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**Ordering Information**

**OptiChamber Drug Delivery Products**

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<th>Units per Case/ Packaging</th>
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**Drug Delivery Products for the European Union (EU)**

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*These products are CE-marked with labeling in multiple languages.

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**Product Specifications**

**Valved Holding Chamber For Use With Metered Dose Inhalers**

The OptiChamber mouthpiece offers a standard 22 mm O.D. for tracheal tube and other connections.

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**Detachable masks are available packaged separately or with OptiChamber Advantage.**

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**Footnotes:**

- **Envisioning tomorrow. Improving today.**

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**Customer Service:** 800-962-1266

**Global Headquarters:** Pittsburgh, Pennsylvania USA 724-387-4000

**www.respironics.com**

**Respironics Europe:** +33-1-56-60-19-80

**Respironics Asia Pacific:** +852-234-342-18

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**DO MC1 4101907 PN 1056584**
Performance Characteristics of the OptiChamber® Advantage Valved Holding Chamber (VHC)

Performance Characterization of pMDI-Delivered HFA Albuterol from Two Valved Holding Chambers

Main Findings:
• The fine particle dose output of HFA Ventolin and HFA Proventil is directly related to the flow rate tested.
• There is no significant difference in the performance of the OptiChamber Advantage and the AeroChamber Plus.

Key Benefit of OptiChamber Advantage:
• Designed for both children and adults, providing optimal performance when used with frequently prescribed asthma medications.

Performance Characterization of pMDI-Delivered HFA Proventil from Two Valved Holding Chambers

Main Findings:
• There is no significant difference in the performance of the OptiChamber Advantage and the AeroChamber Plus.

Key Benefit of OptiChamber Advantage:
• Delivers a clinically effective dose output of the inhaled corticosteroid fluticasone for the enhanced control of asthma related symptoms.

Bacterial Surveillance and Cost-Effectiveness of the Common Canister Protocol (CCP) When Using the Respironics OptiChamber

Main Findings:
• The CCP appears to be a safe method for administering pMDI medications when this VHC is used.
• CCP offers a significant financial incentive (~57% savings) to hospitals adhering to this treatment protocol.

Key Benefit of OptiChamber Advantage and CCP:
• Offers a safe and financially worthwhile alternative to hospitals using the single-patient-use canister method with VHC treatments.

Dead Space Comparison between the OptiChamber Advantage Mask and the AeroChamber Plus Mask
E. Lieberman. Data on File, Respironics NJ.

This paper assesses the dead space volume of VHC masks.

Main Finding:
• The dead space volume of the OptiChamber Advantage Mask (medium) is 32% less than the AeroChamber Plus Mask (medium).

Key Benefit of OptiChamber Advantage:
• Reduced dead space volume increases drug delivery.*

* S. Shah, A. Berlinski MD, B. Rubin MD MBA FAARC. Force-Dependent Static Dead Space of Face Masks Used With Holding Chambers. Respiratory Care; 51; 140-144.
Performance Characteristics of the OptiChamber® Advantage Valved Holding Chamber (VHC)

**Performance Characterization of pMDI-Delivered HFA Albuterol from Two Valved Holding Chambers**


**Performance Characterization of pMDI-Delivered HFA Proventil from Two Valved Holding Chambers**


These posters assess VHC performance with commonly prescribed short-acting beta agonists at different flow rates.

**Main Findings:**
- The fine particle dose output of HFA Ventolin and HFA Proventil is directly related to the flow rate tested.
- There is no significant difference in the performance of the OptiChamber Advantage and the AeroChamber Plus™.

**Key Benefit of OptiChamber Advantage:**
- Designed for both children and adults, providing optimal performance when used with frequently prescribed asthma medications.

**Performance Characterization of pMDI-Delivered Fluticasone from Two Valved Holding Chambers**

H. Wu Ph.D., R. Dalby Ph.D. Data on File, Respironics NJ.

This poster assesses VHC performance using fluticasone at a flow rate of 30 liters per minute (lpm).

**Main Finding:**
- There is no significant difference in the performance of the OptiChamber Advantage and the AeroChamber Plus.

**Key Benefit of OptiChamber Advantage:**
- Delivers a clinically effective dose output of the inhaled corticosteroid fluticasone for the enhanced control of asthma related symptoms.

**Bacterial Surveillance and Cost-Effectiveness of the Common Canister Protocol (CCP) When Using the Respironics OptiChamber**


This poster evaluates the safety and cost savings associated with implementing the common canister protocol (CCP).

**Main Findings:**
- The CCP appears to be a safe method for administering pMDI medications when this VHC is used.
- CCP offers a significant financial incentive (~57% savings) to hospitals adhering to this treatment protocol.

**Key Benefit of OptiChamber Advantage and CCP:**
- Offers a safe and financially worthwhile alternative to hospitals using the single-patient-use canister method with VHC treatments.

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This paper assesses the dead space volume of VHC masks.

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| ADULT MASK/LARGE                   | 10                        | HS8130EU-001|

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The OptiChamber Advantage provides reliable and efficient drug delivery with ease. Featuring a valve sensitive enough to move under the gentlest breath, the OptiChamber Advantage helps to deliver the medication where it is needed most.