



NATIONAL
LUNG CANCER
ROUNDTABLE



Addressing Lung Cancer Biomarker Testing Through Project ECHO in Louisiana: Session 6

June 20, 2023

*This project is generously supported by
Amgen Oncology*

Welcome to Session 6 of the Addressing Lung Cancer Biomarker Testing Through Project ECHO in Louisiana



Each ECHO session will be recorded and will be posted to echo.cancer.org



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Today's materials will be made available on echo.cancer.org



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This ECHO session takes place on the Zoom platform.
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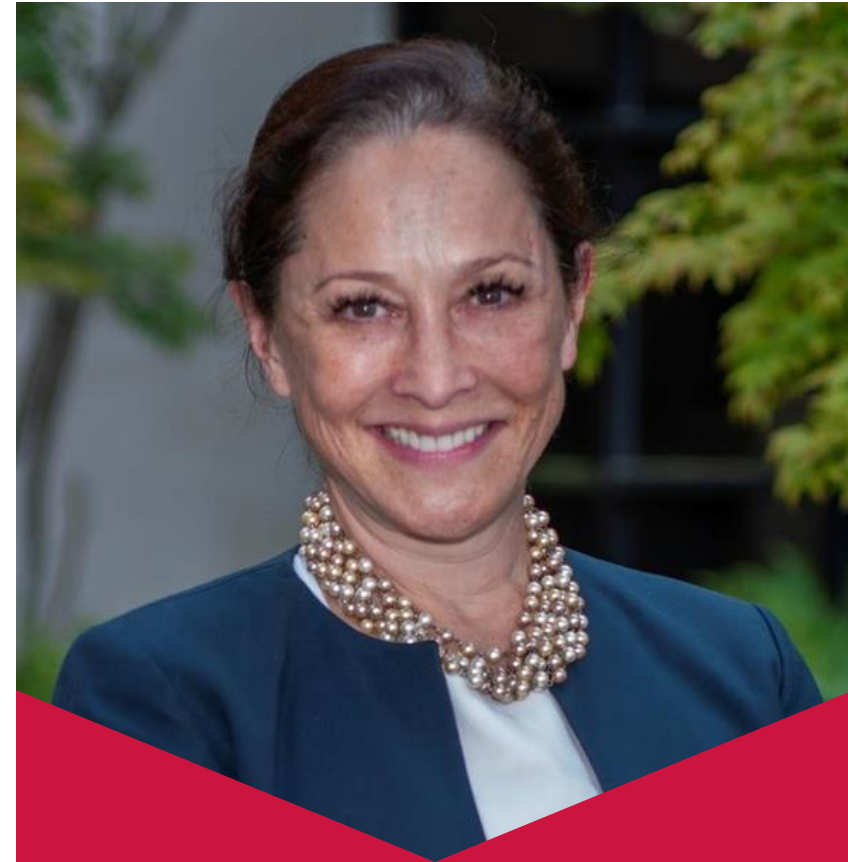
Remember: Do NOT share any personal information about any patient



Questions about Zoom? Type them in the chat box @ Leigh Davis



Agenda Preview & Introductions



**Sarah Thayer, MD, PhD, FACS;
Director**

**Ochsner LSU Health
Feist-Weiller Cancer Center**

Specialty: Surgical Oncology

Today's Agenda

01 **Agenda Preview & Introductions** (10 minutes)

02 **Didactic Presentation: *Lung Biomarker Testing Today & Tomorrow*** (20 minutes)

03 **Didactic Q/A** (5 minutes)

04 **Case Presentation** (5 minutes)

05 **Case Presentation Recommendations & Discussion**
(10 minutes)

06 **Post-ECHO Series Assessment** (5 minutes)



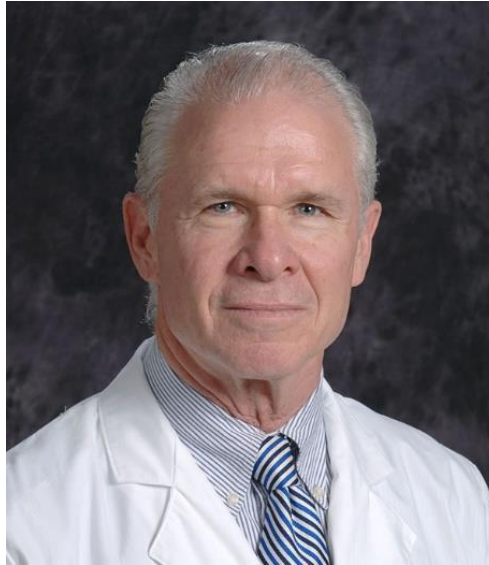
Meet our Louisiana Echo Hub Faculty Members



Robert Holladay, MD, FCCP
Professor of Clinical Internal
Medicine; Program Director,
Interventional Pulmonary
Fellowship Program Medicine
Pulmonary Critical



David Chambers, MD
Assistant Professor-of Clinical
Internal Medicine, Associate
Program Director of the
Pulmonary and Critical Care
Fellowship, Director of Lung
Cancer Screening
Medical Pulmonary



Robert White, MD, FACS
Chairman and Professor of
Surgery
John C. McDonald, MD Endowed
Chair of Surgery



Ira Surolia, MD
Assistant Professor
Feist Weiller Cancer Center

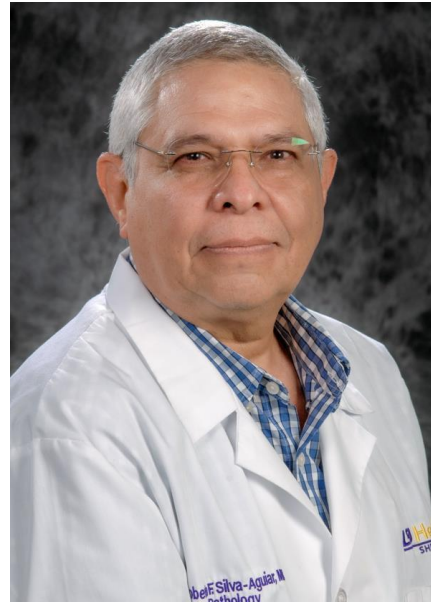


Kavitha Beedupalli, MD
Associate Professor –
Clinical Feist Weiller Cancer
Center

Meet our Louisiana Echo Hub Faculty Members



Brian G. Fuller, MD
Associate Professor
Radiation Oncology
Feist Weiller Cancer Center



Roberto Silva, MD
Associate Professor of Pathology
and Translational Pathobiology
Pathology Department



Troy Richards, MD
Clinical Assistant Professor of
Radiology Radiation Oncology
Department



Carlos Previgliano, MD
Professor of Radiology, Clinical
Specialist Thoracic /
Cardiothoracic Radiology

