

## OVER-THE-COUNTER (OTC) $\beta_2$ -AGONIST PURCHASE IS NOT ASSOCIATED WITH POOR ASTHMA CONTROL: A RANDOM, COMMUNITY STUDY

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Purchase of OTC  $\beta_2$ -agonists has been associated with suboptimal asthma treatment.

**Aim:** To compare the asthma control of those purchasing OTC  $\beta_2$ -agonists with those purchasing with a prescription.

**Study Design:** Up to 10 consecutive adults purchasing  $\beta_2$ -agonists were recruited from each of 43 randomly selected Victorian urban and rural pharmacies. Participants underwent spirometry and completed a modified European Respiratory Health, Juniper Asthma Control, Marks' Quality of Life and adherence questionnaires.

**Results:** 316 individuals were recruited (65% participation rate), of whom 191 (60%) purchased a  $\beta_2$ -agonist with a prescription. Thirty-four participants (11%) were judged to have COPD by evidence of >10 pack year smoking history and irreversible obstructive lung function deficit. Of the remainder, 166(59%) had a preventive asthma medication of whom 133(81%) reported medication use in the last 7 days. There were no significant differences between  $\beta_2$ -agonist purchasers with and without prescription as shown below:

Reliever	FEV <sub>1</sub> % predicted	AQOL Median	Symptoms Score
Script (n=159)	83.2±23.3	0.86	1.64±1.05
OTC (n= 120)	83.7±21.3	0.79	1.46±0.84

**Conclusion:** In this representative state-wide sample, OTC  $\beta_2$ -agonist purchase was not a predictor for worse asthma control, quality of life or lung function.

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