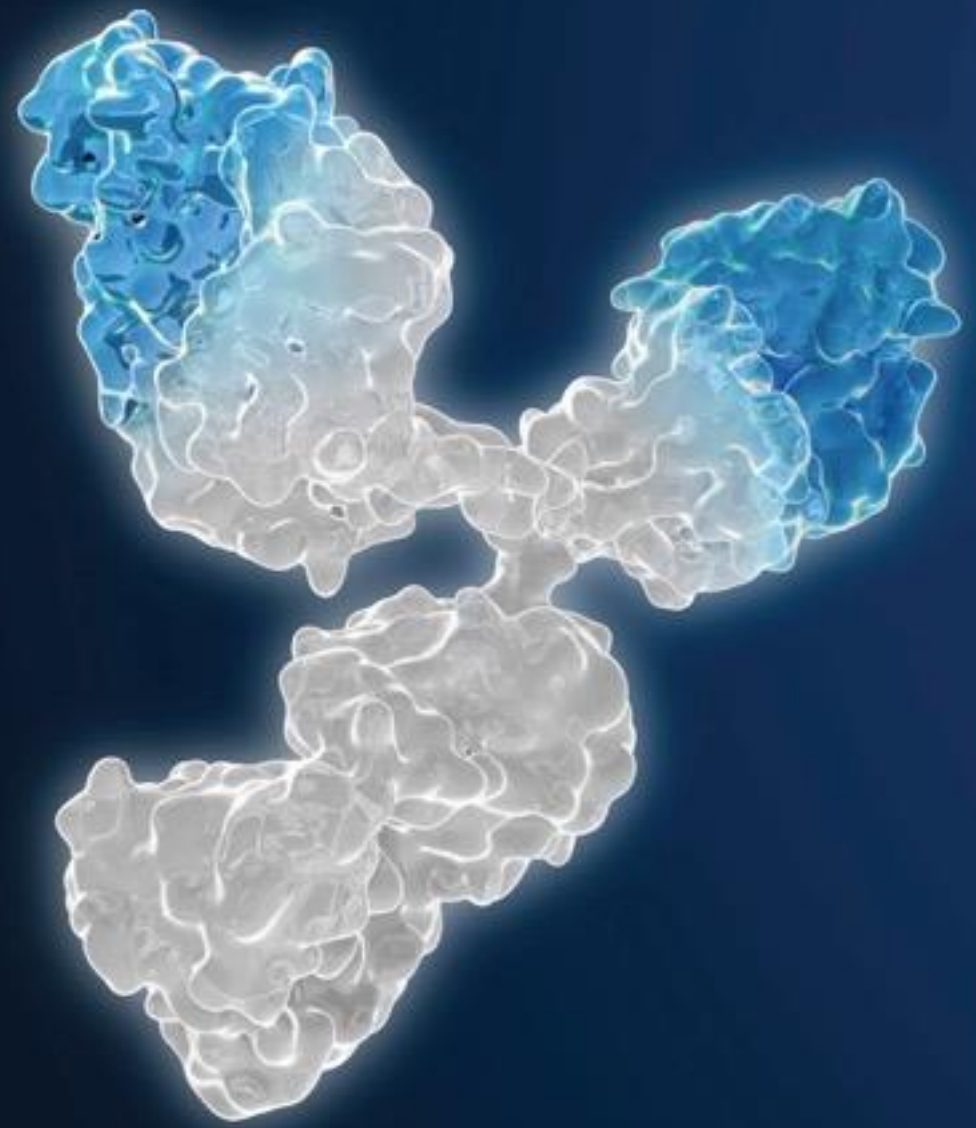

ADVISORY BOARD MEETING EXECUTIVE SUMMARY: ONCOLOGY CLINICAL PATHWAY DESIGN FOR NEW DRUG INDICATIONS

MAY 2023

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SCIENCE TO MEDICINE®

Advisory Board Participants

Gordon Kuntz - **Moderator**
Partner - Pathways & Consulting
Kuntz Consulting

Olaf Lodbrok, MSc, MBA
Senior Vice President, Precision Medicine
Real World Evidence & Analytics
Elsevier

