

## **Transcript Details**

This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: https://reachmd.com/programs/closing-gaps-nsclc/next-generation-sequencing-in-lung-squamous-cell-carcinoma/11237/

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Next Generation Sequencing in Lung Squamous Cell Carcinoma

#### Announcer:

Welcome to Closing the Gaps in Non-Small Cell Lung Canceron ReachMD, sponsored by Lilly.

On today's program, we'll hear from Dr. Jacob Sands, who's a thoracic medical oncologist at the Dana-Farber Cancer Institute and an Instructor of Medicine at Harvard Medical School. Dr. Sands joins us to discuss highlights from his study on next generation sequencing in lung squamous cell carcinoma. Here's Dr. Sands now.

# Dr. Sands:

I appreciate the opportunity to talk about the study that we published in Lung Cancer this year on next generation sequencing in lung squamous cell carcinoma. There are a few things to really take out of this publication that we found interesting. One is this certainly supports doing next generation sequencing in squamous cell carcinoma for enrollment to things like the lung map trial, which is using targeted therapies and that squamous cell carcinoma does have some of these that do show up and are feasibility for enrollment seems reasonable. Some of the more interesting things that also came out of this was that in never smokers or very light smokers. In particular, we did see targeted options, such as sensitizing EGFR mutation, MET amplification, as well as other potential targetable options. This really further supports the NCCN guidelines for doing sequencing in those who are light or never smokers and even if it's squamous cell carcinoma. One aspect that I found particularly interesting as well is that in that population of light, never smokers, that 35% of those cases ended up looking like they probably came from another site. And so skin squamous cell carcinoma when there's a history of that can pathologically be difficult to differentiate just on pathology alone. And it looks like there may have been cases of patients who had a lung cancer diagnosis and were treated as such, that then with the sequencing we saw UV signature and in digging further back, in some of those cases, it did look like they did have a skin primary in the past and sometimes that's very distant as well. So I kind of raised the question of, you know, squamous cell carcinoma pathologically can be hard to differentiate exactly where that came from and so in this sequencing, we did see evidence that maybe this wasn't actually lung although every other indication had been such and it had been treated as such. The takeaway is really where that one doing sequencing was very feasible. In the samples were run, and we did get a result in most of those cases, and the cases where it wasn't really feasible was just due to low, amount of cancer cells, from things like brushing or FNA, which, now fortunately, we're really getting more cores and the cores were by and large able to be run. Two, was that we are seeing these targets. Things like the HRD pathway, for example, there were quite a few cases within that and it looks like doing targeted therapies within squamous cell carcinoma is something, that is feasible as far as enrolling on clinical trials. And three was just the complexity of squamous cell carcinoma in itself and that is particularly in those without really a smoking history that doing genomic sequencing is important and further supports the current NCCN guidelines. And then also really considering the full history of these patients and whether or not they've had a prior, skin cancer and whether what you're seeing in the lungs sticks out as potentially being an unusual scenario. Or whether there's this history in the past that could lead you to think about other possibilities.

### Announcer:

That was Dr. Jacob Sands sharing key findings from his study on next generation sequencing in lung squamous cell carcinoma. To revisit any part of this discussion and to access other episodes in this series, visit ReachMD.com/NSCLC, where you can Be Part of the Knowledge. Thanks for listening!