

## Tempus Next Pathways *unlocked critical insights* into the aNSCLC patient journey with Bristol Myers Squibb (BMS)

### KEY TAKEAWAY SUMMARY

- ➔ BMS collaborated with Tempus to deploy the Next Pathways program across 13 community-based health systems to address care gaps for patients with advanced non-small cell lung cancer (aNSCLC).
- ➔ The Tempus Next Pathways program provided a unified, longitudinal view of the patient journey, delivering actionable insights that helped close 41% of the biomarker testing care gap and informed BMS' health equity and commercial strategies.

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Even when guidelines are clear, the reality of how care is delivered can look very different in practice [...] working with Tempus helped us see the patient journey more clearly and more completely—surfacing where patients were falling off the intended care pathway and why. Those real-world insights are essential if we want to move beyond assumptions and design more targeted, equitable approaches to care.

—Andrew Witriol  
VP, U.S. Oncology Marketing at Bristol Myers Squibb

## Advancing equitable access to high quality cancer care requires deep, sustained collaboration across the healthcare ecosystem.

This case study reflects a shared effort between Bristol Myers Squibb (BMS) and Tempus, rooted in a clear goal: **to help expand access to timely, guideline-based care for all patients—particularly those in historically medically underserved communities.**

Achieving this requires collaboration with those who bring complementary expertise and real-world insight across the healthcare ecosystem, including community oncology providers and health systems. In 2025, BMS worked with Tempus to deploy the Next Pathways platform to better understand and address barriers in equitable access to standard of care after advanced NSCLC diagnosis. Together, BMS and Tempus aimed to better understand gaps in biomarker testing and treatment initiation by pairing the Tempus AI-enabled, near-real-time clinical intelligence with BMS' interest in where challenges emerge along the patient journey.

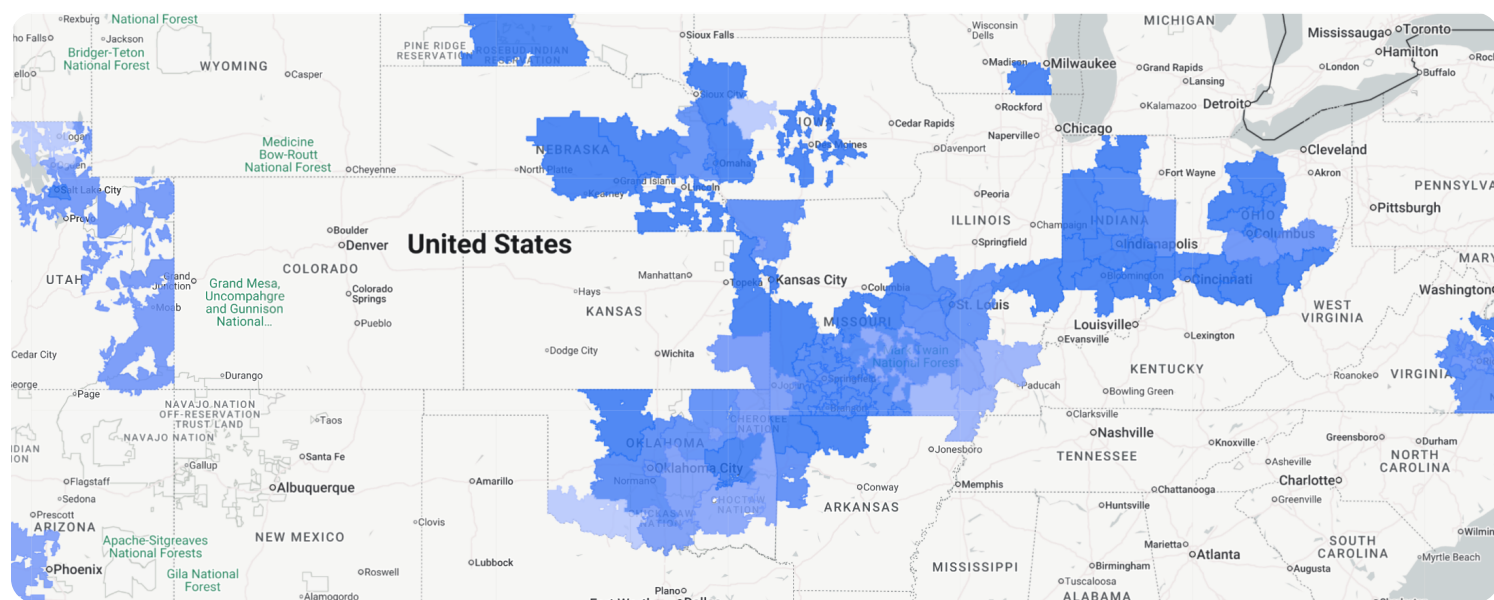
Through this collaboration, we are working to build more connected, data-driven, and patient-centered care pathways that improve outcomes and help extend the reach of innovation to all patients who can benefit.

