Ochsner | LSU Health SHREVEPORT

NATIONAL LUNG CANCER ROUNDTABLE

American Cancer Society® | Project ECHO®

Addressing Lung Cancer Biomarker Testing Through Project ECHO in LOUISIANA

Session 0

October 4, 2022

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

Each ECHO session will be recorded and *may* be posted to a publicly-facing website

You will be muted with your video turned off when you join the call.
Use the buttons in the *black* menu bar to unmute your line and to turn on your video.
If you do not wish to have your image recorded, please turn OFF the video option.

Today's materials will be made available on our ACS ECHO website

Please type your name and organization in the chat box

This ECHO session takes place on the Zoom platform.
To review Zoom's privacy policy, please visit zoom.us/privacy

Remember: Do NOT share any personal information about any patient

Questions about Zoom? Type in the chat box @allison.rosen@cancer.org

American Cancer Society®

Project ECHO®

Before We Start…..

Please type your name and organization in the chat box

Have a question? Don’t wait to ask! Enter in the “Chat” at *anytime*.

Today's Agenda

01	**Welcome and Housekeeping** (5 minutes)
02	**ECHO Hub and Spoke Introductions** (10 minutes)
03	**Project Goals & Introduction to the ECHO Model** (8 minutes)
04	**The Burden of Lung Cancer in Louisiana** (5 minutes)
05	**Introduction to Lung Cancer Biomarker Testing** (15 minutes)
06	**Open Discussion/Q&A** (7 minutes)
07	**Wrap Up** (5 minutes)

SESSION 0

ECHO Hub & Spoke Introductions

SARAH THAYER, MD, Ph.D.

Director, Feist Weiller Cancer Center Carol Feist Endowed Chair for the Study of Cancer Professor of Surgery-Surgical Oncology

Relevant Faculty Disclosure(s)

SARAH THAYER, MD, Ph.D.

- **I have nothing to disclose**

Session 0

We are here to Increase our Collective “IQ” About Biomarker-Driven Care of Lung Cancer and to Save Lives!

Meet our Louisiana ECHO Hub ACS Team

JASMYNE WATTS, MPH
American Cancer Society
Cancer Control Strategic
Partnerships Manager

AMY WILLIAMS, MBA
American Cancer Society
Cancer Control Strategic
Partnerships Manager

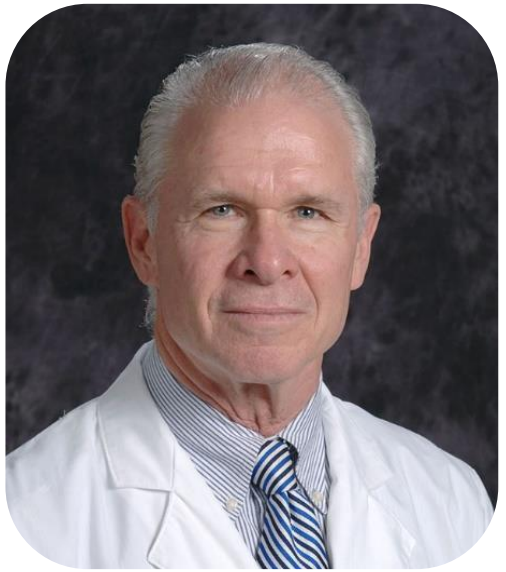
LEIGH DAVIS
American Cancer Society
Senior Director, Cancer
Control Strategic
Partnerships

KOREY HOFMANN, MPH
American Cancer Society
ECHO Coordinator

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



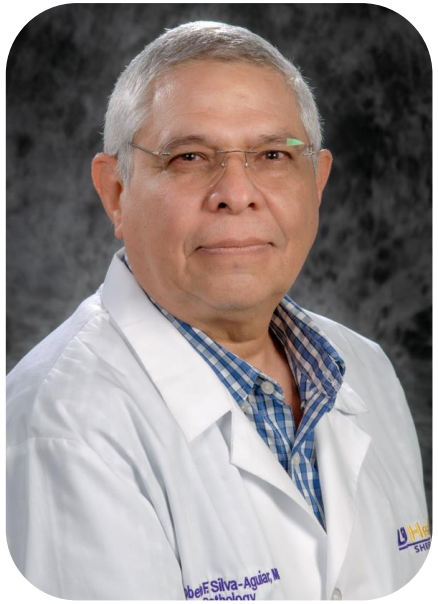
Robert White, MD, FACS
Chairman and Professor of Surgery
John C. McDonald, MD Endowed Chair of Surgery

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

Lisa LaChance, MBA- Project Manager
Rachel Langford RN, OCN
Darren Guin, IT Analyst IV

Introductions: Meet our Louisiana Spoke Sites

North Caddo Medical Center

St. Francis Medical Center

Lourdes Physician Group

DeSoto Regional Health System
Improving Life Everyday

OchsnerHealth

Mary Coil, Marketing Director – North Caddo Regional Medical Center
Susan Gunn, MD – Ochsner Health, New Orleans

Paula Springer, MD – DeSoto, Regional Health System
Shirley Simmons, MD – DeSoto, Regional Health System

Frank Courmier, MD – Lourdes Pulmonary Group, Lafayette
Charlene Benoit, MD – Lourdes Pulmonary Group, Lafayette

Aimee Kane – St. Francis Medical Center, Monroe

Session 0

Project Goals & Introduction to the ECHO Model

KOREY HOFMANN, MPH

Program Manager, National Lung Cancer Roundtable, **American Cancer Society**

ECHO SERIES PROJECT GOALS

SPOKES/LEARNERS WILL GAIN KNOWLEDGE AND CONFIDENCE

- to address the common barriers that may exist within their institutions in the lung cancer biomarker space
- to help implement biomarker testing in NSCLC successfully at their institutions