Project Staff

Rachel Langford RN, OCN
Darren Guin, IT Analyst IV

Introductions: Meet our Louisiana Spoke Sites





Reminder: Please type your *name, role,*
and facility in the chat box



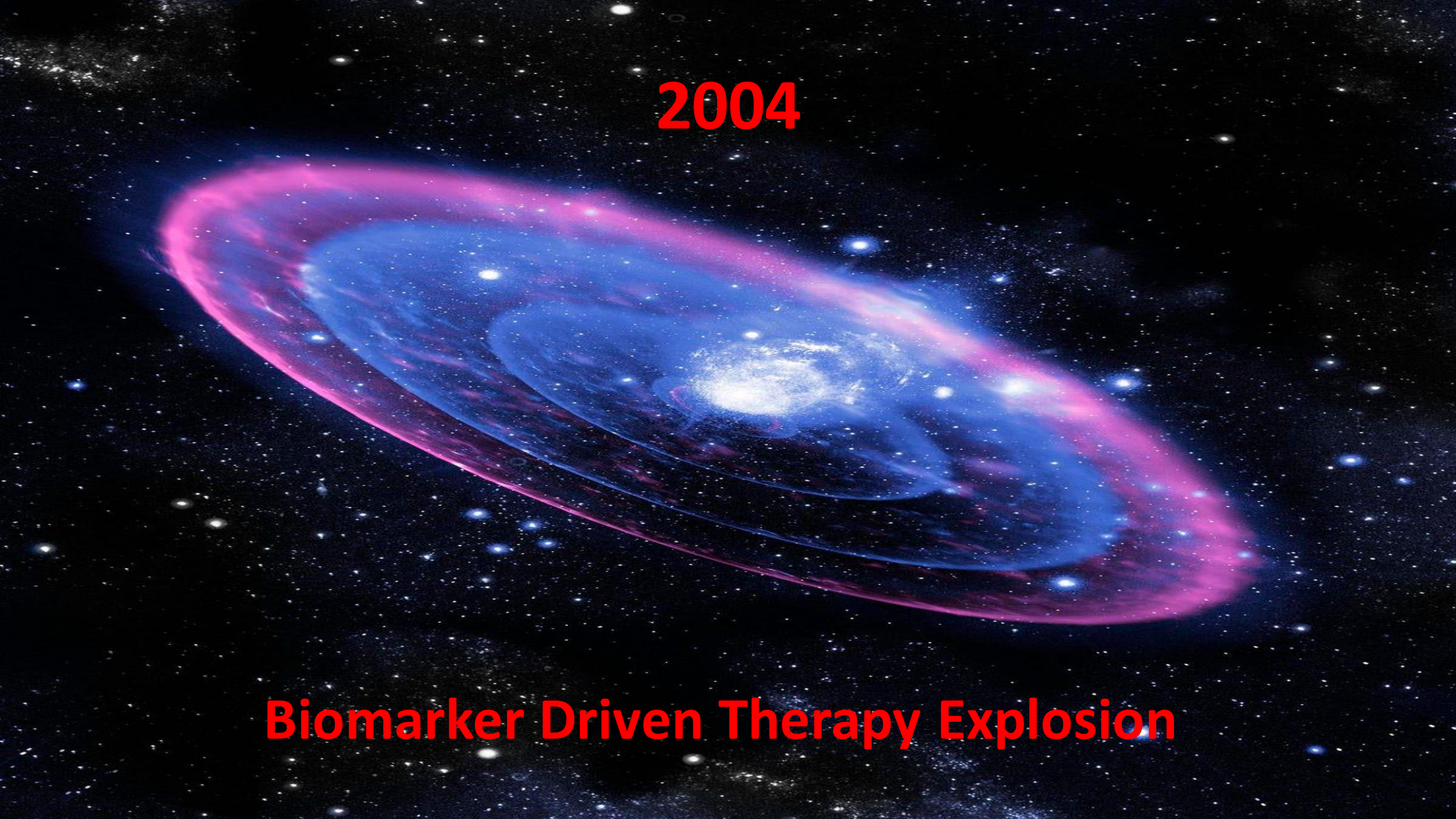
Pierre de Delva, MD

Chief of General
Thoracic Surgery
University of Mississippi
Medical Center

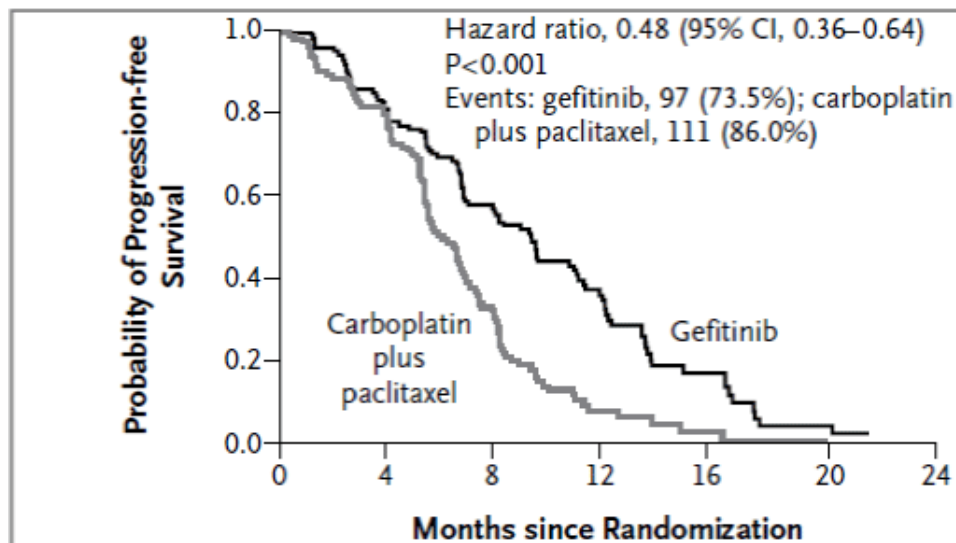
Didactic Presentation:
Lung Biomarker Testing Today & Tomorrow

2004

Biomarker Driven Therapy Explosion



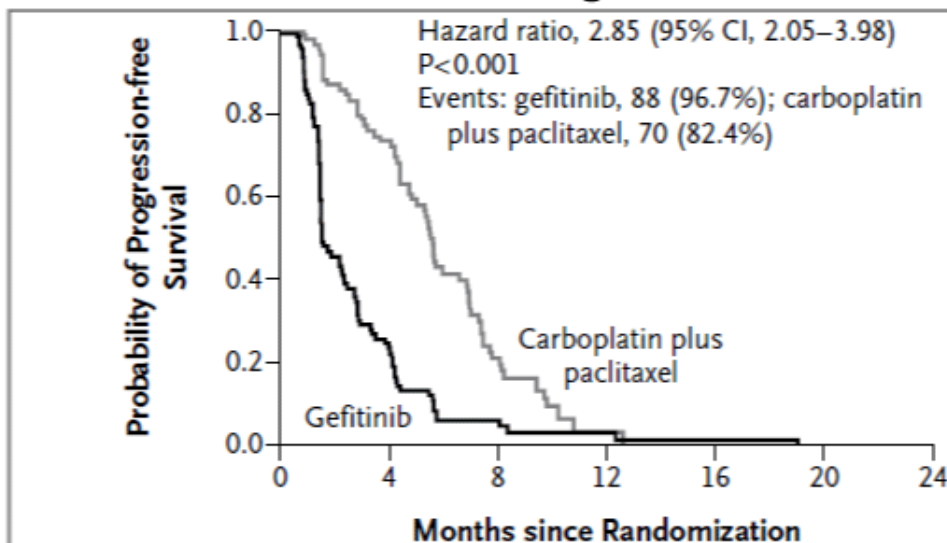
A EGFR Mutation-Positive



No. at Risk

Gefitinib	132	108	71	31	11	3	0
Carboplatin plus paclitaxel	129	103	37	7	2	1	0

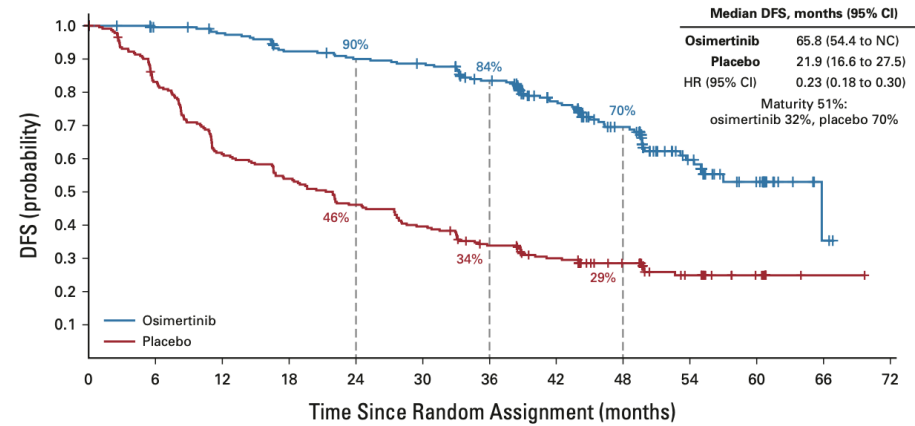
B EGFR Mutation-Negative



No. at Risk

Gefitinib	91	21	4	2	1	0	0
Carboplatin plus paclitaxel	85	58	14	1	0	0	0

Adura Trial- Adjuvant EGFR +

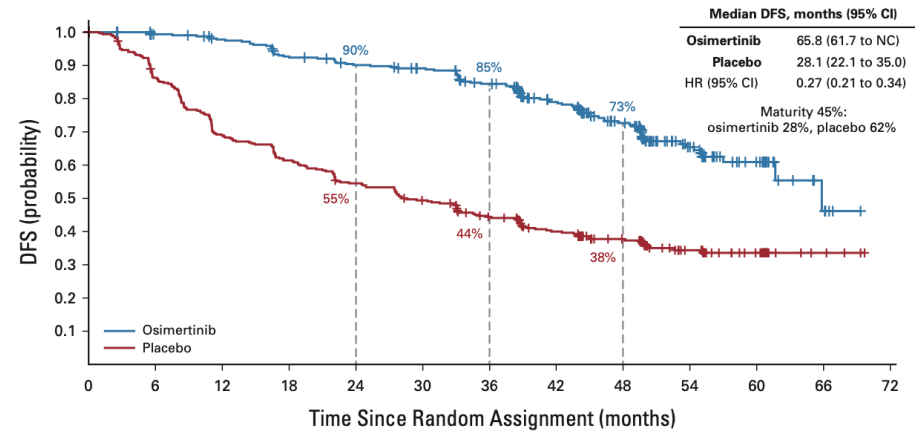


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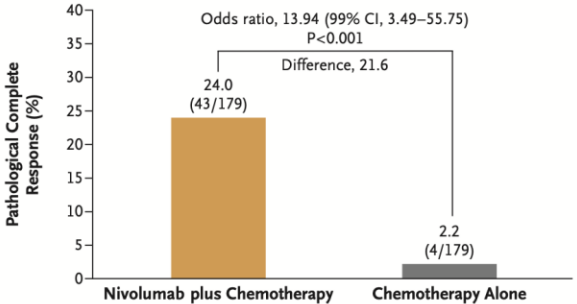
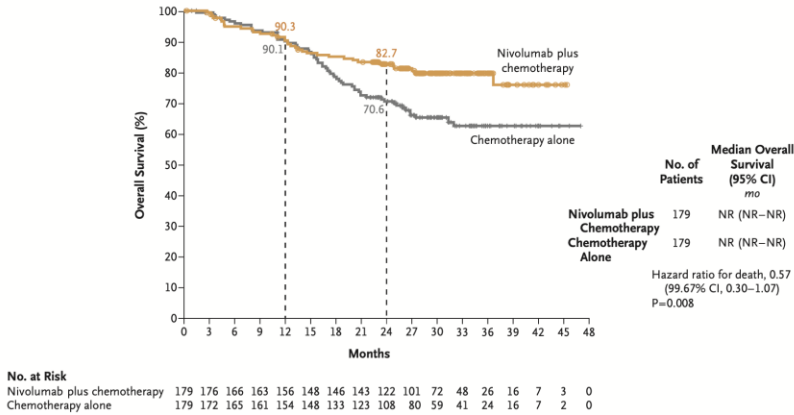
233	222	216	202	196	192	174	138	90	45	20	2	0
237	191	141	124	106	91	74	61	41	23	11	1	0



