

### 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/project-oncology/exploring-innovative-targeted-therapies-for-ret-rearranged-non-small-cell-lung-cancer/12313/>

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## Exploring Innovative Targeted Therapies for RET-Rearranged Non-Small Cell Lung Cancer

### Announcer Introduction

Welcome to Project Oncology on ReachMD. On this episode, sponsored by Lilly, we're joined by Dr. Michael Shafique, an Assistant Professor of Thoracic Oncology at the Moffitt Cancer Center in Tampa, Florida. Dr. Shafique is here to share a brief overview of targeted therapies for RET-rearranged non-small cell lung cancer. Let's hear from him now.

### Dr. Shafique:

So, for the frontline treatment of non-small cell lung cancer, whole-genome sequencing is the primary way that we're going to identify RET fusion patients in the frontline setting, so it's important for all non-small cell lung cancer patients to get genomic testing. If we've identified RET fusion abnormalities upfront the most common ones being the KIF5B and CCDC6 fusion partners with the RET gene-targeted therapy with the RET-specific tyrosine kinase inhibitor is the recommended frontline treatment for most of these patients. This has been primarily driven by two clinical trials that led to the approval of two new oral therapies for these patients; the first one being selpercatinib which was primarily driven by phase 1/2 data from the LIBRETTO study as well as pralsetinib, which was driven by data from the ARROW study. Overall, both drugs seem to have similar or comparable response rates in the frontline setting. Selpercatinib seems to have about an 80% response rate, whereas pralsetinib has about a 60 to 70% response rate in the frontline setting. And in the second line setting, response rates seem to range between 55 and 65%.

The safety signals are encouraging, as well selpercatinib, does have a risk of prolonging the QTC interval in patients and so that's an important monitoring parameter. Both drugs do seem to increase the risk of hypertension in patients and pralsetinib does have a higher rate of AST and ALT abnormalities. Overall for the frontline treatment of patients with RET fusion abnormalities genomic testing really is the way we identify these patients and so it should be done upfront for all patients with non-small cell lung cancer, particularly adenocarcinoma and the frontline treatment for most of these patients the recommendations would tend to favor RET-specific tyrosine kinase inhibitor therapy.

### Announcer Close

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