STATE-BASED ECHO APPROACH WILL FOSTER COLLABORATION

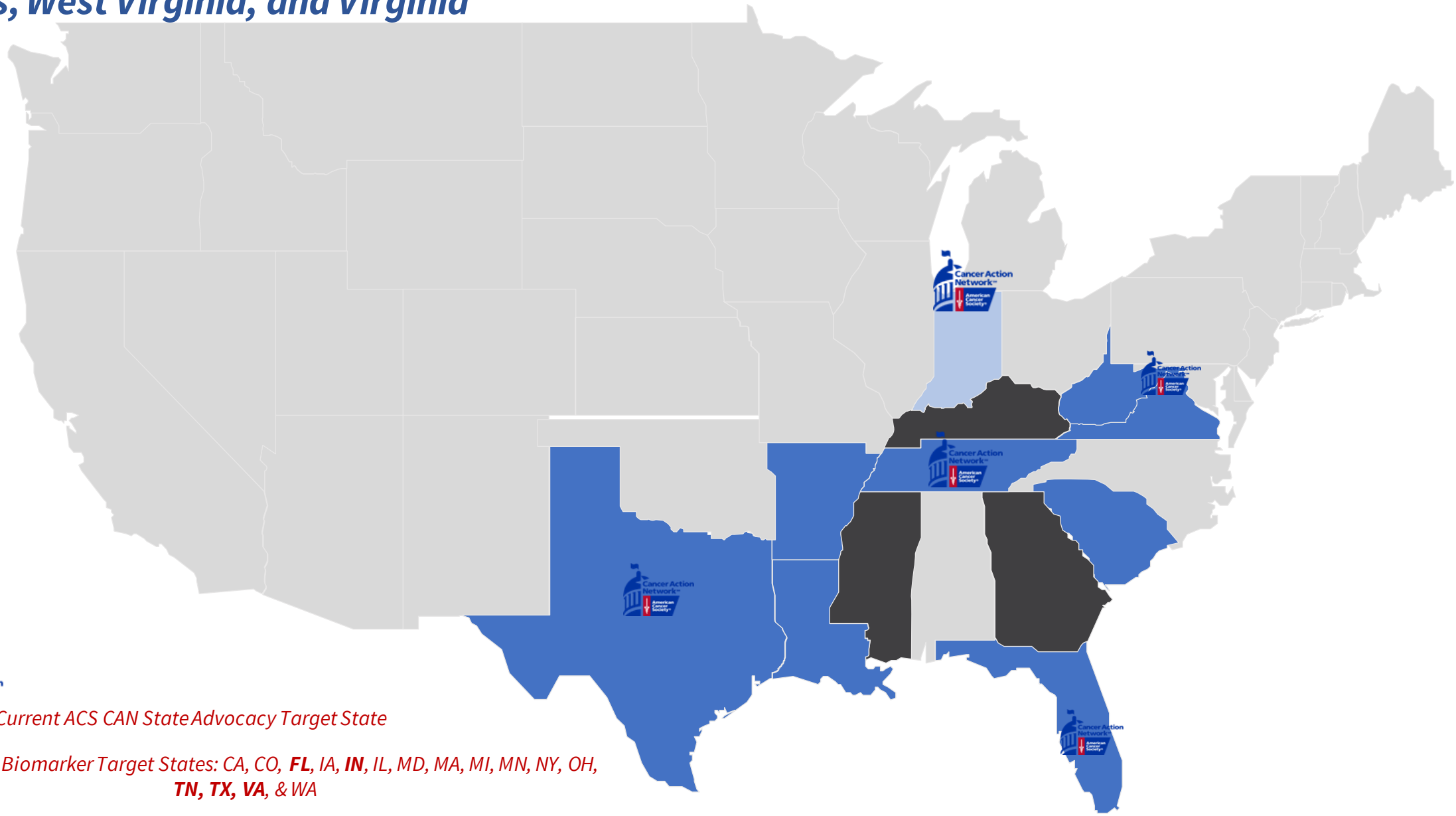
- to address the more common barriers related to biomarker testing within Louisiana reflective of its unique cultural, geographic, and payer landscape

PROVIDE VALUABLE INSIGHTS FOR PILOT REPLICATION

- Evaluate and apply learned lessons to improve the model that will enable successful replication beyond 2023

First Three Pilot Locations: Georgia, Kentucky, and Mississippi

Expansion to Eight States: Arkansas, Florida, Indiana, Louisiana, South Carolina, Tennessee, Texas, West Virginia, and Virginia*



Current ACS CAN State Advocacy Target State

All ACS CAN Biomarker Target States: CA, CO, **FL, IA, **IN**, IL, MD, MA, MI, MN, NY, OH, **TN, TX, VA**, & WA*

Session 0

Today's Session will **NOT** serve as a typical ECHO session but instead will function more like a traditional interactive webinar

About Project ECHO

- ECHO **effectively** and **efficiently** disseminates evidence-based strategies to improve cancer outcomes
- ECHO serves as a hub-and-spoke knowledge led by expert teams (faculty) who utilize videoconferencing (Zoom) to conduct virtual clinics with participants (learners and spokes)
- ECHO is a proven **one-to-many** intervention

The American Cancer Society serves as a Project ECHO (Extension for Community Healthcare Outcomes) Hub

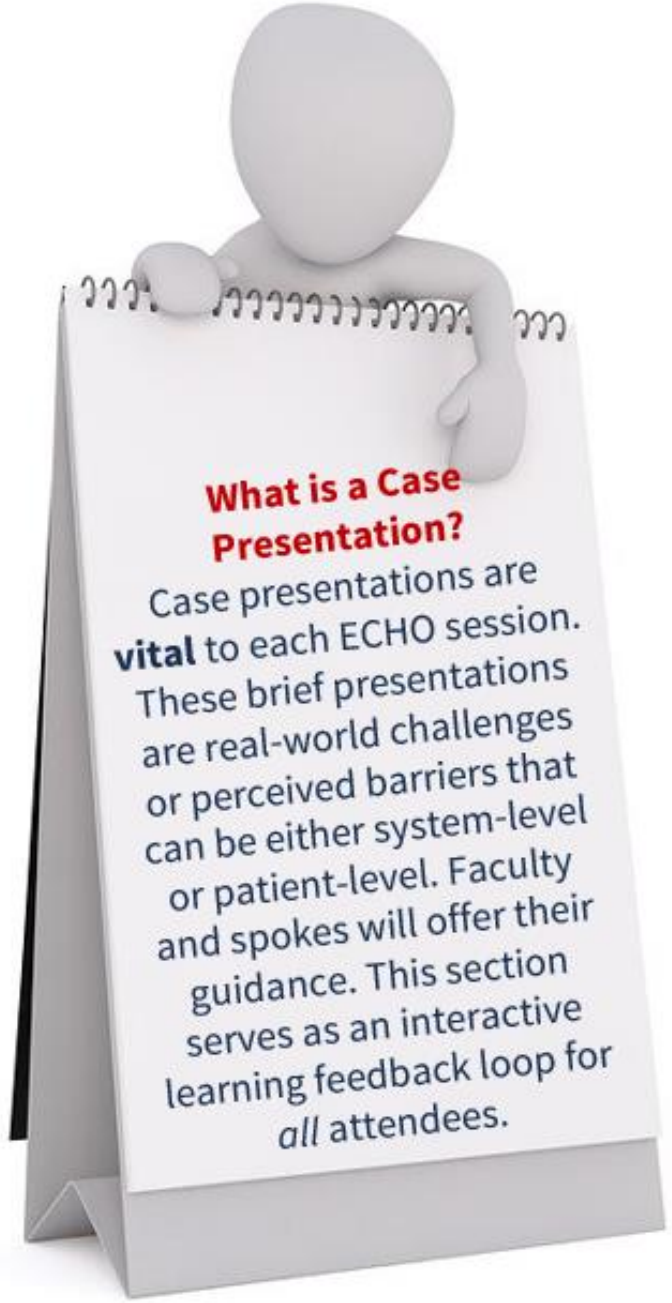
Expectations of Participating Spoke Sites

- Build a small multidisciplinary ECHO team from your system or center
- Have at least **one** team member join each monthly one-hour ECHO session
- Deliver (as a team) **one** case presentation over the course of the ECHO Series
- Complete the post-session poll questions
- Complete the **three** survey/assessments

Reminder: If you have not already, please COMPLETE the Pre-ECHO Assessment. The email was sent from the *ACS ECHO Office* on 5.21.21.

