



Consensus CASSES – Pathways in *NTRK* Fusion- Positive Cancers

September 14, 2021

OneOncology

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STUDY OBJECTIVE

To gain advisors' perspectives on

- > Testing protocols and treatment pathways for *NTRK* fusion-positive cancers

Report Snapshot: Session Overview



A moderated roundtable discussion was held with oncologists from the OneOncology network in a virtual setting on **September 14, 2021**

Disease state and data presentations were led by **Dr Lee Schwartzberg** from The West Clinic in conjunction with content developed by the Aptitude Health clinical team

Insights were obtained on **testing protocols and treatment pathways for *NTRK* fusion-positive cancers** in the community setting

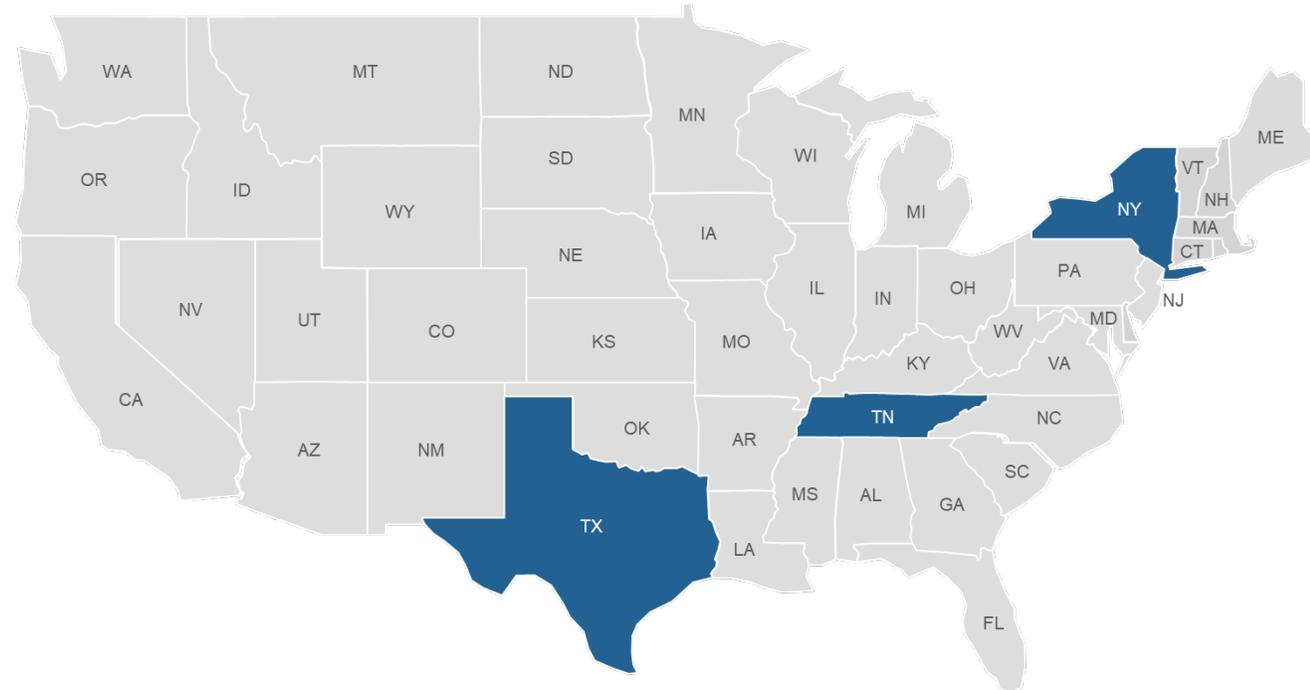
Data collection was accomplished through a **premeeting questionnaire** of 33 **physicians** and in-depth **moderated discussion** with 11 physicians.