Neoadjuvant Chemoimmunotherapy

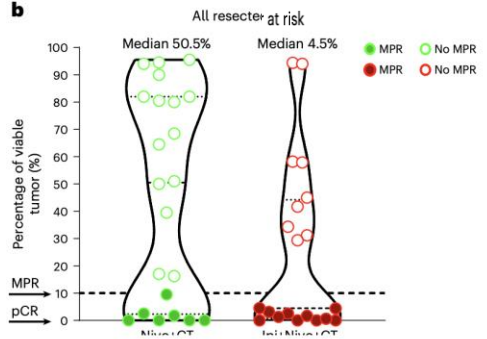
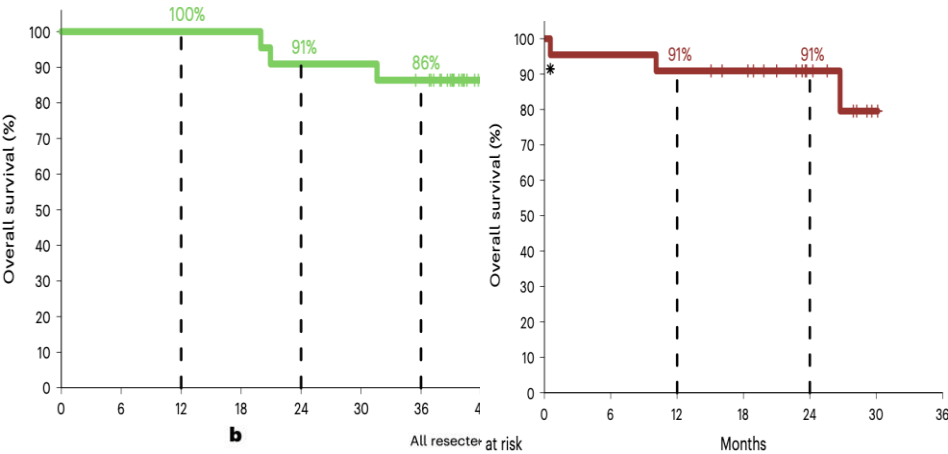
Checkmate 0816

N Engl J Med 386;21 May 26, 2022



Neostar

Nature Medicine | Volume 29 | March 2023 | 593-604



Old vs. New Treatment Options for Advanced Lung Cancer

Traditional Chemotherapy

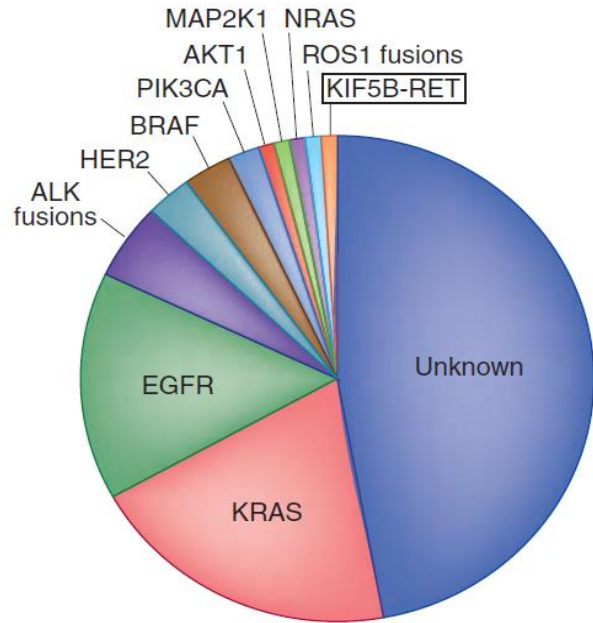


**Biomarker Driven
Chemotherapy/Immunotherapy**

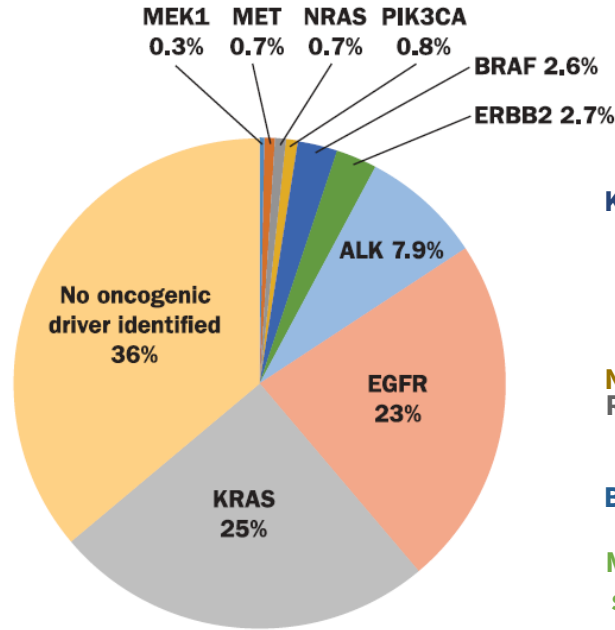


Treatment of Lung Cancer

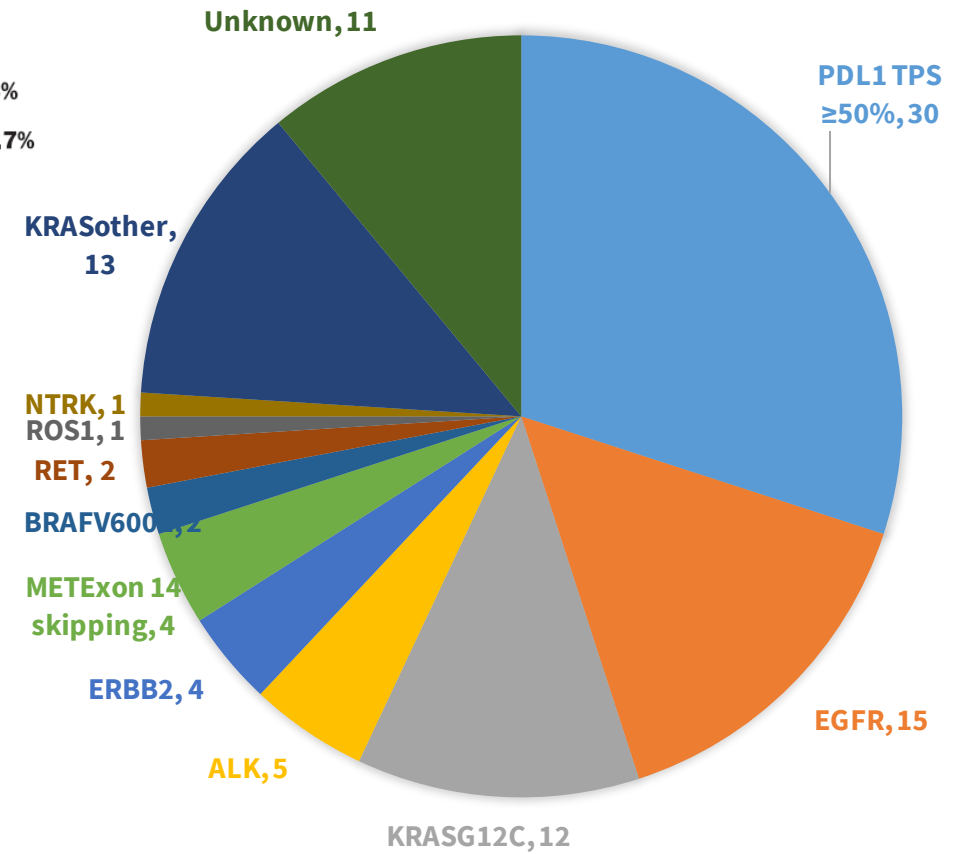
2012



2015



2020





MOLECULAR AND BIOMARKER-DIRECTED THERAPY FOR ADVANCED OR METASTATIC DISEASE^{a,b}

EGFR Exon 19 Deletion or Exon 21 L858R

- First-line therapy
 - ▶ Afatinib¹
 - ▶ Erlotinib²
 - ▶ Dacomitinib³
 - ▶ Gefitinib^{4,5}
 - ▶ Osimertinib⁶
 - ▶ Erlotinib + ramucirumab⁷
 - ▶ Erlotinib + bevacizumab^c (nonsquamous)⁸
- Subsequent therapy
 - ▶ Osimertinib⁹

