



Guideline topic: Pharmacological management of asthma
Evidence table 4.4j: Do Chromones work as first line preventor in children >5 years?

Author	Year	Study type	Quality rating	Population	Outomes measured	Effect size	Confidence intervals / p values	Comments
The CAMP study ¹	2000	Randomised, placebo controlled, partially blind study BUD 400mcg/d v nedocromil (NS) 16mg/d v placebo for 4-6 years	++	Children 5-12 years, N=1041, with mild to moderate asthma	Change in Lung function BHR Hospitalisations Urgent caregiver visits Beta2 rescue Courses prednisone % days needing extra medication symptoms	No significant difference NS v placebo Not significantly improved No sign. reduction Reduced, by 27% NS v placebo) BUD reduced by 43% v placebo Reduced; by 16% NS v placebo reduced	NS NS p=0.02 NS p=0.01 NS NS	Children with mild to mod asthma NS reduced urgent care visits and courses of prednisolone but NOT as effective as BUD. BUD give better asthma control than NS Not fully a double blind study – BUD v Placebo=blind NS v Placebo=blind, but BUD v NS would not be blinded. Both placebo

								groups were merged for analysis
Stelmach ²	2001	Double blind RCT, placebo controlled. NS 4mg BD v Placebo for 8 weeks	++	Children 9-16 y, N=39, moderate atopic asthma	Clinical symptoms (aggreg. score 0-9) Lung function and BHR Markers inflammation	Reduction compared to baseline but NOT compared with placebo FEV1 improved after NS and decreased with placebo	Comparison NS v placebo P=0.24 No comparison with placebo given. NS improved values compared with baseline	Children seemed to have improved with NS compared with baseline, while those on placebo have some deteriorating parameters. Unfortunately comparative stats. Between effects with NS v placebo are not always given.
Armenio ³	1993	Double blind, placebo controlled RCT. NS 4mg QDS v placebo for 12 weeks	++	Children, mild to moderate asthma, age 6-17 y. N=209.	Symptom, scores PEFR (daily)	Total symptom scores reduced by 50% with NS compared to 9% with placebo Significant treatment diff. NS v placebo (p<0.05) throughout the study		
Konig ⁴	1995	Placebo controlled RCT	+	93 mild to moderate asthma, aged 6-12	Symptoms	NS symptom free days =58% v placebo=	P=0.027	

	Nebubised NS v placebo for 24 weeks during the viral season	y.		45%	P=0.03
				Also improvement in : (NS v placebo)	P=0.027 NS
			Freq. and duration viral induced wheezing episodes	day time scores cough	P=0.033
			Beta2 agonist use	NS did not prevent viral exacerbations but had more rapid resolution	P=0.041
			PEFR	NS – 10% reduced use v placebo = 24% increase use. Improvement	

1. Long-term effects of budesonide or nedocromil in children with asthma. The Childhood Asthma Management Program Research Group. N Engl J Med 2000;343(15):1054-63.
2. Stelmach I, Jerzynska J, Brzozowska A, Kuna P. Double-blind, randomized, placebo-controlled trial of effect of nedocromil sodium on clinical and inflammatory parameters of asthma in children allergic to dust mite. Allergy 2001;56(6):518-24.
3. Armenio L, Baldini G, Bardare M, Boner A, Burgio R, Cavagni G, et al. Double blind, placebo controlled study of nedocromil sodium in asthma. Arch Dis Child 1993;68(2):193-7.
4. Konig P, Eigen H, Ellis MH, Ellis E, Blake K, Geller D, et al. The effect of nedocromil sodium on childhood asthma during the viral season. Am J Respir Crit Care Med 1995;152(6 Pt 1):1879-86.