Report Snapshot: Attendee Overview



- > The group of advisors comprised 11 oncologists from New York, Tennessee, and Texas

INSTITUTION	CITY	STATE
The Center for Cancer and Blood Disorders	Fort Worth	TX
New York Cancer & Blood Specialists	Port Jefferson	NY
New York Cancer & Blood Specialists	Bronx	NY
West Cancer Center	Memphis	TN
Tennessee Oncology	Chattanooga	TN
Tennessee Oncology	Nashville	TN
Tennessee Oncology	Shelbyville	TN
The West Clinic	Germantown	TN



Report Snapshot: Agenda



Time (ET)	Topic
6.00 PM – 6.15 PM (15 min)	Introduction and ARS Questions
6.15 PM – 6.30 PM (15 min)	<i>NTRK</i> Gene Fusions as Oncogenic Drivers
6.30 PM – 6.45 PM (15 min)	Treatment of Thyroid/Salivary Gland Cancers
6.45 PM – 7.30 PM (45 min)	Consensus Pathway Discussion: Thyroid/Salivary Gland Cancers
7.30 PM – 7.45 PM (15 min)	Break
7.45 PM – 8.00 PM (15 min)	Treatment of Lung Cancer
8.00 PM – 8.45 PM (45 min)	Consensus Pathway Discussion: Lung Cancer
8.45 PM – 9.00 PM (15 min)	Key Takeaways and Meeting Evaluation



Key Insights and Discussion Summary

Thyroid/Salivary Gland Cancers

INSIGHTS

“For OncoEMR, we have an ordering system where we have to go down and pick ‘Other molecular’ and then it

1. Treatment success in thyroid (2020)

The overall success rate is very high. This is not necessarily because there is a specific disease, or we have a great system.
I think what we do is we have a great system. I think what we do is we have a great system. I think what we do is we have a great system. I think what we do is we have a great system. I think what we do is we have a great system.

2. Data needed to predict from NCCN in thyroid

This is all a lot of things that we have done. Getting a better idea of what we are doing. This is all a lot of things that we have done. Getting a better idea of what we are doing. This is all a lot of things that we have done. Getting a better idea of what we are doing. This is all a lot of things that we have done. Getting a better idea of what we are doing.

INSIGHTS

"I really think the data is very robust. When we have a targetable, an actual mutation, we'd like to prefer that. And

1. Treatment success in thyroid (2022)

The overall survival data was very robust. This is not necessarily because this is thyroid cancer, it's not really overall survival. I think what you're seeing here is that when you have a targetable mutation, you can use a treatment approach rather than using T4 or T3, and I think we think the disease-free rate at 1 year, I believe, is that 10 is important. There is significant benefit with the treatment, and overall doing that something...
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2. Data needed to confirm from 2022 in thyroid

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Key Insights and Discussion Summary

Lung Cancer

INSIGHTS

"In my practice, like I'm testing with next-generation sequencing at the time of diagnosis, especially the ones that

1. Treatment success in frontline NSCLC

The overall survival that we see with this is not necessarily because this is a curable disease, it's not really curable... I think when I think success, I think either use a treatment approach either that using PD or PD1, and I would say that the disease-free rate at 1 year, I believe is that 50 is important. There is significant toxicity with the treatment, and people stop their treatment...
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2. Data needed to switch from 1L to 2L in frontline

That's all a lot of things have been said, nothing is better than 1L than 2L... I think the overall survival that we see with this is not necessarily because this is a curable disease, it's not really curable... I think when I think success, I think either use a treatment approach either that using PD or PD1, and I would say that the disease-free rate at 1 year, I believe is that 50 is important. There is significant toxicity with the treatment, and people stop their treatment...
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Key Insights and Discussion Summary

Pathway Consensus



Advisor Key Takeaways

Advisor Key Takeaways



ADVISOR

> Using RNA testing for *NTRK* mutations in thyroid cancer

- There is a better understanding of sequencing therapy
- There is a better understanding of sequencing therapy
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ADVISOR