What to Expect: The Anatomy of an ECHO Session

- **Housekeeping and Introductions** (10 min)
- **Didactic Presentation** (15 min)
- **Didactic Q/A** (5 min)
- **Case Presentation(s)** (3-5 min)
- **Case Presentation(s) Discussion/Guidance** (20 min)
- **Wrap Up & Post-Session Survey Poll** (5 min)



TIP! **For more about the ECHO Model or Project ECHO, please visit www.echo.unm.edu**

Addressing Lung Cancer Biomarker Testing Through Project ECHO

Case Presentation Form

Instructions

This case presentation form is intended to be completed and submitted electronically. Please email completed forms along with any optional supplemental information to Kelly.durden@cancer.org and carbon copy your regional ACS staff partner. We request that you submit your case presentation form **at least three business days** prior to your scheduled case presentation. Please do NOT submit a scan of a printed version of this form.

This form includes four sections: **Section 1: Presenter Information & Case Presentation Summary**, **Section 2: System-Level Case Presentation**, **Section 3: Patient-Level Case Presentation** and **Section 4: Faculty Recommendations**. You need to complete Section 1 and then, choose **either** Section 2 or Section 3. We recommend that each case presentation will range from **three minutes to five minutes.** Please do not include patient identifiers on this form or use any identifiers during the presentation. Please note, for patient-level case presentations, the faculty will provide guidance that should NOT be interpreted as direct medical advice.

Project ECHO Data Usage Statement

Project ECHO® collects registration, participation, questions/answers, chat comments, and poll responses for some teleECHO® programs. Your individual data will be kept confidential. These data may be used for reports, maps, communications, surveys, quality assurance, evaluation, research, and to inform new initiatives.

Section 1: Presenter Information and Case Presentation Summary

1. **Presentation Date:** Click or tap to enter a date.
2. **Presenter Name(s):** Click or tap here to enter text.
3. **Presenter Title(s):** Click or tap here to enter text.
4. **Organization/Health System:** Click or tap here to enter text.
5. **Please summarize the case you are presenting to the group:** Click or tap here to enter text.
6. **Which specific questions are you asking the faculty and the other participating spoke sites?**
   Click or tap here to enter text.

Section 2: System-Level Case Presentation

1. **Describe your current system or workflow:** *If available, feel free to provide workflow charts separately.*
   Click or tap here to enter text.
2. **What are the primary challenges/barriers:** *Include specifics on identified gaps and quality improvement methods used to clarify the root causes.*
   Click or tap here to enter text.
3. **Describe what you are trying to improve and any other relevant background information:**
   Click or tap here to enter text.
4. **Briefly describe your vision of what it will look like when it is working well:**
   Click or tap here to enter text.
5. **Describe any recent changes (less than 6 months) made to this system or workflow, including when they were made and their impact:**
   Click or tap here to enter text.
6. **If applicable, what data (quantitative, qualitative) do you have to augment your observations:**
   Click or tap here to enter text.

Note: The Case Presentation Form is "Living" Document

Section 3: Patient-Level Case Presentation

DEMOGRAPHIC INFORMATION				
1. Age Click or tap here to enter text.	2. Gender (*Choose One*) Female☐ Male☐ Non-Binary/Third gender☐ Transgender female☐ Transgender male ☐	3. Race/Ethnicity (*Choose All that Apply*) American Indian/Alaska Native ☐ Asian ☐ Black/African American ☐ Hispanic/Latino ☐ White ☐ More than One Race ☐ Other ☐		
NON-SMALL CELL LUNG CANCER (NSCLC) HISTOLOGY & STAGE				
4. Diagnosis Initial Diagnosis ☐ Recurred and or Progressed ☐	5. Histology Adenocarcinoma ☐ Squamous Cell ☐ Large Cell ☐	6. Stage Click or tap here to enter text.		
BIOMARKER TESTING				
7. Has biomarker testing been ordered for this patient (or will it be ordered)?		8. If biomarker testing was not ordered, please elaborate on the factors that precluded it:		
Yes ☐ No ☐ Will be ordered ☐		Click or tap here to enter text.		
The next section is ONLY for those patients who HAVE received or WILL receive biomarker testing				
9. Which technique was used (or will be used) to obtain specimen for pathologic diagnosis? (*Choose One*)				
Bronchoscopic biopsy ☐ Endobronchial ultrasound-guided transbronchial lymph node aspiration (EBUS-TBNA) ☐ Image-guided percutaneous biopsy ☐ Liquid biopsy ☐		Mediastinoscopy ☐ Surgical specimen ☐ Thoracentesis/pericardiocentesis ☐ Unsure ☐		
10. Which platform was/will be used for lung biomarker testing? (*Choose One*)		11. If single-gene test or short-cluster panel, please identify which genes were tested:		
Single-Gene Test ☐ Short-Cluster Panel ☐ Multi-Gene Panel (next generation sequencing (NGS) ☐	ALK ☐ BRAF ☐ EGFR ☐	HER2 ☐ KRAS ☐ NTRK ☐ MET ☐	PD-L1 ☐ ROS1 ☐ RET ☐	
ADDITIONAL INFORMATION				
12. Please include any other information you would like to share with the group: Click or tap here to enter text.				

Section 4: Faculty Recommendations

This section will be completed by the ACS ECHO Coordinator. Recommendations from our faculty will be documented below.

Click or tap here to enter text.

Assigned Case Presentation Number: Will be assigned by ACS

The Case Presentation Process

Spokes will submit their case presentation forms at **least three business days** prior to the ECHO session. The Case presentation form serves as the sole requirement. Additional Slides are optional.

Faculty will receive the case presentation at **least 48 hours in advance** and can provide advance written feedback and or verbal feedback during the ECHO session

The case presentation does **NOT** have to be thematic to the didactic presentation (while it may improve the session flow)

The ACS ECHO Coordinator will type the key takeaways and recommendations, which will be sent out to in the post-session recap.

Case presentations are the heart of the ECHO model, ensuring that "everyone teaches, everyone learns"

Ready to Schedule your Case Presentation?

Email **ACS Staff Lead** or korey.hofmann@cancer.org with your preferred case presentation date (choose between ADD YOUR STATE specific or the combined sessions)

A member of the ACS Hub team will confirm your case presentation date and work with you to ensure your experience is easy AND valuable.

All meeting materials, including the case presentation notes, will be disseminated and uploaded within one week of the session

Central Time States: *Arkansas, Louisiana, Tennessee & Texas*
Addressing Comprehensive Lung Cancer Biomarker Testing Through Project ECHO: Nine-State Expansion Tentative Schedule
September 2022-May 2023

