



Guideline topic: Pharmacological management of asthma
Evidence table 4.7: High dose step-down

Author	Year	Study type	Quality rating	Population	Outcomes measured	Effect size	Confidence intervals / p values	Comments
Adults								
Reddel ¹	2000	RCT	+	61 adult asthmatics	Primary: bronchial reactivity Secondary: PEF, mean bud dose	NS difference: 3200 mg daily vs 1600 mg daily. 3.2 vs 3.0 doubling doses	P=0.07 95% ci	Double blind study for first 8 weeks only, then single blind for 8 weeks, open label for 56 weeks. No difference in outcome measures between 2 high doses of inhaled budesonide.
Tukiainen ²	2000	RCT, double blind, parallel group study. Budesonide 800mcg/day v 200mcg/day via Turbuhaler for 3	+	101 pts. Adults 18 – 68 years (mean approx 38yrs) diagnosed with asthma in last 3 months, symptoms	a)% predicted morning & evening PEFR at 12 weeks b)treatment difference for PEFR c)FEV1 d)day and night asthma sx	a)Approx 90% for both high and low dose b)am = 1.1% eve = 2.4% c) no difference.	P=0.49, CI- 2.1-4.3 P=0.10, CI- 0.5-5.3	Short term study thus exab. Rate not evaluated. Only significant difference was inflammatory markers

		months		of asthma < 6 months. Only requiring prn inhaled beta agonist	e)daily beta2agonist use f)bronchial hyperresponsive g)eosinophils	approx 89% for both d)no difference e)no difference f)no difference g)more of a decrease in high dose	P= 0.02	
Van der Molen ³	1998	RCT	++	84 adult asthmatics from 25 primary care centres.	Primary: am PEF Secondary: Symptom score, spirometry	NS difference 800 mg daily vs 200 mg daily inh budesonide after 4 weeks and at 8 weeks after 200mg daily in goth groups. PEF 27 l/min vs 38 l/min	NS 95% ci	No difference in outcome measures between low and moderate doses of inhaled budesonide.

1. Reddel HK, Jenkins CR, Marks GB, Ware SI, Xuan W, Salome CM, et al. Optimal asthma control, starting with high doses of inhaled budesonide. *Eur Respir J* 2000;16(2):226-35.
2. Tukiainen H, Taivainen A, Majander R, Poussa T, Svahn T, Puolijoki H, et al. Comparison of high and low dose of the inhaled steroid, budesonide, as an initial treatment in newly detected asthma. *Respir Med* 2000;94(7):678-83.
3. van der Molen T, Meyboom-de Jong B, Mulder HH, Postma DS. Starting with a higher dose of inhaled corticosteroids in primary care asthma treatment. *Am J Respir Crit Care Med* 1998;158(1):121-5.