**BMS collaborated with Tempus to deploy the AI-enabled Next Pathways platform across 13 community-based health systems**, working to contextualize a unified, longitudinal view of the aNSCLC patient journey and the systemic barriers that exist in current clinical practice.

Tempus Next Pathways integrates multi-modal data to provide a longitudinal, unbiased view of the patient journey and functions as a comprehensive clinical decision support program, creating a sustainable ecosystem for improving patient care.

Through dynamic monitoring of near-real time data, the Next program uncovered the point(s) at which patients were falling off guideline-directed care and, critically, characterized barriers limiting access to that care. The program identified key insights, including geography's impact on care, which uncovered a critical drop-off point that resulted in lower baseline testing rates in rural regions.

**This collaboration supported a feedback loop: Tempus Next Pathways helped address clinical gaps at the point of care through targeted educational initiatives, while BMS used aggregated insights from the program to help inform broader strategies aimed at improving guidelines, awareness, and supporting patient access.**



Testing rate distribution at zip3 level - Retrospective cohort (Prior to Next platform launch)

### Tempus delivered actionable clinical intelligence from hard to capture de-identified patient journey data such as:

- ✓ Demographic and Social Drivers of Health (SDOH) across key events of the patient journey (e.g., advanced diagnosis)
- ✓ Metastatic disease characterization
- ✓ Testing rate after advanced diagnosis stratified by demographic, Social Drivers of Health (SDOH), and clinical characteristics, before and after the Next care pathway program launch
- ✓ Testing modality, timing and prevalence of actionable mutations
- ✓ Therapy pattern first and subsequent line of therapies stratified by testing status and molecular result actionability status
- ✓ Reasons for deviating from guidelines
- ✓ Aggregated site characteristics

## THE CHALLENGE

### Understanding a complex and fragmented patient journey

For patients with advanced non-small cell lung cancer (aNSCLC), the path from diagnosis to treatment is rarely linear. Guideline-directed biomarker testing is essential to selecting the most optimal therapy, but testing is inconsistent and key clinical details are often buried in fragmented, disparate EHR and lab systems.

**The result: providers may be unable to see the full picture while they're developing treatment recommendations.**

Like many organizations working to improve outcomes in advanced NSCLC, BMS faced a dual challenge—they needed to understand and close potential disparities in biomarker testing for medically underserved patients. At the same time, their clinical development teams needed a more granular view of the journey for patients with KRAS G12C mutations—a common, previously "undruggable" NSCLC oncogenic mutation with targeted therapy now available in later lines.<sup>1</sup> Traditional data sources were incomplete and too slow. They lacked the unified, longitudinal view and clinical context needed to understand why care decisions were made, and they often lagged months behind real-world practice. BMS strategically sought out a collaborator who could deliver a comprehensive, near real-time view of the patient journey that was actually actionable.

