*primary studies - published RCT*

# Efficacy response in CF patients treated with ivacaftor: Post-hoc analysis.

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

data from Phase 3 studies (STRIVE/ENVISION) - post-hoc analysis

### Participants

CF patients (nâ€‰=â€‰209)

### Interventions

Post-ho analysis of patients (nâ€‰=â€‰209) who received 48 weeks of ivacaftor or placebo. Patients were assigned to tertiles according to FEV(1) response.

### Outcome measures

FEV(1), sweat chloride, weight, CFQ-R, and pulmonary exacerbation

### Main results

The number needed to treat (NNT) was calculated for specific thresholds for each outcome. Across all tertiles, numerical improvements in FEV(1), sweat chloride, CFQ-R and the frequency of pulmonary exacerbations were observed in ivacaftor-treated patients: the treatment difference versus placebo was statistically significant for all outcomes in the upper tertile and for some outcomes in the lower and middle tertiles. The NNT for aâ€‰â‰¥â€‰5% improvement in %predicted FEV(1) was 1.90, for aâ€‰â‰¥â€‰5% body weight increase was 5.74, and to prevent a pulmonary exacerbation was 3.85.

### Authors' conclusions

This analysis suggests that the majority of patients with clinical characteristics similar to STRIVE/ENVISION patients have the potential to benefit from ivacaftor therapy.

http://onlinelibrary.wiley.com/doi/10.1002/ppul.23173/abstract;jsessionid=256A81277EE11C9BB7FEBC4D9F64CD0C.f04t01

### See also

Pediatr Pulmonol. 2015 May;50(5):447-55. Epub 2015 Mar 9.

### Keywords

Aminophenols; CFTR Modulators; Genetic Predisposition to Disease; pharmacological_intervention; VX-770; ivacaftor; G551D-CFTR;