> This reinforces the RNA based testing approach

- This reinforces the RNA based testing approach

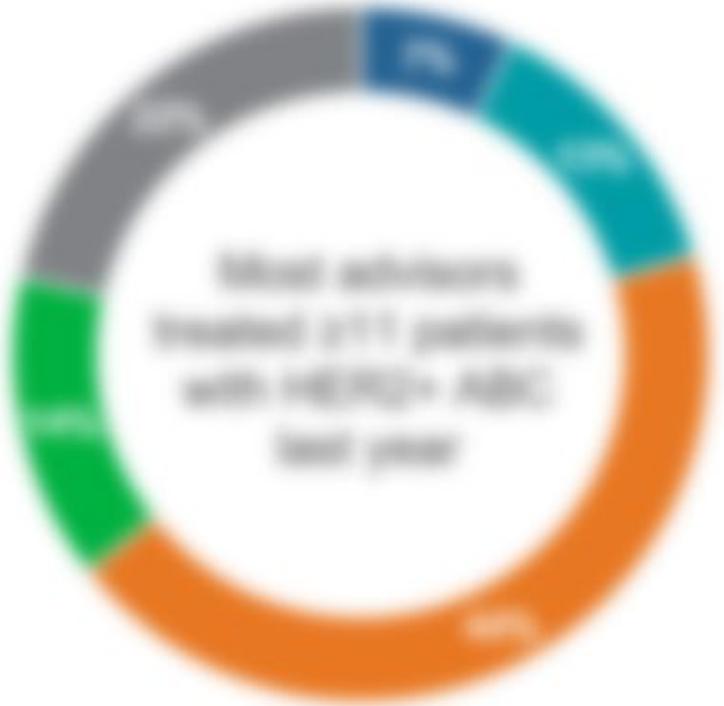


Thyroid Cancer-Specific Questions

Nineteen Percent of the Advisors Have Treated ≥ 4 RAI-R mDTC Patients in the Past 12 Months; Around One-Quarter of the Advisors Treated an *NTRK* Fusion-Positive mDTC Patient

Approximately how many patients with RAI-R metastatic DTC (mDTC) have you treated in the

Approximately how many *NTRK* fusion-positive mDTC patients have you ever treated? (N = 31)



The Majority of Advisors Test for *NTRK* Gene Fusions Upfront in mDTC; 16% of Advisors Do Not Test for *NTRK* Fusions



FOR EXAMPLE PURPOSES ONLY

For 58% of Advisors, Most or All of Their RAI-R mDTC Patients Receive *NTRK* Fusion Testing



FOR EXAMPLE PURPOSES ONLY

Just Over Half of the Advisors Need to Specifically Request *NTRK* Fusion Testing



FOR EXAMPLE PURPOSES ONLY

Most Advisors Outsource *NTRK* Gene Fusion Testing in mDTC; the Majority of These Advisors Use DNA-Based Testing



FOR EXAMPLE PURPOSES ONLY

In mDTC, 58% of the Advisors Perform Tissue-Based Testing First, Followed by a Liquid Biopsy Where Appropriate



FOR EXAMPLE PURPOSES ONLY

All Advisors Who Treat RAI-R mDTC Would Switch to a TRK Inhibitor in an *NTRK*+ Patient; the Slight Majority Would Make the Switch at Disease Progression

FOR EXAMPLE PURPOSES ONLY

More Advisors Would Choose Larotrectinib Over Entrectinib in RAI-R mDTC; However, 39% of Advisors Were Unsure of Their Choice of TRK Inhibitor

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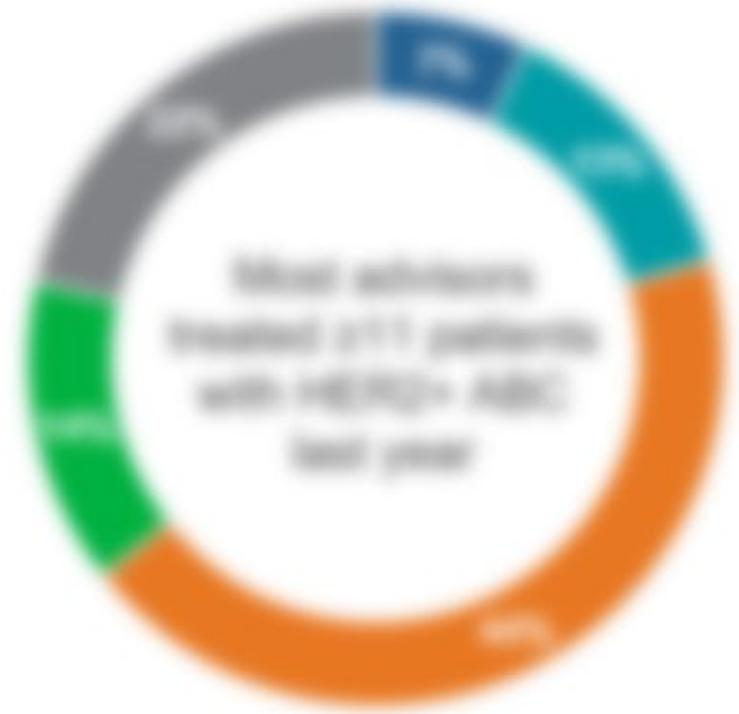
Lung Cancer-Specific Questions

