

2026 World Conference on Lung Cancer

SEPTEMBER 12 – 15, 2026 | SEOUL, REPUBLIC OF KOREA

P2.077-248: Real World Assessment of Biomarker Testing Turn Around Time Impacts in US-Based Lung Cancer Treatment Programs

Andrew Ciupek, PhD¹, Angela Barry, MA¹, Meg Fay Mortman, BSN, RN, ONN-CG¹,

Patrick O. Monahan, PhD², James E. Slaven, MS², Joelle Fathi, DNP¹

¹GO2 for Lung Cancer, Washington, DC, USA, ²Indiana University, Indianapolis, IN, USA

Correspondence: aciupek@go2.org

Introduction

- Clinical guidelines recommend biomarker testing to consider targeted therapies for non-small cell lung cancer (NSCLC) stages IB and above¹.
- Biomarker testing delays may impact the ability of people with lung cancer and their treatment teams to make informed decisions and consider appropriate targeted therapies.
- Studies have indicated that initiating therapy with a general cytotoxic agent rather than a targeted therapy when appropriate may reduce survival^{2,3}.
- We surveyed diverse clinical practices across the United States (US) to understand the impact of biomarker testing turnaround time (TAT) on real-world clinical decision making and to understand the adoption of clinical practices that could affect TAT.

Methods

- GO2 for Lung Cancer (GO2), a US-based lung cancer patient advocacy organization, organized and maintains the GO2 Centers of Excellence (COE) Program, which is a network of US-based health care facilities that diagnose and treat lung cancer.
- GO2 leads an annual survey of the facilities that are members of the COE Network, aiming to benchmark and evaluate real-world implementation of lung cancer quality care practices over time. The survey contains recurring core questions evaluating key areas such as lung cancer early detection, diagnosis, treatment, and survivorship care. Each annual iteration may include additional questions covering timely and emerging topics of focus.
- As part of the annual COE member survey, between November 2024 and June 2025, facilities were asked to report on data from calendar year 2024. This survey version included questions on lung cancer biomarker testing practices.
- To understand real world clinical factors that can affect biomarker testing TAT and how TAT length might impact care received by patients, descriptive statistics were used to analyze survey responses.

Results

1A)

Demographic	N	%
Facilities offering and ordering biomarker testing for diagnosed lung cancers	82	100
US Census Region		
Northeast	10	12
Midwest	26	32
South	28	34
West	14	17
No Response	4	5

1B)

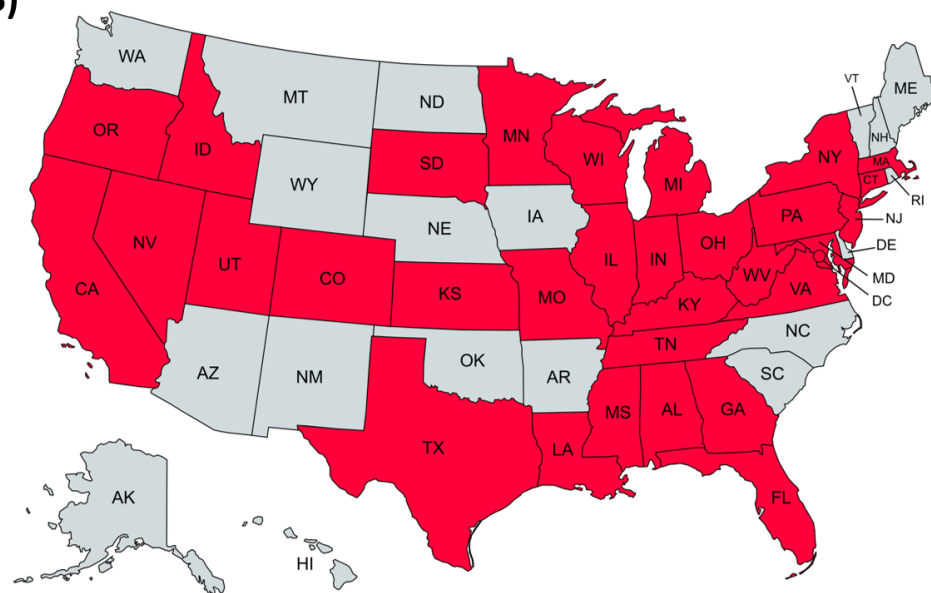
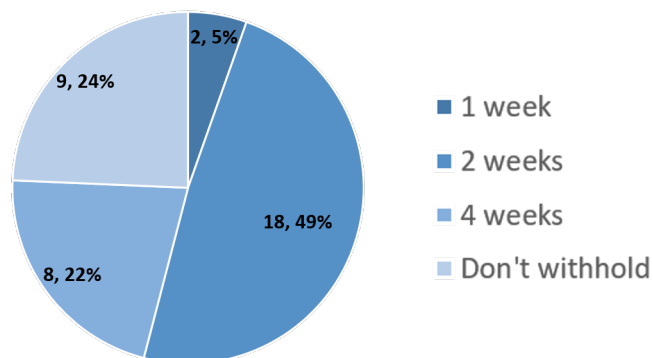


