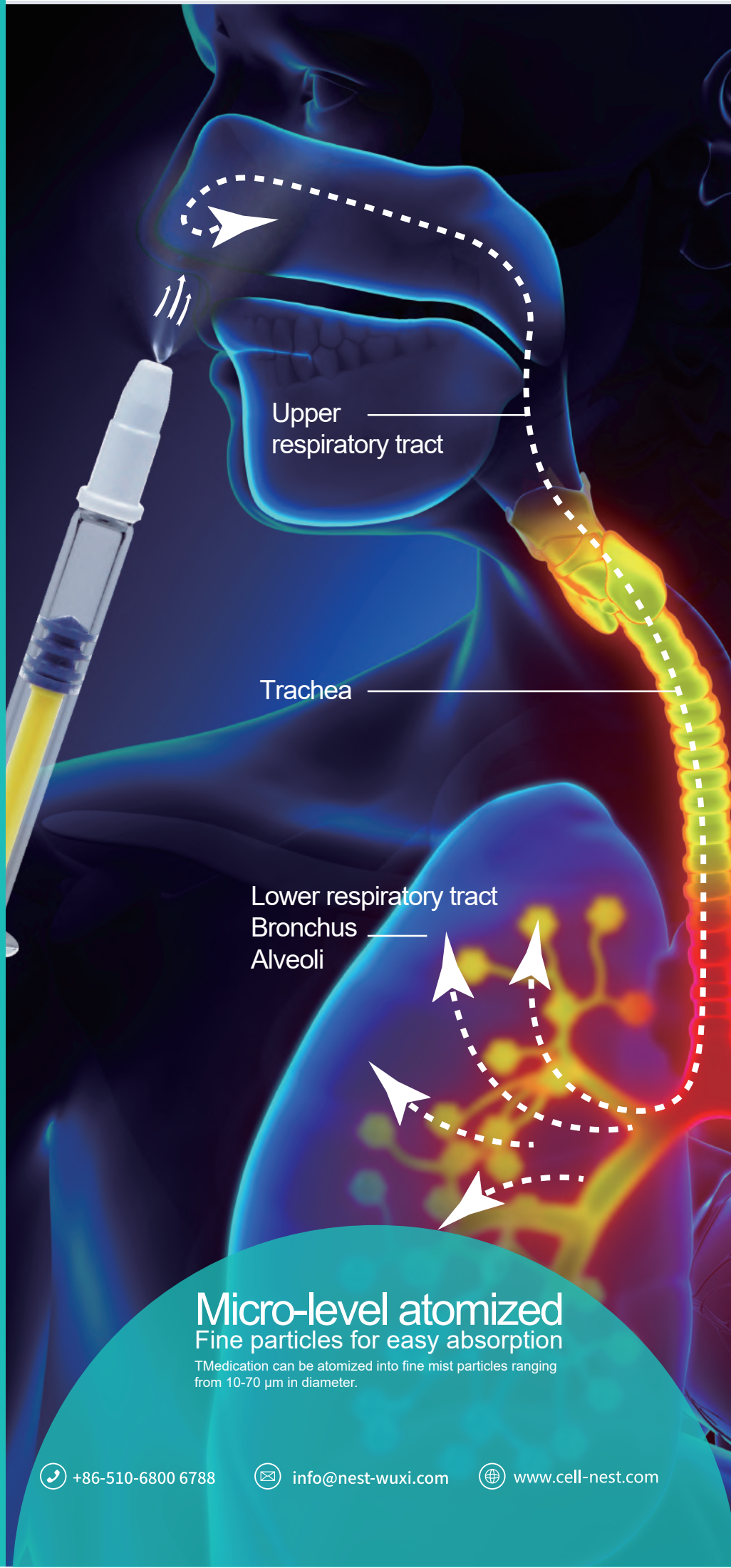
NEST®

Pre-filled Disposable Glass Intranasal Atomization Device

CDE Number：B20230000050

NEST Disposable Pre-filled Glass Intranasal Atomization Device is a pharmaceutical packaging designed to effectively store drugs for extended periods of time while maintaining stability and compatibility. A Spray Nozzle is included to convert liquid medication into uniformly sized mist particles, which are then sprayed onto the patient's mucous membranes (such as nasal or oral mucosa) for efficient drug administration.

