primary studies - published, non RCT

Respiratory Outcomes and Aspergillus Serology Following Elexacaftor/Tezacaftor/Ivacaftor Therapy in People with Cystic Fibrosis and a History of Aspergillus fumigatus Infection.

Code: PM39762638 **Year:** 2025 **Date:** new **Author:** Lanfranchi C

Study design (if review, criteria of inclusion for studies)

Prospective cohort study

Participants

pwCF who initiated ETI therapy and had received antifungal treatment in the preceding five years due to allergic bronchopulmonary aspergillosis (ABPA group) or other AF-related clinical manifestations (AF group). A control group of pwCF with no prior respiratory cultures positive for AF was also included.

Interventions

Elexacaftor/tezacaftor/ivacaftor (ETI) therapy

Outcome measures

Changes from baseline to 12 months in spirometry measures and lung clearance index (LCI(2.5)), as well as respiratory colonization by AF, were compared across groups.

Main results

The study included 16 patients in the ABPA group, 47 in the AF group, and 45 controls. Spirometry and LCI(2.5) improvements were comparable across groups. Positive respiratory cultures decreased from 43.8 to 18.8% in the ABPA group (pâ€‰=â€‰0.30), and from 78.7 to 23.4% in the AF group (pâ€‰

Authors' conclusions

During ETI therapy, pulmonary outcomes improved, AF colonization and sensitization decreased, and no episodes of ABPA were observed in pwCF with a clinical history of AF infection.

http://dx.doi.org/10.1007/s00408-024-00781-4

See also

Lung. 2025 Jan 6;203(1):24. doi: 10.1007/s00408-024-00781-4.

Keywords

CFTR Modulators; Genetic Predisposition to Disease; pharmacological_intervention; placebo; VX-770; VX-661; ivacaftor; Aminophenols; tezacaftor; VX-445; elexacaftor; Trikafta; Adult; Aged; Aspergillus; Child; Fungi; Infection; Antifungal Agents; Respiratory Tract Diseases; Respiratory Tract Infections; kaftrio;