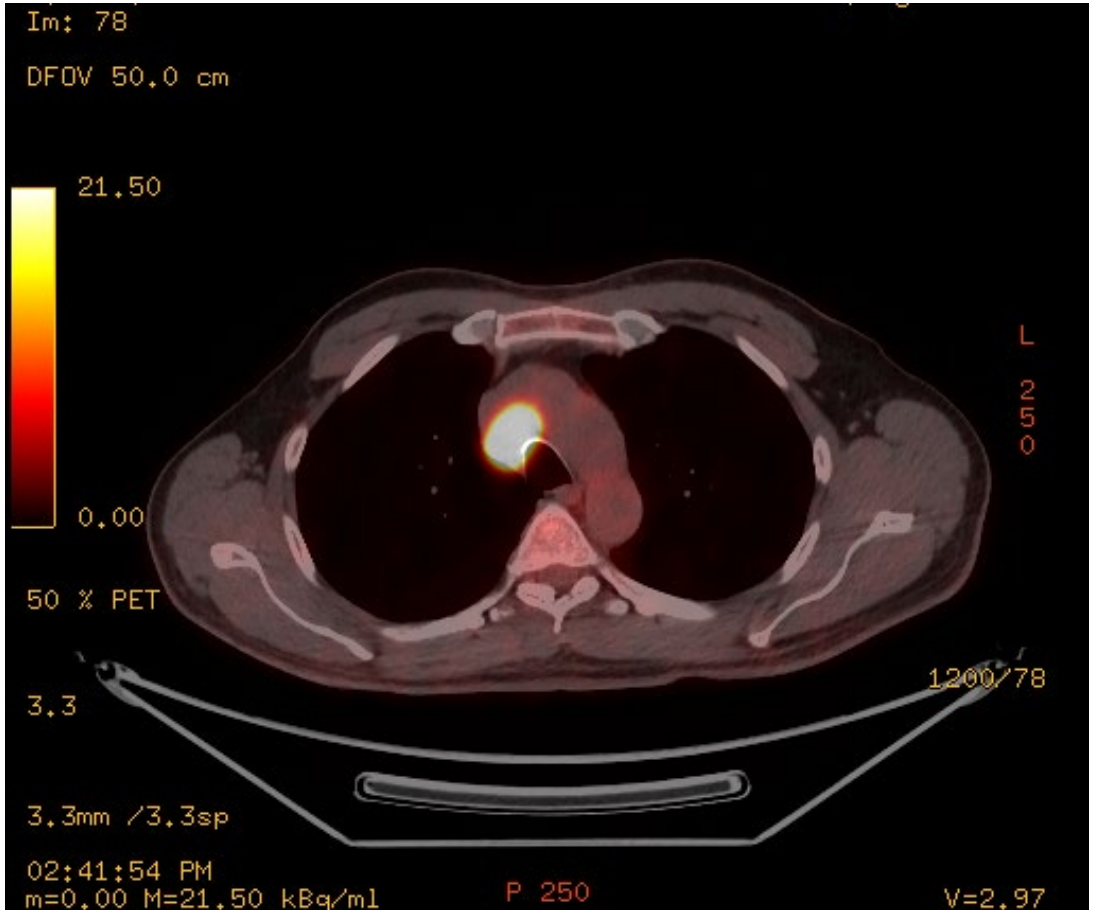
Description and workup:

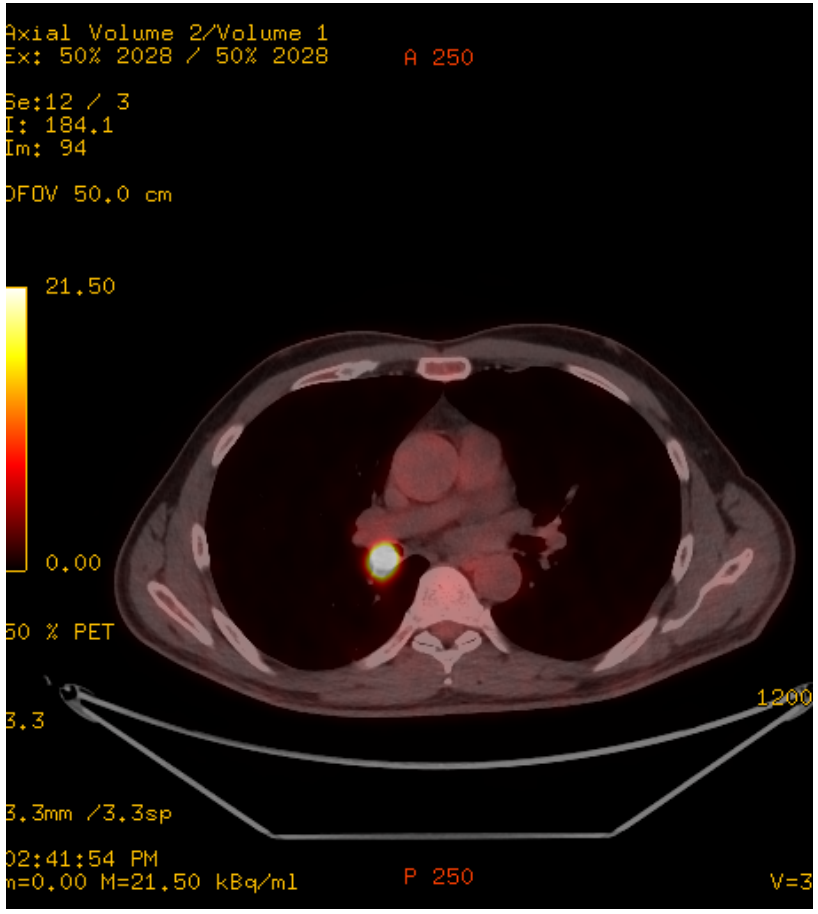
- Presenting with a clinically staged T1c N2 M0 right lower lobe lung cancer
- PS 0
- Past medical history unremarkable for any major cardiovascular or cerebrovascular disease. The patient doesn't take any major medication
- PFTs show an FEV1 of 94% predicted and DLCO 61% predicted
- Distance walked at SWT 660 m without desaturation
- EBUS bx squamous cell carcinoma. PD-L1 35%; *EGFR* and *ALK* negative

ALK, anaplastic lymphoma kinase; bx, biopsy; DLCO, diffusion capacity for carbon monoxide; EBUS, endobronchial ultrasound; EGFR, epidermal growth factor receptor; FEV, forced expiratory volume; PFT, pulmonary function test; PS, performance score; SWT, shuttle walking test; TNM, tumour, node and metastasis.

Speaker's clinical expertise.

