

POSTER PRESENTATION

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The familial Mediterranean fever (FMF) 50 score: does it work in a controlled clinical trial? Re-analysis of the trial of rilonacept for patients with colchicine resistant or intolerant FMF

P Hashkes^{1*}, B Huang²

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Background

The familial Mediterranean fever 50 score (FMF50) was recently devised to define response to treatment and as an outcome measure for clinical trials of FMF.

Objectives

To examine the performance of the FMF50 score in a previously published trial of rilonacept [1] for patients whose FMF was resistant or intolerant to colchicine.

Methods

We reanalyzed the data from the controlled trial of rilonacept vs. placebo in 14 patients with colchicine-resistant or intolerant FMF using the FMF50 score as the primary outcome. The FMF50 score required improvement by $\geq 50\%$ in five of six criteria (attack frequency, attack duration, global patient assessment, global physician assessment, frequency of attacks with arthritis, and levels of acute-phase reactants) without worsening of the sixth criterion.

Results

In the original trial rilonacept was considered effective according to the primary outcome measure (differences in the attack frequency) with eight analyzable patients considered responders and four as non-responders. According to the FMF50 score, only two participants would have been considered responders to rilonacept, and one to placebo. Only two participants had $\geq 50\%$ differences between rilonacept and placebo in five criteria.

The major explanation for non-response to treatment was that with rilonacept the duration of attack decreased by $\geq 50\%$ in only 2 participants and 5 participants had no attacks of arthritis either during screening (before randomization) or during treatment with rilonacept.

Conclusions

The proposed FMF50 score did not differentiate well between responders and non-responders compared to the a priori defined primary outcome measure in this successful controlled study and should be revisited prior to adoption as a primary outcome measure in multinational FMF trials.

Authors' details

¹Shaare Zedek Medical Center, Jerusalem, Israel. ²Cincinnati Children's Hospital Medical Center, Cincinnati, OH, USA.

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Reference

1. Hashkes PJ, Spalding SJ, Giannini EH, Huang B, Johnson A, Park G: Rilonacept for colchicine-resistant or -intolerant familial Mediterranean fever: a randomized trial. *Ann Intern Med* 2012, 157(8):533-541.

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¹Shaare Zedek Medical Center, Jerusalem, Israel

Full list of author information is available at the end of the article