Aim: The effectiveness of inhaled steroids as first-line therapy in the treatment of newly detected asthma in the open population.

Method: 54 adult asthma patients were selected for participation in a randomized, double-blind, placebo-controlled trial. All patients had been detected by means of a screening procedure in 155 randomly selected persons out of 10 general practices. They complied to the following inclusion criteria for the trial: (objective asthma criteria): FEV1 (forced expiratory volume in one second) < reference value minus 2 standard deviations on at least two separate assessments 3 months apart or a PC20 histamine < 2 mg/ml combined with a reversibility of the airway obstruction > 15% of the reference value. 31 subjects were willing to participate in this 1-year trial. The experimental group (15 patients) were treated with fluticasone propionate HCL 100 mg twice daily, the control group consisted of 16 patients. PC20, FEV1, and PC20 were monitored once every three months, symptoms and peakflow weekly. The influence of fluticasone on the effect parameters was estimated by repeated measurement analyses.

Results: Patient characteristics of both trial groups did not differ significantly at baseline. At the end of the trial the difference in FEV1 was 76 ml in favour of the experimental group (p = 0.02). In the experimental group the PC20 showed an improvement of 1.4 doubling doses (p = 0.002) during the trial. There was no significant improvement in symptoms or peakflow but a tendency of improvement in number of exacerbation.

Conclusion: Inhaled steroids have shown to be effective as first-line therapy in newly detected asthma in the open population.

Results of follow-up treatment after an acute asthma attack inhaled steroids may substitute oral therapy.

Conclusion: Half the dose of salbutamol via Turbuhaler was as effective as the full dose given via pMDI with spacer.