Projected Month	Session #	Didactic	Combined Hub or State-Led	Facilitator	Didactic Presenter
September	0	Series Kick-Off: Introduction to ECHO and Biomarker Testing Guidelines Overview	9 State-Led Sessions	**State Facilitative Partner or Designated Facilitator**	**State Faculty**
10/14/2022 @ 10:00 AM CT	1	Understanding the Barriers and Pathways to Lung Cancer Biomarker Testing	Central Time Hub	**Zhonglin Hao, MD, PHD**	**Raymond Osarogiagbon, MBBS, FACP**
11/11/2022 @ 10:00 AM CT	2	Adequate Tissue for Sampling	Central Time Hub	**Pierre de Delva, MD**	**Eric Flenaugh, MD**
1/27/2023 10:00 AM CT	3	Choice of Panel, Interpretation of Results, and Next Steps	Central Time Hub	**Zhonglin Hao, MD, PHD**	**Ignacio I. Wistuba, MD**
2/17/2023 @ 10:00 AM CT	4	Improving Turnaround Time	Central Time Hub	**Pierre de Delva, MD**	**Lynette Sholl, MD, FCAP**
March 2023	5	Navigating Insurance Complexities	9 State-Led Sessions	**State Facilitative Partner or Designated Facilitator**	**State Faculty**
April 2023	6	Placeholder: Optional Session	9 State-Led Sessions	**State Facilitative Partner or Designated Facilitator**	**State Faculty**
May 2023	7	Final ECHO Session in each State/TBD	9 State-Led Sessions	**State Facilitative Partner or Designated Facilitator**	**State Faculty**

Session 0

The Burden of Lung Cancer in Louisiana

DAVID CHAMBERS, MD

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

LSU Feist-Weiller Cancer Center

Relevant Faculty Disclosure(s)

David Chambers, MD

- **I have nothing to disclose**

Lung Cancer Burden At a Glance

Nearly

1 in 4

of all Cancer Deaths are From Lung Cancer

Only

19%

of Lung Cancer Cases are Diagnosed in an Early Stage

*

[1]**American Cancer Society.** Cancer Facts and Figures. *Cancer.org.* [Online] 2022. https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2022.html

[2] **US National Institute of Health, National Cancer Institute.** *SEER Cancer Stat Facts: Lung and Bronchus Cancer SEER 17 2012–2018, All Races, Both Sexes by SEER Combined Summary Stage*

Lung Cancer Burden in Louisiana

3,800

Estimated New Cases in 2022

2,310

Estimated Deaths in 2022

64.6

Incidence rates, 2014 - 2018

*Average annual rate per 100,000, age adjusted to the 2000 US standard population

45.7

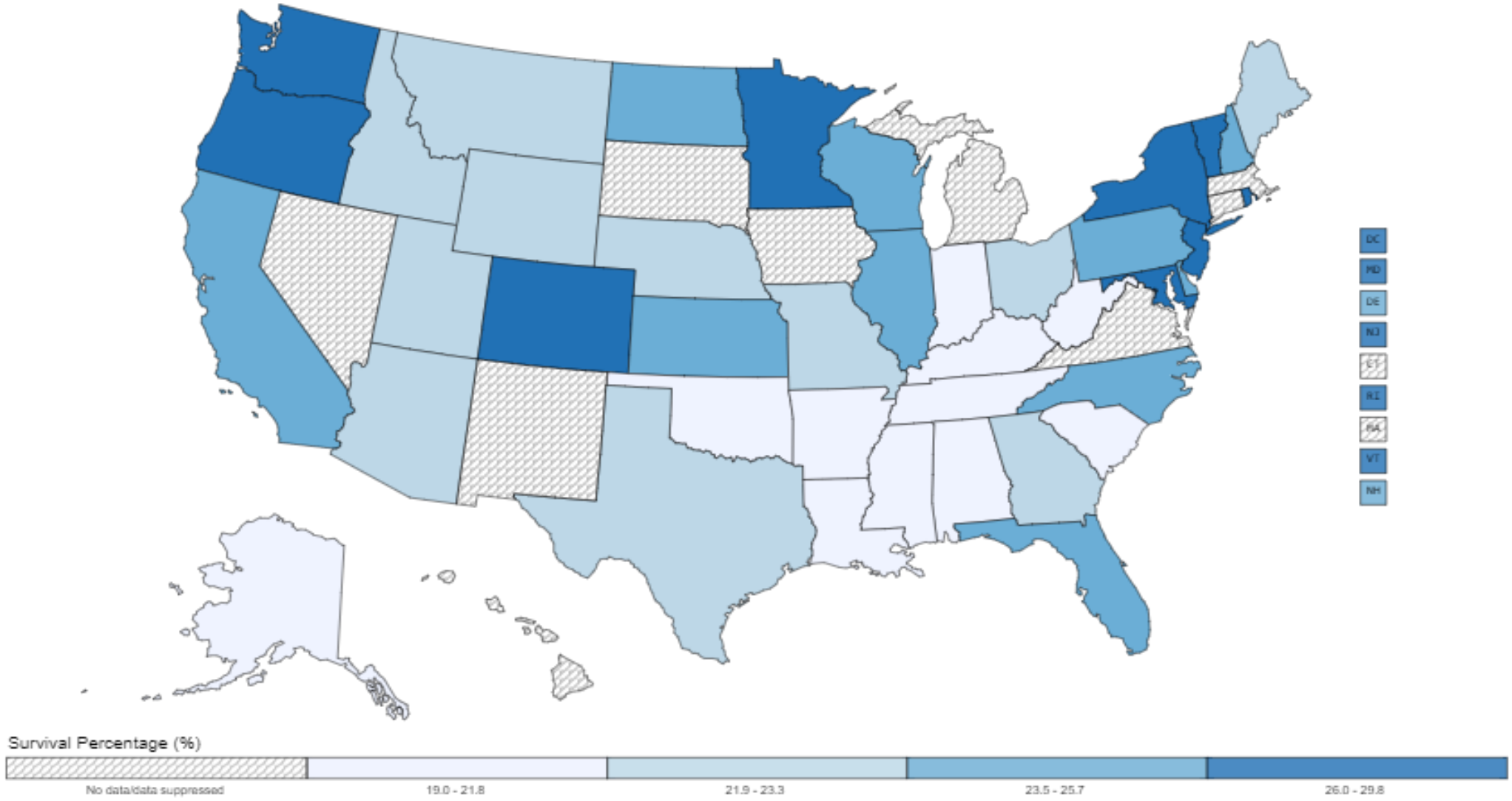
Death rates, 2015-2019**

**Average rate per 100,000, age adjusted to the 2000 US standard population.

American Cancer Society, Cancer Statistics Center

Lung Cancer 5-Year Relative Survival (%) by State

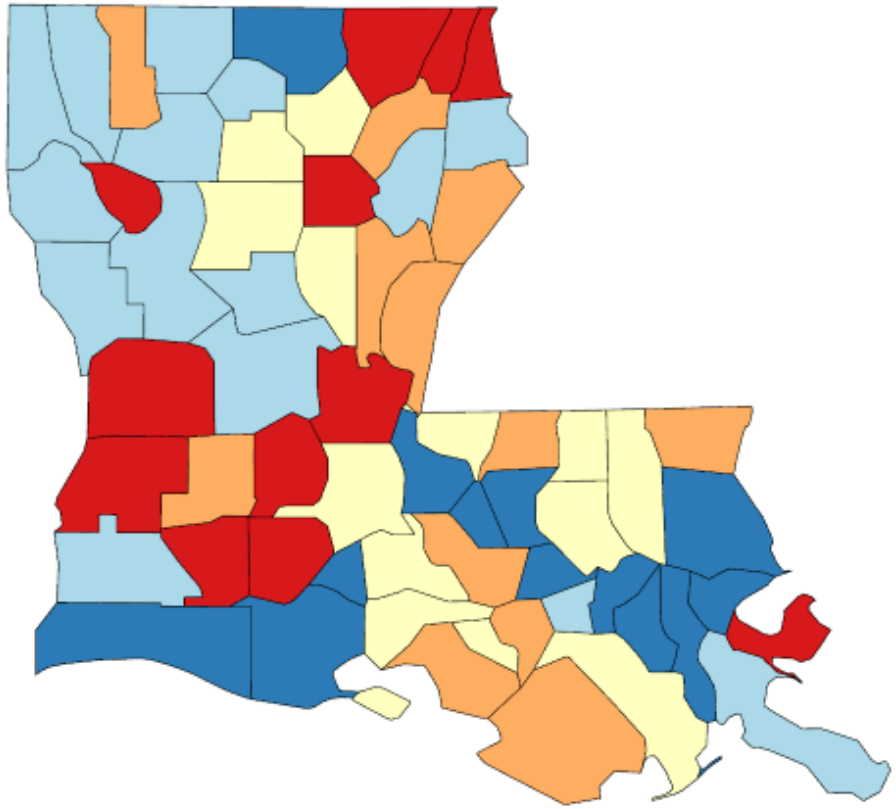
All Races and Ethnicities, Male and Female



