

primary studies - published RCT

## The effect of discontinuing hypertonic saline or dornase alfa on mucociliary clearance in elexacaftor/tezacaftor/ivacaftor treated people with cystic fibrosis: The SIMPLIFY-MCC Study.

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

SIMPLIFY (randomized, open-label study) substudy

### Participants

CF Patients  $\geq 12$  years of age.

### Interventions

Discontinuing hypertonic saline (HS) or dornase alfa (DA) vs continuation of each treatment

### Outcome measures

Change in lung function over a 6-week period. Authors used gamma scintigraphy to determine whether discontinuation of either HS or DA was associated with deterioration in the rate of in vivo mucociliary clearance (MCC)

### Main results

While no significant differences in MCC endpoints were associated with HS discontinuation, significant improvement in whole and peripheral lung MCC was observed after discontinuing DA.

### Authors' conclusions

These results suggest that pwCF on ETI with mild lung disease do not experience a subclinical deterioration in MCC that could later impact health outcomes after discontinuing HS, and in fact may benefit from improved MCC after stopping DA treatment.

<http://dx.doi.org/10.1016/j.jcf.2024.02.003>

### See also

J Cyst Fibros. 2024 May;23(3):457-460. doi: 10.1016/j.jcf.2024.02.003. Epub 2024 Feb 13.

### Keywords

Adolescent; Child; Deoxyribonuclease; Drug Administration Schedule; Airway clearance drugs -expectorants- mucolytic- mucociliary-; hydration; Hypertonic Solutions; Inhalation OR nebulised; nebuliser; non pharmacological intervention - devices OR physiotherapy; pharmacological\_intervention; Recombinant Proteins; Respiratory System Agents; Dornase alpha; Pulmozyme; CFTR Modulators; Genetic Predisposition to Disease; placebo; VX-770; VX-661; ivacaftor; Aminophenols; tezacaftor; VX-445; elexacaftor; Trikafta;