## TEMPUS' DIRECT IMPACT

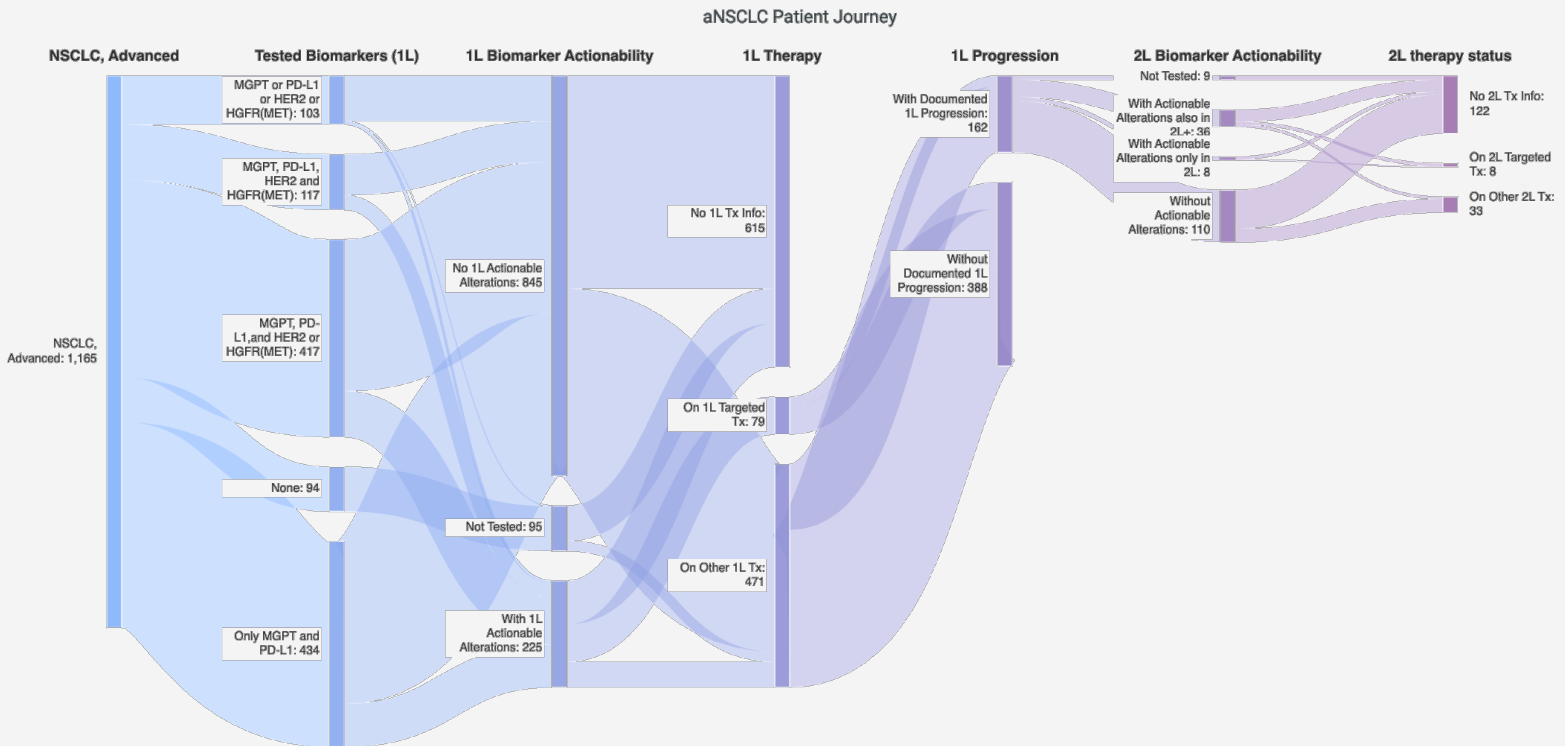
### From data to strategic clarity

The collaboration created a clearer, narrative view of the aNSCLC landscape, shaped through close collaboration with Tempus' clinical, analytics, and implementation teams, which turned complex data into actionable insights. Beyond identifying care gaps, **Tempus delivered a dynamic analytics dashboard and tailored insights report providing actionable clinical intelligence.**

