# **NEBUTECH® NEBULIZER**





# **NEBUTECH® HIGH-PERFORMANCE NEBULIZER**

Every breath counts in aerosol delivery. The NebuTech<sup>®</sup> High-Performance Nebulizer rapidly delivers effective therapy using its unique bolus aerosol delivery pattern. Combined with the high pressure Salter Elite compressor, the NebuTech helps patients stay compliant to their prescribed aerosol therapy. NebuTech is the fastest growing jet nebulizer in hospitals, making the transition to home treatments easier.

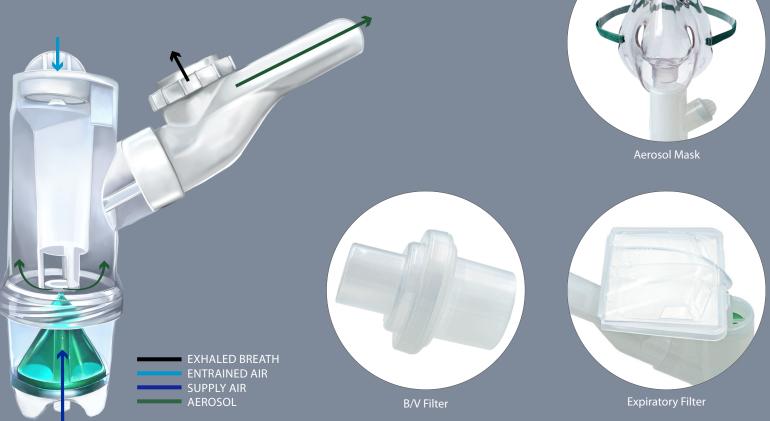


- · Screw on cap provides leak proof seal
- Safety PEP allows improved ventilation of the lungs during therapy
- Expiratory Filter Set helps protect against exposure to potential exhaled medication



# VERSATILITY

Patient-friendly add-on features provide a flexible and improved respiratory experience that is unique to each patient. NebuTech<sup>®</sup> allows for multiple patient settings, options and positions.



## **FEATURE OPTIONS**



## SAFETY PEP

Features include 10 settings selection, visible numbers with click-lock adjustment, maximum 20 cm  $H_2O$  relief valve, and manometer port. Allows PEP therapy simultaneously with aerosol treatment.



## CONE

The cone creates a greater surface area to maximize capillary action and enables operation at various angles.



## COMPRESSOR

The lightweight portable and quiet Salter AIRE Elite compressor is designed for rapid effective aerosol delivery Compressors are available in two voltage choices and come paired with either T-Piece or NebuTech nebulizers.

# **FILTER OPTIONS**

## **B/V FILTER**

Bacterial and viral (B/V) filters help reduce the transmission of microbes and other particulate matter in the breathing system. Providing highly efficient filtration, the B/V filters are lightweight and shaped to reduce drag on the breathing system while ensuring patient comfort.

- Low expiratory resistance less 1.0 cm  $H_2O$  pressure change from before to after treatment, maximum resistance after treatment was 2.8 cm  $H_2O$
- The filter should be replaced every 24 hours
- The Safety PEP cannot be used in conjunction with the BV Filter

## FILTER EFFICIENCY\*

| Media Bacterial Filtration<br>(BFE ASTM F2101 Nelson Labs)  | 99.99% |
|---|--------|
| Media Viral Filtration<br>(VFE ASTM F2101 Nelson Labs)  | 99.99% |
| Filter Efficiency @ 30 L/min<br>(using TSI 8130 and ISO23328-<br>1:2008, Also known as Salt Test) | 99.30% |

\*SunMed Bacterial/Filter media was tested to VFE Efficiency 99.99% and BFE Efficiency 99.99% ASTM Standards by Nelson Laboratory. Filter efficiency may vary during use and should be replaced if filter becomes visibly soiled, resistance to flow reaches an unacceptable limit or after 24 hours of active use.