The planned extend of resection if a right middle-lower bilobectomy





Images provided courtesy of speaker.

Neoadjuvant treatment

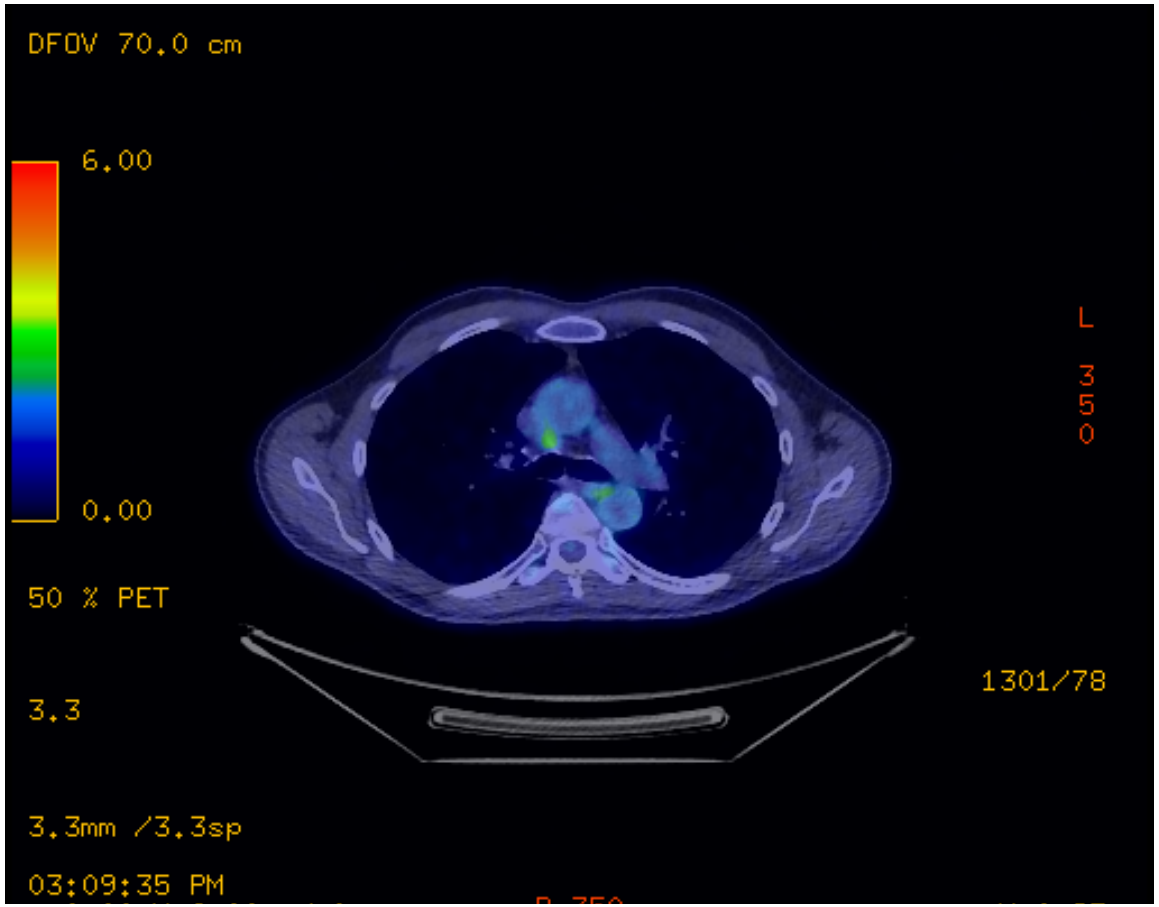
- Patient completed 3 cycles of carboplatin-paclitaxel-nivolumab with good partial response
- Residual FDG avid right hilar and right lower paratracheal lymph nodes

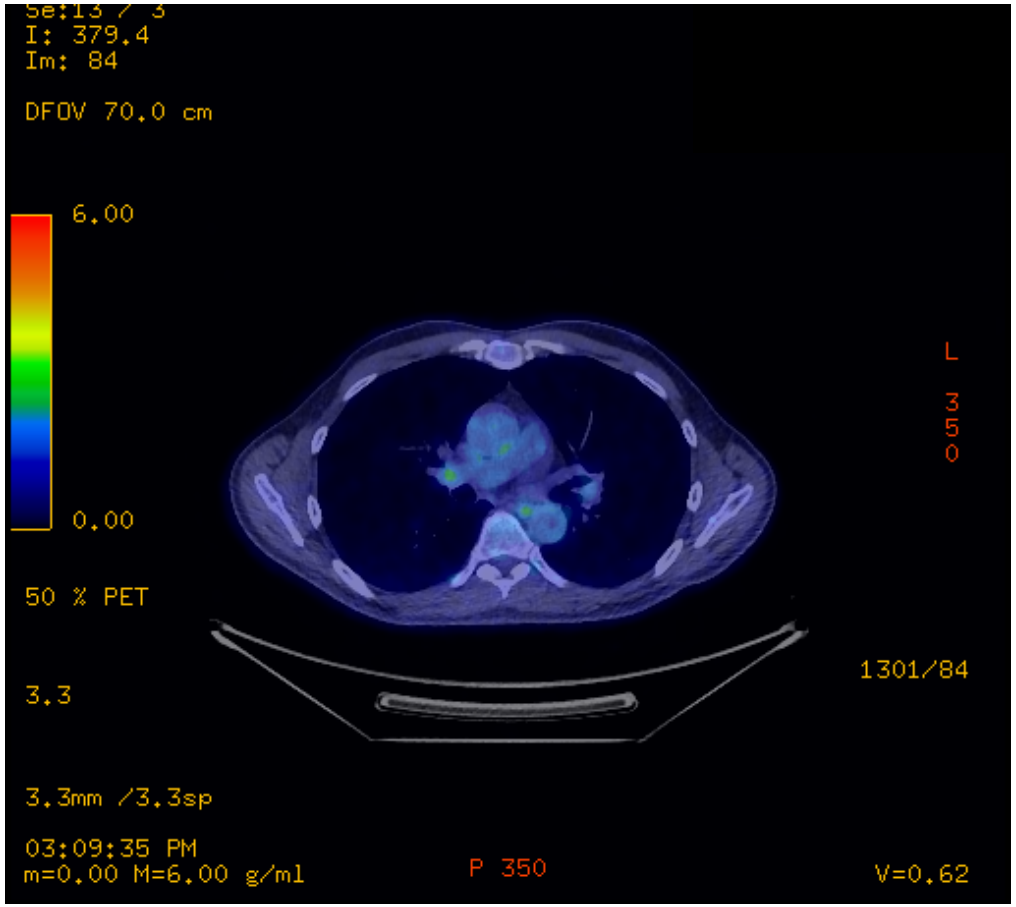
- Post-induction PFTs after neoadjuvant treatment show an FEV1 of 96% of predicted and DLCO of 64% of predicted (similar to pre-induction values)
- CPET: V02 max of 12.5 ml/kg/min and VE/VC02 slope 23

CPET, cardiopulmonary exercise test; DLCO, diffusion capacity for carbon monoxide; FDG, fluorodeoxyglucose; FEV, forced expiratory volume; PFT, pulmonary function test; PS, performance score; SWT, shuttle walking test; TNM, tumour, node and metastasis.

