



Guideline topic: Pharmacological management of asthma
Evidence table 4.3b: Ketotifen for exercise-induced asthma

Author	Year	Study type	Quality rating	Population	Outcomes measured	Effect size	Confidence intervals / p values	Comments
Dorward ¹	1982	Randomised, single blind, placebo controlled, cross-over. Single dosing with ketotifen 2mg. Sodium cromoglycate 120mg, ipratropium 120ug, clemastine 1.2mg.	+	7 patients with asthma, aged 11-35 years	Exercise-induced bronchoconstriction % fall in FEV1:	Placebo: 47% Ketotifen: 39% Clemastine: 27% Ipratropium: 23% Cromoglycate: 7%	NS p< 0.05 p< 0.05 p< 0.01	Ketotifen was no better than placebo in preventing EIA, in contrast to clemastine, ipratropium and sodium cromoglycate.
Petheram ²	1981	Randomised, double-blind placebo-controlled, cross-over. Single-dosing with ketotifen 1mg, 2mg and 4mg.	+	12 adults with asthma Mean age 27 years	Exercise-induced bronchoconstriction % fall in FEV1 % fall in PEF % fall in V50	No idfferences between ketotifen and placebo	NS	Ketotifen did not prevent EIA compared to placebo.

Tanser ³	1980	Randomised, double-blind, placebo-controlled, cross-over. 3 day treatment with ketotifen 1mg bd or placebo	++	17 asthma patients aged 14-60 years	Exercise-induced bronchoconstriction % fall in PEF:	Placebo: 15% Ketotifen: 18%	NS	No significant effect of ketotifen detected in preventing EIA/
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1. Dorward AJ, Patel KR. A comparison of ketotifen with clemastine, ipratropium bromide and sodium cromoglycate in exercise-induced asthma. Clin Allergy 1982;12(4):355-61.
2. Petheram IS, Moxham J, Bierman CW, McAllen M, Spiro SG. Ketotifen in atopic asthma and exercise-induced asthma. Thorax 1981;36(4):308-12.
3. Tanser AR, Elmes J. A controlled trial of ketotifen in exercise-induced asthma. Br J Dis Chest 1980;74(4):398-402.