Aimee Ginsburg, PharmD, BCPS
Director, Pathways and Clinical Content
Executive Lead of Pathways Task Force
McKesson Specialty Health

Ray Page, DO, PhD, FASCO
Senior Advisor & Director of Research
The Center for Cancer and Blood Disorders

Frederick Schnell, MD, FACP
Chief Medical Officer
National Cancer Treatment Alliance

Learning Objectives

Understand whether/how clinical pathways are currently being developed at the panelists' institutions.
Understand the types of data that can be considered when modifying a clinical pathway.
Understand cost considerations when modifying a clinical pathway.
Understand the outcome measures that are prioritized when considering a new drug indication in a clinical pathway.

Theme 1- Clinical Pathway Committee Process for Evaluating a New Drug Indication

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Theme 1- Clinical Pathway Committee Process for Evaluating a New Drug Indication

- The process of reviewing an indication is relatively quick, especially after Food and Drug Administration (FDA) approval, based on Dr. Page's experience.
- According to Olaf Lodbrok, MSc, his institution uses an evidence-based approach in their disease committee review process of peer-reviewed evidence, which typically takes around 4 weeks.
- Routine reviews occur quarterly, with monthly ad hoc meetings for groundbreaking evidence.
- However, Aimee Ginsburg, PharmD, stated that consideration for a new drug indication is dependent on changing data and the standard of care. If the standard of care changes, the drug will be added to the next monthly meeting.

Theme 1- Clinical Pathway Committee Process for Evaluating a New Drug Indication

- The use of National Comprehensive Cancer Network® (NCCN®) guidelines in developing clinical pathways varies among participants. Some consider NCCN® pathways as a data point for discussion, while others do not explicitly use them in developing clinical pathways.
- According to Dr. Page, NCCN® guidelines are not as considered compared to the actual review of the data.
- Most participants do not accept data packages from pharmaceutical companies and usually only accept peer-reviewed evidence. An exception, as stated by Aimee Ginsburg, PharmD, is if the data is pharmacoeconomic in nature.
- All participants emphasized the importance of maintaining transparency in the clinical pathway process in order to keep an open connection with pharmaceutical and biotechnology companies. Olaf Lodbrok, MSc, follows the compendium rules, CFR 42 or 14, which is a fully transparent, well-documented process.

Theme 1- Clinical Pathway Committee Process for Evaluating a New Drug Indication

How to handle biosimilars in a clinical pathway:

"We do allow similar products on the pathway. So it's not exclusionary very often. There are, I think, up to three therapy recommendations for similar or related products with different profiles so that the physician can stay on pathway and still tailor therapy optimally to the individual patients depending on efficacy, toxicity, and cost."
– Olaf Lodbrok, MSc, MBA

"Assuming that products have equivalent efficacy, toxicity, and cost, we allow more than one similar product on the pathway. Also, our pathways allow all biosimilars, and we no longer have the innovator products on the pathway."
– Aimee Ginsburg, PharmD, BCPS

"Generally, there's a hierarchy based on efficacy, toxicity, and cost. There's a preferred upfront treatment, given certain indications based on comorbid problems, renal function, etc. The pathway doesn't get into the details of which individual biosimilar you use. Some of it can be contractual relationships with the GPO, but sometimes it can be preferential relationships of the payer."
– **Ray Page, DO, PhD, FASCO**

"We're interested in keeping diversity of choice because it allows us to control the cost and select things on cost and toxicity reasons. Also, anytime there's a biosimilar available, it will be prioritized in the pathway if it's equal in efficacy. And lastly, we prioritize clinical trial enrollment always. As a result, the organization has a robust research profile that covers phase one, two, and three trials."
– Frederick Schnell, MD, FACP

GPO= Group purchasing organization.