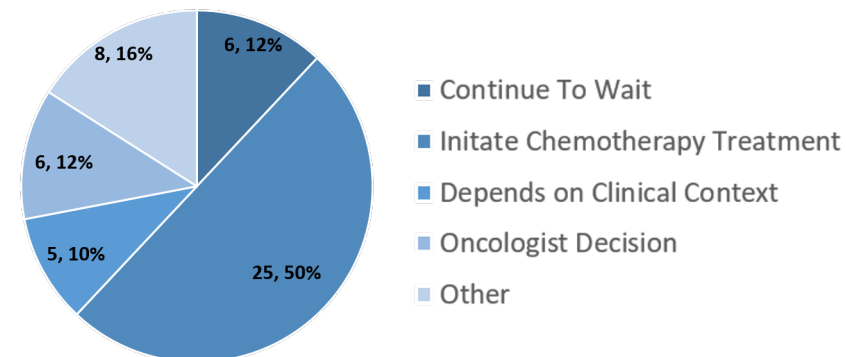
Figure 1: Demographics of individual medical facilities or programs responding to biomarker testing questions in survey. A) Table indicates the number of facilities/programs responding and their primary location by US Census defined region of the United States. B) Map indicates states that facilities/programs were located in. Shading of a state indicates at least one facility/program responded to survey questions from that state.

Results

2A) How long will your team withhold treatment from time of diagnosis for a molecular test result to return before initiating first line therapy?



2B) If a test result is not available within the reported timeframe, what is your standard of practice for next steps?



2C) If you have begun a non-targeted therapy as you waited for a test result, what do you do if the test reveals the patient is eligible for targeted therapy?

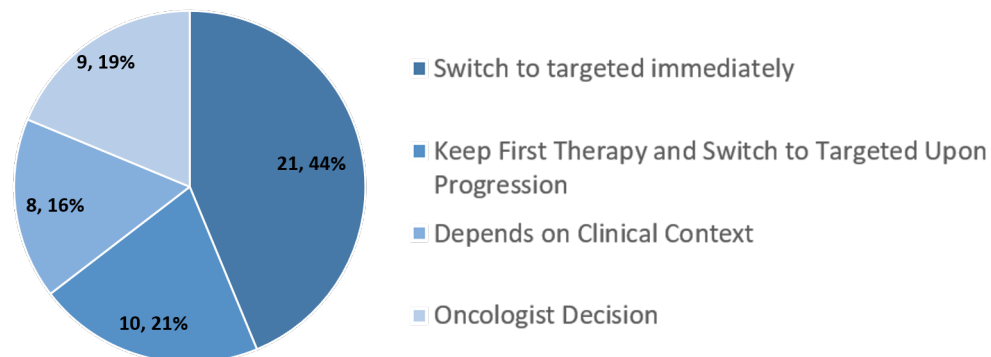
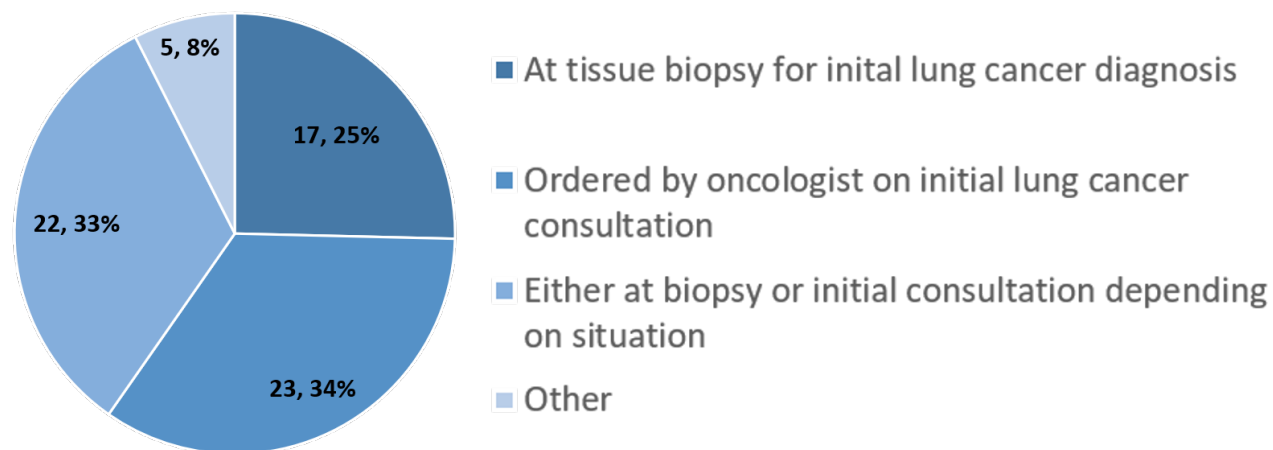


Figure 2: Self reported biomarker testing practices. Each circle chart indicates the number and percentage of survey respondents providing the indicated response to the survey question listed above the chart. Survey participants were allowed to skip individual questions and could indicate “unknown” or “I don’t know” for an individual question (these responses were not included in the charts), thus the number of indicated responses on each graph may not add up to the total overall number of survey participants.

