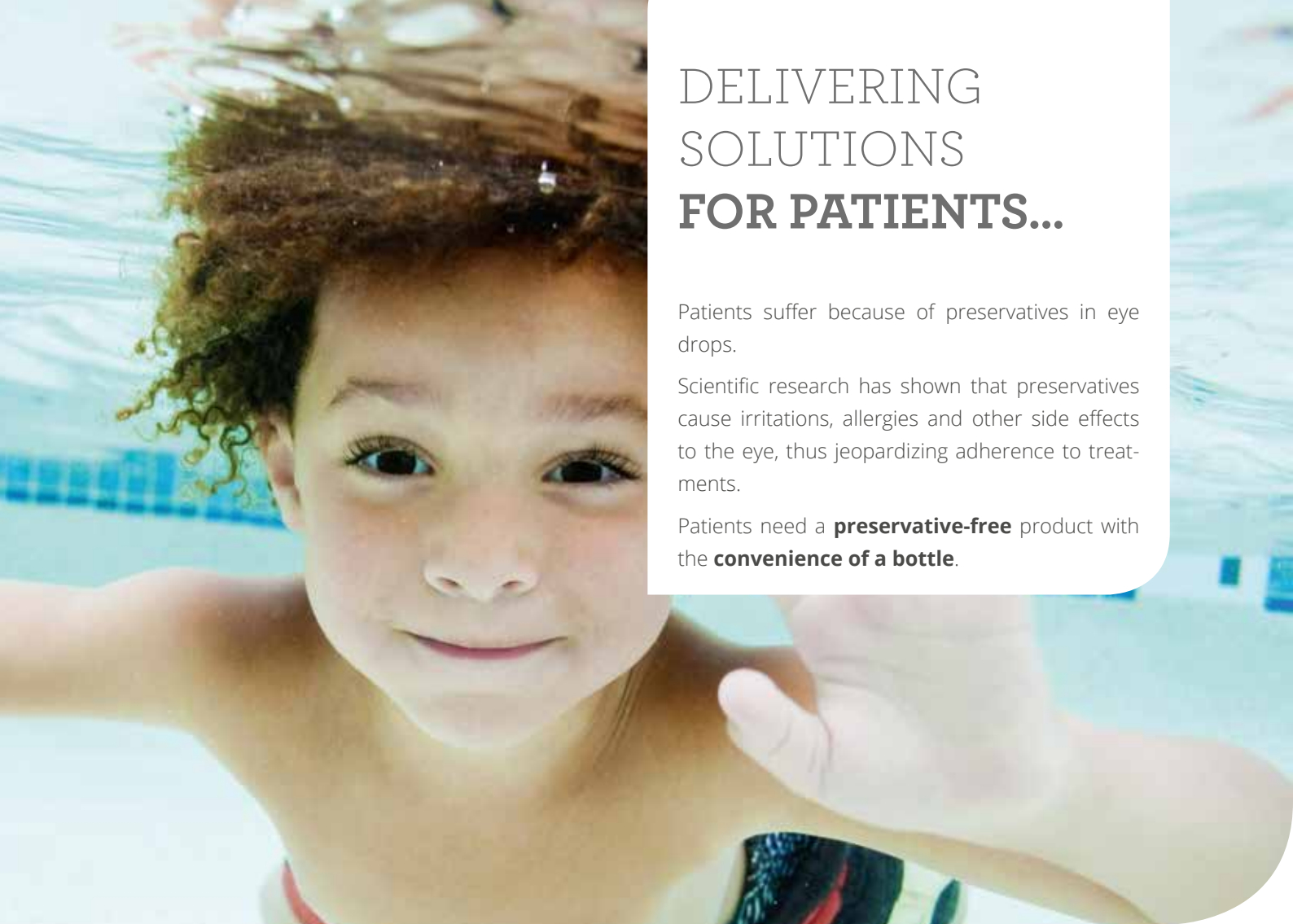




a **clear vision** for eyecare

Nemera

we put
patients
First



DELIVERING SOLUTIONS FOR PATIENTS...

Patients suffer because of preservatives in eye drops.

Scientific research has shown that preservatives cause irritations, allergies and other side effects to the eye, thus jeopardizing adherence to treatments.

Patients need a **preservative-free** product with the **convenience of a bottle**.