Speaker's clinical expertise.

Post-induction PET-CT





CT, computed tomography; PET, positron emission tomography.

Images provided courtesy of speaker.

Delay to surgery

Immediately prior to incision, patient developed a life-threatening anaphylactic reaction and surgery was abandoned and rescheduled

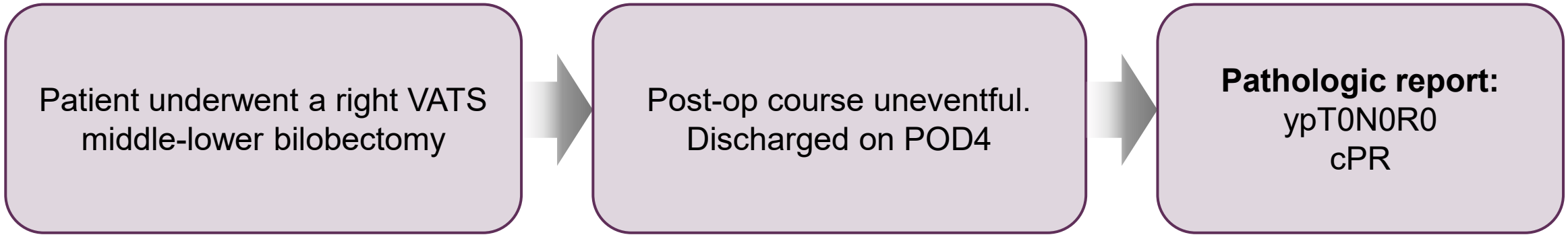
Four weeks later, the patient was brought back for surgery. Surgery was again cancelled due to the patient presenting with a cold episode

Surgery occurred 10 weeks after the last cycle of chemo-nivolumab

Chemo, chemotherapy.

Speaker's clinical expertise.

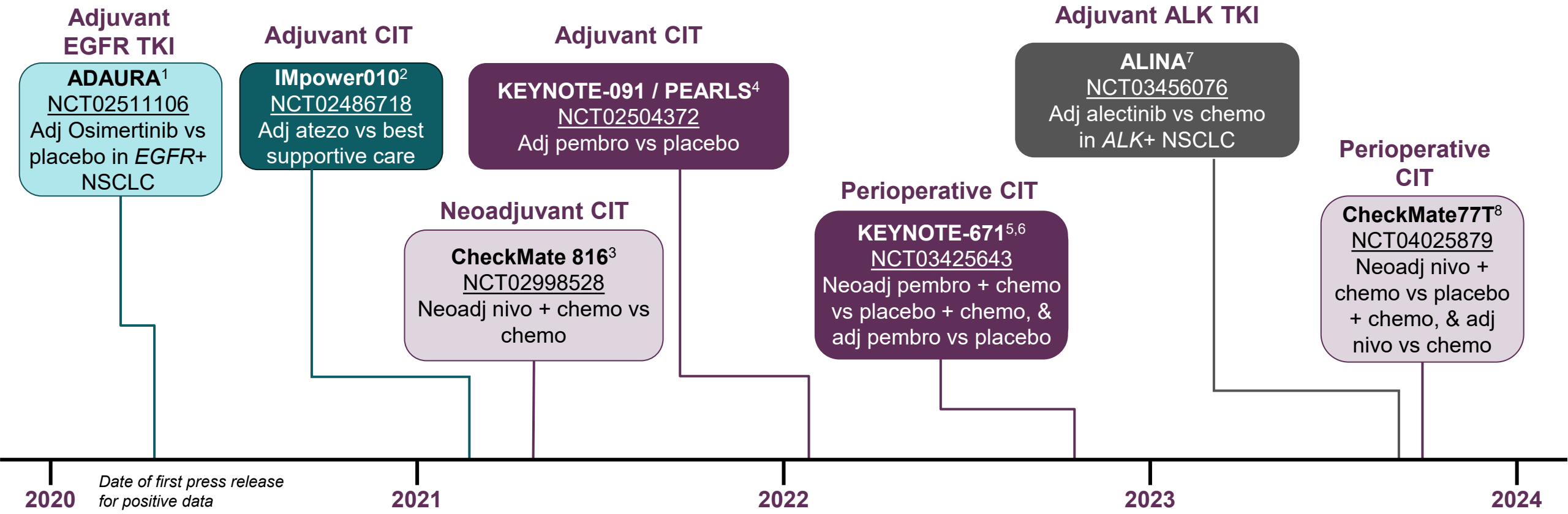
Surgical outcome



cPR, complete pathological response; N, node; POD, post-operative day; R, recurrence; T, tumour; VATS, video-assisted thoracic surgery.

Speaker's clinical expertise.

The treatment landscape in the early-stage NSCLC setting is rapidly evolving



Contents of this symposium may include information about experimental or investigational compounds, indications and services that are not yet approved in the UK/EU.
Adj, adjuvant; atezo, atezolizumab; ALK, anaplastic lymphoma kinase; chemo, chemotherapy; CHMP, Committee for Medicinal Products for Human Use; CIT, cancer immunotherapy; durva, durvalumab; EGFR, epidermal growth factor receptor; neoadj, neoadjuvant; nivo, nivolumab; NSCLC, non-small cell lung cancer; pembro, pembrolizumab; TKI; tyrosine kinase inhibitor.

References in slide notes.