Results

3A) At which points of care is biomarker testing offered/ordered for your program/facility's patients with lung cancer?



3B) Where is your biomarker testing performed?

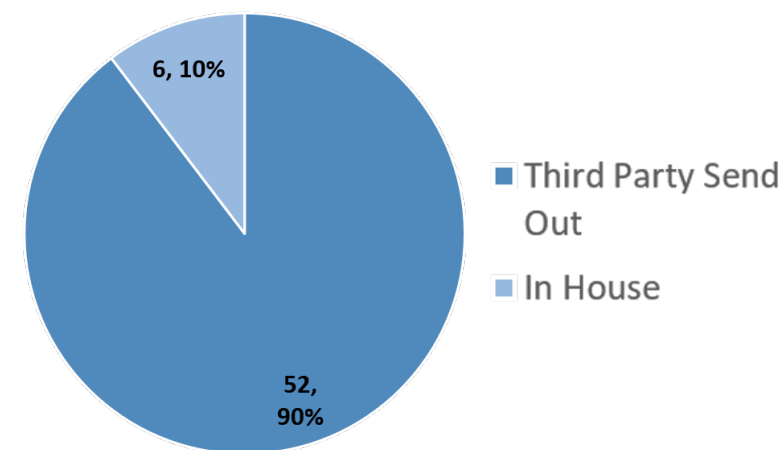


Figure 3: Self reported biomarker testing workflows. Each circle chart indicates the number and percentage of survey respondents providing the indicated response to the survey question listed above the chart. Survey participants were allowed to skip individual questions and could indicate “unknown” or “I don’t know” for an individual question (these responses were not included in the charts), thus the number of indicated responses on each graph may not add up to the total overall number of survey participants.

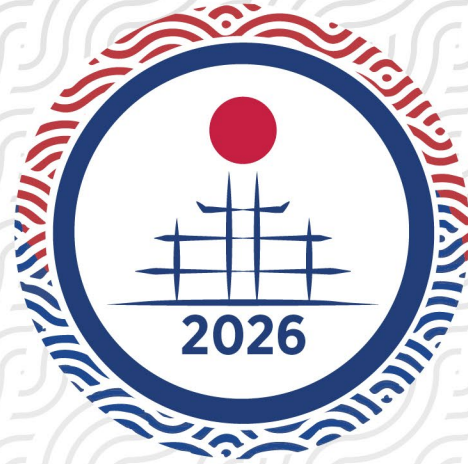
Discussion and Conclusion

- Most treatment teams reported that they would likely initiate first line therapy before biomarker testing results were available if the TAT from diagnosis was longer than 2 weeks.
- While a significant portion of teams surveyed would likely initiate general cytotoxic therapy during testing delays, almost all teams would switch therapy if positive testing results were received.
- Almost all treatment teams surveyed utilized send-out testing services.
- Wide variance was seen in adoption of reflex testing workflows.

Standardizing institutional clinical protocols and workflows and adequately resourcing efforts to ensure consistent reflex testing practices for ordering may increase timely biomarker testing and treatment, especially in most settings where clinical specimens testing is not performed within the ordering institution.

References

- 1) NCCN Guidelines for Non-Small Cell Lung Cancer V.6.2026. 2026. Accessed 8/11/2026. To view the most recent and complete version of the guideline, go online to NCCN.org.
- 2) Nagasaka M, Gadgeel SM. Role of chemotherapy and targeted therapy in early-stage non-small cell lung cancer. *Expert Rev Anticancer Ther*. 2018 Jan;18(1):63-70. doi: 10.1080/14737140.2018.1409624. Epub 2017 Nov 26. PMID: 29168933; PMCID: PMC6863145.
- 3) Zhang Q, Wang Z, Guo J, Liu L, Han X, Li M, Fang S, Bi X, Tang N, Liu Y. Comparison of single-agent chemotherapy and targeted therapy to first-line treatment in patients aged 80 years and older with advanced non-small-cell lung cancer. *Onco Targets Ther*. 2015 Apr 20;8:893-8. doi: 10.2147/OTT.S81837. PMID: 25945061; PMCID: PMC4408957.



Thank You.●