Forty-Eight Percent of the Advisors Have Treated ≥ 21 mNSCLC Patients in the Past Year; 45% of Advisors Have Treated an *NTRK* Fusion-Positive mNSCLC Patient



Approximately how many patients with metastatic NSCLC (mNSCLC) have you treated in the past 12 months? (N = 33)

Approximately how many *NTRK* fusion-positive mNSCLC patients have you ever treated? (N = 33)



0-10 11-20 21-30 31-40 41-50

0-10 11-20 21-30 31-40 41-50

For the Majority of Advisors, Most or All of Their mNSCLC Patients Receive *NTRK* Fusion Testing

What percentage of your mNSCLC patients receive *NTRK* fusion testing? (N = 33)

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For 55% of Advisors, *NTRK* Fusion Testing Is Automatically Requested

Is *NTRK* fusion testing automatically requested for mNSCLC patients or do you need to specifically request the testing? (N = 33)

FOR EXAMPLE PURPOSES ONLY



Most Advisors Outsource *NTRK* Gene Fusion Testing in NSCLC; the Majority of These Advisors Use DNA-Based Testing



How does your practice test NSCLC patients for *NTRK* gene fusions? Select all that apply.
(N = 33)



Most Advisors Initially Use Tissue for Biomarker Testing and Reflex to Liquid Biopsy Where Appropriate

What testing algorithms do most of your patients with mNSCLC experience for biomarker testing? (N = 33)

FOR EXAMPLE PURPOSES ONLY



Slightly More Advisors Initiate First-Line Therapy While Waiting for *NTRK* Fusion Results vs Waiting for *NTRK* Fusion Results Before Beginning Therapy

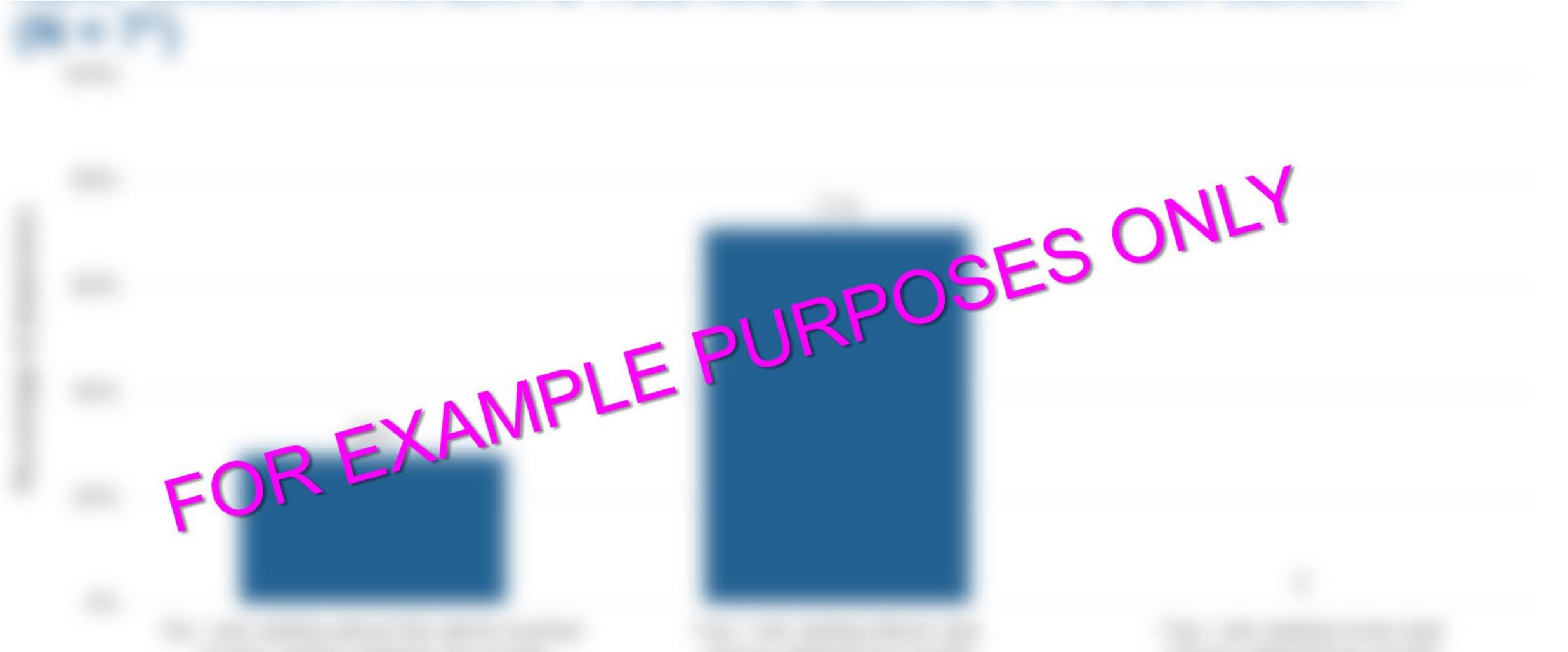
Do you test for *NTRK* prior to initiating first-line systemic therapy in mNSCLC?