Source - U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, based on 2021 submission data (1999-2019): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; https://www.cdc.gov/cancer/dataviz, released in June 2022.

Lung Cancer Mortality Rates 2015 – 2019

All Races and Ethnicities, Male and Female



Age-Adjusted

Annual Death Rate

(Deaths per 100,000)

Quantile Interval

- 34.9 to 43.2
- > 43.2 to 48.6
- > 48.6 to 52.4
- > 52.4 to 56.8
- > 56.8 to 95.6

United States
Rate (95% C.I.)
36.7 (36.6 - 36.8)

Louisiana
Rate (95% C.I.)
45.7 (44.9 - 46.5)

Healthy People 2020
Goal C-2
45.5

Notes:

State Cancer Registries may provide more current or more local data.

Data presented on the State Cancer Profiles Web Site may differ from statistics reported by the State Cancer Registries (for more information).

Source: Death data provided by the National Vital Statistics System public use data file. Death rates calculated by the National Cancer Institute using SEER*Stat. Death rates (deaths per 100,000 population per year) are age-adjusted to the 2000 US standard population (19 age groups: <1, 1-4, 5-9, ... , 80-84, 85+). The Healthy People 2020 goals are based on rates adjusted using different methods but the differences should be minimal. Population counts for denominators are based on the Census 1969-2018 US Population Data File as modified by NCI.

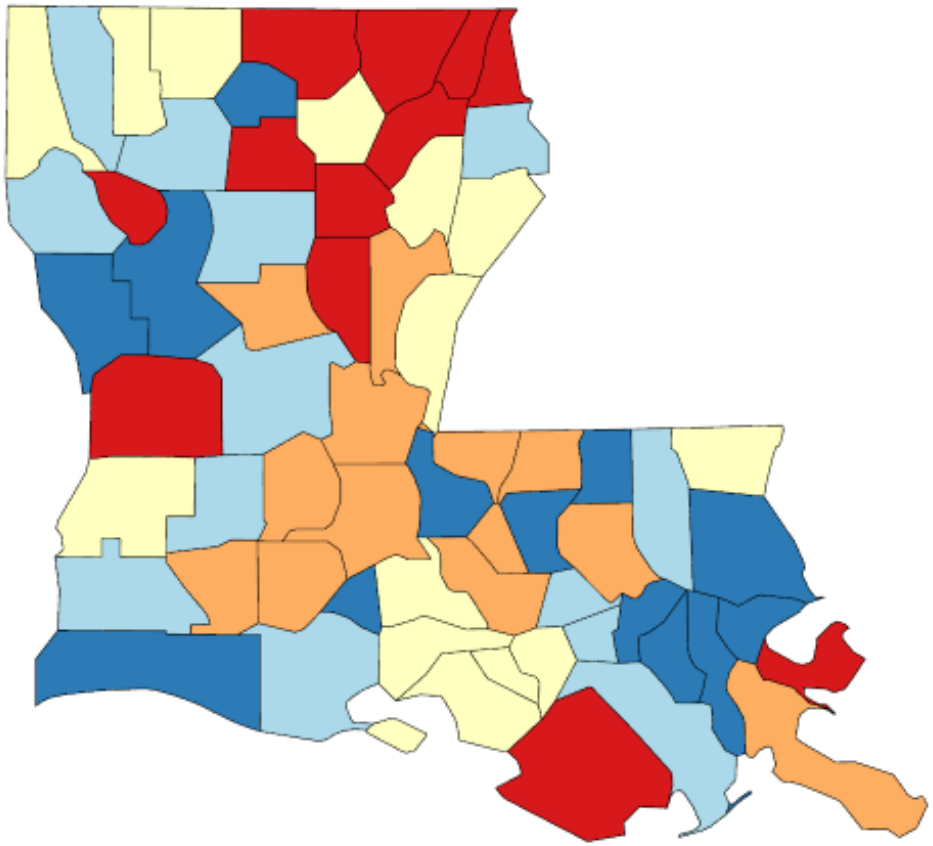
Healthy People 2020 Goal C-2 : Reduce the lung cancer death rate to 45.5.

Healthy People 2020 Objectives provided by the Centers for Disease Control and Prevention.

Data for the United States does not include data from Puerto Rico

Lung Cancer Incidence Rates 2015 – 2019

All Races and Ethnicities, Male and Female



Age-Adjusted

Annual Incidence Rate

(Cases per 100,000)

Quantile Interval

- 50.6 to 61.1
- > 61.1 to 67.3
- > 67.3 to 72.6
- > 72.6 to 77.2
- > 77.2 to 101.7

US (SEER + NPCR)
Rate (95% C.I.)
57.3 (57.1 - 57.4)

Louisiana
Rate (95% C.I.)
64.6 (63.6 - 65.6)

Notes:

State Cancer Registries may provide more current or more local data.

Data presented on the State Cancer Profiles Web Site may differ from statistics reported by the State Cancer Registries (for more information).

