NATIONAL LUNG CANCER ROUNDTABLE

American Cancer Society®

Project ECHO®

Addressing Lung Cancer Biomarker Testing Through Project ECHO: 2022-2023 Expansion

Session SIX: 5.25.23

4:00 p.m. CST

Welcome to Session Five: Arkansas ACS/NLCRT Lung Cancer Biomarker Testing Project ECHO

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

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

Please type your name, email address and organization in the chat box

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 @Shimeka Chretien-Bass

American Cancer Society

Project ECHO

Agenda Preview & Introductions

Sajjed Bhatti, MD

UAMS Winthrop P. Rockefeller Cancer Institute

Facilitator

Today's Agenda

01	**Agenda Preview & Introductions** (10 min)
02	**Didactic Presentation: *ACS CAN- Advocacy*** (15 min)
03	**Didactic Q/A** (10 min)
04	**Case Presentation: Reflections from Washington, D.C.** (10 min)
05	**Case Presentation Q/A** (10 min)
06	**Wrap Up** (5 min)

This ACS NLCRT Lung Cancer Biomarker Testing ECHO series is made possible by funding provided by:

Additional thanks to Foundation Medicine

Introductions: Meet our Arkansas ECHO Hub

Sajjad A. Bhatti, MD
UAMS Winthrop P. Rockefeller Cancer Institute
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Faculty Member

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St. Bernards Cancer Center
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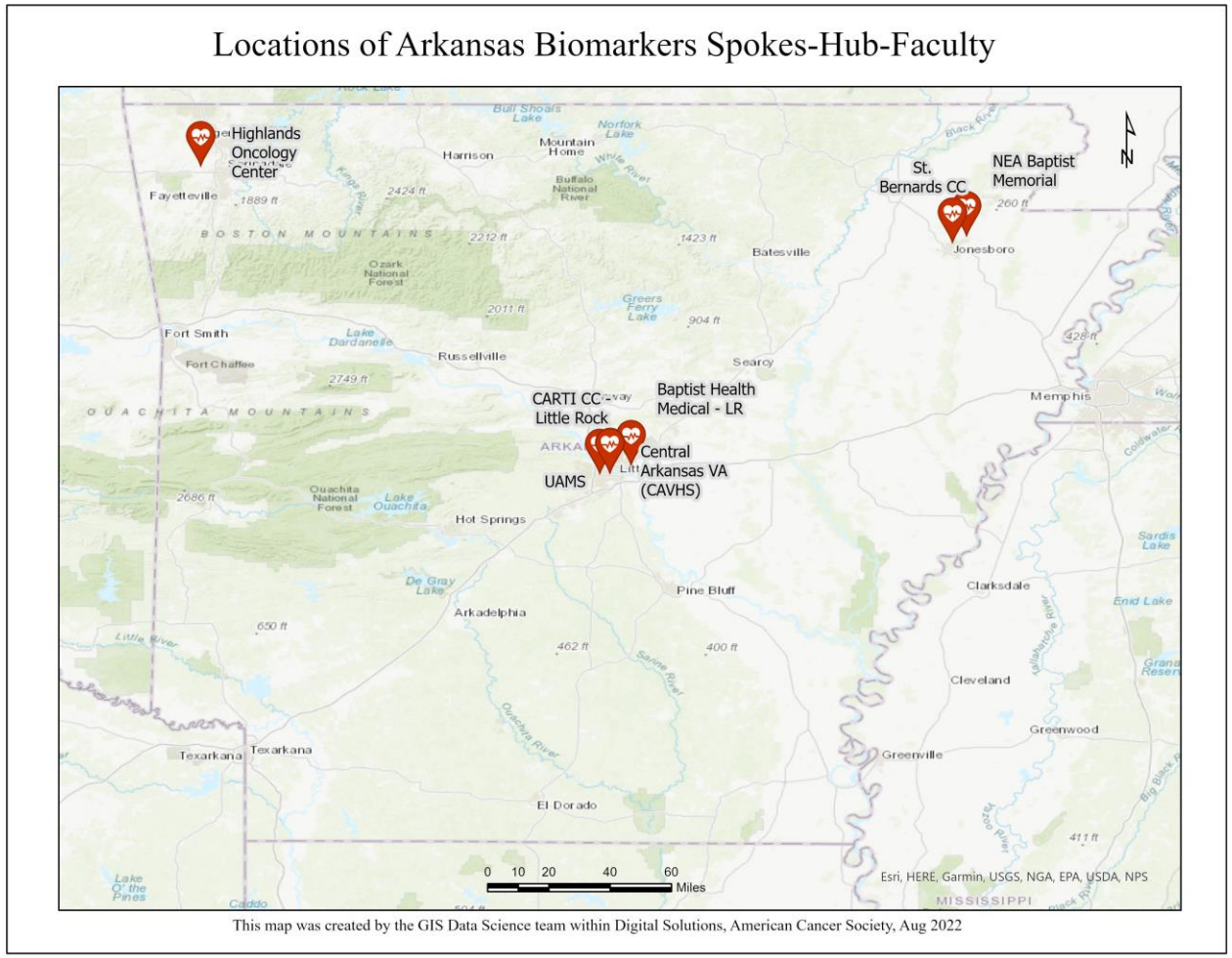
American Cancer Society
ECHO Coordinator

