

Hovione 

In it for life



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Everything  
for Inhalation



## Fully integrated independent service provider in inhalation

Hovione offers customised high performance APIs, particle engineering and formulation along with a full range of simple, patented, cost-effective DPIs.



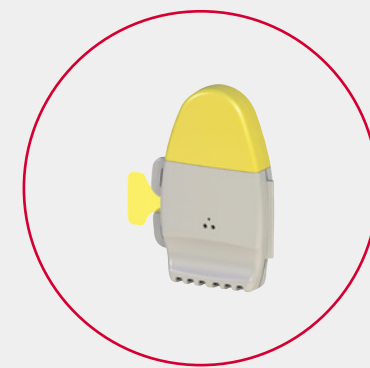
DISPOSABLE DPI



LARGE DOSE DPI



CAPSULE DPI



BLISTER DPI

### Portfolio of Off Patent APIs

**Our products are particle engineered to customised specifications using Hovione's in-house micronisation capabilities.**

- Acclidinium
- Beclomethasone
- Fluticasone
- Glycopyrrolate
- Indacaterol
- Mometasone
- Salbutamol
- Salmeterol
- Tiotropium
- Umeclidinium
- Vilanterol

### Dry Powder Formulation Services

- Formulation development services
- Generic API with bespoke powder properties
- Small-scale to commercial manufacturing
- Precision capsule filling
- Wet polishing
- Jet milling
- Spray drying
- Scalability

### Particle Engineering Technologies

#### Unprecedented particle size control:

- Median particle size control down to 0.1  $\mu\text{m}$
- Spans down to 0.6
- At any scale

#### Advanced engineered particles for low and high dosages:

- Microencapsulation
- Nanocoating