The Cost Associated with Antifibrotic-Treated Vs. Untreated Patients with IPF in the Medicare Population

This poster, looking at healthcare resource utilization in patients with IPF who were on antifibrotic versus those who weren't, was a claims data study, retrospectively looking at patients in the Medicare database that had idiopathic pulmonary fibrosis. They were divided into those who were treated with antifibrotics, and this was in a post-approval phase after 2014, and those in a matched control population that were managed before 2014 and the approval of the anti-fibrotic agents.

What they found was that outcomes including all-cause hospitalization, respiratory hospitalization, ICU admission, and inpatient and outpatient costs were reduced in those patients that were treated with antifibrotic compared to matched controls. However, antifibrotic use was associated with increased outpatient costs of medication compared to those that were not treated with antifibrotics. These data seem to suggest that while the use of antifibrotic medications in IPF increased the outpatient medication costs, they can significantly decrease other healthcare resource utilization, including inpatient admissions, ICU admissions, and inpatient and outpatient costs.

So this is a really well-done study on healthcare outcomes and cost of antifibrotic medications on inpatient healthcare cost and outpatient medication costs in Medicare recipients. It was reviewed retrospectively by Medicare claims beginning in 2014 and onward after the FDA approval of antifibrotic therapy with pirfenidone and nintedanib. They reviewed claims from 2010 to 2017 and actually matched patients with 4,641 patients in each group. Both groups were patients with idiopathic pulmonary fibrosis, and one group was not treated with antifibrotics and the other was. They essentially compared differences in costs of inpatient hospitalizations, outpatient medical care and outpatient medication costs.

And you can see from this study that patients treated with antifibrotics had vastly lower inpatient hospitalization costs. They had lower outpatient medical costs and higher outpatient medication costs. And the take-home from this really is that antifibrotic therapy, while it is somewhat costly, is actually cost-saving by reducing inpatient treatment and outpatient medical treatment for patients with IPF, and had a significant impact, not only on quality of healthcare and quality of life, but on net costs provided to these patients by Medicare in this study.

So this data set would suggest that not only do antifibrotic agents reduce hospitalizations potentially and improve likelihood of discharge from the hospital, but they're actually fairly cost-effective in the long run. And so globally, there was some discussion about the upfront cost of antifibrotic therapy, which could be potentially substantial to the patient and to the third-party coverage payer. But in the grander scheme, they actually are cost-saving by this study and reduce total in- and outpatient medical costs needed for patients.