Korey Hofmann
American Cancer Society
ECHO Coordinator

Allison Rosen
American Cancer Society
ECHO Tech Coordinator

Introductions: Meet our Arkansas Spoke Sites



CARTI
BRINGING THE FIGHT TO CANCER

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UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

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Cancer Treatment Center

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Didactic Presentation: *ACS CAN-Advocacy*

- ***Matt Glanville***
- ***Arkansas and Oklahoma Government Relations Director***
- ***ACS CAN***

American Cancer Society Cancer Action Network℠

Biomarker Testing and Precision Medicine

Matt Glanville
Government Relations Director – Arkansas and Oklahoma

Biomarkers and Precision Medicine

Biomarkers - a characteristic that is objectively measured and evaluated as an indicator of normal biological processes, pathogenic processes, or pharmacologic responses to a specific therapeutic intervention. Includes *gene mutations* or *protein expression.*

The right treatment, at the right time

- An essential component of precision medicine
- Targeted cancer therapy
- Avoidance of therapies unlikely to provide clinical benefit

Not just about cancer:

- Being explored in a variety of disease areas (e.g., cardiology, rheumatology, neurology, infectious, respiratory, autoimmune diseases)

Screening vs. Genetic testing vs. Biomarker testing

Screening tests – like MCED, mammograms
Looking for signs of cancer in general population

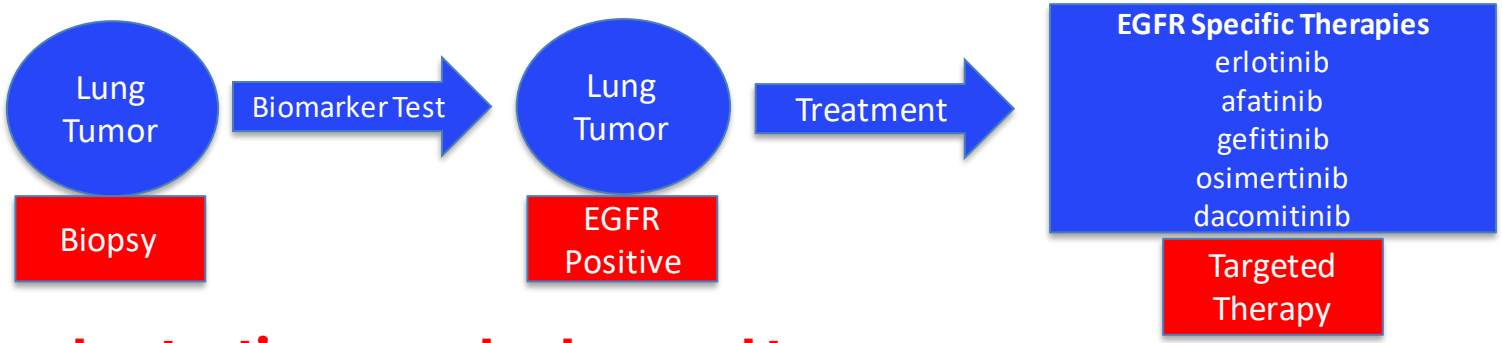
Genetic testing
Testing for inherited risk to determine risk for developing certain cancers or passing risk onto children

