# 2022 Targeted Therapies Patient Forum Advances ALK+, RET+, and MET+ NSCLC 

Dr. Fred Hirsch (Executive Director, Center for Thoracic Oncology at Tisch Cancer Institute, Mount Sinai, Professor of Medicine, Icahn School of Medicine, Associate Director, Biomarker Discovery for TCI)

## TRANSCRIPT

Without going into too many details here, another abnormality that has been familiar to us over several years is ALK-positive tumors. We now have several drugs that target this abnormality. Most recently, we have introduced Lorlatinib as a first-line alternative in this particular subgroup.

I just want to show you one outcome study. This study is from the University of Colorado where I was working before. This is a group of patients with advanced disease. Remember, 10-15 years ago, the prospect for this group of patients was we were counting seven to nine months. But what do we see here? The median survival is now 6.8 years, meaning that $50 \%$ of the patients are still alive at that time. That, in my opinion, is amazing data and very encouraging.

As I said, we have many new drugs. We've also learned about mutations that are sensitive and resistant to different drugs. Interestingly, some mutations can be sensitive to one drug and a resistant mechanism for another. Therefore, we might be able in the future to sequence our therapies based on mutation status. We don't do that routinely today. But I foresee this becoming a prospect over the next few years. In fact, the National Cancer Institute ( NCI ) actually has clinical protocols which are based on this mutation analysis.

To give you a few other examples-RET—we currently have several drugs. Most recently, we've seen Silvercatinib, Pralsetinib, with a response rate of more than $60 \%$ in patients who previously failed traditional therapy. Furthermore, these patients are showing very long progression-free survival periods. We also have MET inhibitors, with a $60 \%$ response rate, and the list continues.

