



# Soft Nasal Spray Adaptor

## Proprietary technology to achieve exceptional performance

A joint venture between Bespak and Medspray, Resyca® soft mist nasal sprays combine innovation with a legacy of excellence to support the delivery of delicate biological formulations, such as mRNA vaccines, to the nasal cavity.



### **The Resyca Soft Nasal Spray Adaptor:**

A single-use and disposable soft mist nasal spray device. Fill on-site and use directly on the patient.

## Precision and control in every spray

The Soft Nasal Spray Adaptor sprays aqueous solution formulations by means of the Rayleigh spray principle, allowing for the ejection of liquid jets through a multitude of micron-sized pores. These jets break up into droplet trains suitable for inhaled drug delivery via the nose or the lungs. Producing smaller droplets at a much lower initial velocity, the adaptor allows for a more uniform coverage when compared to conventional nasal spray nozzles.

The spray plume characteristics of the Soft Nasal Spray Adaptor can be tuned to specific formulation characteristics to achieve exceptional delivery and coverage of the drug in the nose or towards the nose-to-brain region.

## Optimised for patient needs

By considering treatment efficacy, patient comfort and customisation for formulation suitability, the Soft Nasal Spray Adaptor offers a range of key benefits, bringing you closer to commercialisation and, ultimately, patients:

**Disposable, single-use** syringe attachment for convenience and sterility

**Up to 50% coverage** of the nasal cavity, maximising deposition

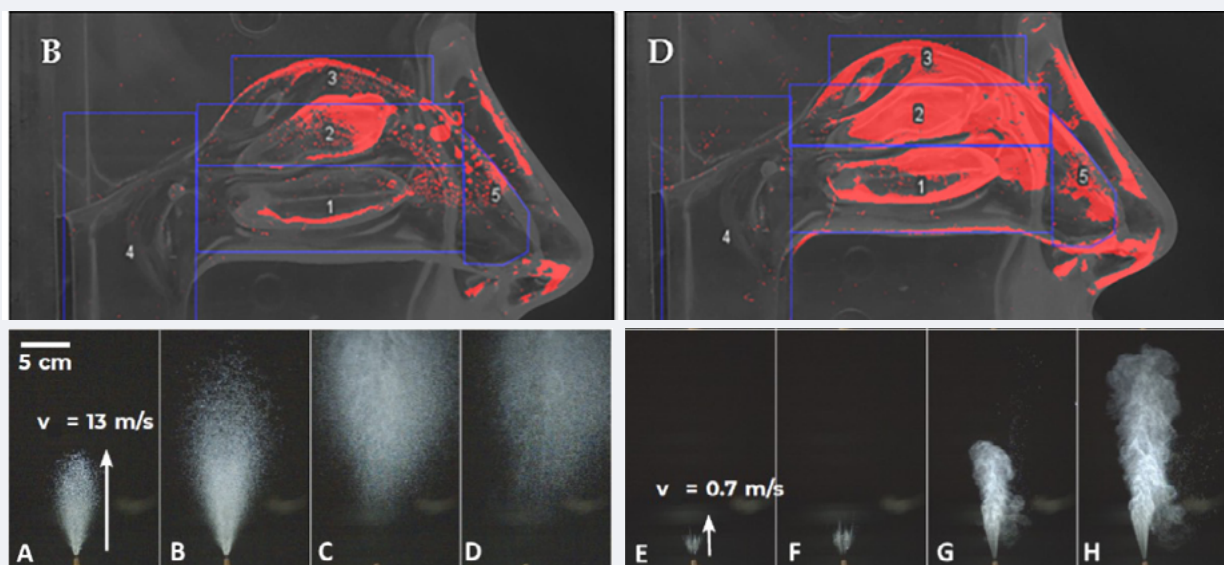
**Nozzle customisation** and tuneable spray plume for enhanced delivery efficiency and optimal targeting

**Gentle for the nasal tissue**, providing superior comfort, even for infants

**Low shear aerosolisation** to preserve the integrity of fragile formulations

**Environmentally-friendly**, mechanical operations with minimal carbon footprint

Intended to be used in combination with a Luer-Lock syringe, the Soft Nasal Spray Adaptor may be combined with Resyca's pre-filled syringe technology. The selected 0.5 and 1 mL SG OMPI ALBA syringe has been developed with delicate biologic formulations in mind. Furthermore, the adaptor can be combined with the Bepak NasaDose™ device.



**Top:** Nasal drug deposition with (B) standard swirl nozzle nasal spray and (D) Soft Nasal Spray Adaptor;

**Bottom:** Time series of droplet spray formation with standard swirl nozzle (A-D) and Resyca Soft Nasal Spray Adaptor (E-H). Source: D'Angelo et al., J. Advanced Research, 2023.

**Your breakthrough. Our capabilities. Ready when you are.**  
Let's shape the future of soft mist inhalation together.