Theme 1- Clinical Pathway Committee Process for Evaluating a New Drug Indication

Process of ordering a drug/regimen off-pathway or pre-pathway:

"I think almost 85% of cases are on pathway. This would be an off-pathway usage if it's documented, but it's perfectly permissible. We see in addition to off-pathway uses, we see off-label uses as well, to a certain amount."
–Olaf Lodbrok, MSc, MBA

"If there is a pathway, and maybe the drug hasn't been added to pathway or was intentionally excluded, we do allow for an exception process where you simply order what you're interested in and document the reason for using it over something that's on pathway." **–Aimee Ginsburg, PharmD, BCPS**

" You always want to treat the patient in front of you. You should have an expectation that there will be times that you will deviate from the pathway and create your own path and be off-pathway because it's in the best interest of the patient. The pathway should always be a guideline."–**Ray Page, DO, PhD, FASCO**

Theme 2- Data Considerations for Clinical Pathways

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Theme 2- Data Considerations for Clinical Pathways

What data can be considered?

- Published data
- Peer-reviewed journals
- Randomized controlled trials
- Phase 2 trials
- Phase 3 trials
- FDA labeling
- Scientific Abstracts presented at conferences
- Real-world evidence (RWE) trials
- Health economic modeling/studies
- FDA approval (gold standard)

- The panelists agreed that the prestige of a journal does not necessarily influence the data to be considered.
- The only data acceptable is peer-reviewed data, and unpublished data is not recommended.
- According to Aimee Ginsburg, PharmD, pharmacoeconomic data is the only non-published data accepted by the institute. Additionally, FDA approval is considered the gold standard, according to Frederick Schnell, MD, FACP, and is going to be a mandate for economic coverage of care for most parts of the United States across all markets.

FDA= Food and Drug Administration.

Theme 2- Data Considerations for Clinical Pathways

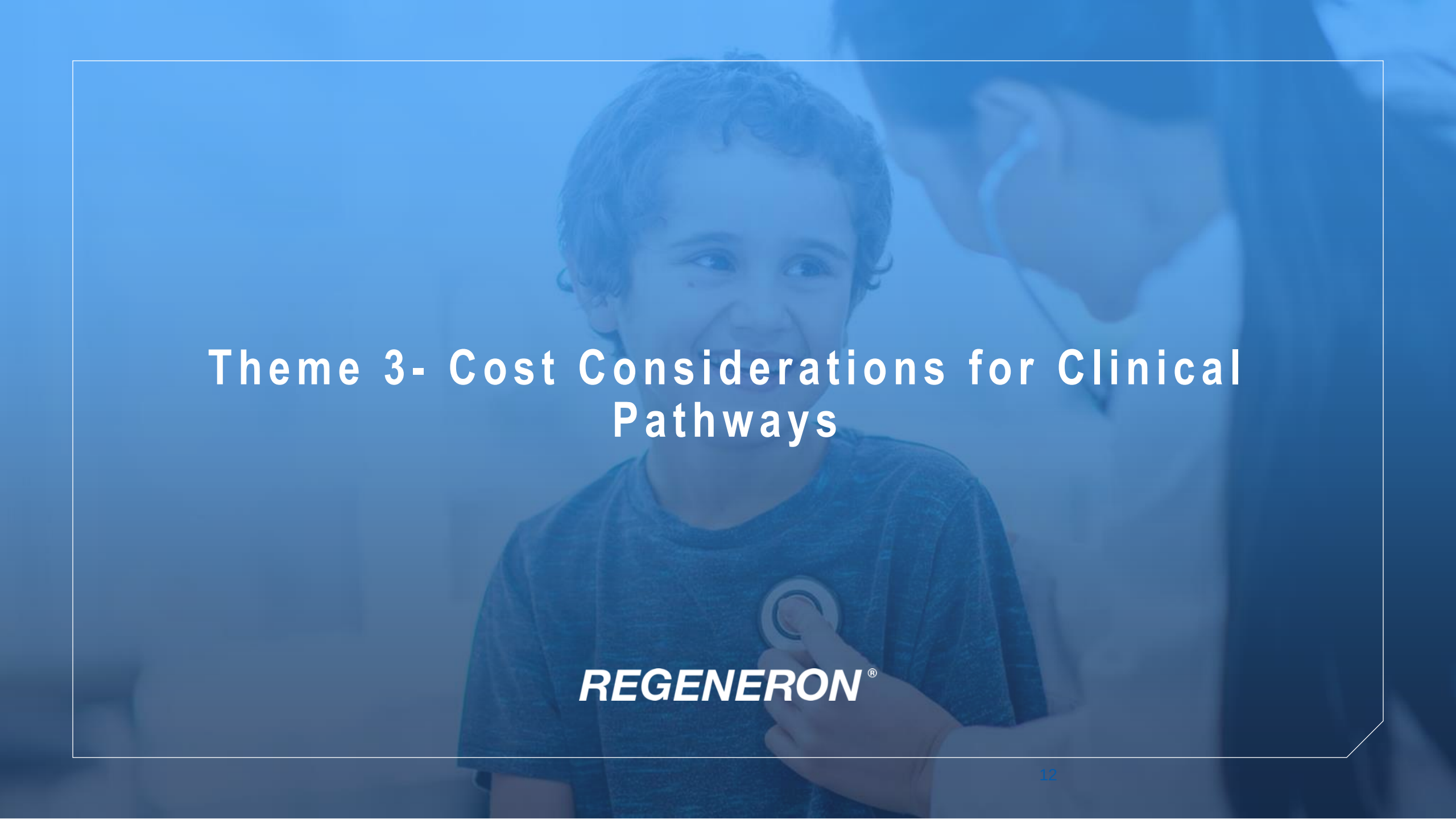
How are the initial studies of a drug under consideration for a new indication viewed vs. studies of established therapies?