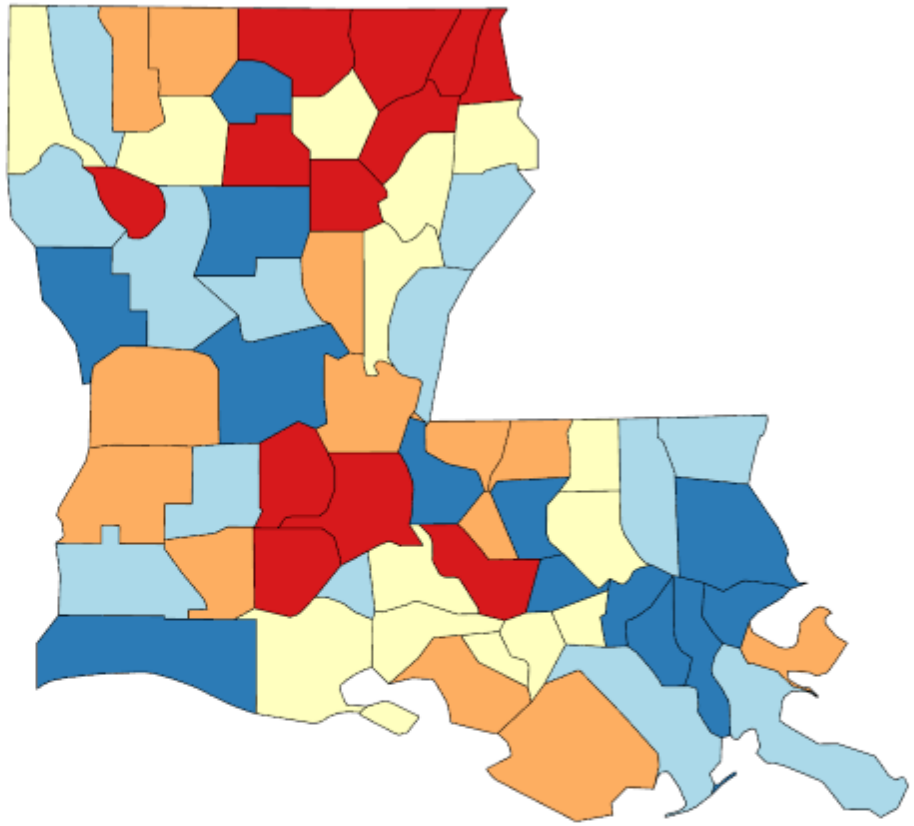
† Incidence rates (cases per 100,000 population per year) are age-adjusted to the 2000 US standard population (19 age groups: <1, 1-4, 5-9, ... , 80-84, 85+). Rates are for invasive cancer only (except for bladder which is invasive and in situ) or unless otherwise specified. Rates calculated using SEER*Stat. Population counts for denominators are based on Census populations as modified by NCI. The 1969-2018 US Population Data File is used for SEER and NPCR incidence rates.

Rates are computed using cancers classified as malignant based on ICD-O-3. For more information see malignant.html

Data for the United States does not include data from Puerto Rico

Lung Cancer LATE-STAGE Incidence Rates 2014 – 2018

All Races and Ethnicities, Male and Female



Age-Adjusted

Annual Incidence Rate

(Cases per 100,000)

Quantile Interval

- 35.3 to 44.9
- > 44.9 to 49.2
- > 49.2 to 54.7
- > 54.7 to 58.6
- > 58.6 to 81.0

US (SEER + NPCR)
Rate (95% C.I.)
39.0 (38.9 - 39.0)

Louisiana
Rate (95% C.I.)
47.8 (47.0 - 48.6)

Notes:

State Cancer Registries may provide more current or more local data.

Data presented on the State Cancer Profiles Web Site may differ from statistics reported by the State Cancer Registries (for more information).

^ Late Stage is defined as cases determined to be regional or distant. Due to changes in stage coding, Combined Summary Stage (2004+) is used for data from Surveillance, Epidemiology, and End Results (SEER) databases and Merged Summary Stage is used for data from National Program of Cancer Registries databases. Due to the increased complexity with staging, other staging variables maybe used if necessary.

Data for the United States does not include data from Puerto Rico

Session 0

Introduction to Lung Cancer Biomarker Testing

ROBERT HOLLADAY, MD, FCCP

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

LSU Feist-Weiller Cancer Center

Relevant Faculty Disclosure(s)

ROBERT HOLLADAY, MD, FCCP

- **I have nothing to disclose**

Session 0

There has been **unprecedented** progress of new treatment options for non-small cell lung cancer (NSCLC) that targets specific biomarkers

Session 0

Prescribing the **right** treatment option for a patient ***requires*** comprehensive biomarker testing

Session 0

Personalized Treatment of advanced Non-Small Cell Lung Cancer (NSCLC) *is guided by* molecular biomarker assessment

Biomarker-Driven Treatment for Lung Cancer At-A-Glance

10

10 FDA – Approved Biomarkers for directing targeted therapies for Non-Squamous NSCLC

3

PD-L1 TPS >50% Directs 3 Immunotherapy-Only first line treatment options

Clinical Trials

Numerous biomarker-driven drugs are presently in clinical trials for NSCLC and small cell lung cancer (SCLC)

5

5 Organizations with guidelines for testing for comprehensive biomarker testing for NSCLC

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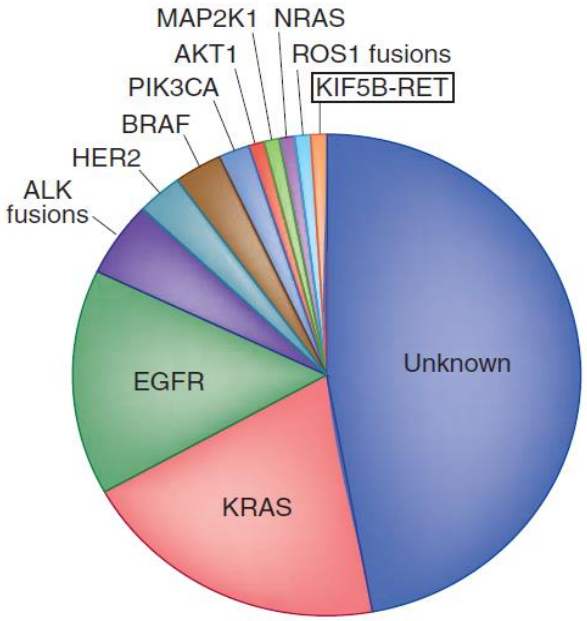
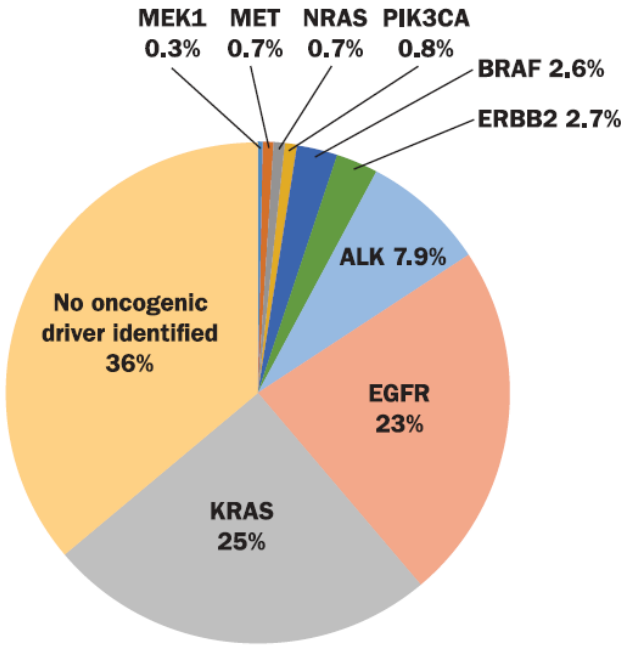
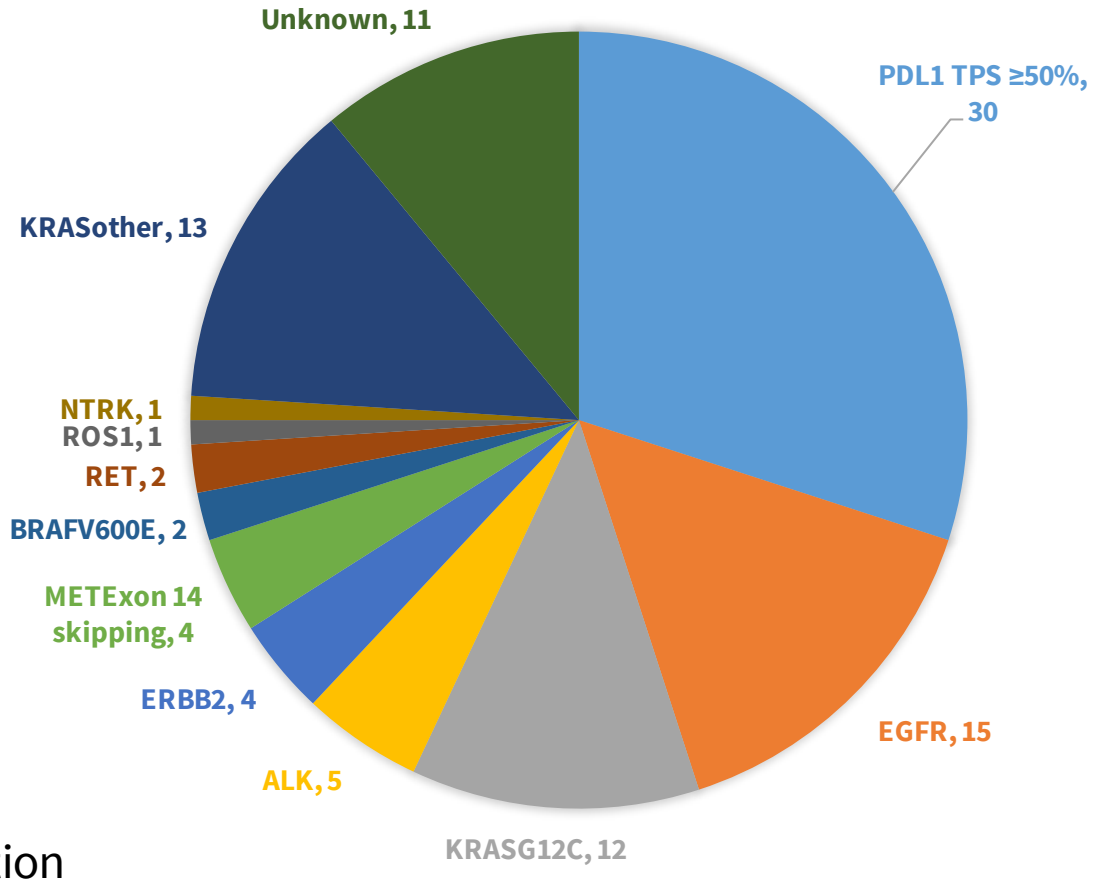
Changes in Biomarker Testing



