

# LiteAire® Collapsible MDI Holding Chamber

## Dual-Valved Cardboard Spacer



LiteAire®'s unique dual-valved MDI holding chamber design delivers pop-up convenience and effective drug output at a fraction of the cost.

**Dual Valved  
Recyclable  
Labeled for One Weeks Use  
Pop-Up to Use  
No Natural Latex  
Portable/Stores Flat**



### The LiteAire delivers true value when used in:

#### **Emergency Department/ Outpatient Clinic:**

For patients requiring the use of a holding chamber for immediate treatment. The LiteAire spacer with MDI for beta agonist delivery in the treatment of acute asthma in an emergency department setting has been shown to be as clinically effective as beta agonist delivery with a nebuliser<sup>1</sup>

#### **Pulmonary Function Testing:**

Clean, recyclable, ready to use in a truly single patient use environment; reduces the risks of patient cross-contamination; designed to accept all MDI's.

#### **Short-Term Respiratory**

**Infections:** A cost effective treatment method that meets the short-term needs of the acute respiratory patient.

**Patient Compliance:** Complies with single patient use labeling and regulations, enhanced infection control and greater patient compliance with added convenience and portability.

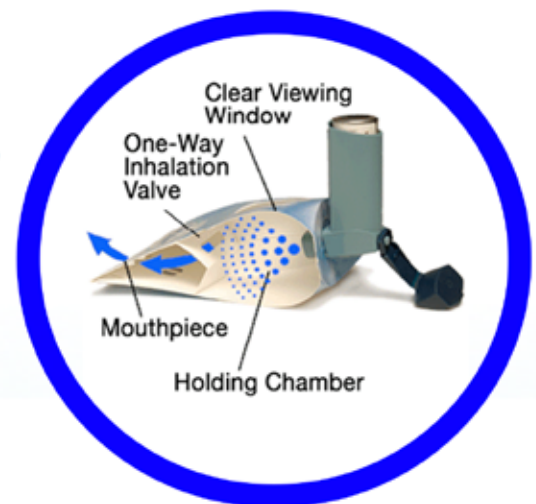
**In most clinical settings, the LiteAire MDI holding chamber can reduce costs by replacing existing rigid plastic holding chambers or inefficient spacers with a cardboard alternative. This unique design allows the LiteAire to be reused by a patient over multiple doses and meets and often exceeds the performance of plastic holding chambers.**

# Clinical Efficacy of the LiteAir Cardboard Spacer

The LiteAir Cardboard Spacer is a technically innovative and clinically proven product which we launched in Australia in 2007 having been manufactured in its current format since 2006.

The LiteAir recyclable spacer is a viable alternative and has significant advantages over other spacers:

- ✓ **Efficacy:** Proven clinical efficacy of the LiteAir spacer.
- ✓ **Cost:** The cost of autoclaving re-usable spacers on average is \$4.60 per spacer including staff time.<sup>(1)</sup>
- ✓ **Storage:** Compared to the significant storage space required for large volume spacers the LiteAir Cardboard Dispenser Box holds 25 LiteAir spacers and is the size of a tissue box.
- ✓ **Recyclable:** The LiteAir spacer is made from recyclable cardboard.
- ✓ **Ease of Use:** Patients may have difficulty coordinating their inhaler technique with large volume spacers versus small volume spacers - this is particularly true in children and the elderly.
- ✓ **Preparation:** The LiteAir recyclable spacer is ready to use immediately and requires no priming.
- ✓ **Convenience:** The LiteAir spacer is extremely portable and stores flat.



This experience and expertise in manufacturing ensures you receive the highest quality product for clinical use.

## EFFICACY AND COST COMPARISONS OF BRONCHODILATOR ADMINISTRATION BETWEEN METERED DOSE INHALERS WITH DISPOSABLE SPACERS AND NEBULIZERS FOR ACUTE ASTHMA IN AN INNER-CITY ADULT POPULATION

The Journal of Emergency Medicine, 2009

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**Background:** Despite demonstration of equivalent efficacy of beta agonist delivery using a metered dose inhaler (MDI) with spacer vs. nebulizer in asthma patients, use of a nebulizer remains standard practice.

**Objectives:** We hypothesize that beta agonist delivery with a MDI/disposable spacer combination is an effective and low cost alternative to nebulizer delivery for acute asthma in an inner-city population. **Methods:** This study was a prospective, randomized, double-blinded, placebo-controlled trial with 60 acute asthma adult patients in two inner-city emergency departments.

**Subjects:** (n= 60) received albuterol with either a MDI/spacer combination or nebulizer. The spacer group (n= 29) received albuterol by MDI/spacer followed by placebo nebulization. The nebulizer group (n=29) received placebo by MDI/spacer followed by albuterol nebulization. Peak flows, symptom scores, and need for rescue bronchodilator were monitored. Median values were compared with the Kolmogorov-Smirnov test.

**Results:** Patients in the two randomized groups had similar baseline characteristics. The severity of asthma exacerbation, median peak flows, and symptom scores were not significantly different between the two groups. The median (inter-quartile range) improvement in peak flow was 120 (75-180) L/min vs. 120 (80 -155) L/min in the spacer and nebulizer groups, respectively (p= 0.56). The median improvement in the symptom score was 7 (5-9) vs. 7 (4 -9) in the spacer and nebulizer groups, respectively (p= 0.78). The median cost of treatment per patient was \$10.11 (\$10.03-\$10.28) vs. \$18.26 (\$9.88 -\$22.45) in the spacer and nebulizer groups, respectively (p < 0.001).

**Conclusion:** There is no evidence of superiority of nebulizer to MDI/spacer beta agonist delivery for emergency management of acute asthma in the inner-city adult population. MDI/spacer may be a more economical alternative to nebulizer delivery.

(1) Laboratory usage habits and delivered salbutamol dose of spacers available in Australia and New Zealand - Presented by Graham Hall, Respiratory Medicine, Princess Margaret Hospital and School of Paediatric and Child Health, University of Western Australia at the TSANZ Conference in Melbourne, April 2008.

### Ordering Information

Single 25-Count Dispenser Box (PART NO TH1304)  
Case of Four 25-Count Dispenser Boxes (PART NO TH1306)

For a complimentary evaluation of the LiteAir disposable spacer in your health-care facility please contact our office on 1300 136 855