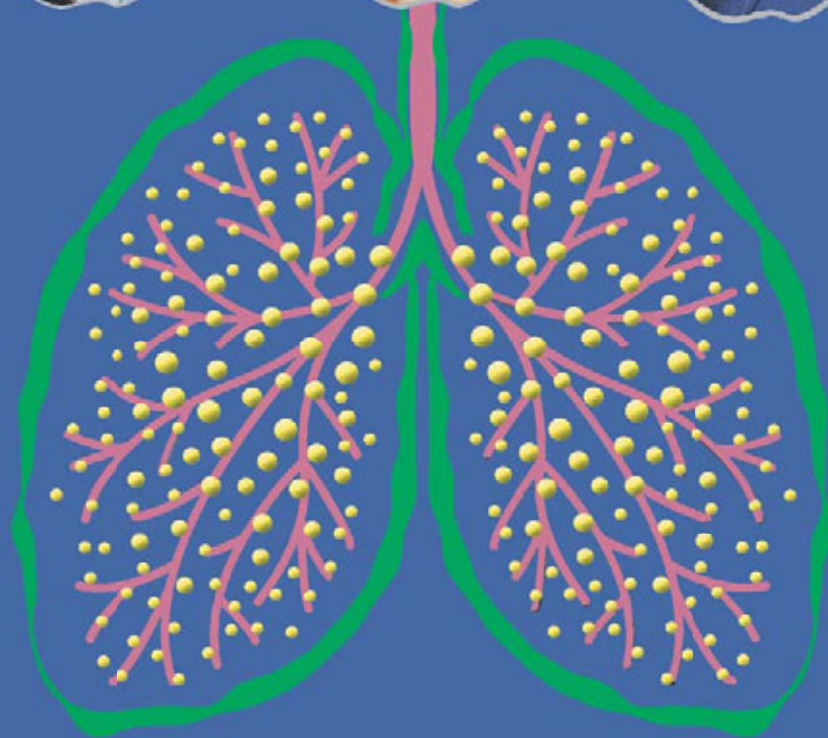


# Consistent Delivery

No static about it.

The **PARI VORTEX™** Non Electrostatic Valved Holding Chamber



[www.PARI.com](http://www.PARI.com)



*Specialists in  
effective inhalation*



## Introducing the new PARI VORTEX™ Non Electrostatic Valved Holding Chamber. It's a revolutionary breakthrough in holding chamber technology.

### No Static About It

At PARI, our goal is to make a difference in the lives of people who are affected by respiratory disease. We're accomplishing this by developing efficient products that deliver aerosol medication in the most effective way. The **PARI Vortex™** is the first non electrostatic valved holding chamber available in North America, featuring an aluminum holding chamber that has no electrostatic charge.

### Why Should You Care About Static?

Because electrostatic charge dramatically influences the amount of medication available for inhalation.<sup>1</sup> Conventional plastic holding chambers retain a constant electrostatic charge that attracts and traps aerosol particles onto the wall of the chamber, reducing the amount of medication available for inhalation.<sup>2</sup>

### Optimal Delivery

The non electrostatic chamber of the **PARI Vortex™** ensures that patients receive a more consistent medication dose – treatment after treatment, day after day. In addition, the **PARI Vortex™** features a unique cyclonic inspiratory flow pattern, which further enhances aerosol delivery for patients with low tidal volume. This means more

aerosol particles stay in suspension and are available for inhalation. It's optimal delivery, at the patient's fingertips.



### User Friendly

Numerous studies with conventional plastic holding chambers have shown that when there is a delay in time between MDI actuation and inhalation, less medication is available to the patient.<sup>3,4</sup> Non electrostatic metal holding chambers extend the amount of time MDI users have to inhale their medication.<sup>5</sup> This makes the **PARI Vortex™** easier to use for children, as well as adults, since it requires less technique-dependent coordination.

<sup>1</sup> Wildhaber JH, Aerosoltherapie. Schweiz Med Wochenschr 1998;128:1223-1228.

<sup>2</sup> Wildhaber JH, Devadason SG, Eber E, Hayden MJ, Everard ML, Summers QA, Les

<sup>3</sup> Berg E, Nikander K, Morra L, Smaldone GC, Impact of inspiratory delay and valved

<sup>4</sup> Bisgaard H, Anhoj J, Klug B, Berg E, A non electrostatic spacer for aerosol delivery.

<sup>5</sup> Bisgaard H, A metal aerosol holding chamber devised for young children with asthma

## Important Features and Benefits of the PARI VORTEX™:

Non electrostatic metal chamber improves dose delivery consistency.

Dishwasher safe and affordable.

