



Other  
Routes

# VP3 multidose spray pump

Technology Platform



Aptar   
pharma

From formulation to patient.

## VP3 Technology Platform

The reference pump for your anti-allergic treatments – powering anti-allergic block buster drug products for decades

### Use well established spray pump technology for your allergic rhinitis product development

Our VP3 is the leading nasal multidose spray pump in the Allergic Rhinitis market, used by main prescription drug products in Europe, Asia and USA. The nasal spray pump technology supports formulations of common medication classes, such as corticosteroids, antihistamines and more.

### Key Benefits of Aptar Pharma's VP3 spray pump technology:

- Fast priming pump
- Excellent dose accuracy
- Wide range of dose volumes: 50 $\mu$ l to 140 $\mu$ l
- Fine and reproducible spray mist
- Suitable for a wide range of viscosities and formulations, including suspensions
- Ultra-clean gasket manufactured by Aptar Pharma's in-house Elastomer Center
- Global GMP manufacturing footprint following ISO7 production standards
- E-commerce capability compliant with ISTA-6 Overbox Testing (test results may vary based on container shape, container size and sample formula)

### A highly flexible choice of actuators, closures and features supports multiple applications and formats to suit your specific product needs

#### Available Closure Types/Doses

##### CRIMP-ON

DIAMETER (FEA STANDARDS)	DOSES ( $\mu$ l):
20 MM	50, 70, 93*, 100, 140*

\*Average dose with water (95 and 137 mg)

##### SCREW-ON

DIAMETER	DOSES ( $\mu$ l):
18/415 GPI	50, 70, 93*, 100, 140*

##### NASAL ACTUATORS + CAP

			SAFETY CLIP
CRIMP PUMP			
TRHEAD PUMP	•	•	•

«Our innovative Anti-Drying Cap, ADC, technology avoids actuator blocking by drying formulation / crystallization»

### Our VP3 spray pump technology comes with a broad development, regulatory and technical support

We offer you expertise and support along your drug development journey including:

- Regulatory drug combination product packages
- In vitro bioequivalence testing supported by Nanopharm
- Technical support to identify your optimal product configuration
- External supplier network for VP3 specific nasal spray containers established (bottle database)

For more information, please visit [www.aptar.com/pharma](http://www.aptar.com/pharma)