8990 Nebulizer

## **EXPIRATORY FILTER**

The filter set fits on the exhalation valve of the mouthpiece to reduce the amount of aerosolized medication released in the atmosphere. Thereby providing safety to caregivers from exposure to potential exhaled medication.

- Disposable filter set or reusable filter set with replacement filter pads
- · Easy to mount to exhalation valve
- · Reduces exposure to aerosolized medications



8960 Nebulizer

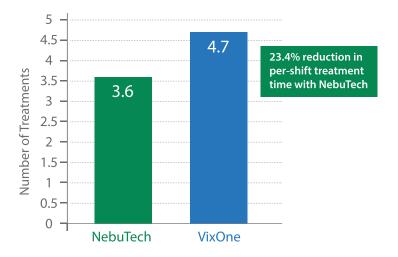


# EFFICIENCY

Hospitals today not only demand products that deliver improved patient outcomes, they need these results in a cost-efficient manner. NebuTech®offers the efficiency you need.

- Less medicine waste with one-way valving<sup>2</sup> and closed-chamber system
- More drug to patient faster<sup>1,4</sup>
- Reduced treatment time<sup>1,3,4,6</sup>
- Enhanced productivity and workflow: RT staff saves time for other value-added, patient-focused activities<sup>3,4,5,6,7</sup>

#### Lower Per-Shift Treatment Time for Required Procedures





## NEBUTECH®MAKES IT EASY TO PROVIDE CONSISTENCY IN CARE

NebuTech spans the full continuum of patient care from pediatric to elderly. Using similar products from hospital to home helps ensure better patient compliance with treatments.

References: 1. Misra C. Improved aerosol delivery characteristics of a breath enhanced nebulizer over a breath actuated nebulizer. 2. Data on file. Salter Labs; Arvin, CA. 3. Rish J, Timmons I. Comparison of the efficacy of two nebulizers in treating acute exacerbation of COPD in the emergency department. Respir Ther. 2013;8(6). 4. Hoisington ER, Chatburn RL, Stoller JK. A comparison of respiratory care workload with 2 different nebulizers. Respir Care. 2009;54(4):495-499. 5. Wilkinson M. Comparison of nebulizers in ED in pediatric asthma patients. Abstract 4139.301. Presented at Pediatric Academic Societies (PAS) 2016 annual meeting. May 2016. Baltimore, MD. 6. Myers TR, Chatburn R, Rogers M, Camasson-Richardson K, Kerchmar C. Does nebulizer brand make a clinical difference in the emergency room management of pediatric asthma? Respir Care. 1999;44(10):1278. 7. Lantz G. Labor Savings Using the Salter NebuTech\*Nebulizer. Data on file. Salter Labs; Arvin CA.

# **PERFORMANCE / DESIGN**

Innovative technology makes the difference when choosing the right nebulizer, NebuTech® sets itself apart.

- Front-loaded bolus dosing during critical first one-third of each breath<sup>1</sup>
- Increased drug deposition deep into the lungs<sup>1</sup>
- High quality of aerosol 80% of particles in the respirable range (<5 microns)<sup>2</sup>



## **OUTCOMES VS 1-HOUR CONTINUOUS NEBULIZER**

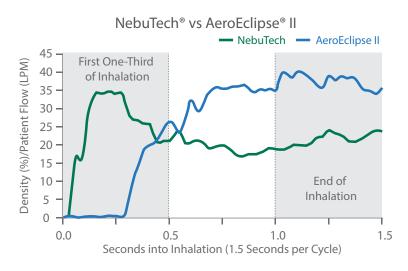
In an emergency department (ED) study of children with moderate to severe asthma exacerbations, breath-enhanced NebuTech®helped anxious asthmatic patients and their parents spend less time in the ED<sup>5</sup>:

- ED length of stay (LOS)<sup>2</sup> was reduced by over 44 minutes (p<0.001)
- Shorter time between assessments
- Quick action upon symptom resolution
- · Similar safety profile



Zero readmissions for patients treated with NebuTech, even though they presented with a PAS score of 3 or higher.