Biomarker testing
Used in people who already have cancer to determine best treatment options, how aggressive the disease is, monitor for recurrence

What is biomarker testing?

Biomarker testing in people with cancer

- Looks for the presence of molecules like proteins or gene mutations found in cancer cells
- Can be used to inform therapy selection and treatment decisions
- Example: EGFR-positive non-small cell lung cancer --> several EGFR inhibitors



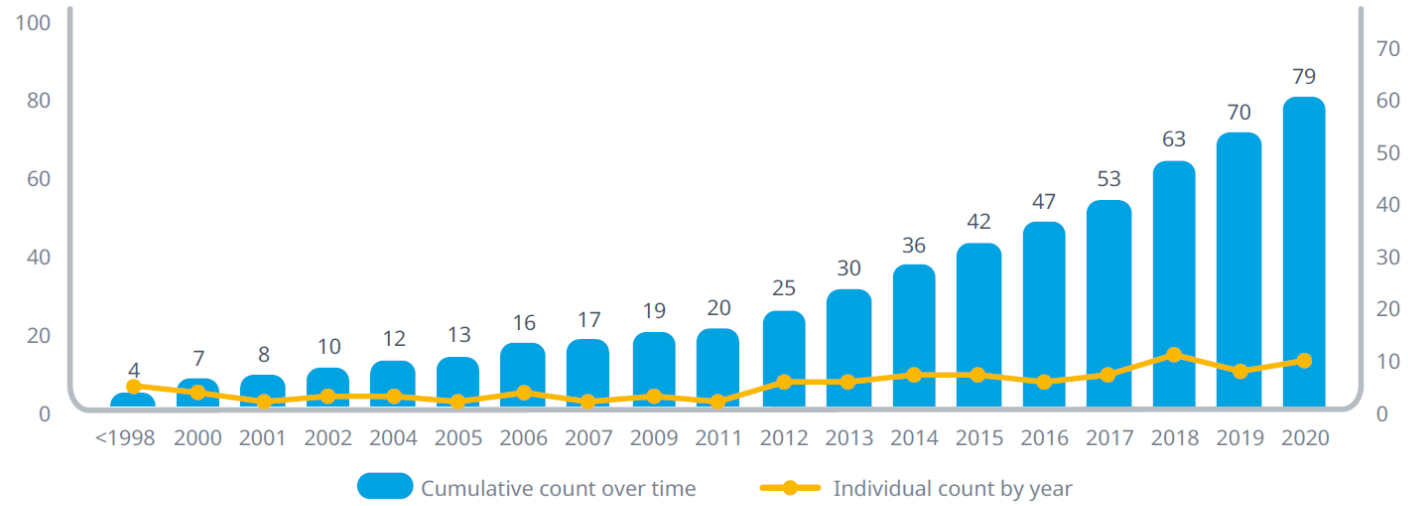
Biomarker testing can also be used to:

- Identify the likeliness of disease recurrence or progression
- Predict a drug's efficacy or likelihood of toxicity
- Identify signs of disease recurrence before it is visible on imaging

Trends in biomarker testing

Nearly 80 oncology medicines are used after a predictive biomarker test up from 20 in 2011