Neoadjuvant nivolumab

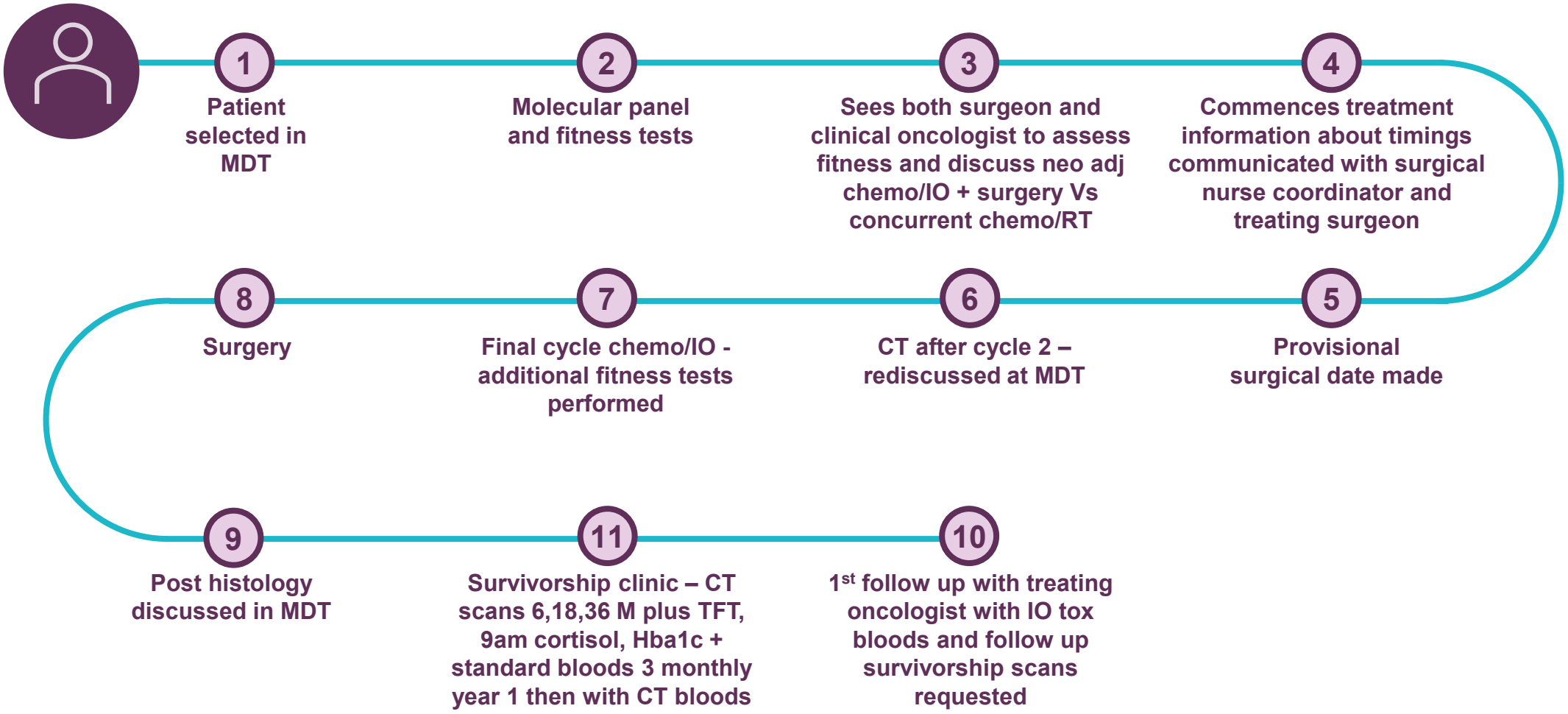
- **Licensed in 2022 and received NICE recommendation in March 2023 in combination with platinum-based chemotherapy[1,2]**
- Tumours ≥4 cm or node positive (Stage IB (≥ 4 cm), II, or IIIA NSCLC*)
- NEGATIVE for *EGFR* exon 19 or 21 mutation or an *ALK* gene fusion (NOT a requirement for squamous histology)
- Potentially curative resection to proceed within 6 weeks of completing the final cycle of neoadjuvant nivolumab plus chemotherapy
- ECOG PS of 0 or 1

*As per the 7th edition AJCC/Union for International Cancer Control (UICC) staging criteria

AJCC, American Joint Committee on Cancer; ALK, anaplastic lymphoma kinase; ECOG, Eastern Cooperative oncology Group; EGFR, epidermal growth factor receptor; NICE, National Institute for Health and Care Excellence; NSCLC, non-small cell lung cancer; PS, performance score; TNM, tumour, node and metastasis; UICC, Union for International Cancer Control.

1. NICE. TA876. Available at: https://www.nice.org.uk/guidance/ta876. Accessed June 2024; 2 OPDIVO (nivolumab) Summary of Product Characteristics.

Current pathway in Leeds



CT, computed tomography; chemo, chemotherapy; Hba1c, glycated haemoglobin; IO, immunotherapy; MDT, multidisciplinary team; M, months; neo adj, neoadjuvant; RT, radiotherapy; TFT, thyroid function test.

Data provided courtesy of speaker.