EGFR S768I, L861Q, and/or G719X

- First-line therapy
 - ▶ Afatinib^{1,10}
 - ▶ Erlotinib²
 - ▶ Dacomitinib³
 - ▶ Gefitinib^{4,5}
 - ▶ Osimertinib^{6,11}
- Subsequent therapy
 - ▶ Osimertinib⁹

EGFR Exon 20 Insertion Mutation

- Subsequent therapy
 - ▶ Amivantamab-vmjw¹²
 - ▶ Mobocertinib¹³

KRAS G12C Mutation

- Subsequent therapy
 - ▶ Sotorasib¹⁴
 - ▶ Adagrasib¹⁵

ALK Rearrangement

- First-line therapy
 - ▶ Alectinib^{16,17}
 - ▶ Brigatinib¹⁸
 - ▶ Ceritinib¹⁹
 - ▶ Crizotinib^{16,20}
 - ▶ Lorlatinib²¹
- Subsequent therapy
 - ▶ Alectinib^{22,23}
 - ▶ Brigatinib²⁴
 - ▶ Ceritinib²⁵
 - ▶ Lorlatinib²⁶

ROS1 Rearrangement

- First-line therapy
 - ▶ Ceritinib^{27,28}
 - ▶ Crizotinib²⁹
 - ▶ Entrectinib³⁰
- Subsequent therapy
 - ▶ Lorlatinib³¹
 - ▶ Entrectinib³⁰

BRAF V600E Mutation

- First-line therapy
 - ▶ Dabrafenib/trametinib³²
 - ▶ Dabrafenib³²
 - ▶ Vemurafenib
- Subsequent therapy
 - ▶ Dabrafenib/trametinib^{33,34}

NTRK1/2/3 Gene Fusion

- First-line/Subsequent therapy
 - ▶ Larotrectinib³⁵
 - ▶ Entrectinib³⁶

MET Exon 14 Skipping Mutation

- First-line therapy/Subsequent therapy
 - ▶ Capmatinib³⁷
 - ▶ Crizotinib³⁸
 - ▶ Tepotinib³⁹

RET Rearrangement

- First-line therapy/Subsequent therapy
 - ▶ Selpercatinib⁴⁰
 - ▶ Pralsetinib⁴¹
 - ▶ Cabozantinib^{42,43}

ERBB2 (HER2) Mutation

- Subsequent therapy
 - ▶ Fam-trastuzumab
deruxtecan-nxki⁴⁴
 - ▶ Ado-trastuzumab emtansine⁴⁵

[PD-L1 ≥50% First-line Therapy](#)

[PD-L1 ≥1-49% First-line Therapy](#)



MOLECULAR AND BIOMARKER-DIRECTED THERAPY FOR ADVANCED OR METASTATIC DISEASE^{a,b}

PD-L1 ≥1%–49% First-line Therapy

ADENOCARCINOMA, LARGE CELL, NSCLC NOS

Preferred

- (Carboplatin or cisplatin) + pemetrexed + pembrolizumab (category 1)^{48,49}

Other Recommended

- Carboplatin + paclitaxel + bevacizumab^{c,d} + atezolizumab (category 1)⁵²
- Carboplatin + albumin-bound paclitaxel + atezolizumab⁵³
- Nivolumab + ipilimumab + pemetrexed + (carboplatin or cisplatin) (category 1)⁵⁴
- Nivolumab + ipilimumab (category 1)⁵⁷
- Cemiplimab-rwlc + paclitaxel + (carboplatin or cisplatin) (category 1)⁵⁵
- Cemiplimab-rwlc + pemetrexed + (carboplatin or cisplatin) (category 1)⁵⁵
- Tremelimumab-actl + durvalumab + carboplatin + albumin-bound paclitaxel (category 1)⁵⁶
- Tremelimumab-actl + durvalumab + (carboplatin or cisplatin) + pemetrexed (category 1)⁵⁶

Useful in Certain Circumstances

- Pembrolizumab (category 2B)^{e,46,47}

SQUAMOUS CELL CARCINOMA

Preferred

- Carboplatin + (paclitaxel or albumin-bound paclitaxel) + pembrolizumab (category 1)⁵⁸

Other Recommended

- Nivolumab + ipilimumab + paclitaxel + carboplatin (category 1)⁵³
- Nivolumab + ipilimumab (category 1)⁵⁷
- Cemiplimab-rwlc + paclitaxel + (carboplatin or cisplatin) (category 1)⁵⁵
- Tremelimumab-actl + durvalumab + carboplatin + albumin-bound paclitaxel⁵⁶
- Tremelimumab-actl + durvalumab + (carboplatin or cisplatin) + gemcitabine⁵⁶

Useful in Certain Circumstances

- Pembrolizumab (category 2B)^{e,46,47}

[PD-L1 ≥50% First-line Therapy](#)

[Continuation Maintenance](#)



MOLECULAR AND BIOMARKER-DIRECTED THERAPY FOR ADVANCED OR METASTATIC DISEASE^b

PD-L1 ≥50% Continuation Maintenance

ADENOCARCINOMA, LARGE CELL, NSCLC NOS

- Pembrolizumab (category 1)^f
- Pembrolizumab + pemetrexed (category 1)^g
- Atezolizumab and bevacizumab^{c,d} (category 1)^h
- Atezolizumabⁱ
- Nivolumab + ipilimumab (category 1)^j
- Cemiplimab-rwlc (category 1)^k
- Cemiplimab-rwlc^l ± pemetrexed^m (category 1)
- Durvalumabⁿ ± pemetrexed^o

SQUAMOUS CELL CARCINOMA

- Pembrolizumab (category 1)^{f,p}
- Atezolizumabⁱ
- Nivolumab + ipilimumab (category 1)^j
- Cemiplimab-rwlc (category 1)^{k,l}
- Durvalumabⁿ

PD-L1 ≥1%–49% Continuation Maintenance

ADENOCARCINOMA, LARGE CELL, NSCLC NOS

- Pembrolizumab (category 2B)^f
- Pembrolizumab + pemetrexed (category 1)^g
- Atezolizumab and bevacizumab^{c,d} (category 1)^h
- Atezolizumabⁱ
- Nivolumab + ipilimumab (category 1)^j
- Cemiplimab-rwlc^l ± pemetrexed^m (category 1)
- Durvalumabⁿ ± pemetrexed^o

SQUAMOUS CELL CARCINOMA

- Pembrolizumab^{f,p}
- Nivolumab + ipilimumab (category 1)^j
- Cemiplimab-rwlc (category 1)^l
- Durvalumabⁿ



CONCURRENT CHEMORADIATION REGIMENS

Concurrent Chemoradiation Regimens[€]

Preferred (nonsquamous)

- Carboplatin AUC 5 on day 1, pemetrexed 500 mg/m² on day 1 every 21 days for 4 cycles; concurrent thoracic RT^{1,*,†,‡}
- Cisplatin 75 mg/m² on day 1, pemetrexed 500 mg/m² on day 1 every 21 days for 3 cycles; concurrent thoracic RT^{2,3,*,†,‡} ± additional 4 cycles of pemetrexed 500 mg/m²^{†,§}
- Paclitaxel 45–50 mg/m² weekly; carboplatin AUC 2, concurrent thoracic RT^{4,*,†,‡} ± additional 2 cycles every 21 days of paclitaxel 200 mg/m² and carboplatin AUC 6^{†,§}
- Cisplatin 50 mg/m² on days 1, 8, 29, and 36; etoposide 50 mg/m² days 1–5 and 29–33; concurrent thoracic RT^{5,6,*,†,‡}

Preferred (squamous)

- Paclitaxel 45–50 mg/m² weekly; carboplatin AUC 2, concurrent thoracic RT^{6,*,†,‡} ± additional 2 cycles every 21 days of paclitaxel 200 mg/m² and carboplatin AUC 6^{†,§}
- Cisplatin 50 mg/m² on days 1, 8, 29, and 36; etoposide 50 mg/m² days 1–5 and 29–33; concurrent thoracic RT^{5,6,*,†,‡}

Consolidation Immunotherapy for Patients with Unresectable Stage II/III NSCLC, PS 0–1, and No Disease Progression After Definitive Concurrent Chemoradiation

Durvalumab 10 mg/kg IV every 2 weeks or 1500 mg every 4 weeks for up to 12 months (patients with a body weight of ≥30 kg)^{7,8}
(category 1 for stage III; category 2A for stage II)

PERIOPERATIVE SYSTEMIC THERAPY**Neoadjuvant Systemic Therapy**

- All patients should be evaluated for preoperative therapy, with strong consideration for nivolumab + chemotherapy for those patients with tumors ≥ 4 cm or node positive and no contraindications to immune checkpoint inhibitors.* Otherwise refer to the Neoadjuvant Systemic Therapy for Patients Not Candidates for Immune Checkpoint Inhibitors.
- Test for PD-L1 status, *EGFR* mutations, and *ALK* rearrangements (stages IB–IIIA, IIIB [T3,N2]).
[Principles of Molecular and Biomarker Analysis \(NSCL-H\)](#)
- After surgical evaluation, patients likely to receive adjuvant chemotherapy may be treated with induction systemic therapy as an alternative.

