primary studies - published RCT

A phase 3, randomized, double-blind, parallel-group study to evaluate tezacaftor/ivacaftor in people with cystic fibrosis heterozygous for F508del-CFTR and a gating mutation.

Code: PM33339768 **Year:** 2020 **Date:** 2020 **Author:** McKone EF

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

Randomized, double-blind, parallel-group, Phase 3 study

Participants

Patients heterozygous for F508del-CFTR and a gating mutation (F/gating genotypes).

Interventions

Enrolled participants entered a 4-week IVA run-in period to create a stable IVA baseline. Participants were then randomized to receive IVA or TEZ/IVA for 8 weeks in an active comparator treatment period (ACTP).

Outcome measures

The primary endpoint was absolute change in percent predicted forced expiratory volume in 1 second (ppFEV(1)). Key secondary endpoints were relative change in ppFEV(1) and absolute change in CF Questionnaire-Revised respiratory domain score. Secondary endpoints included absolute change in sweat chloride (SwCl) concentration, PK parameters, and safety. All endpoints except PK parameters and safety were assessed from baseline through Week 8.

Main results

Sixty-nine participants (92.0%) in the IVA group and 75 participants (98.7%) in the TEZ/IVA group completed treatment. No improvements were seen in efficacy endpoints from baseline at the end of the IVA run-in period through the end of the ACTP in the IVA group. No significant differences in ppFEV(1) or any key secondary endpoint were observed between the IVA and TEZ/IVA groups. SwCl concentrations decreased more in the TEZ/IVA versus IVA group during the ACTP. The safety profile and PK parameters of TEZ/IVA were consistent with those of previous studies in participants â‰¥12 years of age with CF.

Authors' conclusions

The dual-combination regimen of TEZ/IVA demonstrated clinical efficacy but did not have significantly greater clinical efficacy than IVA alone in participants â‰¥12 years of age with F/gating genotypes. However, as reported in other studies, TEZ/IVA was generally safe and well tolerated

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See also

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Keywords

Aminophenols; CFTR Modulators; Genetic Predisposition to Disease; pharmacological_intervention; VX-770; ivacaftor; VX-661; tezacaftor; Symdeko; Symkevi;