Pao and Hutchinson 'Chipping away at the lung cancer genome' Nature Medicine. **March 2012**



Scholl et al. Lung Cancer Mutation Consortium
J Thorac Oncol. **May 2015**



2020: biomarkers with drug targets

Current NSCLC Lung Cancer Biomarker Guidelines

NCCN

The National Comprehensive Cancer Network® NCCN has released updated evidence-based guidelines on comprehensive biomarkers in lung cancer[1]

CAP, IASLC, & AMP

Evidence-based consensus guidelines on biomarker testing in NSCLC from **the College of American Pathologists (CAP)**, **International Association for the Study of Lung Cancer (IASLC)**, and the **Association for Molecular Pathologists (AMP)** recommend that all late-stage NSCLC patients with advanced stage lung adenocarcinoma should receive biomarker testing for three mutations (EGFR, ALK, and ROS1)[2] in 2018

ASCO

The American Society of Clinical Oncology (ASCO) released an update in February 2022 to their 2017 guideline on systemic therapy for patients with stage IV NSCLC with driver alterations[3,4]

Synopsis of Common Recommendations for Lung Cancer Biomarker Testing

Type of Lung Cancer	Stage of Lung Cancer	Common Recommendations
NSCLC Lung **Non-Squamous**	**Stages IIA and Above**	Testing for mutations in the **EGFR** gene should be conducted *Clinical trial options may exist for other mutations*
NSCLC Lung **Non-Squamous**	**Stage IV** adenocarcinoma that has **recurred or progressed** after an initial diagnosis of stage I, II, or III lung cancer in patients who were **NOT** previously tested	Comprehensive Biomarker Testing, e.g., **Next-Generation Sequencing (NGS)** is recommended **PD-L1** -is recommended to determine whether a patient will benefit from immunotherapy **alone** in the first line setting
NSCLC Squamous Cell Lung Cancer	**Stages I, II, and III**	Currently, biomarker testing e.g., Next-Generation Sequencing (NGS) is performed **ONLY** for clinical trials
All NSCLC: Large-Cell, Squamous and Non-Squamous	**Stage II to IIIA**	FDA approval for adjuvant atezolizumab for tumors with PD-L1 expression on ≥ 1% of tumor cells
NSCLC Squamous Cell Lung Cancer	**Stage IV**	**PD-L1** is recommended to determine whether a patient will benefit from immunotherapy **alone** in the first line setting **Consider testing** for **ALK**, **BRAF V600E**, **EGFR**, **KRAS**, **MET exon 14 skipping**, **NTRK**, **RET**, and **ROS1** at the time of diagnosis, contingent on a patient's or pathology. *Testing for other biomarkers may be helpful in deciding eligibility for clinical trials*
Small Cell Lung Cancer (SCLC)	**All Stages**	Currently, biomarker testing is performed **ONLY** for clinical trials

Resources:

Non-Small Cell Lung Cancer (NSCLC)—NCCN Clinical Practices Guidelines in Oncology. Version 4.2021. Accessed May 2021.

Updated Molecular Testing Guideline for the Selection of Lung Cancer Patients for Treatment with Targeted Tyrosine Kinase Inhibitors. Accessed May 2021.

Small Cell Lung Cancer (SCLC)—NCCN Clinical Practice Guidelines to Oncology. Version 3.2021. Accessed May 2021.

Blurred Lines: Anatomy-based Prognostication is ***insufficient***

- Stage IV EGFR+ adenocarcinoma with 5-year survival rate >20% vs 5% for stage IV adenocarcinoma without identifiable predictive biomarker….

  Lin JJ, et al. J Thorac Oncol. 2016 PMCID: PMC4979601.
  Hirsch FR, et al. Cancer. 2018 PMID: 29579334.

- ALEX: 5-year survival Alectinib v Crizotinib- 62.5 (95% CI 54.3- 70.8) v 45.5% (95% CI 33.6-57.4)

  Mok T, et al. Ann Oncol. 2020 PMID: 32418886.