Leeds data as of March 2024

As of March 2024, **57** patients were referred to neoadjuvant pathway in Leeds

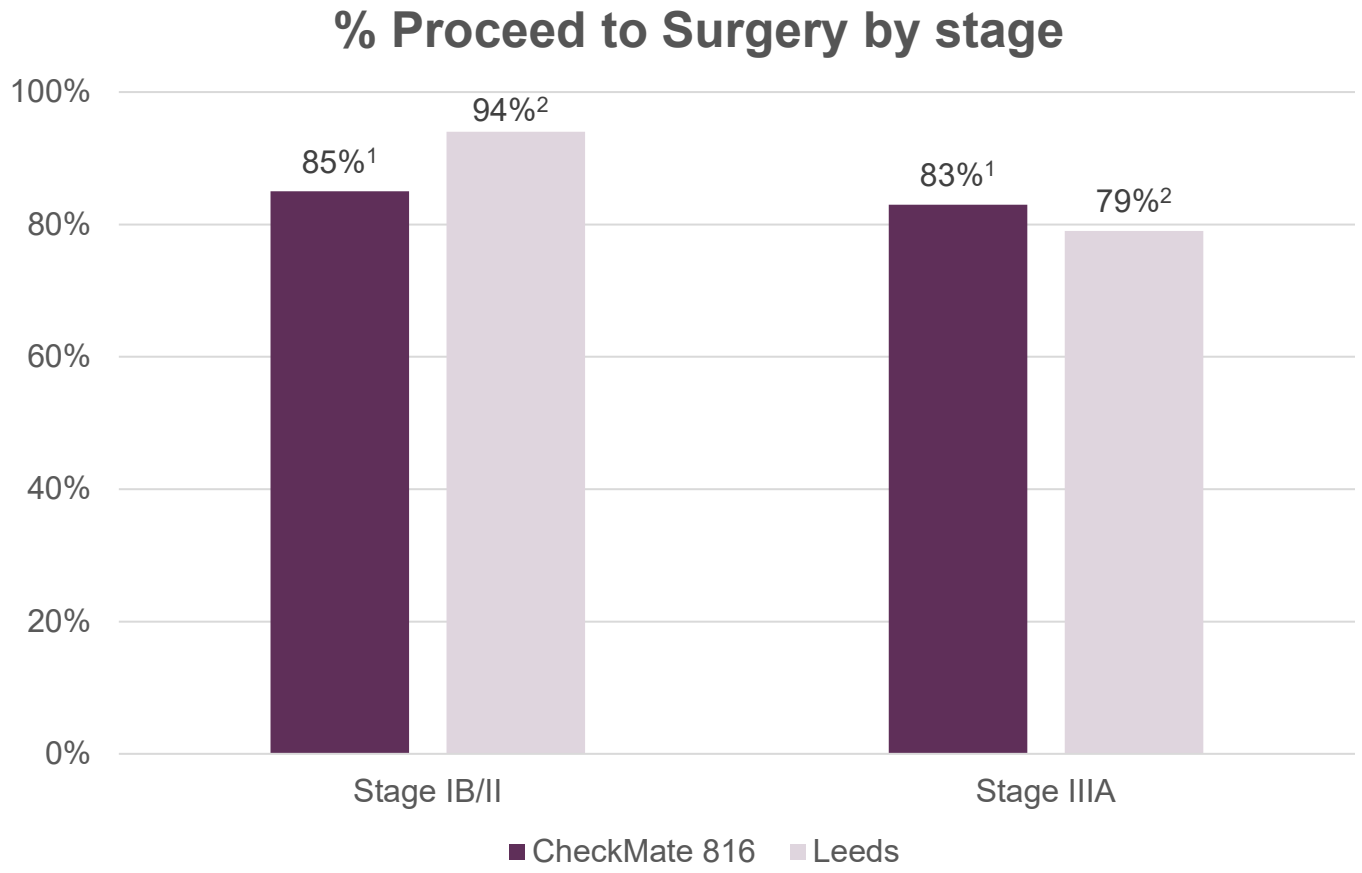
35 proceeded to surgery

6 could not proceed to surgery due to disease progression (4) or poor fitness (2)

16 are still in the pathway

Data provided courtesy of speaker.

CheckMate 816 data[1,2]



For illustrative purposes. Datasets should not be directly compared due to differences in setting and patient populations.

1. Forde PM, et al. N Engl J Med. 2022 May 26;386(21):1973–1985 (including Supplement). 2. Leeds data courtesy of speaker.

Surgical outcomes

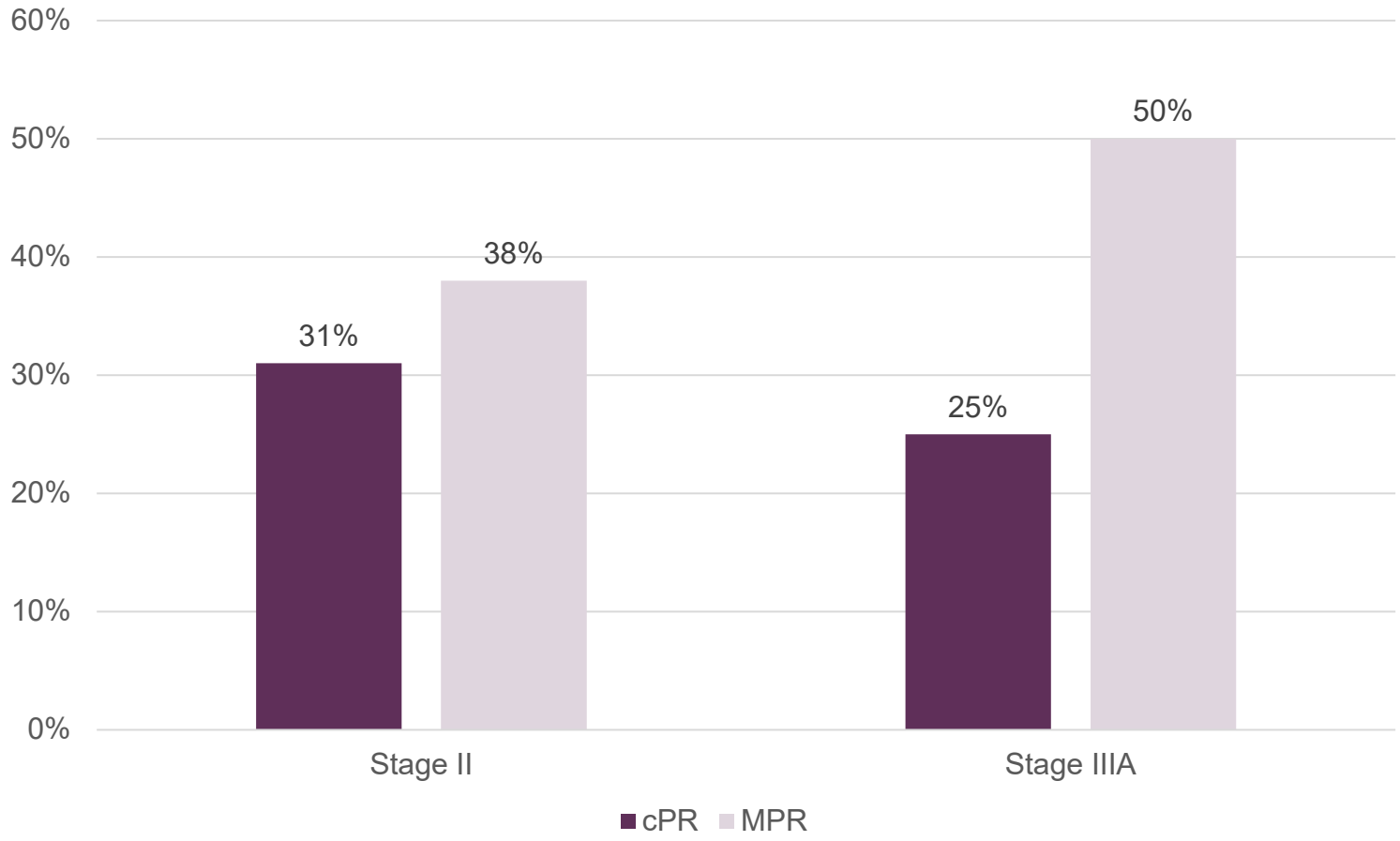
Outcome	Checkmate 816[1](%)	Leeds data[2](%)
Pneumonectomy	16.8%	3%
Bilobectomy	2.0%	12%
Lobectomy	77.2%	82%
Minimally invasive	29.5%	91%
Conversion rate	11.4%	23%
Surgery duration (median, IQR)	185 [133–260]	183 [136–224]
LoS (days)	10 [7–14]	4 [3–7]
Treatment related mortality	0%	5.7% (no.2)

For illustrative purposes. Datasets should not be directly compared due to differences in setting and patient populations.

