

# Parenteral



COMPLEX DEVICES,  
SIMPLE CARE





**State-of-the art  
parenteral device  
platforms to improve  
overall user's  
injection experience.**

## **SELF-ADMINISTRATION**

The growing prevalence of chronic diseases, coupled with the evolution of patient's lifestyles, is driving new ways of administering parenteral drugs.

- Home-care therapy setting is clearly emerging as one of the major trend in the industry, reinforced by the switch from intravenous to subcutaneous injections.
- Self-administration at home therefore translates into a need for safer, easy-to-use, and ergonomic devices.
- Parenteral drug delivery devices are adapted in multiple ways to leverage the user's injection experience hence foster patient adherence.

## **PLATFORM APPROACH**

Our platforms are designed strategically for a maximum possible range of potential therapeutic areas and patient populations.

- To meet both pharmaceutical company's and patients' needs, our platforms can be tailored and customized for your specific combination-product.

# Our parenteral products

## COMMERCIALY AVAILABLE PRODUCT

### Passive safety systems



Our premium passive safety device platform, Safe'n'Sound®, helps in preventing needlestick injuries and leveraging patients' injection experience.

- Safe'n'Sound® 1ml
- Safe'n'Sound® 2.25ml

## IN DEVELOPMENT PLATFORMS

### Wearables



Our smart on-body injector platform, Symbioze™, is tailored for multiple-use, high-volume administration to foster patient adherence. It consists of a reusable main unit and a prefilled, preloaded disposable module containing the drug, offering sustainability for users.

### Pen Platforms



Our comprehensive portfolio of own-IP and tailor-made pen injectors help customers to treat a wide range of pathologies.

- Reusable pens & disposable pens
- Tailor-made pens
- Autoinjectors

### Implanters



We developed a portfolio of devices to deliver implants with integrated needlestick protection. We can also support your projects and explore design attributes for new developments.

## Our services



**Integrated services  
from device selection to  
GMP manufacturing**



**Early-stage  
Innovation**



**Testing services  
for customer  
formulations**

# Safe'n'Sound®

## SAFE'N'SOUND® 1 AND 2.25ML

Robust and ergonomic design for the safety of healthcare professionals and naïve users.

Safe'n'Sound® 1ml and 2.25ml are highly customizable platforms of add-on passive safety devices for prefilled syringes. It helps in preventing needlestick injuries.