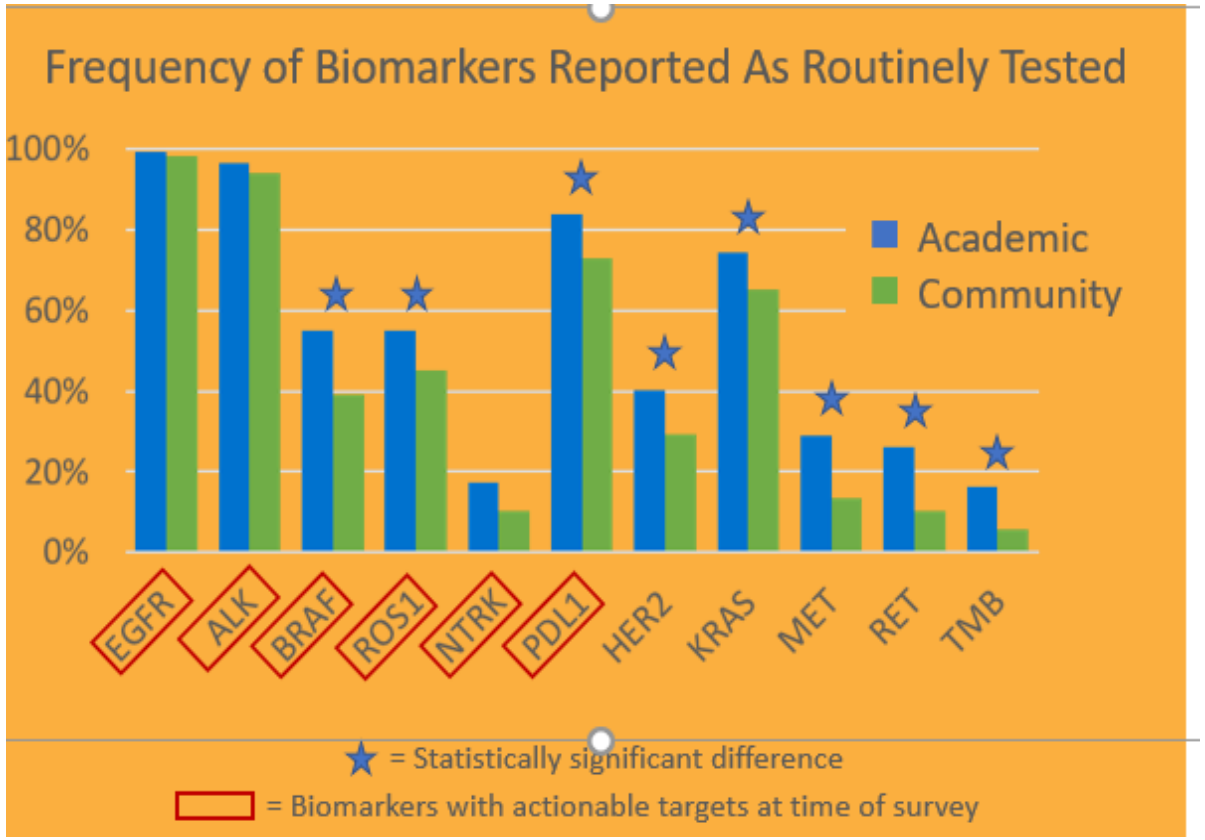
  ….are they even the same disease?

Session 0

Despite this unprecedented progress, current data shows suboptimal rates in biomarker testing

Biomarker Testing Rate

- Current data have inherent limitations due to selection bias, response bias, limited assessment by insurance type, etc. ***However…..,***
- Testing rates **vary across regions** and academic and community practices
- Use of **single assay tests are more common** than use of multi-gene panels using NGS or multiplex PCR (White paper, Friends of Cancer Research, 2018)
- *EGFR and ALK* testing represent the most common testing. However, patients who are older, male, have a history of smoking, and are not covered by commercial insurance have lower testing rates
- Among 4,335 NSCLC patients in a 2018 commercial database from 280 clinics, **only 71% received *ROS1* testing**. *Clinical Lung Cancer* 2020



Survey of CHEST Pulmonologists in 2019, unpublished data, in review.

Wong W, Wu N, Gupta R, Mansfield AS. Utilization Trends and Factors Associated With ROS1 Testing Among Patients With Advanced Non-small-cell Lung Cancer in US Community Practices. Clin Lung Cancer, 06/29/2020

Session 0

Many patients face challenges receiving comprehensive biomarker testing

Session 0

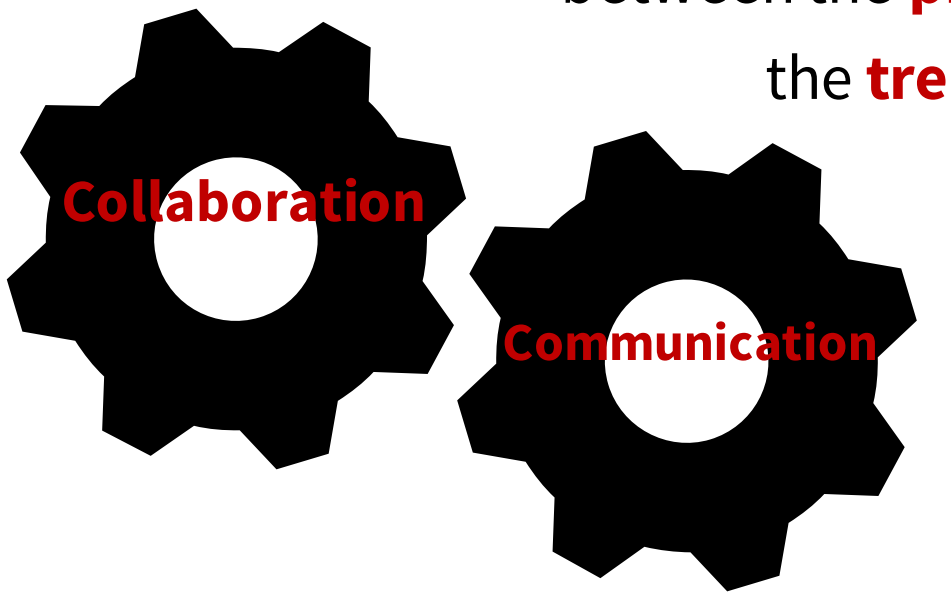
Optimizing Lung Cancer Biomarkers in Practice,

requires **collaborative effort** and **frequent communication**,

between the **proceduralist**, the **pathologist**,

the **treating oncologist**, the **nurse navigator**,

and others on the **multi-disciplinary care team**



THE IDEAL STATE

"Access to High Quality Biomarker Testing for All Eligible Patients with Non-Small Cell Lung Cancer: No Patient Will Be Left Behind"

Session 0

Open Discussion: Questions & Answers

Session 0

Post-Session Poll Questions

A Few Reminders

Next ECHO Session: October 14, 2022 at 10:00am

Next Didactic Presenter: Topic: *Understanding the Barriers to Biomarker Testing:* **Raymond Osarogiagbon, MBBS, FACP (CENTRAL HUB)**

Materials and Resources will be made available within one week.
All resources will be available on the ACS ECHO Website

Case Presentations
Spokes: Interested in scheduling your Case Presentation? Let us know.
Faculty: All future case presentations will be shared with you at 24-hours in advance

Additional Feedback on Today's Session? Tell us in the Post Session Feedback Forum
(URL in chat box)

Pre-ECHO Survey: If you have not yet completed, please take our Pre-ECHO assessment.
The survey came from the ACS ECHO Office.

Questions: Contact Jasmyne.Watts@cancer.org or Amy.Williams@cancer.org

Session 0

Thank you! See you October 14th for Session 1