

 Guideline topic: Pharmacological management of asthma Evidence table 4.11c: Add-on drugs for inhaled steroids: Anticholinergics								
Author	Year	Study type	Quality rating	Population	Outcomes measured	Effect size	Confidence intervals / p values	Comments
Macaluso ¹	1986	RCT	+	Asthma patients on theophylline	FEV1, GC, cough, dyspnoea	NS difference		
Mallfi & Turry	1986	RCT	+	? Asthma patients on other drugs?	FEV1, VC global score	??FEV1, VC global score	P<0.001	
Philip-Joet ²	1990	RCT	+	? asthma patients on other drugs	FEV, VC, PEFR, dyspnoea	NS difference		
Rebuck ³	1983	RCT	+	17 patients on ICS, of 22 who were on theophylline	FEV, VC, PEFR	Slight AVC FEV1	P<0.05	
Salorinne ⁴	1988	RCT	+	Asthma patients on ISST theophylline	FEV1, PEFR, symptoms suffered	PEFR 10-20 l/min	P<0.01	
Wolstenholme ⁵	1989	RCT	+	Asthma	FEV1,	NS		

				patients on DCSG + ICS	PEFR, symptomatic	difference		
--	--	--	--	------------------------------	----------------------	------------	--	--

1. Macaluso S, Del Torre L. Efficacy and compliance to prolonged Duovent treatment of bronchospasm. Comparison with salbutamol. *Respiration* 1986;50(Suppl 2):222-5.
2. Philip-Joet F, Reynaud-Gaubert M, Jirou-Najou JL, Arnaud A. Comparison of Berodual and salbutamol in asthma: a multicenter evaluation. *Respiration* 1990;57(6):379-83.
3. Rebuck AS, Gent M, Chapman KR. Anticholinergic and sympathomimetic combination therapy of asthma. *J Allergy Clin Immunol* 1983;71(3):317-23.
4. Salorinne Y, Ahonen A. Comparison of the bronchodilator effect of ipratropium bromide powder and two doses of ipratropium bromide aerosol in the treatment of asthma. *Curr Ther Res Clin Exp* 1988;43(6):1073-81.