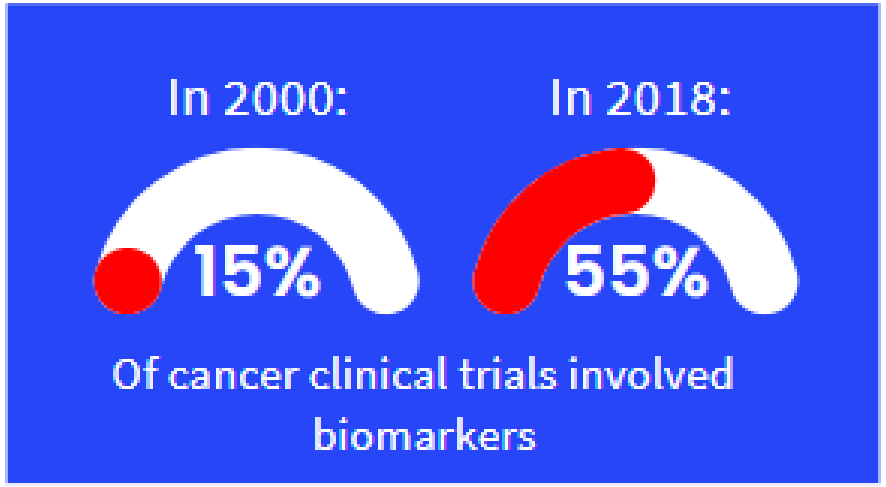
Exhibit 38: Number of U.S. Oncology Medicines with Required or Recommended Predictive Biomarker Testing



Source: IQVIA Institute, May 2021

Biomarker testing and clinical trials

Cancer clinical trials are increasingly driven by biomarkers and the development of targeted therapies



Increasing access to biomarker testing key to supporting access to clinical trials

[1] The Evolution of Biomarker Use in Clinical Trials for Cancer Treatment Key Findings and Implications. Personalized Medicine Coalition 2019.

Who Should Get Tested and Why?

The Role of Clinical Guidelines in Determining Appropriate Testing

- Several professional associations have cancer biomarker testing and treatment guidelines
  - National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology, American Society of Clinical Oncology (ASCO), others
- Helps assure that testing and treatment take advantage of the latest knowledge

- Biomarker testing has become the standard of care in certain cancers

Patients who receive biomarker testing and are eligible for and receive targeted cancer therapy have better outcomes.

Who is Getting Tested?

Unequal access to testing

- In metastatic non-small cell lung cancer (NSCLC), **eligible Black patients are less likely to receive biomarker testing** compared to white patients.
- Patients with advanced NSCLC or colorectal cancer who were **Black, older, or Medicaid-insured had lower odds of next-generation sequencing biomarker testing** compared to patients who were white, younger, or commercially insured.
- There are **socioeconomic inequalities** in biomarker testing and targeted therapy utilization across cancer types.
- There **are lower rates of testing in community oncology settings versus academic medical centers**.