"If something looks like it's a game changer and it's in the published arena, it's presented at a prestigious meeting, or a breakthrough drug, we try to bring that forward as fast as we can."
– Frederick Schnell, MD, FACP

"Considering flaws in cross-trial comparison, it is crucial to evaluate new studies in relation to the initially approved treatment data to determine their merit."
– Aimee Ginsburg, PharmD, BCPS

"Clinical decisions rely on physician preference and pathway choices, influenced by compelling data from studies, while the committee determines how treatments fit into the pathway."
–Ray Page, DO, PhD, FASCO

Theme 3- Cost Considerations for Clinical Pathways



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Theme 3- Cost Considerations for Clinical Pathways

Where and when does cost factor into a pathway determination?

- According to Ray Page, DO, PhD, FASCO, the committee looks at drug cost variations and considers how they fit and compare with the regimen. Generally, they prioritize efficacy and deal with costs later. However, in the value-based care world, the total cost of care is important but poorly understood in drug selection for pathways. The total cost of care usually doesn't play a role in pathways placement.

- Aimee Ginsburg, PharmD, agrees that efficacy is the beginning consideration, and toxicity comes next. If a drug meets or beats the efficacy and toxicity of a drug on the pathway, then they consider the cost. Cost is always discussed and displayed upfront.

- Olaf Lodbrok, MSc, MBA, states that cost comes third after efficacy and toxicity, and the disease committees only reach out to their team for cost information in about 20% of cases. However, cost is considered at the decision-making point, particularly when modifying a pathway or comparing it to other agents.

- Frederick Schnell, MD, believes that the projected cost should address both per-exposure cost and total cost of care to impact therapeutic selection.

Theme 3- Cost Considerations for Clinical Pathways

Which costs are considered?

- Drug costs
- Medicare allowable reimbursement
- Wholesale acquisition cost (WAC)
- Average sales price
- Total cost of care

- “We review drug costs on a monthly basis, regardless of the administration method. We calculate an average cost for the initial cycle, ramp-up cycle, and maintenance cycle so that we can compare the cost differences when the dosing changes. This applies whether the therapy lasts for 14 cycles or three months. In the metastatic setting, we consider the monthly cost since the disease can be treated until progression.” - **Aimee Ginsburg, PharmD**

Theme 3- Cost Considerations for Clinical Pathways

Other Cost Considerations:

- All participants prioritized cost-effectiveness as a form of health economics and outcomes research (HEOR)/RWE analyses.
- Other costs such as drug administration, adverse event (AE) management, and recurrent disease are not upfront discussions and are data points being considered over time.
- According to Frederick Schnell, MD, “We're committed to getting the data on HEOR and RWE, and we have a team trying to develop a publication base of expertise in this area.”

RWE= Real-world evidence.