Neoadjuvant Systemic Therapy in Patients Candidates for Immune Checkpoint Inhibitors

- Nivolumab 360 mg and platinum-doublet chemotherapy every 3 weeks for 3 cycles¹
 - ▶ Platinum-doublet chemotherapy options include:
 - ◇ Carboplatin AUC 5 or AUC 6 day 1, paclitaxel 175 mg/m² or 200 mg/m² day 1 (any histology)
 - ◇ Cisplatin 75 mg/m² day 1, pemetrexed 500 mg/m² day 1 (nonsquamous histology)
 - ◇ Cisplatin 75 mg/m² day 1, gemcitabine 1000 mg/m² or 1250 mg/m² days 1 and 8 (squamous histology)
 - ◇ Cisplatin 75 mg/m² day 1, paclitaxel 175 mg/m² or 200 mg/m² day 1 (any histology)
 - ▶ Chemotherapy Regimens for Patients Not Candidates for Cisplatin-Based Therapy
 - ◇ Carboplatin AUC 5 or AUC 6 day 1, pemetrexed 500 mg/m² day 1 (nonsquamous histology)
 - ◇ Carboplatin AUC 5 or AUC 6 day 1, gemcitabine 1000 mg/m² or 1250 mg/m² days 1 and 8 (squamous histology)

Neoadjuvant Systemic Therapy for Patients Not Candidates for Immune Checkpoint Inhibitors**Preferred (nonsquamous)**

- Cisplatin 75 mg/m² day 1, pemetrexed 500 mg/m² day 1 every 21 days for 4 cycles²

Preferred (squamous)

- Cisplatin 75 mg/m² day 1, gemcitabine 1250 mg/m² days 1 and 8, every 21 days for 4 cycles³
- Cisplatin 75 mg/m² day 1, docetaxel 75 mg/m² day 1 every 21 days for 4 cycles⁴

Other Recommended

- Cisplatin 50 mg/m² days 1 and 8; vinorelbine 25 mg/m² days 1, 8, 15, and 22, every 28 days for 4 cycles⁵
- Cisplatin 100 mg/m² day 1, vinorelbine 30 mg/m² days 1, 8, 15, and 22, every 28 days for 4 cycles^{6,7}
- Cisplatin 75–80 mg/m² day 1, vinorelbine 25–30 mg/m² days 1 and 8, every 21 days for 4 cycles
- Cisplatin 100 mg/m² day 1, etoposide 100 mg/m² days 1–3, every 28 days for 4 cycles⁶

Useful in Certain Circumstances

- Chemotherapy Regimens for Patients Not Candidates for Cisplatin-Based Therapy
 - ▶ Carboplatin AUC 6 day 1, paclitaxel 200 mg/m² day 1, every 21 days for 4 cycles⁸
 - ▶ Carboplatin AUC 5 day 1, gemcitabine 1000 mg/m² days 1 and 8, every 21 days for 4 cycles⁹ (squamous histology)
 - ▶ Carboplatin AUC 5 day 1, pemetrexed 500 mg/m² day 1 every 21 days for 4 cycles¹⁰ (nonsquamous histology)

All chemotherapy regimens listed above can be used for sequential chemotherapy/RT.

Adjuvant Systemic Therapy

PERIOPERATIVE SYSTEMIC THERAPY**Adjuvant Systemic Therapy**

- Test for PD-L1 status, *EGFR* mutations, and *ALK* rearrangements (stages IB–IIIA, IIIB [T3,N2]).
[Principles of Molecular and Biomarker Analysis \(NSCL-H\)](#).

Preferred (nonsquamous)

- Cisplatin 75 mg/m² day 1, pemetrexed 500 mg/m² day 1 every 21 days for 4 cycles²

Preferred (squamous)

- Cisplatin 75 mg/m² day 1, gemcitabine 1250 mg/m² days 1 and 8, every 21 days for 4 cycles³
- Cisplatin 75 mg/m² day 1, docetaxel 75 mg/m² day 1 every 21 days for 4 cycles⁴

Other Recommended

- Cisplatin 50 mg/m² days 1 and 8; vinorelbine 25 mg/m² days 1, 8, 15, and 22, every 28 days for 4 cycles⁵
- Cisplatin 100 mg/m² day 1, vinorelbine 30 mg/m² days 1, 8, 15, and 22, every 28 days for 4 cycles^{6,7}
- Cisplatin 75–80 mg/m² day 1, vinorelbine 25–30 mg/m² days 1 and 8, every 21 days for 4 cycles
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Useful in Certain Circumstances

- Chemotherapy Regimens for Patients Not Candidates for Cisplatin-Based Therapy
 - Carboplatin AUC 6 day 1, paclitaxel 200 mg/m² day 1, every 21 days for 4 cycles⁸
 - Carboplatin AUC 5 day 1, gemcitabine 1000 mg/m² days 1 and 8, every 21 days for 4 cycles⁹
 - Carboplatin AUC 5 day 1, pemetrexed 500 mg/m² day 1 every 21 days for 4 cycles¹⁰ (nonsquamous histology)

All chemotherapy regimens listed above can be used for sequential chemotherapy/RT.

Systemic Therapy Following Previous Adjuvant Systemic Therapy

- Osimertinib 80 mg daily¹¹
 - Osimertinib for patients with completely resected stage IB–IIIA or stage IIIB (T3, N2) NSCLC and positive for *EGFR* (exon 19 deletion, exon 21 L858R) mutations who received previous adjuvant chemotherapy or are ineligible to receive platinum-based chemotherapy.
- Atezolizumab 840 mg every 2 weeks, 1200 mg every 3 weeks, or 1680 mg every 4 weeks for up to 1 year¹²
 - Atezolizumab for patients with completely resected stage IIB–IIIA, stage IIIB (T3, N2), or high-risk stage IIA NSCLC with PD-L1 ≥1% and negative for *EGFR* exon 19 deletion or exon 21 L858R mutations or *ALK* rearrangements who received previous adjuvant chemotherapy and with no contraindications to immune checkpoint inhibitors.*
- Pembrolizumab 200 mg every 3 weeks or 400 mg every 6 weeks for up to 1 year¹³
 - Pembrolizumab for patients with completely resected stage IIB–IIIA, stage IIIB (T3, N2), or high-risk stage IIA NSCLC and negative for *EGFR* exon 19 deletion or exon 21 L858R mutations or *ALK* rearrangements who received previous adjuvant chemotherapy and with no contraindications to immune checkpoint inhibitors.*

Neoadjuvant Systemic Therapy

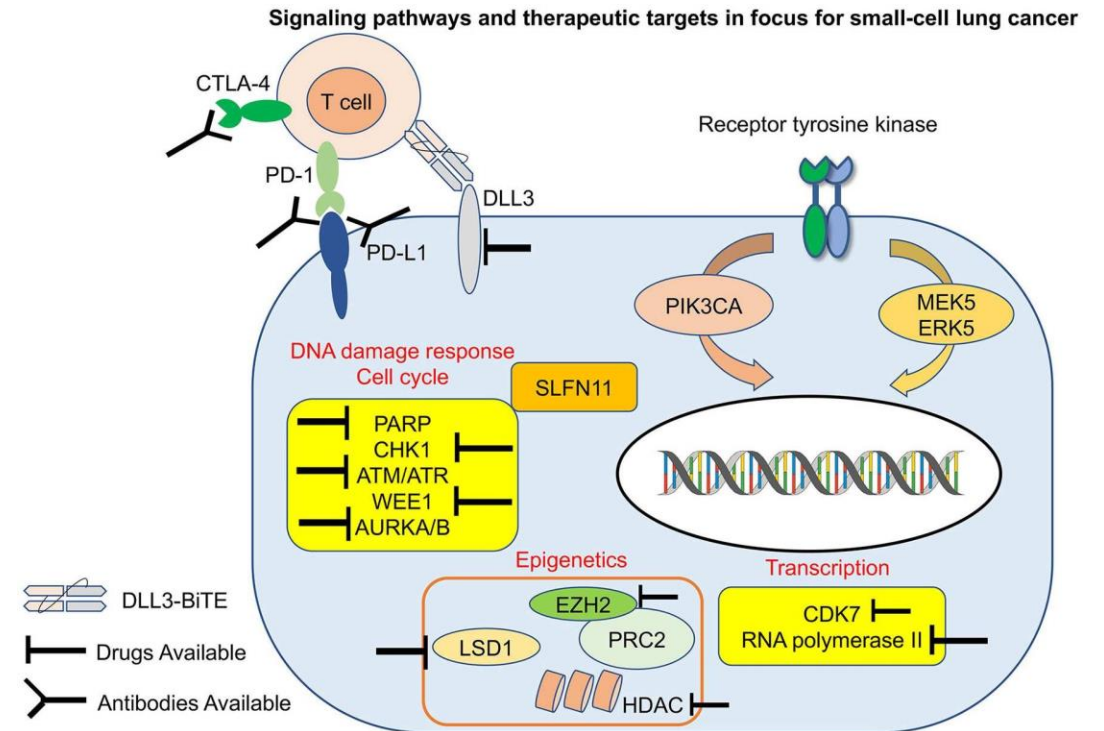
Where are we today in biomarker testing for lung cancer?