## **AEROSOL DELIVERY**



#### TOTAL DRUG DOSE (ug/min)

| PERFORMANCE                | NEBUTECH®    | AEROECLISPE® II |
|----------------------------|--------------|-----------------|
| First 250 mL of Inhalation | 249 ± 40     | 73 ± 20         |
| Entire Inhalation Cycle    | $469 \pm 64$ | 309 ± 33        |



1 Photo of AeroEclipse nebulizer courtesy of Monoghan Medical 2. LOS = start of therapy to discharge decision

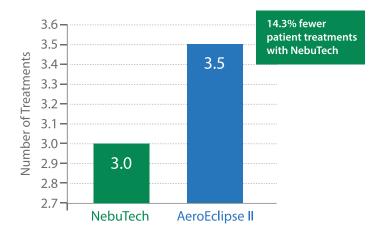


## **OUTCOMES VS. AEROECLIPSE® II**

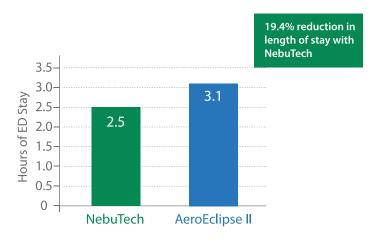
In two large hospital evaluations, NebuTech®performed extremely well compared with AeroEclipse® II across several critical performance factors<sup>1,3</sup>:

- Significantly fewer number of patient treatments<sup>3</sup>
- Reduced overall length of patient stay<sup>3</sup>, which can help reduce per-shift treatment time of healthcare professional

#### Median Number of Treatments in Emergency Department



#### Length of Emergency Department Stay



## **OUTCOMES VS. STANDARD T-PIECE**

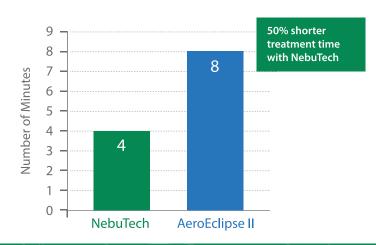
NebuTechdemonstrated significant clinical outcome improvements, which translate into financial benefits.

- Significantly shorter length of patient stay in the emergency department
- Significantly reduced hospital admissions
- NebuTech<sup>®</sup> Reduced Hospital Admissions by <sup>6</sup>:
  - 36% vs. Circulaire (p=0.02)
  - 50% vs. Acorn (p=0.02)

## SPEED

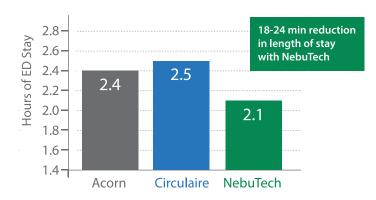
Treatment time is important to both you and your patient. In two independent evaluations, NebuTech delivered an advantage compared with other competing products<sup>3,4</sup>:

- Significantly shorter treatment times, with an average of 4 minutes per treatment<sup>3</sup>
- 82% of treatments completed in less than 3 minutes<sup>4</sup>



#### **Treatment** Time

#### Pediatric Asthma: Length of Emergency Department Stay<sup>6</sup>



# NEBUTECH® HIGH-PERFORMANCE NEBULIZER WITH EXPIRATORY BACTERIAL/VIRAL FILTER Disposable, single patient, multiple use

| ITEM        | DESCRIPTION  | PATIENT INTERFACE                                  | CONNECTOR          | SUPPLY TUBE | PK |
|-------------|--|--|--------------------|-------------|----|
| 8990-7-50   | Disposable Nebulizer with Expiratory<br>Bacterial/Viral Filter | One-Way Valve Mouthpiece                           | Trumpet            | 7′ (2.1 m)  | 50 |
| 8990TG-7-50 | Disposable Nebulizer with Expiratory<br>Bacterial/Viral Filter | One-Way Valve Mouthpiece                           | Female Thread Grip | 7′ (2.1 m)  | 50 |
| 8992-7-50   | Disposable Nebulizer with Expiratory<br>Bacterial/Viral Filter | One-Way Valve Mouthpiece and Adult<br>Aerosol Mask | Trumpet            | 7′ (2.1 m)  | 50 |
| 8992TG-7-50 | Disposable Nebulizer with Expiratory<br>Bacterial/Viral Filter | One-Way Valve Mouthpiece and Adult<br>Aerosol Mask | Female Thread Grip | 7′ (2.1 m)  | 50 |
| 8995-0-50   | Expiratory Bacterial/Viral Filter                              | -  | -                  | -           | 50 |