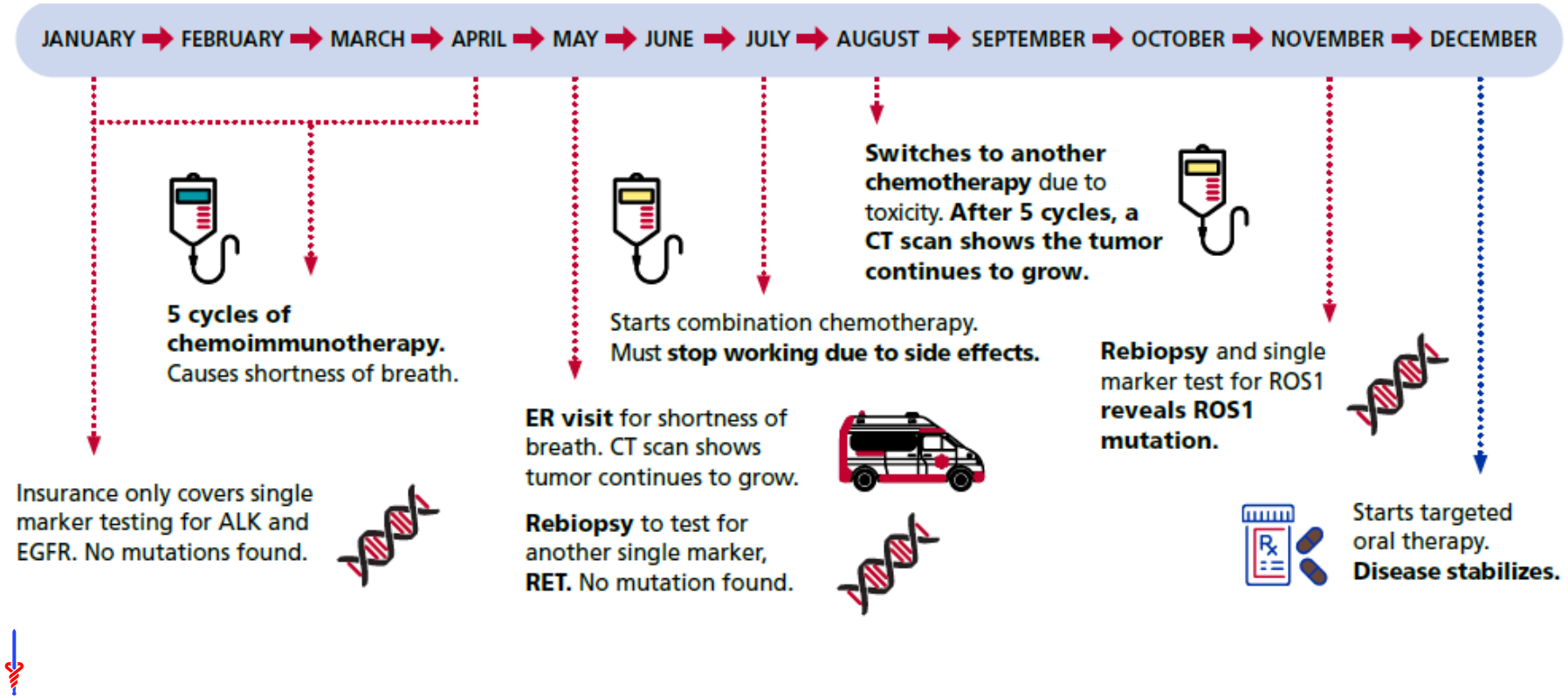
These disparities in access and use of guideline-indicated biomarker testing and targeted therapy can potentially widen existing disparities in cancer survival.

What does this look like for a patient?

Kathy is a 54-year-old white woman with no history of tobacco use. After visiting her primary care physician for persistent cough and shortness of breath, she was ultimately referred to an oncologist. Her oncologist ordered a diagnostic CT scan which revealed a large mass in the left lung with lymph node involvement. A biopsy confirmed stage IV non-small cell lung cancer, and her PET/CT scan was consistent with extensive bone metastases.

Kathy, 54
Lung Cancer Patient

Without Comprehensive Biomarker Testing



With Comprehensive Biomarker Testing

Comprehensive biomarker testing reveals a **ROS1 mutation**
Starts targeted oral therapy. **Disease stabilizes.**

JANUARY → FEBRUARY → MARCH → APRIL → MAY → JUNE → JULY → AUGUST → SEPTEMBER → OCTOBER → NOVEMBER → DECEMBER

Barriers: Insurance

Coverage of tests differs greatly across payers

- Coverage policies generally more common for single-gene tests vs. multi-gene panel tests