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Most Advisors Would Use a TRK Inhibitor for This Patient; Slightly More Would Choose Larotrectinib

If an *NTRK* gene fusion is detected in a mNSCLC patient *prior* to initiating first-line systemic therapy, what therapy option would you prefer (assuming adenocarcinoma

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Around Half of the Advisors (47%) Would Be Comfortable or Very Comfortable With Switching Therapy to a TRK Inhibitor

When an *NTRK* fusion is detected *after* first-line systemic therapy was initiated for mNSCLC, how comfortable would you be in switching therapy to a TRK inhibitor, with 1 being Very uncomfortable and 5 being Very comfortable? (N = 32)



All Advisors Would Switch to a TRK Inhibitor in an *NTRK*+ Patient; the Majority Would Make the Switch at Disease Progression

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Most Advisors Were Not Familiar With the Comparative Effectiveness Data of Entrectinib vs Larotrectinib in NSCLC

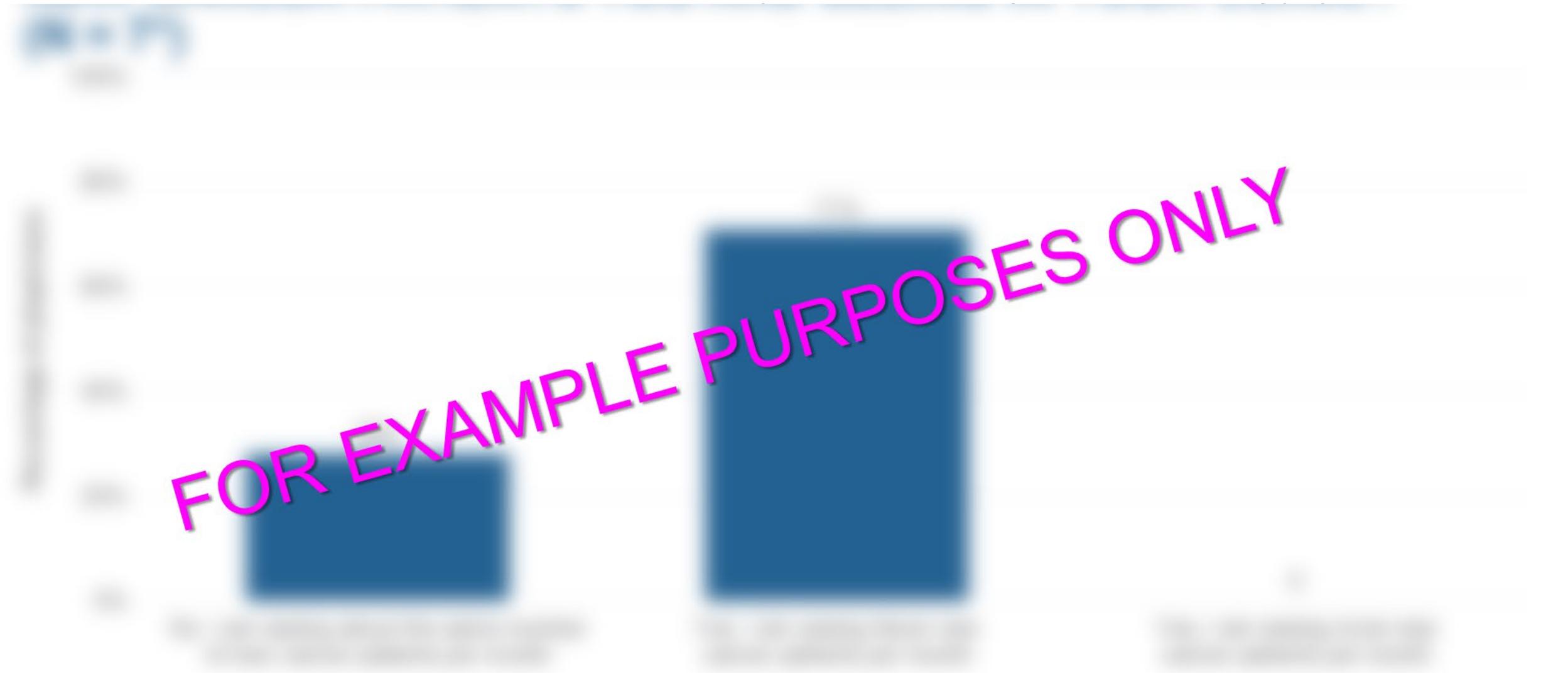
On a scale of 1–5, how familiar are you with the comparative effectiveness data on entrectinib vs larotrectinib in NSCLC, with 1 being Unfamiliar and 5 being Very familiar?