SunMed Bacterial/Filter media was tested to VFE Efficiency 99.9978% and BFE Efficiency 99.9999% ASTM Standards by Nelson Laboratory. Filter efficiency may vary during use.

#### NEBUTECH® HIGH-PERFORMANCE DISPOSABLE NEBULIZER FOR HOSPITALS

#### Single patient, multiple use

| ITEM          | DESCRIPTION                             | PATIENT INTERFACE   | CONNECTOR          | SUPPLY TUBE | РК |
|---------------|---|---|--------------------|-------------|----|
| 8960-7-50**   | Disposable Nebulizer                    | One-Way Valve Mouthpiece  | Trumpet            | 7′ (2.1 m)  | 50 |
| 8980-0-25***  | Disposable Expiratory Filter Set        | -   | -                  | -           | 25 |
| 1301-0-25     | Salter Safety PEP Device With Nose Clip | -   | -                  | -           | 25 |
| 1301-0-10     | Salter Safety PEP Device With Nose Clip | -   | -                  | -           | 10 |
| 8960-PEP-7-25 | Disposable Nebulizer                    | One-Way Valve Mouthpiece and Salter<br>Safety PEP Device w/ Nose Clip | Trumpet            | 7′ (2.1 m)  | 25 |
| 8984-7-50     | Disposable Nebulizer                    | Adult Aerosol Mask  | Trumpet            | 7′ (2.1 m)  | 50 |
| 8960TG-7-50   | Disposable Nebulizer                    | One-Way Valve Mouthpiece  | Female Thread Grip | 7′ (2.1 m)  | 50 |
| 8984-7-50     | Disposable Nebulizer                    | Adult Aerosol Mask  | Female Thread Grip | 7′ (2.1 m)  | 50 |
| 8967-7-50     | Disposable Nebulizer                    | Pediatric Valved Aerosol Mask   | Trumpet            | 7′ (2.1 m)  | 50 |
| 8982-7-50     | Disposable Nebulizer                    | One-Way Valve Mouthpiece and<br>Expiratory Filter Set                 | Trumpet            | 7′ (2.1 m)  | 50 |

#### NEBUTECH® HIGH-PERFORMANCE REUSABLE NEBULIZER\* FOR HOMES

| ITEM          | DESCRIPTION   | PATIENT INTERFACE   | CONNECTOR | SUPPLY TUBE | PK |
|---------------|---|---|-----------|-------------|----|
| 8660-7-50**   | Reusable Nebulizer                                  | One-Way Valve Mouthpiece  | Trumpet   | 7′ (2.1 m)  | 50 |
| 8680-0-25***  | Reusable Expiratory Filter Set                      | -   | -         | -           | 25 |
| 8685-0-1      | Replacement Filter Media                            | -   | -         | -           | 30 |
| 8672-7-25     | Reusable Nebulizer                                  | One-Way Valve Mouthpiece and Salter<br>Safety PEP Device w/ Nose Clip | Trumpet   | 7′ (2.1 m)  | 25 |
| 8352-8660-7-1 | Salter Aire Elite Compressor,<br>Reusable Nebulizer | One-Way Valve Mouthpiece  | Trumpet   | 7′ (2.1 m)  | 1  |

U.S. Patent No. \*RE33,717, 5,584,28; \*\*6,176,234 | \*\*\*Other U.S. and worldwide patents pending

# SunMed