IQR, interquartile range; LoS, length of stay.

1. Forde PM, et al. N Engl J Med. 2022 May 26;386(21):1973–1985 (including Supplement). 2. Leeds data courtesy of speaker.

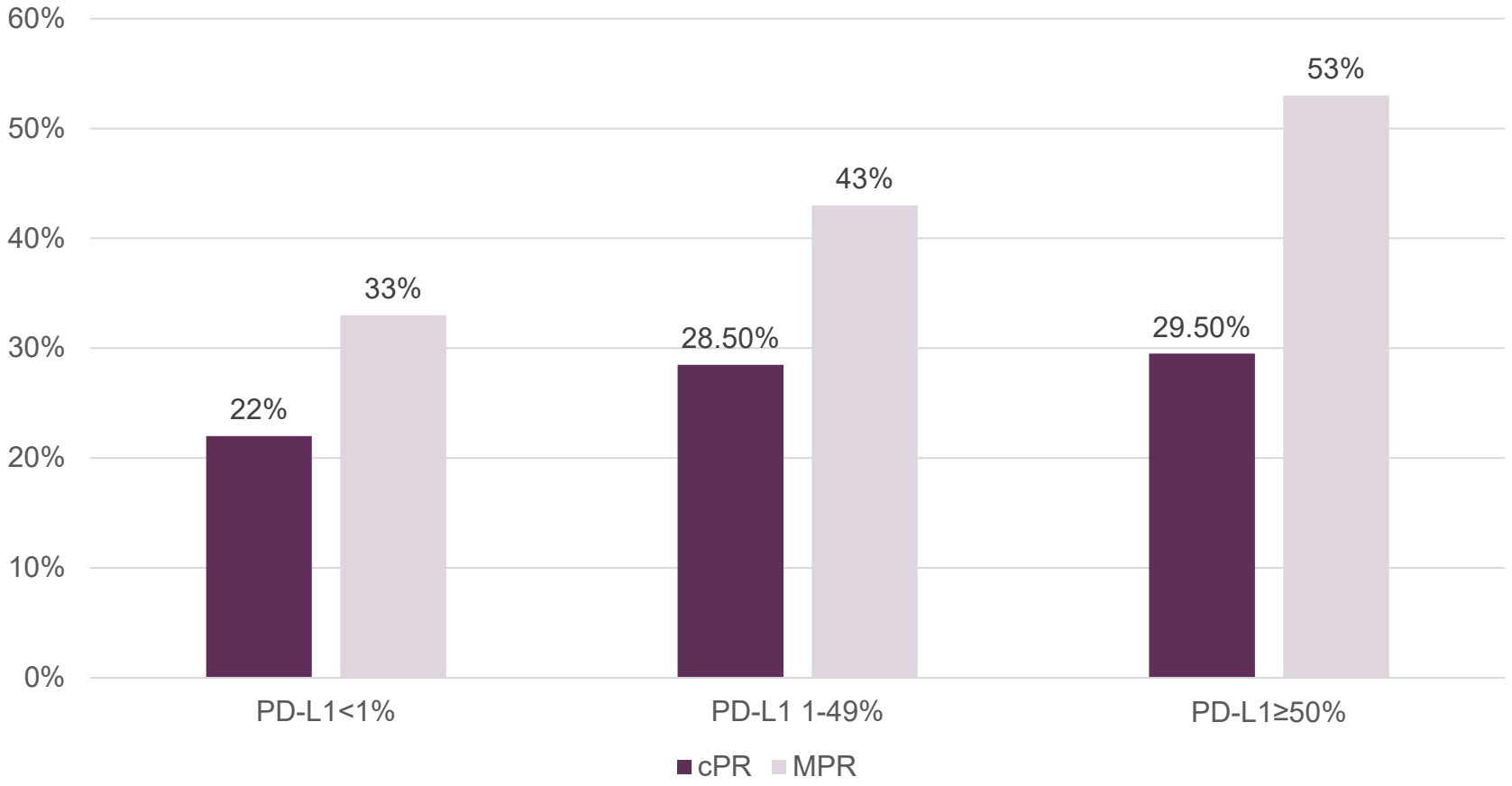
Pathologic response by stage – Leeds series



cPR, complete pathologic response; MPR, major pathologic response.

Data provided courtesy of speaker.

Pathologic response by PD-L1 status – Leeds series



cPR, complete pathologic response; MPR, major pathologic response; PD-L1, programmed death-1 ligand.

Data provided courtesy of speaker.

Case-Based Scenario

Trust me Gary – one of many cases

Dr Spyros Gennatas

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Case study 2: A 51-year-old male

- Caribbean origin
- Attending with mother and sister
- Works as an event planner
- **Never smoker**, no asbestos exposure, no passive smoking
- **Presented with chest pain and shortness of breath**

- **Chest X-ray:** Mass in the right lung and moderate pleural effusion
- **CT scan:** Large right pleural effusion + multiple bilat small nodules, extensive pleural nodularity. Significant mediastinal + right hilar lymphadenopathy

CT, computed tomography.

Speaker's clinical expertise.

Histopathology

- **Pleural fluid aspiration:** Lung adenocarcinoma
- **Immunohistochemistry:**
  - PD-L1 (3%)
- **Other biomarkers:**
  - *ALK* and *ROS1* WT
  - *EGFR/KRAS/BRAF/MET/ERBB2* WT
  - RNA panel failed

ALK, anaplastic lymphoma kinase; BRAF, v-raf murine sarcoma viral oncogene homolog B1; EGFR, epidermal growth factor receptor; ERBB2, erythroblastic oncogene B; KRAS, Kirsten rat sarcoma viral oncogene homolog; MET, mesenchymal–epithelial transition factor; PD-L1, programmed death ligand-1; RNA, ribonucleic acid; ROS1, c -ros oncogene 1; WT=wild-type.

Speaker's clinical expertise.

Treatment plan

- **20/09/2023** patient consented for carboplatin, pemetrexed and pembrolizumab
- Baseline blood tests, EDTA etc… performed
- **11/10/2023** TC to give final go-ahead
- **13/10/2023** treatment slot provided

EDTA, edetic acid; TC, telephone consultation.

Speaker's clinical expertise.