MDI receptacle creates a cyclonic inspiratory flow pattern optimizing aerosol delivery.

Patent-pending duckbill valve requires minimal inspiratory effort to open and close.

Unique design reduces oropharyngeal deposition.

Universal receptacle fits all major brands of MDIs.

Clear mouthpiece allows for visual confirmation of the drug delivery into the chamber.

Latex-free, compact and portable.

Tapered, conical mouthpiece ensures uniform medication flow.

### Great Benefits and No Extra Charge

Consistency. Simplicity. Optimal drug delivery. It's never been easier to improve the treatment of your patients than by prescribing the new **PARI Vortex™**. It's the holding chamber with all the benefits and no extra charge.



**PARI Vortex™ with medium duck mask**  
For children age 3+  
NDC# 83490-0510-03  
PARI #51F5200



**PARI Vortex™ valved holding chamber**  
NDC# 83490-0510-01  
PARI #51F5000



**PARI Vortex™ with adult mask**  
NDC# 83490-0510-04  
PARI #51F5300



**PARI Vortex™ with small duckling mask**  
For toddlers age 1-2 years  
NDC# 83490-0510-02  
PARI #51F5100



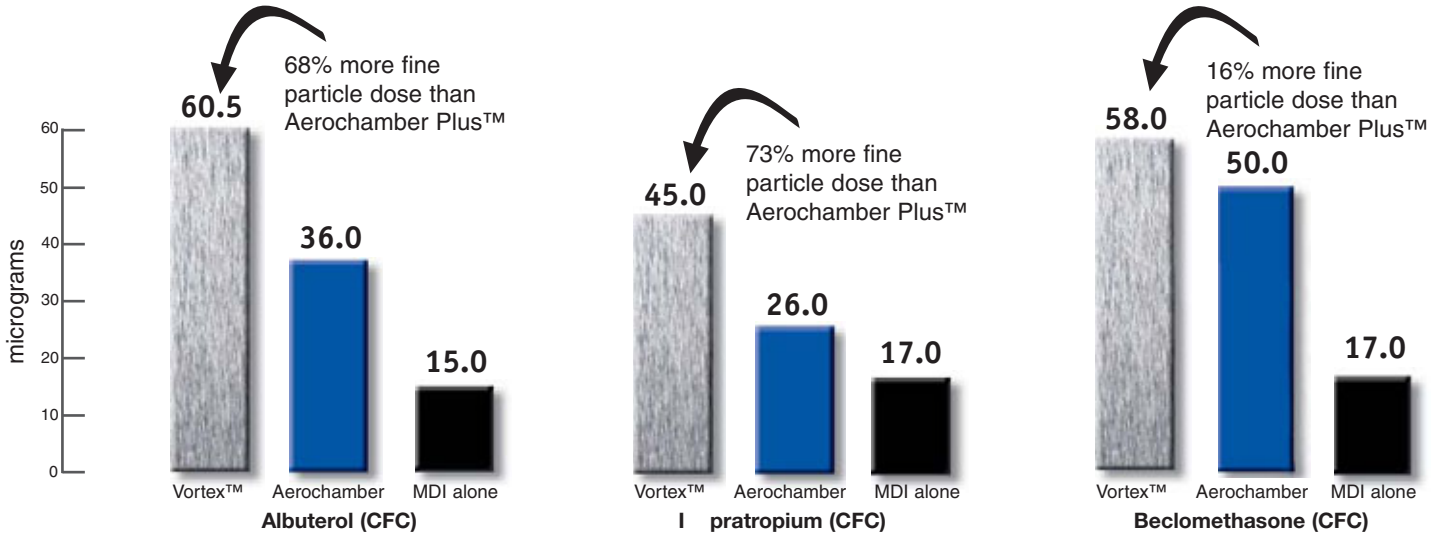
**PARI Vortex™ hospital package**  
NDC# 83490-0510-05  
PARI #51H5400