- Tremendous expansion of treatment options with rapid discovery of new targets, development of effective therapeutic agents and providing hope to many more patients with lung cancer
- However, serious challenges remain:
 - The pace of discovery and implementation has made it hard for most oncologist and lung cancer providers to keep up
 - As more discoveries are made, many unanswered questions remain, which clinical research is struggling to answers in a timely fashion
 - Disparities in consistent delivery of biomarker driven care due to access to sophisticated oncology programs, insurance coverage/approval, treatment cost and patient/provider education

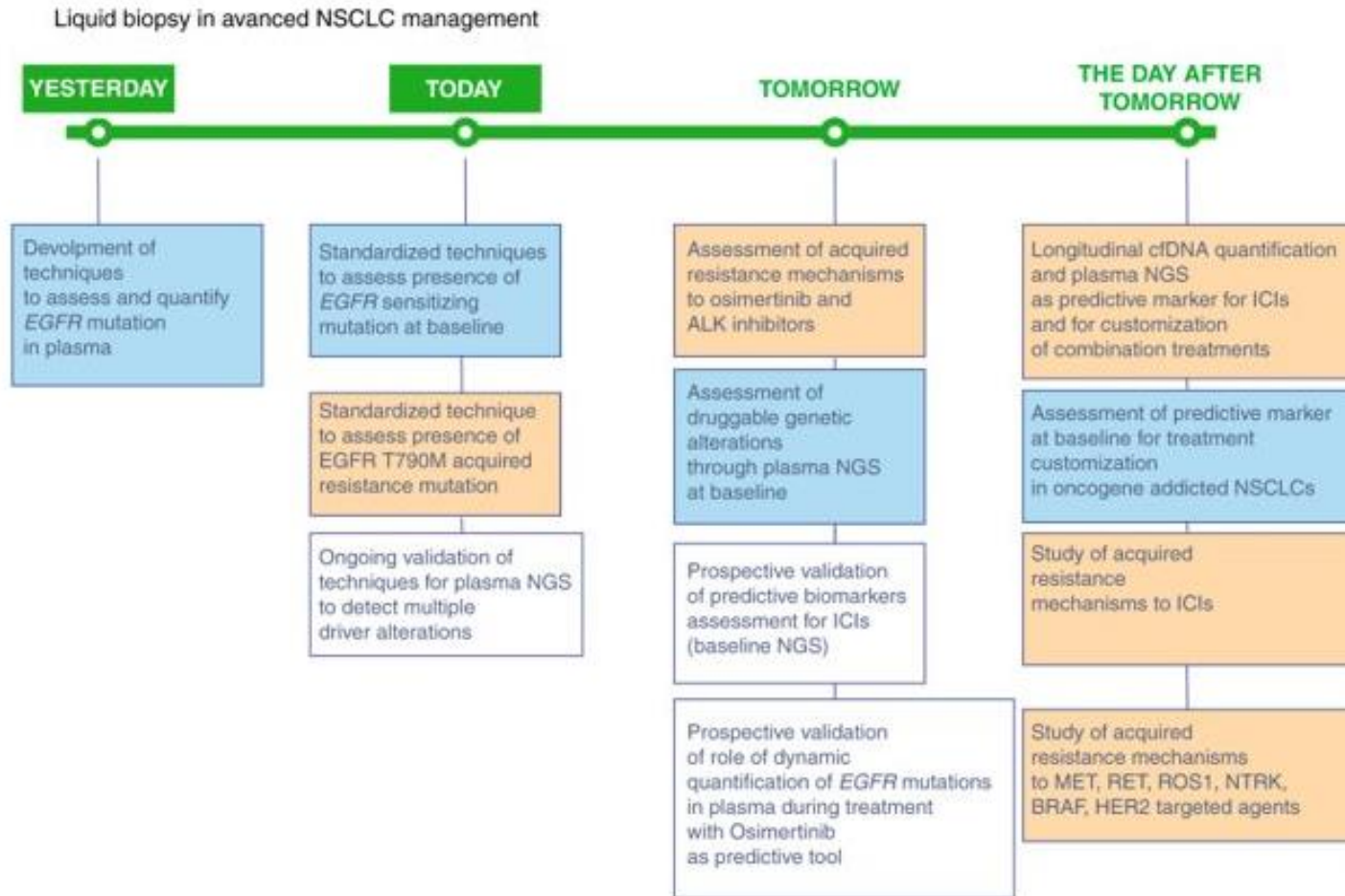


Biomarker Driven Care in Small Cell and NET

- SCLC historically a graveyard for drug development
- Multiple targets signaling pathways have been discovered
- Trials in biomarker driven care are starting to show some modest results

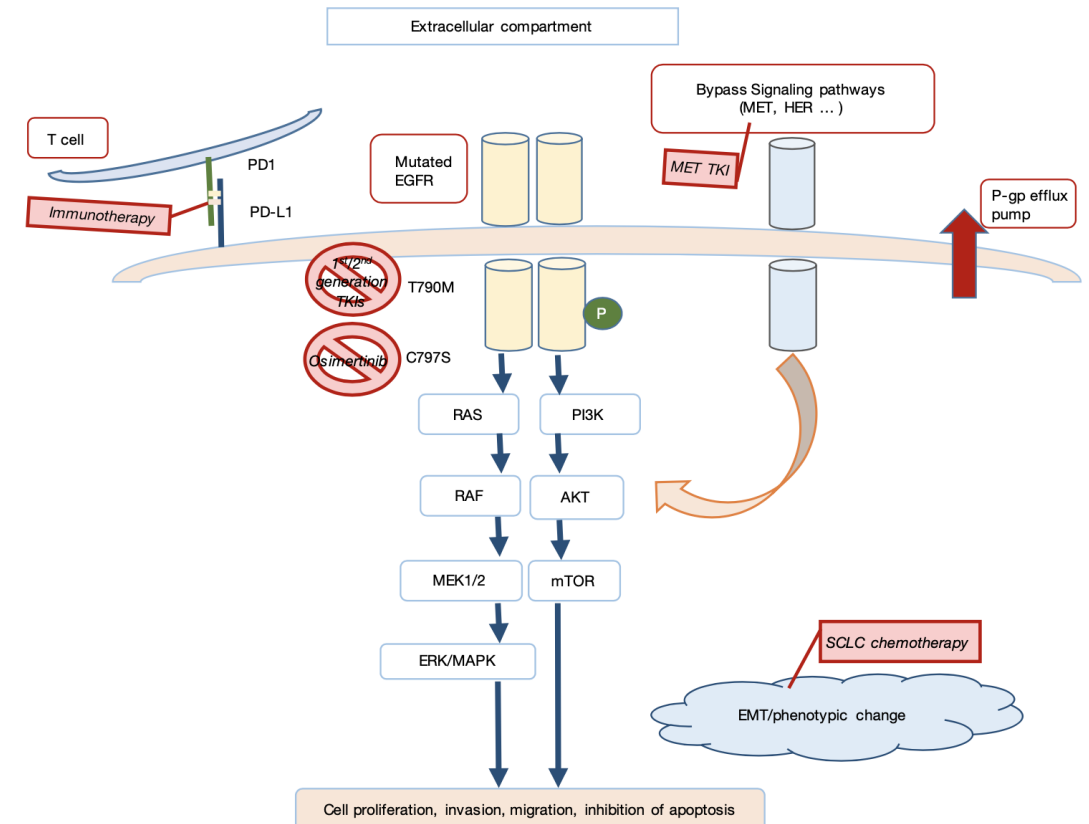


Liquid Biopsy for biomarker testing, screening and monitoring



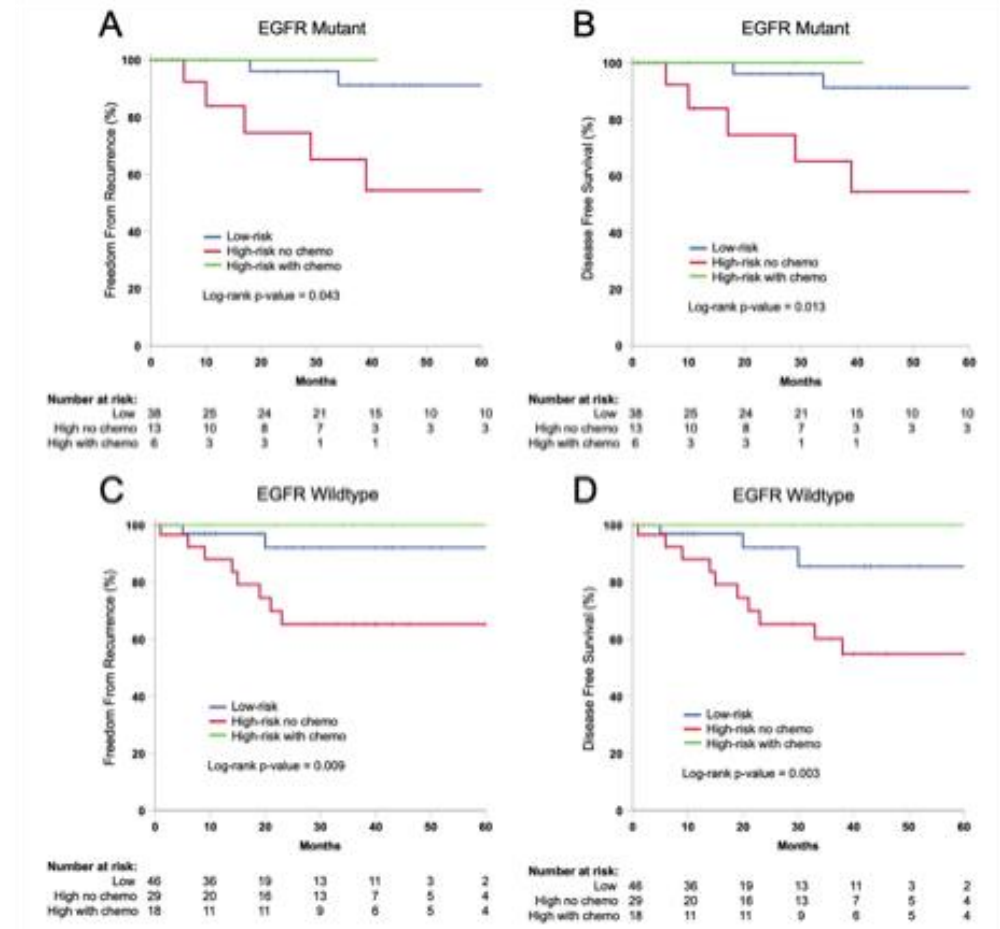
Biomarker Driven Resistance and Outcome Prediction