Theme 3- Cost Considerations for Clinical Pathways

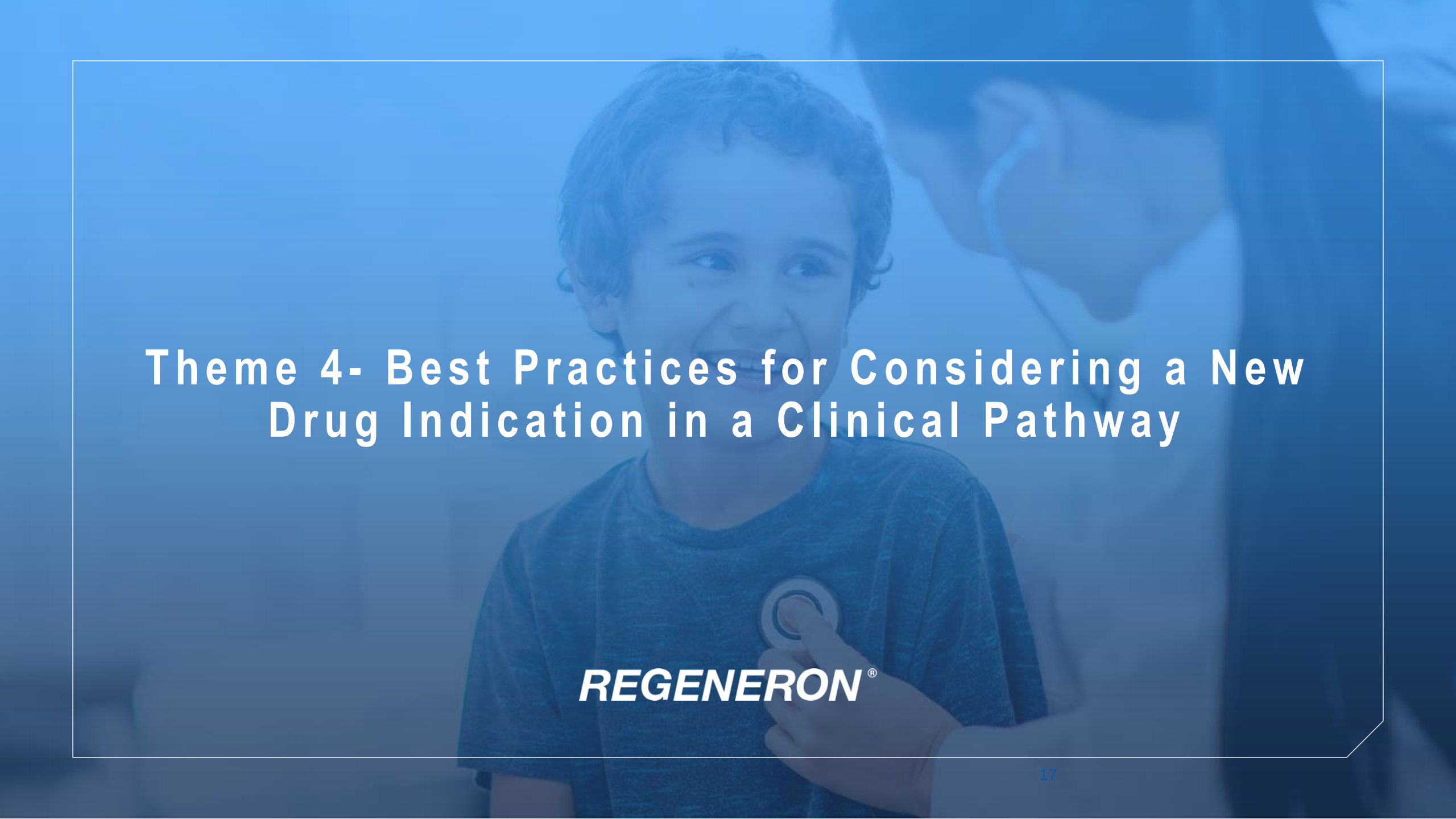
If cost is the criteria, what percentage difference would be enough to sway the committee for one drug over another (5%, 10%, or more)?