Plans aren't necessarily following the evidence

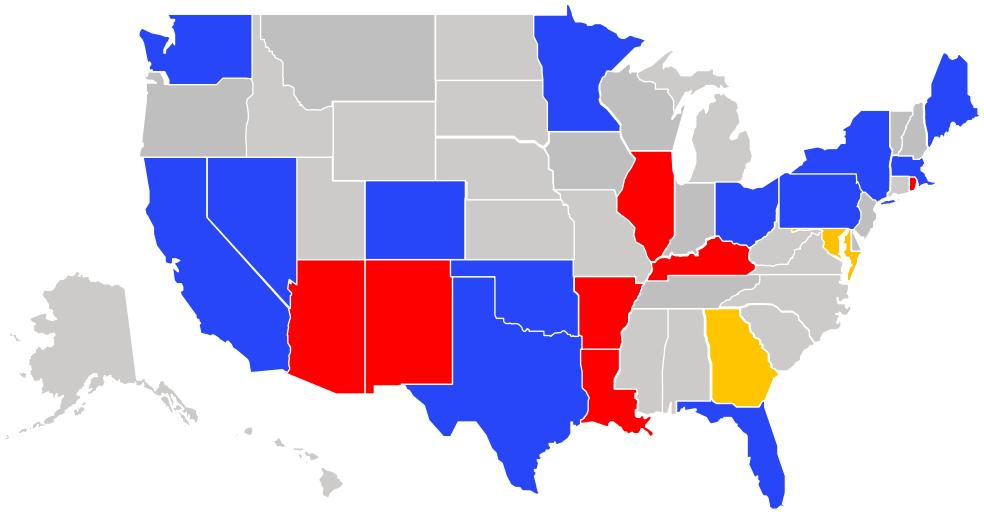
- A recent paper in *Personalized Medicine* highlights gaps between insurance coverage and clinical practice guidelines.

- Although 91% of plans evaluated reference NCCN treatment guidelines in their biomarker testing policies, **71% are "more restrictive" than these guidelines for biomarker testing in breast, non-small cell lung cancer, melanoma and/or prostate cancer patients.**

Wong, W., et al. (2022) *Alignment of health plan coverage policies for somatic multigene panel testing with clinical guidelines in select solid tumors.*

Legislation to Address Coverage Gaps

Requires state-regulated insurance plans including Medicaid to cover comprehensive biomarker testing when supported by medical and scientific evidence
Disease and stage agnostic



	Legislation expected in 2023
	Legislation enacted
	Legislation passed

Legislation enacted: AZ, IL, LA, RI, KY, NM, AR* (commercial only)
Legislation passed (2023 session): GA, MD
Legislation expected in 2023: CA, CO, FL, MA, ME, MN, NV, NY, OH, OK, PA, TX, WA

Why Disease Agnostic?

Biomarker testing applications extend beyond oncology

- Biomarker testing is increasingly important for the treatment of diseases including:
  - Arthritis and other autoimmune conditions
  - Rare diseases

Research is happening in many other areas including Alzheimer's, other neurological conditions, and cardiology.

Cancer patients and survivors have high rates of comorbidities

- Substantial progress has been made in the fight against cancer in recent decades, resulting in a 33% reduction in the cancer death rate since its peak in 1991.
- As patients are living longer, and some cancers become more of a chronic condition, cancer patients are often living with one or more comorbidities.
  - Most common comorbidities include diabetes, cardiac conditions (COPD, congestive heart failure, cerebrovascular disease, peripheral vascular disease), renal failure, and rheumatological conditions.
  - A recent study found that nearly two-thirds of patients diagnosed with colorectal cancer, lung cancer, or Hodgkin's lymphoma had at least one comorbidity at the time of their diagnosis, and about half of patients had multiple comorbidities.

Didactic Questions

Case Presentation: Advocacy in Action

Dr. Sam Makhoul

CARTI Cancer Center

Questions

Wrap-Up & Post-Session Poll Questions

A Few Reminders:

Next Learning Opportunity: ACS CAN Policy Forum

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.

A reminder that the upcoming session will be held on Friday, November 3rd at the Red and Blue Events Center, Little Rock. Invitation is forthcoming.

All resources will be available on the ACS ECHO Website within 1-2 weeks and a recording and materials will be sent out by email shortly

Questions: Contact Krista.Kirksey@cancer.org

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Thank you!

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