- Acquired resistance to targeted and immunotherapy is a rapidly expanding field of diagnostics and therapeutics
 - Resistant to EGFR mutant NSCLC to Osimertinib and treatment with mobocertinum and amivantamab
 - Resistance to immunotherapy by EGFR and ALK mutant NSCLC
 - Targeting PD1/PDL1 and CTLA4



Biomarker Driven Outcome Prediction

- Biomarker signals demonstrates risk of recurrence and mortality in the NSCLC and can drive therapeutic decisions
 - Ex. 14 gene panel and adjuvant chemotherapy in Stage 1a NSCLC



Biomarker Driven Pharmacology/Toxicity

- Biomarkers can predict appropriate dosing and toxicity
 - Frameshift Neoantigens
 - Peptides can predict Immunotherapy toxicities

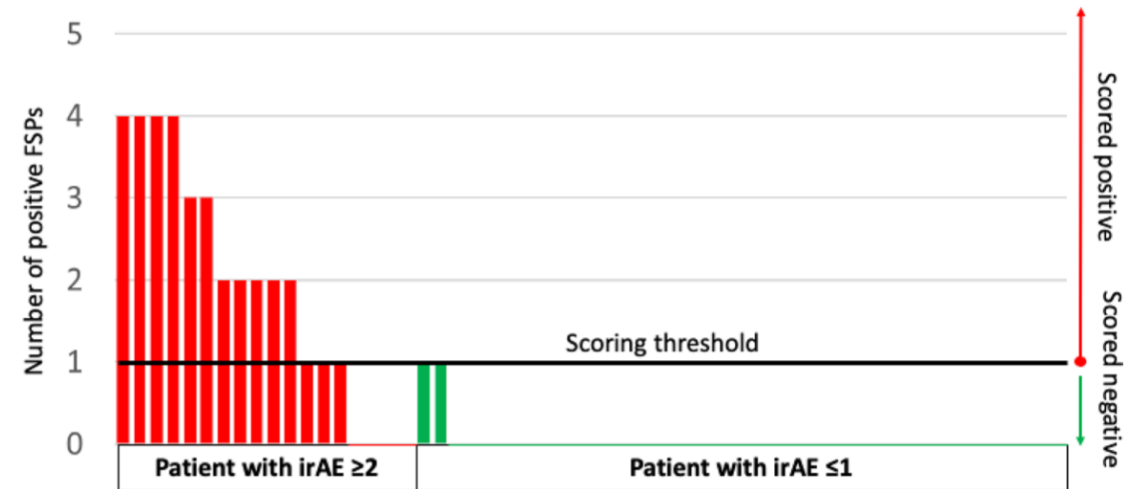
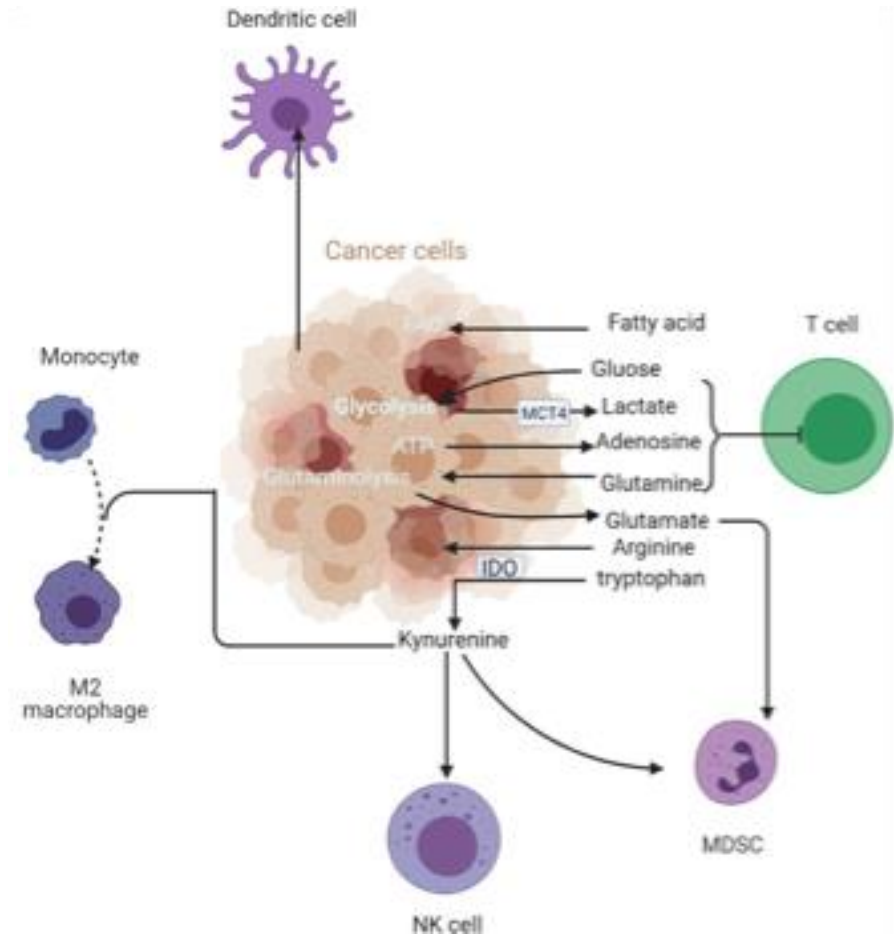


Fig. 5 Bar graph displays ordered, positive contrast scores for irAE prediction. A set of 11 irAE-specific FSPs were statistically selected to build a model for irAE prediction. Patients with 1 or more positive FSPs (left Y axis) are predicted to have irAE \geq G 2. Red bar: patient with observed irAE \geq G 2. Green bar: patient with observed irAE = G 0 or G 1. Black line: cut-off score for irAE \geq G 2 prediction. Predictions are shown on right Y-axis

Modulation of the tumor microenvironment (TME)

- Assessment of the TME can predict response to treatment
- Radiotherapy, electroporation, cytokines and oncoviruses demonstrates the ability to prime the tumor for Immunotherapy