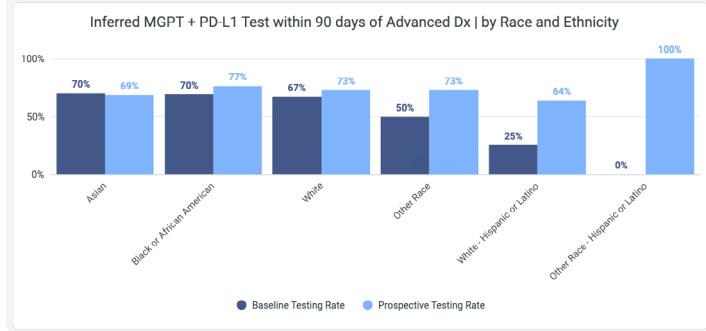
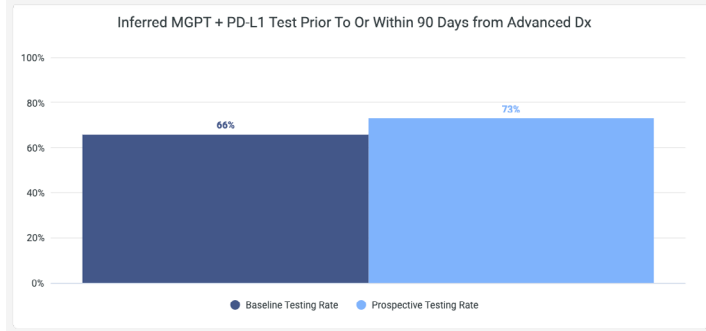
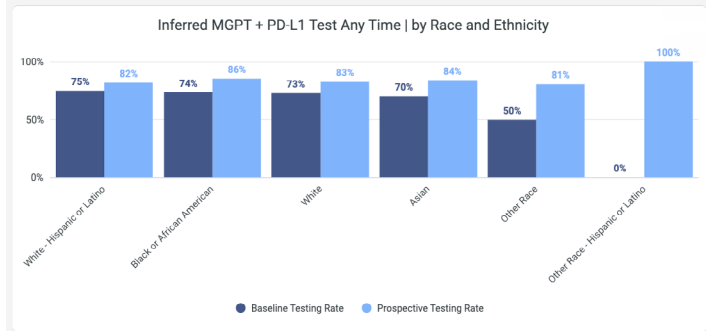
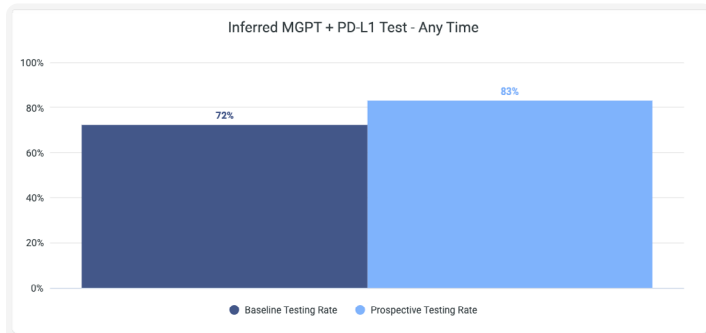
Next Intelligence provided a single, objective view of the aNSCLC patient journey for eligible, actively treated patients at participating health systems. This was achieved by consolidating lab and EHR data from across the sites, irrespective of the specific laboratory or EHR systems used at those locations.

Through Next Pathways, BMS is able to track biomarker testing rates, therapy patterns, biomarker prevalence, and, critically, the clinical reasoning behind care decisions in near-real time.

**The program surfaced aggregated, de-identified insights into documented reasons biomarker testing did not occur**, such as clinical decline, transition to hospice care, or other factors—context that standard real-world data often doesn't capture. Furthermore, the near real-time and longitudinal components allow these insights to be updated quickly, enabling them to adapt their strategy to the current clinical practice.



The dashboard provided BMS with aggregated visibility into barriers to guideline uptake across participating sites. For their clinical development and policy teams, the platform delivered granular evidence to understand the advanced NSCLC patient experience, including first-line and subsequent line of therapy patterns for patients with and without actionable biomarkers. They could also validate biomarker prevalence against published literature, thus evaluating generalizability of the provided insights to a broader population. **By quantifying why patients were not actionable, Tempus helped BMS size the true addressable testing care gap and focus resources where they could move the needle most.**



Advanced NSCLC with Inferred MGPT and PD-L1 Testing Rate before and after Next Oncology Program was Deployed at Live Health Systems

