
Tracheobronchial nebulizer DIVO™

Sir,

We studied the publications of esteemed scientists concerning delivery of medicine into the respiratory

tract.^[1,2] We would like to complement the review and discuss information on the capabilities of new devices for inhalation therapy with professional scientists and practitioners.



Figure 1: Tracheobronchial nebulizer DIVO

Tracheobronchial nebulizer DIVO™ [Figure 1] is developed now allowing to spray water-based medicine and oily liquids with dispersion adjustment of the received aerosols (from 0.5 to 30 μm), as well as the specified dispersion powders.

The device allows varying dispersion of aerosol particles without changing the nebulizer camera that can be useful for achievement of the greatest treatment effect of the respiratory tract.

The device allows to:

- Produce a device sprays with different dispersion
- Produce aromatic oils aerosols for aromatherapy sessions
- Obtain aerosols from solutions of medicine containing suspended particles
- Spray powdery medicine.

A distinctive feature of nebulizer DIVO™ is the original design of the camera allowing to produce aerosol in the ranges of 30-5 μm ; 5-2 μm ; 2-0.5 μm , and the hardware-software complex allowing to configure settings of the nebulizer operation parameters depending on the model (stationary or portable) for a specific patient saving the current settings in the database.

We developed two models of the nebulizer: Stationary, intended for the use in physiotherapy rooms and allowing

centralized management of nebulizers' group on individual algorithms according to the patient's profile, and portable, for the use at home or in the hospital for patients with limited mobility.

The device allows displaying operating modes: Treatment time, medicine type, aerosol parameters, aerosol temperature, etc.

In this regard, we would like to discuss with the medical community the usage of this medical equipment, the necessity and possibilities for the use of devices with adjustable aerosol parameters for the treatment of various diseases of the respiratory tract, and also to receive information from specialists on the use of oil-based and powdery medicine currently applied in inhalation therapy.

In addition, we would like to inform pharmaceutical companies on the opportunities of new devices and encourage them to develop special medicine for inhalation equipment.

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