### 1ml Long Staked



### 2.25ml Long Staked



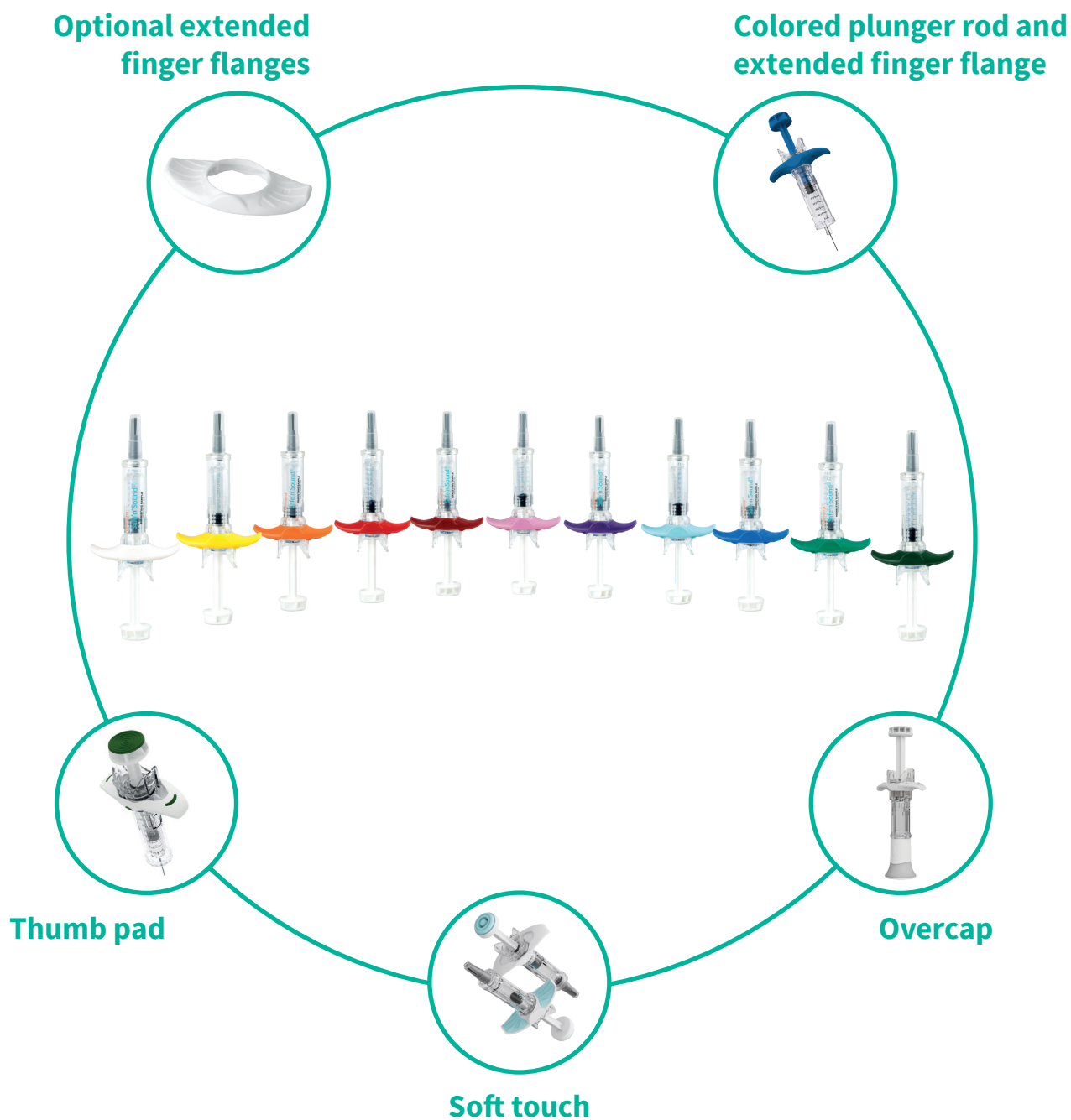
- Single use device
- Easy to activate with passive one-handed activation
- Ergonomic design
- Robust against shocks and vibrations
- Suitable for low fill volumes and higher viscosity formulations
- For prefilled ISO standard glass syringes and compatible with PLA-JEX™ polymer-based prefillable syringes
- Highly customizable platform
- Market proven and commercially available in 1 and 2.25ml sizes
- Compatible with manual and fully automated assembly lines

\* *Plajex is a registered trademark of Terumo Corporation, TM*



# Safe'n'Sound® customization capabilities

Safe'n'Sound® is a highly customizable platform in order to meet both users and pharma needs.



# Our pen injectors platforms

## Designed for various therapies and applications.

With 4 platforms, we offer pen injectors designed to meet key user needs, compatible with any drug in a cartridge container.

### PENDURA AD

#### REUSABLE

For low and high-volume drugs

**Automatic, spring-driven** drug delivery

**Side activation** button



### PENONE

#### DISPOSABLE

For any drug with a **fixed dosing**

**Automatic, spring-driven** drug delivery

**Side activation** button

**Dose counter**



### PENVARIO

#### DISPOSABLE

For any drug with **variable dosing**

**Standard** disposable pen



### PEN HV

#### DISPOSABLE

For any drug with high volume dose and/or high viscosity

**Automatic, spring-driven** drug delivery

**Push-button** on **top** of pen



# Reusable pens

## PENDURA AD: Multiple use, same efficiency.

Our reusable pens ensure the application of proven technological solutions with reliability, intuitiveness as well as ease-of-use.



# Disposable pens

## PENONE: agile capabilities in fixed-dose disposable pen platform

Our PENONE platform is dedicated to manufacturing of state-of-the-art disposable fixed-dose pen injectors with client customized dose volume and number of increments.





## PENVARIO

**Extensive range of possibilities for disposable variable dose pen injectors.**

- Manual, variable dose disposable pen injector
- Features of standard disposable pen injectors, i.e.:
  - Manual, push button activated
  - Variable dose
  - Dial back
- Low- and high scale production possible
- Highly Customizable



## PENHV

**Spring-assisted does delivery for fixed or variable dose disposable pen injectors.**

- Variable dose or fixed-dose
- Spring-assisted
- Push button on the top of pen
- Non-extendable dosing knob
- Dedicated for the administration of high volume/ high viscosity drugs



### CHALLENGES

Need for low-force spring assisted disposable pen.

Rise of higher viscosity drugs and larger dose volume administration.



### SOLUTION

Long-standing experience designing spring-assisted pens.