- "I guess it depends, but I think it would probably be way more substantial than five or 10%. Sometimes you'll have somebody on the standard regimen, and then you got a new combination or a new drug that comes out, and it's like a 300% increase in the cost of therapy and drugs." - **Ray Page, DO, PhD, FASCO**

- "There's no predefined number, but I think anything above 25% would be worthy of consideration in terms of making changes." - **Olaf Lodbrok, MSc, MBA and Frederick Schnell, MD**

- "It must be enough to make providers interested in switching."- **Aimee Ginsburg, PharmD**

Theme 4- Best Practices for Considering a New Drug Indication in a Clinical Pathway



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Theme 4- Best Practices for Considering a New Drug Indication in a Clinical Pathway

What do you find most valuable in your pathway?

"It is a two-step quality process. First you get the peer-review journal articles, which is one level of review and quality. The second is the community consensus effort around this. So, you have a high level of quality and editorial independence built into the pathway." **– Olaf Lodbrok, MSc, MBA**

"I would say to me it's the standardization, and so it's the fact that we have a set of rules that we've implemented consistently across the pathways, and so each disease is handled in the exact same manner."
– Aimee Ginsburg, PharmD, BCPS

"It allows us to incorporate our clinical trials. I think it improves when you're a community oncologist and you're seeing every disease type that you can think of, and you got a busy clinic."
– Ray Page, DO, PhD, FASCO

"It's important to do the right things and do the best things for the patient clientele."
– Frederick Schnell, MD, FACP

Theme 4- Best Practices for Considering a New Drug Indication in a Clinical Pathway

Barriers to changing or adding clinical pathways in your organization.

Barriers

- Turnaround time from when data is available to when the next meeting is
- Implementing high-cost therapeutics in centers of variable size and expertise
- Time to review the journal publication
- Getting an expert staff together
- Process can become “clunky” when trying to integrate into the electronic health record (EHR)

Theme 4- Best Practices for Considering a New Drug Indication in a Clinical Pathway

How transparent are your pathway decision-making processes?

- “In terms of transparency, we are trying to share what we are doing actively, so it is a very transparent process, and it is influenced by input from our provider group. There's no financial issue that affects the committee members. Most of this work is being done by people who are giving up their manpower or brainpower for this. They're not remunerated in any major way” - **Frederick Schnell, MD, FACP**

- “Internal transparency is 100%. Everybody involved in the process, all the practice members know the methodology, the data source, and everything in that category. The external transparency is limited to what is submitted from pharma regarding pharmacoeconomic analysis only. And we do collect, as everyone else said as well, the conflict-of-interest information on our pathways task force annually. And that's also posted externally as well.” - **Aimee Ginsburg, PharmD, BCPS**

Theme 4- Best Practices for Considering a New Drug Indication in a Clinical Pathway

Is there anything you would change about the process if you could?

"As a genomic testing educator, I focus on the long-term impact on patient care and outcomes in cancer. Educating non-physicians and the business community and building sustainable pathways with clinician support and a robust platform is key to success.
– Frederick Schnell, MD,FACP

"If you can use an AI tool to gather that information and put all that information to take you down the pathway."
– Ray Page, DO, PhD, FASCO

"I think that the process is rather tight in terms of how we do things, what rules we follow. It's very organized in the way that I like." **– Aimee Ginsburg, PharmD, BCPS**

"If we knew how to do it better, we would probably be trying to do it better."
– Olaf Lodbrok, MSc, MBA

AI= Artificial intelligence.

Conclusions

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Conclusions

- "Seeking assistance to future-proof pathways and manage the challenges of increasing biomarkers and limited specimen testing strategies, particularly in the parallel testing strategy stream." **– Olaf Lodbrok, MSc, MBA**

- "As a genomics educator, I emphasize the link between testing and patient outcomes. Sustainability, clinician support, and a secure platform are vital in my role as a pathway builder." **– Frederick Schnell, MD, FACP**

- "Precision medicine will continue to play a role in oncology and clinical pathways. Pharma must prioritize trials to show improvement of precision medicine drugs over standard-of-care treatments. As treatment options and outcomes improve, clinical practice and pathways will adapt." – **Aimee Ginsburg, PharmD, BCPS**

- "As a cancer care provider, I collaborate with sponsors and stakeholders to improve patient access to optimal therapy and welcome all ideas to enhance the quality of care we provide." – **Ray Page, DO, PhD, FASCO**

Thank you!