

# Cystic Fibrosis Research News

## Citation:

Hong G, Lechtzin N, Hadjiliadis D, Kawut S. Inhaled antibiotic use is associated with *Scedosporium/Lomentospora* species isolation in cystic fibrosis. *Pediatr Pulmonol.* 2019 Feb;54(2):133-140.

## What was your research question? (50 words maximum)

We wanted to better understand what factors may be contributing to the rise of fungal colonization/infections in patients with cystic fibrosis (CF). In particular, we looked at a fungus known as *Scedosporium* species.

## Why is this important? (100 words maximum)

Over the past twenty years there has been an increase of fungal colonizations/infections in the CF population and *Scedosporium* species is the second most common mold seen in the CF lung. We do not fully understand the direct causes or effects of finding *Scedosporium* on cultures.

## What did you do? (100 words maximum)

We studied individuals with CF who were 6 years and older in the CF Foundation Patient Registry between January 1, 2010 and December 31, 2012. We identified the individuals who had a positive culture for *Scedosporium* and compared their characteristics to see if they shared anything in common. People who had a history of lung or liver transplant were not included.

## What did you find? (100 words maximum)

The study found *Scedosporium* species in approximately 3% of the United States CF population. Older patients and Caucasian individuals were more likely to have a positive *Scedosporium* culture. In addition, people who were prescribed an inhaled antibiotic, such as tobramycin or aztreonam, were more likely to have a positive *Scedosporium* culture.

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## **What does this mean and reasons for caution? (100 words maximum)**

The association between inhaled antibiotics and *Scedosporium* informs us that chronic inhaled antibiotics may be playing a role in *Scedosporium* colonization/infection. However, we cannot conclude that inhaled antibiotics are directly causing *Scedosporium* colonization/infection. It is plausible that we are seeing *Scedosporium* in sicker people who happen to be on inhaled antibiotics. Further investigation to better characterize this relationship is necessary.

## **What's next? (50 words maximum)**

We need to see the clinical impact that *Scedosporium* has on CF patients.