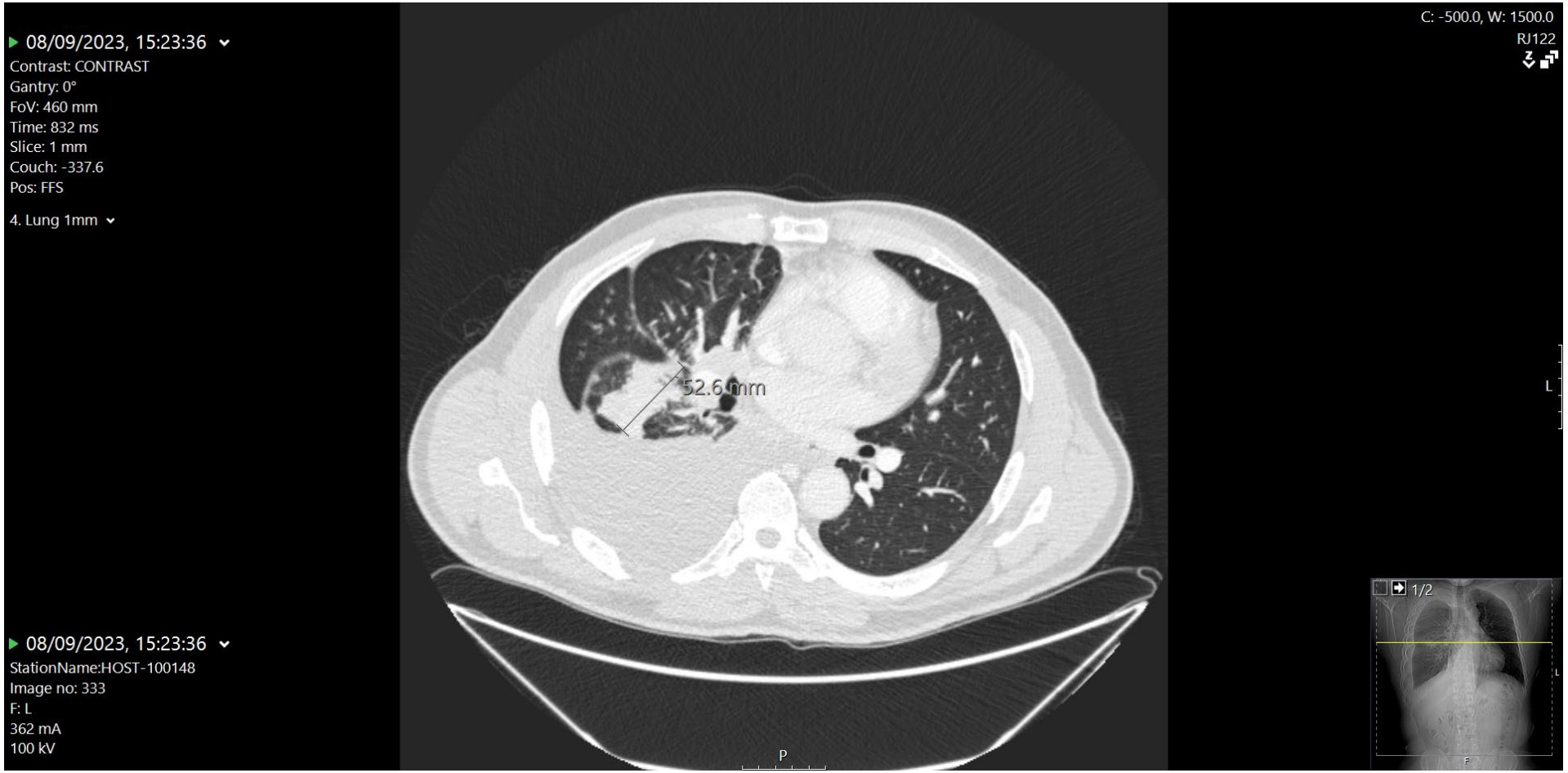
New lab result

- **09/10/2023** Call from the lab to alert me of a new result
- ***RET* FISH salvage RET (10q11.2):** Rearrangement detected
- **Call from me to Gary:** Change of plan. Come for a F2F consultation on 11/10/2023
- **IV treatment slot cancelled, new info and consent for selpercatinib**

F2F, face-to-face; FISH, fluorescence *in situ* hybridisation; RET, rearranged during transfection.

Speaker's clinical expertise.

