



Cystic Fibrosis Research News

Citation:

McGarry, M. E., et al. Early acquisition and conversion of *Pseudomonas aeruginosa* in Hispanic youth with cystic fibrosis in the United States. *Journal of Cystic Fibrosis*, 2020

What was your research question?

We asked if Hispanic patients with Cystic Fibrosis (CF) are at an increased risk of acquiring the respiratory pathogen *Pseudomonas aeruginosa* (*P. aeruginosa*) when compared with non-Hispanic white patients? Do they acquire it at an earlier age than non-Hispanic white patients.?

Why is this important?

Ethnic differences in the timing of acquisition and progression of *P. aeruginosa* has not been investigated in longitudinal studies. Understanding how differences in *P. aeruginosa* in Hispanic patients contribute to increased incidence and more severe pulmonary disease is vital to improve outcomes.

What did you do?

We compared the risk for and when patients acquired *Pseudomonas* and converted to different forms between Hispanic and non-Hispanic white patients.

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What did you find?

We found that Hispanic patients are at increased risk for *p. aeruginosa*. Hispanic patients acquire all forms of *P. aeruginosa* and convert to more severe forms at an earlier age compared to non-Hispanic white patients.

What does this mean and reasons for caution?

Further investigation is needed to understand why Hispanic patients are at increased risk of *P. aeruginosa*. We were limited by inconsistencies in social and economic data collected across the various CF care centers as minorities were not included or underrepresented in anti-pseudomonal studies historically. There may be other social economic factors not found in or noted in the registry.

What's next?

Further investigation is needed to understand why Hispanic patients are at increased risk from *P. aeruginosa*, how *P. aeruginosa* influences lung function differently in Hispanic compared to non-Hispanic white patients.