...with Nemera's expertise in designing, developing and industrializing the best-in-class preservative-free ophthalmic device

Nemera offers a multidose closing tip system, Novelia®, which avoids the need for preservatives in the drug and prevents bacterial contamination over the duration of treatment.

The ophthalmic device is commercialized for both Medical Devices and Prescription drugs. It is recognized and appreciated by patients today across 4 continents!



Standard ophthalmic device portfolio

- Novelia® preservative-free multidose eyedropper



Customised solutions based on existing ophthalmic technologies



High volume industrialisation of your ophthalmic delivery solutions

Quality for patients

With over 50 years of experience in packaging development and industrialization, we are committed to providing excellence in the quality of our products and services for the benefit of patients:

- Design performed by our Innovation Centre ISO 9001 and ISO 13485 certified
- With over 100 square meters of world class laboratory
- Production according to GMP in an ISO Class 7 clean room
- Full traceability, 100% in-line controls
- Manufacturing plant ISO 9001, ISO 13485 and ISO 15378 certified

Novelia®

This innovative tip is the new Nemera proprietary ophthalmic platform. The product is designed for formulations up to 1500cps.

NOVELIA® KEY ADVANTAGES:

FOR THE PHARMACEUTICAL COMPANY...

- **100% controlled and safe** thanks to its **patented Pure Flow™ technology**
- Functional with **suspensions** and **solutions** up to high viscosities
- Large **range of bottles**
- Compatible with most **existing filling lines** (screw cap)
- Simplified manufacturing process thanks to **preassembled cap and nozzle**

... AND OF COURSE FOR THE PATIENT

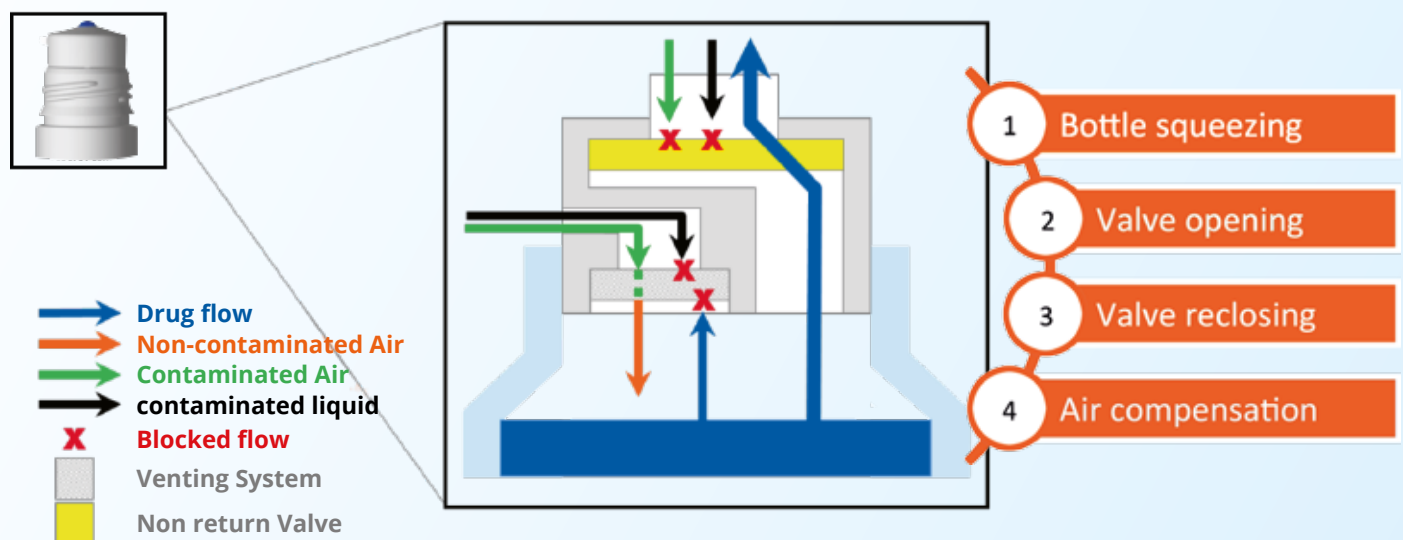
- **Preservative-free** to protect the ocular surface
- **User-friendly** and **intuitive**, as easy to use as any standard eyedropper
- **Blue tip** for a better precision when targeting the eye
- **One drop at a time** in the patient's eye, **calibrated drops**
- **Low squeeze force**
- **More sustainable and affordable** compared to unit-dose, easier to carry



With Novelia®, preserve patient's eyes, not drugs!