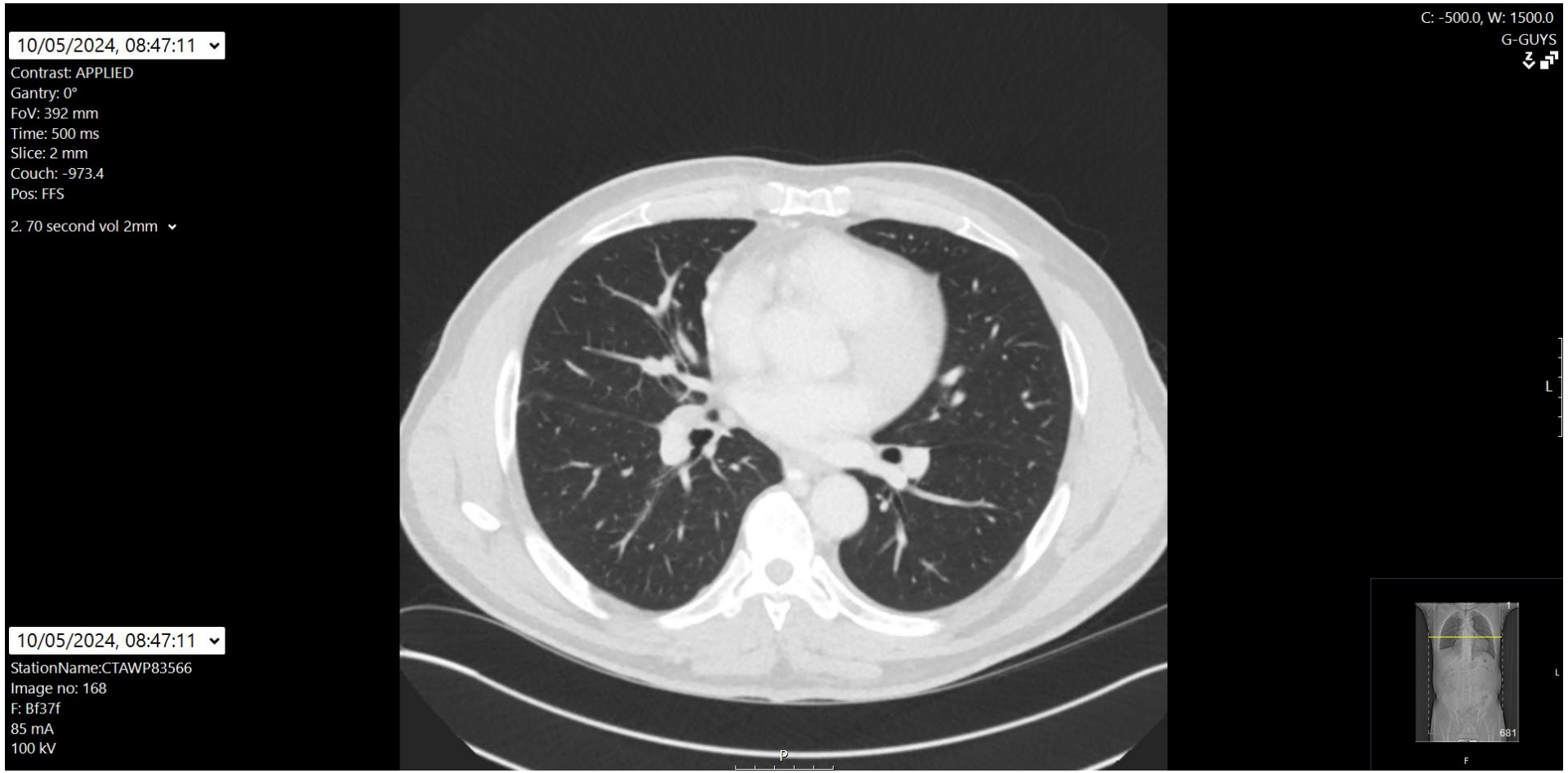
CT thorax at presentation



CT, computed tomography.

Image provided courtesy of speaker.

CT thorax after 6 months of treatment



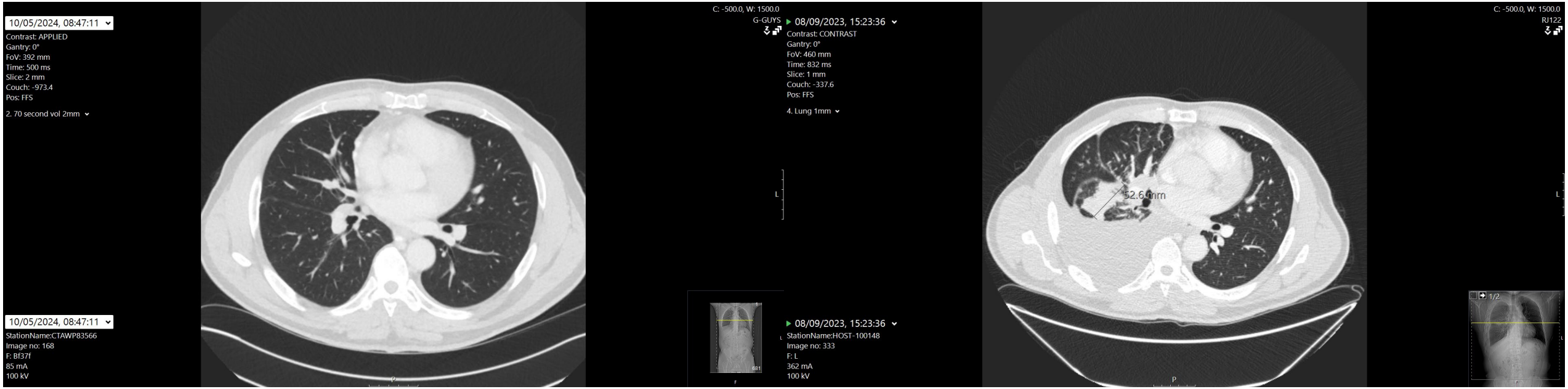
CT, computed tomography.

Image provided courtesy of speaker.

Side by side

CT thorax at presentation

CT thorax after 6 months of treatment



CT, computed tomography.

Images provided courtesy of speaker.

What is so important about this case?

- **Trust**
- **Shared decision making – what does this mean?**
- **Patient education**
- **Avoid over-simplification**
- **Remote/phone consultation vs. F2F**
- **Circumstances change**
- **Maintaining trust**

F2F, face-to-face.

Speaker's clinical expertise.

Bonus point re: understanding

PD-L1, programmed death ligand-1.

Speaker's clinical expertise.

Case-Based Scenario

Case study 3

Ms Emma Halkyard

THINK AGAIN LUNG SUMMIT

Case study 3: A 79-year-old female

October 2021

- T3N0 RUL - squamous
- **Comorbidities:** MI, COPD, tobacco dependency (60PYH)
- **Lung function:** FEV1 48%, FVC 83%, ratio 56%, TLCO 69%, KCO 84%

- **MDT plan:** refer for surgery (borderline PS and PFTs)
- PD-L1 89%
- **Surgical clinic:** patient preference for radiotherapy, particular risks for her (10% mortality)
- **Clinical oncology clinic:** phone consultation (lengthy)

December 2021: 55Gy in 20F

COPD, chronic obstructive pulmonary disease; F, fraction; FEV, forced expiratory volume; FVC, forced vital capacity; Gy, grey; KCO, carbon monoxide transfer coefficient; MI, myocardial infarction; N, node; PFT, pulmonary function test; PS, performance score; RUL, right upper lobe; T, tumour; TLCO, transfer capacity for carbon monoxide.

Speaker's clinical expertise.

October 2022: progressive disease in RML and solitary liver metastasis

Medical oncology clinic:

- In person (3 adult children)
- Breathless for many years (prednisolone)
- Did not want chemo (husband, oesophageal cancer)
- PS 2
- **Understanding:** Immunotherapy will not cause AEs, did not want prognosis, explained cure not possible, buy more time
- **2/52 consent:** Pembrolizumab

- "Wants to try treatment but fervently wishes to avoid becoming more unwell with drug AEs, would want to stop"
- Asked about the "future" – "2 years" – clarified what this means

AE, adverse event; Chemo, chemotherapy; RML, right middle lobe; PS, performance score.

Speaker's clinical expertise.

Patient management

- **Post cycle 2:** Rash managed with steroid, then inpatient admission with flu
- Pembrolizumab interrupted
- **CT Feb 2023:** Stable disease in lung and liver

- Restart pembrolizumab after 10-week interruption
- **Post cycle 3:** Rash, using topical steroid

- **Post cycle 4:** Rash increased, subjectively “worse”, oral steroid 1mg/kg
- Weekly phone calls
- **CT April and July:** Lesions reduced

Nov 2023: Decision to stop pembrolizumab, surveillance scans stable

Feb 2024:
Patient asking about restarting pembrolizumab

Please consult the pembrolizumab SmPC for further information on adverse events and their management.

CT, computed tomography.

Speaker’s clinical expertise.

Thank you

Prescribing information is available at this meeting, and at the following links:
IMFINZI GB , IMFINZI NI , TAGRISSO GB , TAGRISSO NI

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