# VORTEX™

**Non Electrostatic Valved Holding Chamber**

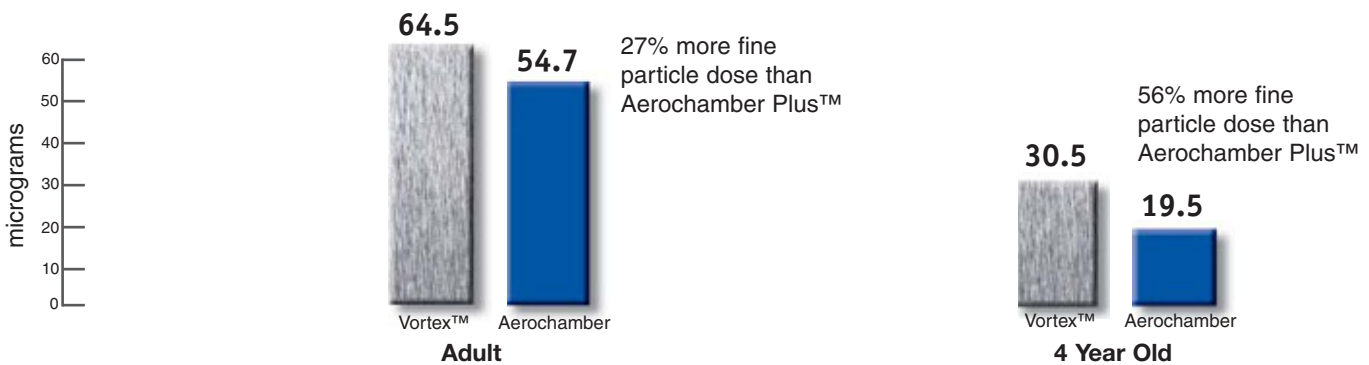


### Respirable Dose Delivered\*



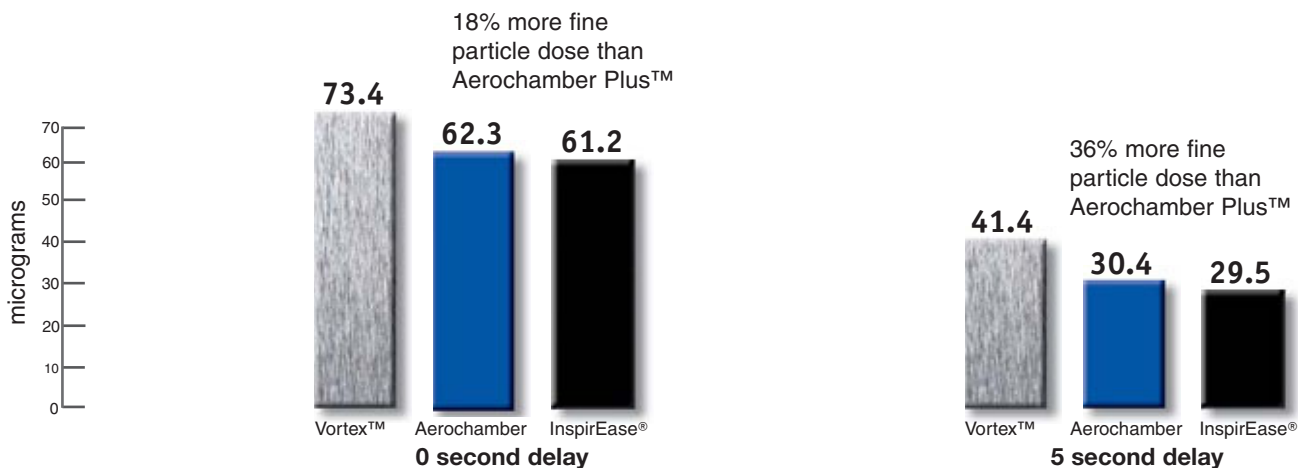
\*Respirable Dose=particles from 0.45 to 5.8 microns Source: Nelson Laboratories, Holding Chamber Comparative and Characterization Study, Protocol No. 200133408-02, 2002.

### Inhaled Beclomethasone (HFA) Dose Delivery<sup>1</sup>



Single breath of an adult with mouthpiece, 28.3 liters/minute. Sinusoidal tidal breathing pattern of a 4 year old with face mask, 230 ml, 24 breaths/minute.

### Time Delay of Inhaled Beclomethasone (HFA) after MDI Actuation vs. Dose Delivery<sup>1</sup>



<sup>1</sup> Zuberbuhler P, Wang Z, Finlay W, In vitro testing of new non-electrostatic holding chamber with hydrofluoralkane salbutamol and beclomethasone inhalers. CHEST 2002; 122:185S. Vortex™ is a trademark of PARI Respiratory Equipment, Inc. AeroChamber Plus™ is a trademark of Monaghan Medical Corporation. InspirEase® is a trademark of Key Pharmaceuticals, Inc.



Specialists in effective inhalation

PARI RESPIRATORY EQUIPMENT, INC.  
2943 Oak Lake Blvd. Midlothian, VA 23112-3998  
USA and CANADA 1.800.FAST.NEB (327.8632)  
Tel 1.804.253.PARI (7274) Fax 1.800.727.4112

www.PARI.com  
E-mail Vortex@PARI.com  
Respiratory CEU programs available  
© 2003 PARI Respiratory Equipment, Inc.  
ML-51-002 Rev B 08/03