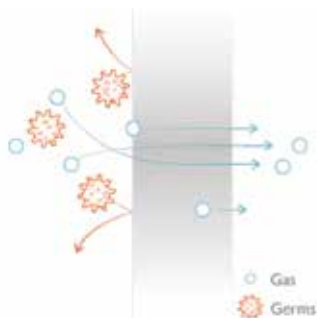


FUNCTIONING OF THE NOVELIA® SYSTEM



PUREFLOW™ TECHNOLOGY

The one-way valve ensures that no contaminated liquid can be re-introduced into the container after a drop has been dispensed, completely removing the need to filter the liquid. The intake of air into the dispenser takes place via a separate venting system with a silicone membrane we refer to as the PureFlow™ Technology.



This unique patented technology, as the silicone membrane is a homogeneous and continuous material, allows each device to be tested in-line as a consistent part of the manufacturing process to ensure robust quality standards. This provides an even greater safety guarantee for the patients.



NOVELIA® PLATFORM

Nemera offers a broad range of configurations to accommodate all formulations

Flow control: PureFlow™ 10 for very liquid formulations (viscosity of 1-10 cP)
PureFlow™ 200 for liquid formulations (viscosity of 10-200 cP)
PureFlow™ 1500 for viscous formulations (viscosity of 200-1500 cP)

Drop size: Current drop size is 40µl with water
New drop sizes are in development (25µl-55µl range)

Bottle: LDPE: 5ml, 7.5ml, 11ml Standard, 11ml SOFT
LDPE: 15ml in development
PP: 5ml & 11ml in development



SUCCESSFUL MICROBIAL INTEGRITY TESTING

Tested against the worst-case scenario of 4-day exposure to contamination.
Tested against the long-term use scenario of continual use for up to 3 months.
Other highly challenging tests to assess the performance of the system.

PROVEN EFFICACY

4,800 products have been tested since November 2009 to assess Novelia®'s sterility performance



SERVICES

SAMPLING

Nemera provides customers with appropriate sampling services in line with the customer's project needs.



LABORATORY

Our highly qualified team has extensive expertise in pharmaceutical methods and requirements to support your projects.

Our laboratory is able to perform a wide range of tests related to the device performance:

- Drop size test
- Flow control test
- Squeeze force measurement
- Functional studies to simulate product use with a selected API
- Tomography services
- Test to verify final product assembly after filling



REGULATORY

Novelia® has been approved as a packaging of Drug Products and Medical Devices in many countries across 4 continents. Our Regulatory department provides customers with all necessary support to register their products with Novelia® in countries around the world.

Novelia is covered in a US DMF Type III (#27079).

FILLING AND PROCESSING

Novelia® can be adapted to most existing filling lines.

After filling in the bottle, the pre-assembled nozzle/cap needs to be screwed onto the bottle.

Please contact us for processing and filling advice.

NOVELIA® IS USED BY PATIENTS TODAY ACROSS 4 CONTINENTS!

Novelia® is the only preservative-free multidose eyedropper on the US market!



**NOVELIA® IS USED AND APPRECIATED BY HUMANS,
AND ANIMALS ALIKE (CATS, DOGS AND HORSES)**



Nemera is a world leader in the design,
development and manufacturing of drug delivery solutions.



50⁺

OVER 50
ENGINEERS IN
DEVELOPMENT

30000⁺

OVER 30,000
SQM OF
CLEAN ROOM
MANUFACTURING

47

SALES IN
47 COUNTRIES

750

OVER
750 MILLION
DEVICES
PRODUCED YEARLY

1300⁺

OVER 1,300
EMPLOYEES

4 PLANTS IN EUROPE & THE USA



- Neuenburg, Germany
- La Verpillière, France
- Le Tréport, France
- Buffalo Grove, IL, USA

OUR PORTFOLIO



ear, nose,
throat



pulmonary



dermal/
transdermal



parenteral



ophthalmic



we put
patients
First

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