(N = 32)

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Slightly More Advisors Would Choose Larotrectinib Over Entrectinib in mNSCLC; Around One-Third of Advisors (31%) Were Unsure of Their Choice of TRK Inhibitor

FOR EXAMPLE PURPOSES ONLY





Testing/Pathway-Specific Questions

Most Advisors Do Not Have a Field for *NTRK* Biomarker Status in Their EHR



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How Biomarker Testing Is Ordered



Please describe how you order biomarker testing at your practice. (N = 31)

<p>Ordered through EMR – “molecular testing” then I manually type in Tempus xT for tissue. I order Guardant or Tempus Blood through EMR under orders tab</p>	<p>Ordered through HER – panel testing.</p>
<p>Ordered through EMR</p>	<p>Ordered through EMR and then manually type in Tempus</p>
<p>Order through EMR and then manually type in Tempus xT for tissue</p>	<p>EMR order biomarker. The tempus orders usually are ordered</p>
<p>Ordered through EMR</p>	<p>Order through EMR and then manually type in Tempus xT for tissue</p>
<p>Order through EMR and then manually type in Tempus xT for tissue</p>	<p>Usually order through EMR and then manually type in Tempus</p>
<p>Order through EMR and then manually type in Tempus xT for tissue</p>	<p>Order through EMR and then manually type in Tempus</p>
<p>Order through EMR</p>	<p>EMR order</p>
<p>Order through EMR</p>	<p>EMR order usually. If a test is ordered in a panel that requires the biopsy and needs to be the appropriate biopsy order</p>
<p>Order through EMR</p>	<p>Order through EMR and then manually type in Tempus xT for tissue</p>
<p>Order through EMR</p>	<p>Order through EMR and then manually type in Tempus xT for tissue</p>
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In Most Advisors' Practices, Patients Are Treated On-Pathway $\geq 81\%$ of the Time; 13% of the Advisors Do Not Use Clinical Pathways in Their Practice

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Most Advisors' Practices Have Pathways for mNSCLC; for 40% of Advisors, Their Practice Has Pathways for *NTRK* Fusion-Positive Cancers



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Practices Have Varied Approaches to Modifying Clinical Pathways; for 47% of the Advisors, Their Practice Modifies Pathways Every 4–6 Months

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*Three advisors indicated they are unsure; 1 advisor specified every 3 months.

For Practices That Use Clinical Pathways, Slightly More Have Pathways Integrated Into the EHR



Are your clinical pathways integrated into the EHR? (N = 30)

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Pathways Are Typically From a Third-Party Entity, Most Often ClinicalPath or OneOncology



Are the clinical pathways used in your practice developed internally or do you rely on a third-party entity? (N = 30)

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For Those Who Have Internally Created Pathways, the Department Head, a Disease-State Expert, and a Precision Medicine Expert Are Most Likely to Be Involved

If your clinical pathways are created internally, who is part of the pathway development?
Select all that apply. (N = 30)

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