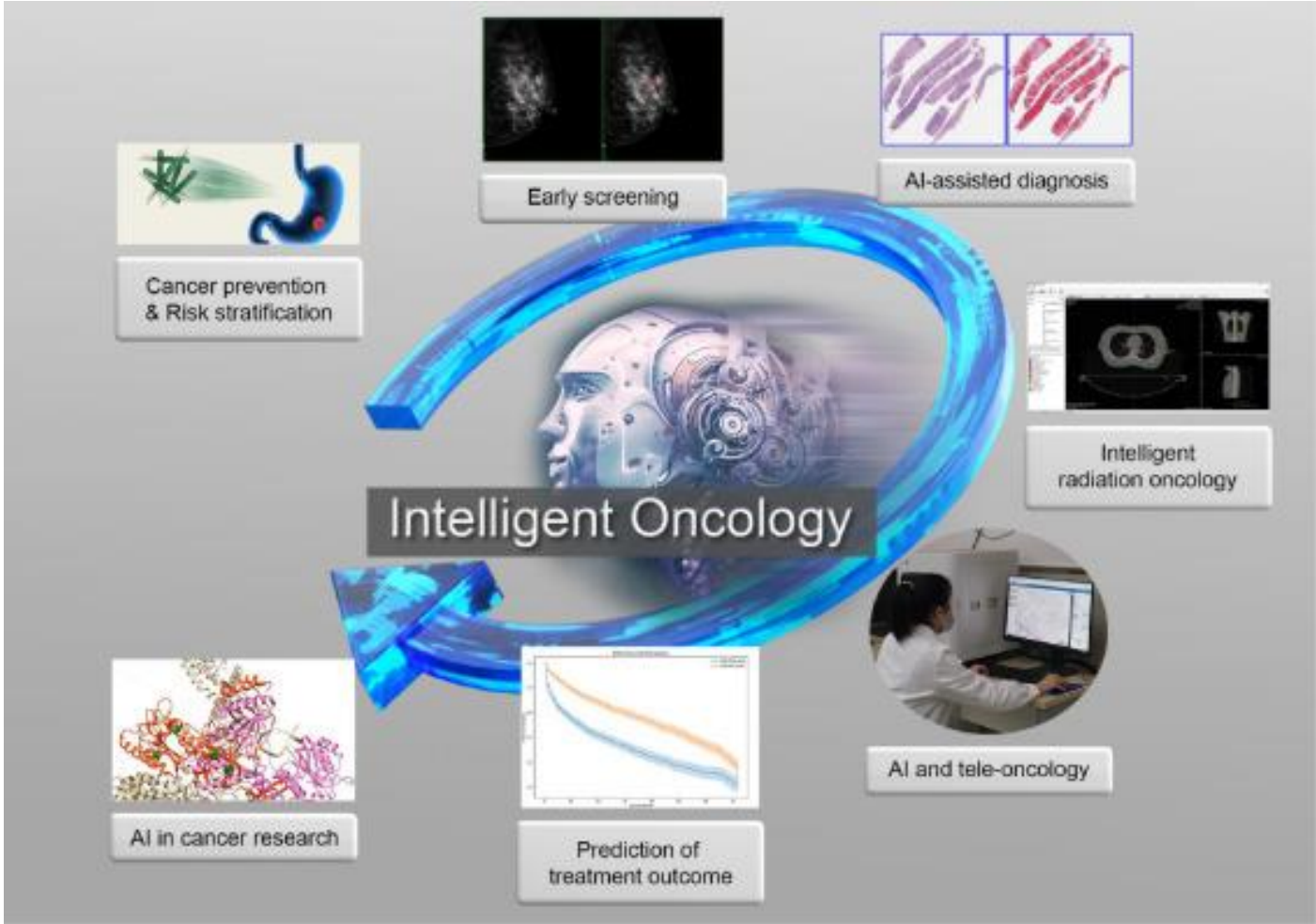


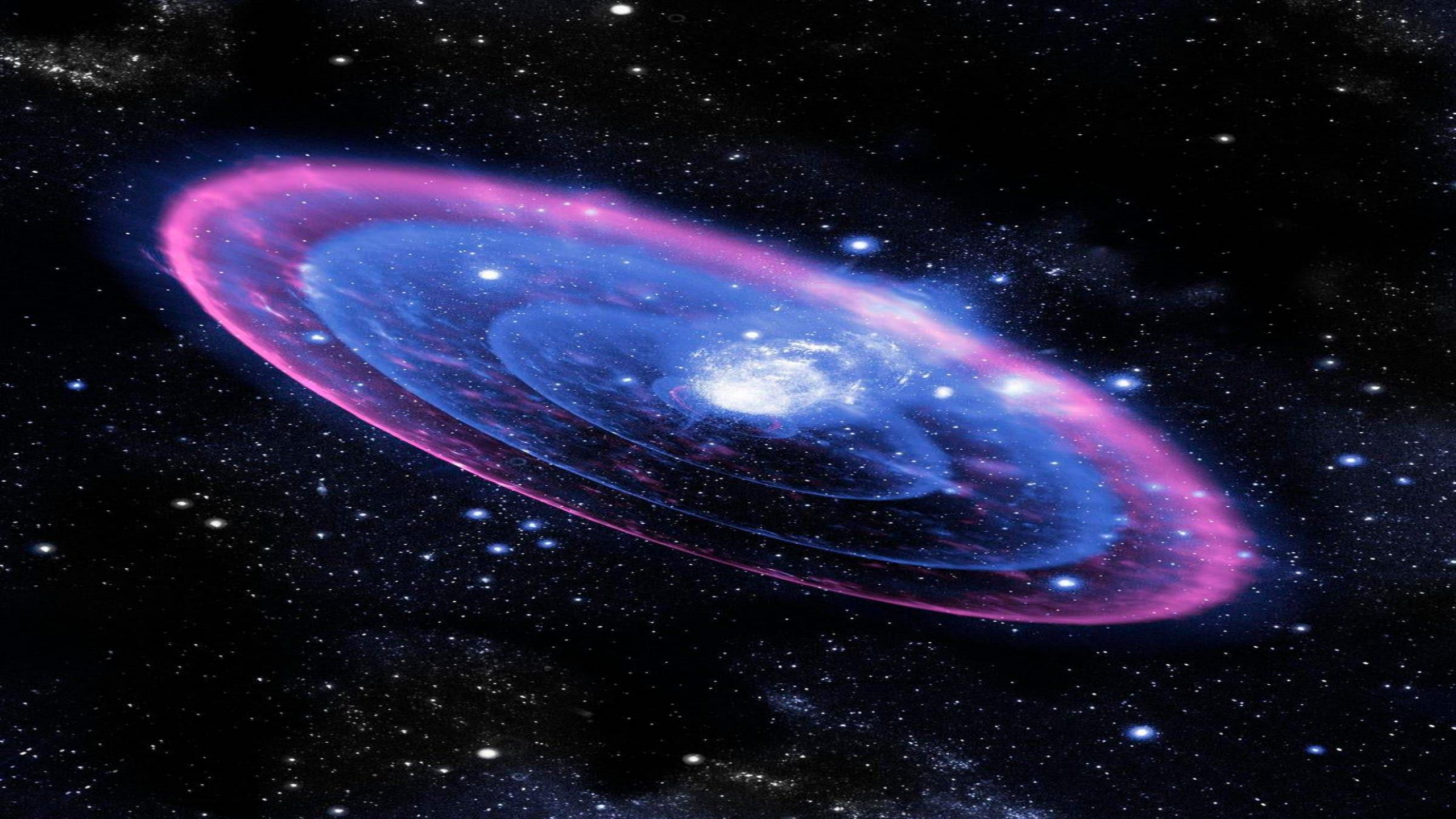


Biomarker and non anatomic staging

- 9th Edition TNM Staging due January 2024.
 - Staging will likely stay focused on TNM factors
- Non anatomical factors, particularly biomarkers are part of the survey and likely be part of a future staging scheme

AI assisted oncology





??????





Together Everyone Achieves More

Didactic Q & A



Case Presentation: Ochsner LSU Health Feist-Weiller Cancer Center



**Robert Holladay,
MD, FCCP**

Professor of Clinical
Internal Medicine;
Program Director,
Interventional
Pulmonary Fellowship
Program Medicine
Pulmonary Critical

Case Summary by Dr. Holladay

Case #1

- 76 yo woman with a PMH of HTN, type 2 DM and previous Hepatitis B infection presented to the hospital with complaints of fatigue and some “dizziness”. Noted to have a small left sided pleural effusion and a LUL lung nodule. Initial thoracentesis was performed which was positive for adenocarcinoma.
- Stage 4 T1b, N0, M1a. Pleural fluid was not sufficient for tissue for biomarker testing.
- Had bronchoscopy to evaluate the LUL lung nodule. Was performed with robotic navigation. On site cytology review noted to be positive for adenocarcinoma. Pathology was sent for biomarker testing noted to be positive for EGFR with NGS testing.
- Patient has been started on standard chemotherapy with carboplatin and premetrexed. Osimertinib added once NGS results noted positive for EGFR. Tolerating the treatment currently.

Case Summary by Dr. Holladay

Case #2

- 47 yo woman with PMH of obesity and anxiety who presented with a persistent cough and dyspnea. CT chest showed findings of RUL lung mass and associated mediastinal adenopathy. Had bronchoscopy with EBUS which was positive at station 4R lymph node for adenocarcinoma.
- Specimen had biomarker testing by NGS which was positive for EML4-ALK.
- PET scan showed activity in lung lesions and also in the left ilium.
- Biopsy of iliac lesion noted to be positive for adenocarcinoma

- Stage 4 T4, N2, M1b.
- Started on therapy with alectinib.
- Dosage adjusted for problems with fatigue and lower extremity edema

Case Summary by Dr. Holladay

Case #2 Continued

- PET imaging after being on targeted therapy shows improvement in chest and bone findings.
- Started on denosumab for metastatic bone disease at six months after diagnosis of lung cancer
- Repeat imaging at 15 months from presentation shows continued improvement in RUL lung mass and mediastinal adenopathy. No evidence of new bone metastasis.

Case Presentation Discussion

Discussion/Feedback from our Faculty





Wrap-Up & Post-ECHO Series Assessment

Reminder: Post-ECHO Series Assessment Survey



We need your help to continue improving this ECHO Series and appreciate your feedback.

Please check your email inbox and junk folders for an email from “redcap@vumc.org” with a Post-ECHO Survey link.



You will also receive a Six-Month Follow-Up Survey in late November/early December.



Materials and Resources will be available soon on the [ACS ECHO Website](#)



Questions: Contact korey.hofmann@cancer.org and leigh.davis@cancer.org

Thank you to Amgen for their generous support!

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**Thank you to Dr. Sarah Thayer
for your leadership.**

**Thank you to Oschner LSU Health
Feist- Weiller Cancer Center for their
partnership.**