The liquid medication can be pre-filled into the syringe and sealed for storage and transportation. This eliminates the need to transfer the liquid medicine to a syringe before use, reducing workload. It also addresses the issues of dosage loss and waste caused by residue. Additionally, pre-filling enhances safety and hygiene by minimizing the risk of contamination during the transfer process.



Micro-level atomized

Fine particles for easy absorption

TMedication can be atomized into fine mist particles ranging from 10-70 μm in diameter.

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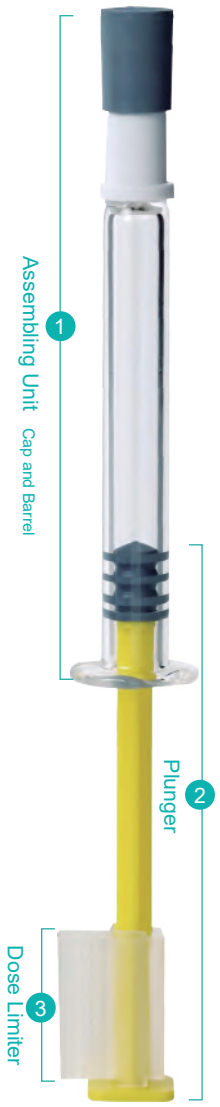


Features

- **Stable Material**

Made of high quality medium borosilicate glass, which is extensively applied in pharmaceutical packaging including biological agents and vaccines, the product possesses strong chemical durability and shock resistance.

- **Hermetically Sealed**

The spray is equipped with a protection cap, which is embedded with sealing ring to ensure its leak-proofness and virus-resistance during transfer and transportation.

- **Perfect Atomization Effect**

Atomization cavity with precision turbine design ensures uniformly atomized particles evenly distributed on human mucous membrane for ideal liquid atomization effect.

- **Precise Dose**

The precise Dose Limiter ensures the uniformity of each dose .

- **Single Use Design**

The device is set with self-distruct design. After administration, the stopper will stick in the syringe and can't be taken out for a second use.

Application

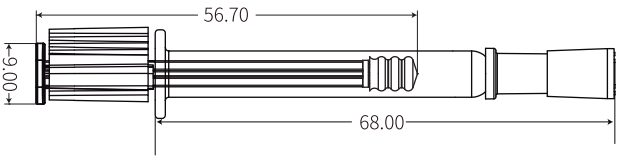
Intranasal medication, administered through absorption in the mucous membrane, is an efficient treatment method. The nasal mucosa is moist and smooth with rich blood vessels, making it an ideal route for intranasal medication. This device is designed for intranasal delivery of medication to achieve the effects of reducing inflammation, stopping bleeding, fighting bacteria, and relieving nasal congestion. The medication will then be absorbed into the blood vessels and distributed throughout the body. For example, if antipyretic analgesics like Analginum are delivered nasally in droplets, they can help reduce fever.

Compared to intravenous drug delivery and other modes of administration, intranasal medication offers several advantages. Firstly, the activity of nasal mucosal hydrolase is lower than in the gastrointestinal tract, reducing the degradation of polymer compounds like polypeptides, hormones, vaccines, etc., thus ensuring the effectiveness of the drugs. Secondly, it bypasses the "first-pass effect" in the liver and reduces the potential liver damage caused by oral drugs. Thirdly, it has high bioavailability, allowing for targeted drug delivery to the brain. Finally, it is easy to administer and convenient for infants and children, with minimal adverse reactions and good compliance.

In recent years, nasal spray vaccines have gained attention as a new area of research and application, thanks to the specific advantages of intranasal administration. Research has shown that nasal mucosal immunity can induce both local and systemic immune responses. Its effects is comparable to intravenous injection and can even be more effective and intense than oral administration. Therefore, nasal spray vaccines broaden the possibilities of intranasal administration.

Order information

Specifications	Description	Packaging		Cat.NO.
0.5 mL	①Assembling Unit	160pcs/rk	2400 pcs/cs	205001
	② Plunger	10000pcs/pk	10000 pcs/cs	205091
	③Dose Limiter	5000pcs/pk	10000 pcs/cs	205092



10x16 Nested Configuration

- The specification for pre-sterilized wash-free and sterilization-free NEST Disposable Pre-filled Glass Intranasal Atomization Device is now available. From injection molding to final packaging, they are produced in a cleanroom that adheres to GMP management standards.
- Suitable for various sterilization methods, including ethylene oxide and steam sterilization.