

medical **products** research



INSPIRATION  
IN RESPIRATORY  
THERAPY



## FREE ASPIRE ADVANCED

The gentle solution for airway clearance.

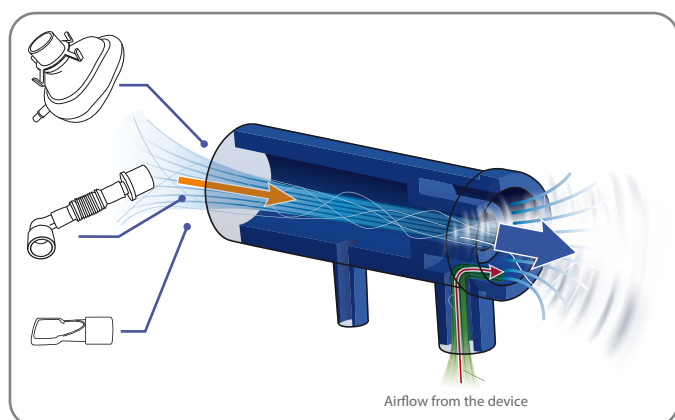
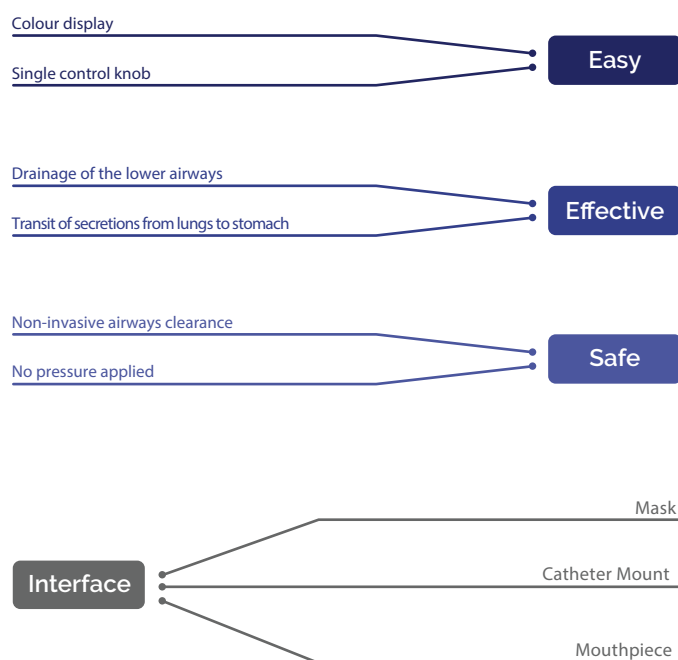
**FREE ASPIRE ADVANCED** is a medical device for the non-invasive removal of tracheobronchial secretions, designed for adult and paediatric patients with reduced or absent cough capacity.

# FREE ASPIRE ADVANCED

## Operating principle

**FREE ASPIRE ADVANCED** employs EFA® (Expiratory Flow Accelerator) patented technology. Through an acceleration of the expiratory flow, the tracheo-bronchial secretions reach the upper airways, in complete safety and without any contraindications, so allowing the patient to expel them or ingest them if unable to eject them spontaneously.

Therapy with **FREE ASPIRE ADVANCED** is comfortable and respects the patient's natural breathing pattern. Patients feel no unpleasant sensation during the therapy.



## Clinical evidences

Expiratory Flow Accelerator (EFA) technique on mucus hypersecretion of COPD patients with reduced cough efficiency after a severe exacerbation.

E. Zampogna, E. Crisafulli, M. D'Andria, C. Gregorini, G. Bellelli, E. Lucini, S. Faverzani, D. Visca, A. Spanevello, N. Schiavone, A. Chetta, A. Zanini Integrative Clinical Medicine, 2019; 3: 1-6

Airway Clearance with Expiratory Flow Accelerator Technology: Effectiveness of the "Free Aspire" Device in Patients with Severe COPD.

G. Patrizio, M. D'Andria, F. D'Abrasca, A. Cabiaglia, F. Tanzi, G. Garuti, A. Nicolini Turkish Thoracic Journal 2019; 20(4): 209-15

A pilot study on the non-invasive management of tracheobronchial secretions in tracheostomised patients

S. Belli, D. Cattaneo, F. D'Abrasca, I. Prince, G. Savio, B. Balbi Clinical Respiratory Journal 2019; 13.10: 637-642

Airway clearance management with vakum technology in subjects with ineffective cough: A pilot study on the efficacy, acceptability evaluation, and perception in children with cerebral palsy.

L. Bertelli, G. Bardasi, S. Cazzato, E. Di Palmo, M. Gallucci, G. Ricci, A. Pession Pediatric Allergy, Immunology, and Pulmonology, 2019, 32.1: 23-27

Free aspire: a new device for the management of airways clearance in patient with ineffective cough

L. Bertelli, G. Di Nardo, S. Cazzato, G. Ricci, A. Pession, Pediatric Reports 2017; volume 9:7270

Management of bronchial secretions with Free Aspire in children with cerebral palsy: impact on clinical outcomes and healthcare resources

G. Garuti, E. Verucchi, I. Fanelli, M. Giovannini, J.C. Winck, M. Lusuardi Italian Journal of Pediatrics (2016) 42:7

Airways Clearance Techniques in Cystic Fibrosis: Physiology, Devices and the Future

A. H. Kendrick Cystic Fibrosis - Renewed Hopes Through Research - Edited by Dinesh Sriramulu 2012 |cap 22| 493-518

"One of the other ways of removing excess sputum from the airways is by increasing airflow along the airways. During normal tidal breathing the airflow can be artificially increased by applying a venturi effect within a breathing circuit, and this increase in the velocity of the air can enhance the movement of sputum. This is achieved because the movement of air above a layer of mucus develops a shearing force over the surface of this liquid layer. When the shearing force exceeds the surface tension in the mucous layer, the mucus starts to move in the direction of the air flow."

(Cystic Fibrosis - Renewed Hopes Through Research)

## Clinical applications

COPD  
Neuromuscular diseases  
Cerebral palsy  
Dysphagia  
Post Stroke  
Cystic Fibrosis  
Bronchiolitis  
Post-surgery rehabilitation

ICU  
Neonatology

## Technical Data

Power supply: 100-240V AC - 50-60 Hz  
Electrical absorption: 25W  
Electrical protection class: Class II  
Applied part type: Type BF  
IP protection grade: IP21  
Dimensions and weight: 20,5 x 22 x 15 cm - 1,08 Kg

Medical Products Research Srl states that Free Aspire Advanced is compliant with the DM 93/42/CEE directive, class IIa.  
The safety of the device is verified in accordance with the issued international standards.