PF-ILD: Treatment Efficacy Based on PF-ILD Subtype and Concomitant Treatment with RA Medication

In this abstract, I presented further analysis of the INBUILD trial, trying to explore the hypothesis that by excluding some specific group of patient from the analysis would change the overall results of the trial. As you know, the INBUILD trial is a trial that has been assessing the efficacy and the safety of nintedanib in patients with progressive fibrosing ILD. It means that patients were enrolled with different diagnoses, including chronic hypersensitivity pneumonitis, autoimmune ILD, idiopathic nonspecific interstitial pneumonia, unclassifiable idiopathic interstitial pneumonia, or other interstitial lung disease, like occupational.

Now, the first analysis was very important, was showing that by excluding diagnostic groups one by one from the overall analysis, these would not change. So the five major diagnostic group, when you exclude one by one, one of these groups, the overall signal of efficacy of nintedanib over the rate of decline in forced vital capacity over 52 weeks remained the same. And that means that there is no single entity, which is basically driving the overall effect. The second analysis that we performed was what happened when we exclude the subject with unclassifiable idiopathic interstitial pneumonia or idiopathic nonspecific interstitial pneumonia. And so the answer to the question is that there is no difference when you take into consideration the overall or group or after excluding this specific group.

The third analysis was an interesting one because we try to exclude the patient with features that are the feature typical or idiopathic pulmonary fibrosis. As you know, patient with IPF were not included in the INBUILD trial because the drug was already approved for IPF. Now, when we excluded from the INBUILD analysis, patient were male, former smoker, over 65 years of age, and with the UIP-like pattern on high solution CT scan, even that exclusion of patient did not change the overall effect of the drug. So basically, these results really further support the hypothesis that there is a common mechanism across these diseases, which targeted by nintedanib and which is maintaining the progression of the fibrotic disease in the lung of these patients and is further confirming the fact that by using nintedanib over 52 weeks, this decline in forced vital capacity is significantly reduced.

Chaudhuri and colleagues presented the results of a subgroup analysis of the INBUILD trial. The INBUILD trial is a study of nintedanib in patient with progressing fibrosing interstitial lung disease, and they explored the hypothesis that baseline medications could have an effect on the efficacy and the safety of nintedanib in patient with PF-ILD. In particular, they wanted to know whether the use of disease-modifying anti-rheumatic drugs or glucocorticoids at baseline can impact the effect of nintedanib in these patients. So they reanalyzed the data from INBUILD trial and they showed that 54% of patients in the INBUILD trial were taking glucocorticoids at baseline, different forms and different dosages, in different type of disease.

11% of patients were taking non-biological disease-modifying anti-rheumatic drugs, and 3% were taking one disease-modifying drug, which was a monoclonal antibody. They had different diagnosis. Of course, glucocorticoids were used for a variety of disease, while disease-modifying anti-rheumatic drugs were used mainly, of course, for patients with connective tissue disease-associated interstitial lung disease.

The interesting finding is that overall the placebo patient group showed that if they were taking some form of glucocorticoids or DMARDs at baseline, they progressed a little bit more, and this probably is a reflecting the fact that these patients were more severe. However, the efficacy of nintedanib was similar, independent of the baseline co-medication. So it doesn't matter if the patient were taking glucocorticoids or DMARDs. The size of the effect of nintedanib on FVC decline was the same. And also the safety profile of the drug was the same, meaning that the use of a co-medication, in particular, glucocorticoids and disease-modifying anti-rheumatic drugs at baseline did not affect the efficacy or the safety profile of nintedanib in the INBUILD trial.