## A COMPREHENSIVE VIEW WITH NEXT PATHWAYS

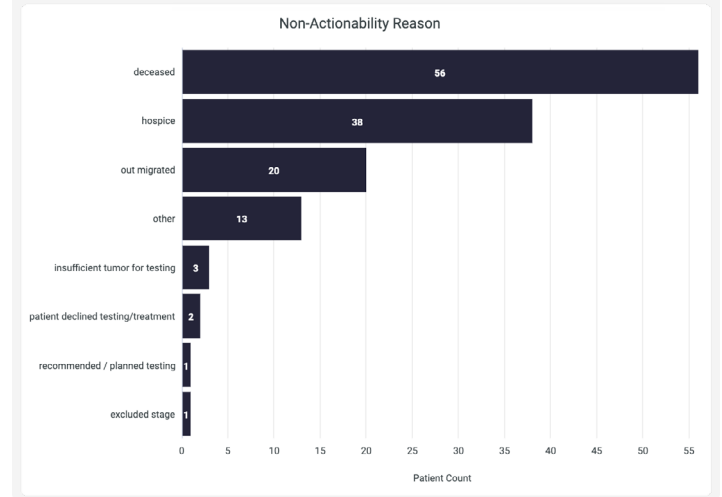
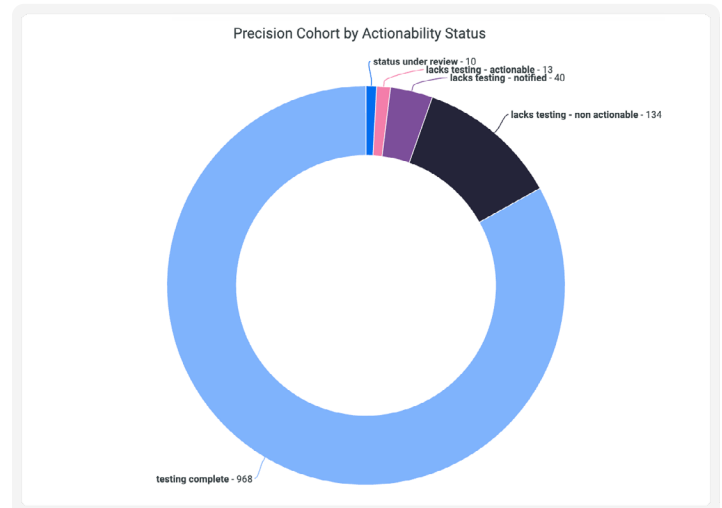
Tempus deployed Next Pathways across the Tempus Next network, including 13 community health systems. The program was designed as a longitudinal educational intervention to identify and close care gaps in near real-time.

**Our approach was two-pronged:**

**01 Identifying testing gaps at diagnosis:** The Next platform analyzed structured and unstructured clinical data to surface patients with a new aNSCLC diagnosis who were missing guideline-directed Multigene Panel (MGP) and PD-L1, HER2 and HGFR[MET] IHC testing to inform 1L and subsequent lines of treatment decision making.

**02 Resurfacing biomarker status to inform subsequent treatment decisions:** For patients who progressed on first-line therapy, the platform resurfaced existing biomarker status to the provider at the point of care to support consideration of guideline-informed subsequent-line treatment options.

- ✓ 12% Lift in Guideline-Directed Testing
- ✓ 13 Health Systems Deployed
- ✓ Comprehensive Journey Insights for aNSCLC Patients



## MEASURABLE OUTCOME

### Driving real-world change and insight

The deployment of Tempus Next Pathways delivered immediate, measurable impact. While the 13 participating health systems began with a relatively high baseline testing rate of 73%, **the intervention increased guideline-directed biomarker testing to 84%**. This improvement closed 41% of the remaining care gap and helped understand the addressable portion of the remaining open gap in care (excluding non actionable patients, testing rate increased to 95% post launch) and reasons for deviating from guideline-directed testing. This demonstrated the ability of Tempus Next Pathways to make a significant impact even in areas with established testing practices and provide deeper insight into why patients fall outside of guideline-directed care—a critical input for shaping more targeted, equity-focused interventions.

## THE TEMPUS ADVANTAGE

### The power of an integrated platform

An upfront view of the Tempus Next Pathways platform provides more than just de-identified data; it delivers a comprehensive solution that turns complex information into actionable data.

**For BMS, Tempus provided a narrative-driven analysis that supported both near-term clinical insight generation and longer-term efforts to understand and address challenges across the aNSCLC patient journey.**

- 1 Mausey N, Halford Z. Targeted Therapies for Previously “Undruggable” KRAS-Mutated Non–Small Cell Lung Cancer: A Review of Sotorasib and Adagrasib. *Annals of Pharmacotherapy*. 2024;58(6):622-635. doi:10.1177/10600280231197459

*Case studies and past performance are not necessarily an indication of future results, and do not guarantee a similar outcome.*

Learn how Tempus can help you unlock insights and accelerate your programs at [tempus.com](https://tempus.com).