# Symbioze™

## Smart, high volume and sustainable on-body injector platform to foster patient's adherence.

Nemera's smart patch-worn on-body injector platform, Symbioze™, is an innovative, user-friendly and sustainable solution to self-inject a medication at home. Its unique positioning consists of delivering high volume drugs (20ml), especially biologics, in combination with a multiple-use approach, thanks to its reusable and disposable parts.



**READY TO USE**  
'clip, patch & go'  
patch worn,  
prefilled and  
preloaded

**REUSABLE**  
Suitable for  
different drug  
platform

**SMART**  
Robust engine,  
connectivity &  
live feedback

**PHARMA FRIENDLY**  
Standard filling  
and assembly

**FLEXIBLE**  
Adjust to different  
volumes, flowrates  
& viscosities

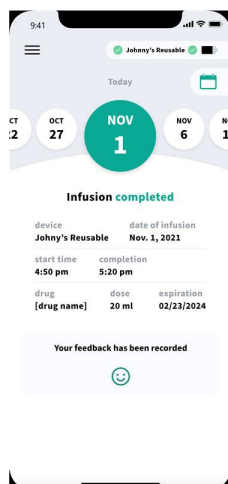
## KEY BENEFITS

**Sustainable and  
cost-effective**

**Intuitive and  
easy to use  
for optimum  
treatment  
adherence**

**Ideal for complex,  
novel drugs  
administration  
whilst staying in  
line with pharma  
standards**

**Final assembly  
in regular,  
non-aseptic  
final assembly/  
packaging  
environment**



- Ready-to-go mobile app as a companion to core technology.
- Enhanced treatment management with a wide range of connectivity features.



\* Symbioze™ is a trademark of Nemera La Verpillière



# Implanters

**Solutions for sustained released formulations.**



Implants are fragile and insertion into the body requires caution. Nemera developed a portfolio of devices to deliver implants with integrated needlestick protection. As implants can vary a lot, we support your projects and explore design attributes that will increase the user experience such as improved holding and priming, improved motion for implant insertion, etc.

## SOLID IMPLANT DEPOT INJECTION DEVICE



- Implants easily loaded under the skin without risk of breakage
- Visible implant before application
- Prevent device reuse thanks to its clip mechanism
- Robust and simple system
- Customizable implant (needle size, shape...)
- Safety depot syringe with compact plunger rod

## SAFETY RETRO INJECTOR FOR SOFT IMPLANTS

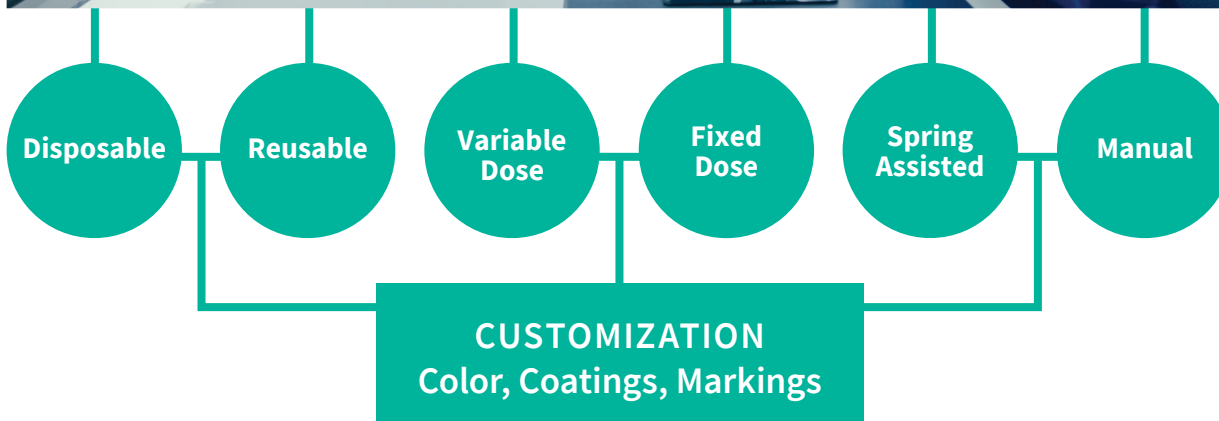


- Implants easily loaded under the skin without risk of breakage
- Prevent device reuse thanks to its clip mechanism
- Little effort and pressure applied on implant
- Automatic implant positioning thanks to its specific plunger rod
- Better control of implant positioning

# Pen injectors

**An array of technological solutions available to shape the optimum pen device matching your needs.**

Comprehensive, integrated capabilities to successfully drive the design and manufacturing of state-of-the-art pen injectors.



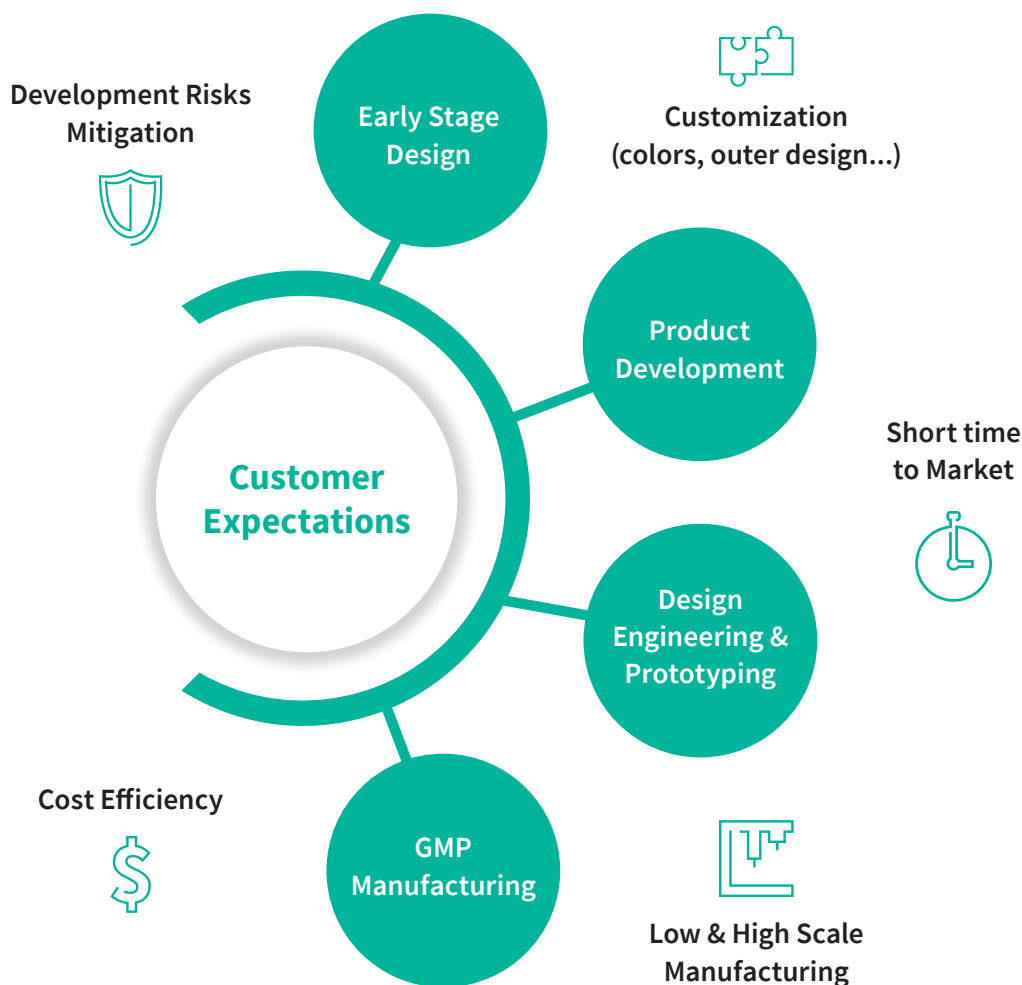


# Tailor-made pens and autoinjectors

## Leader in co-manufacturing for pens and autoinjectors.

With proven track record in managing parenteral customized solution and large-scale industrialization projects, we are leader in co-manufacturing for pens and autoinjectors for different application fields.

With the extensive 10 years of leading experience in co-development and design for manufacturing of pens and autoinjectors, we empower millions of patients with hormonal or immune disorders worldwide who rely every day on devices manufactured by Nemera.



# Our services

## INTEGRATED SERVICES

from device selection to GMP manufacturing

We have developed end-to-end services and expertise in device development, device consulting, and contract manufacturing to complement our diverse portfolio of products to help you through every step of the journey.



## EARLY-STAGE INNOVATION

Our front-end innovation, design research, human factors expertise enhances our capabilities in gaining a full understanding of the patient journey to ensure a successful drug/device combination product.

## TESTING SERVICES FOR CUSTOMER FORMULATIONS

Thanks to our cutting-edge laboratory service, our comprehensive test range assures compliant and reliable parenteral drug/device combination products.



Learn more about  
our services at:  
**[nemera.net/our-services](https://nemera.net/our-services)**

# Our broad offering

Offering a broad range of solutions in major delivery routes, we are the holistic development and manufacturing partner for your custom drug delivery device solution.

