Nemera
we put patients first

Our vision is to become the most patient-centric drug delivery device solutions & combination product services company.

We design and manufacture drug delivery device solutions that maximize treatment efficacy and partner with our customers in their device strategies, to ultimately bring high quality and safe treatment solutions to patients.

ADDRESSING PATIENT NEEDS WITH GLP-1 RA THERAPIES: CHALLENGES FOR DRUG DELIVERY

Every day, headlines highlight the growing impact of diabetes and obesity. Together, these conditions—now often referred to as **diabesity**—represent one of the most pressing global health challenges of our time. With over one billion people affected by obesity worldwide and diabetes cases continuing to rise, healthcare systems are under increasing pressure to deliver effective, scalable, and patient-friendly solutions.

At the heart of this challenge lies a simple truth: **patients are not all the same.** Their needs vary by geography, lifestyle, economic context, and treatment experience. Addressing this diversity requires more than innovative drugs—it demands **smart, adaptable drug delivery solutions** designed around real patient lives.

Designing for real-world diversity

From the United States to Europe to emerging markets such as India, treatment approaches differ significantly. Patients may require:

High-volume or low-volume injections

Fixed or adjustable dosing

Disposable or reusable devices

Cost-sensitive or premium solutions

A one-size-fits-all approach is no

longer viable. Instead, success depends on **flexibility, usability, and accessibility**—delivered through thoughtfully engineered platforms.

TRANSFORMING THE INJECTION EXPERIENCE

Pen injectors have revolutionized the administration of injectable therapies. Originally developed for insulin delivery, they are now widely used across multiple therapeutic areas, including diabetes, obesity and cardiovascular diseases (CVD).
Their success is driven by clear patient benefits:

Simplicity: intuitive, pen-like design for easy self-administration

Comfort: reduced injection force and improved needle technology

Accuracy: precise dosing with minimal risk of error

Convenience: portable, ready-to-use systems

Autonomy: reduced reliance on healthcare professionals

Various patient populations mean various needs for drug delivery - example of reusable pen injector

In a world where adherence is critical, these features directly translate into **better clinical outcomes.**

GLP-1 RAs target several chronic conditions - example of manual pen injector

Platform innovation: one foundation, endless possibilities

Modern drug delivery is moving toward platform-based solutions—and for good reason. Platforms enable pharmaceutical companies to accelerate development while maintaining flexibility across multiple therapies and markets.
Key advantages include:

Faster time to market with proven technologies

Reduced development risk and cost

Compatibility with a wide range of drug formulations

Scalable manufacturing for global distribution

Customization to meet specific patient and market needs

This approach ensures that innovation is not only rapid but also reliable and adaptable.

A portfolio built around patients

Nemera's pen injector platforms are designed to address the full spectrum of patient requirements:

Multidose, spring-assisted solutions reduce treatment burden by combining multiple doses into a single device, improving portability and ease of use.

Reusable platforms offer long-term cost efficiency and sustainability, while maintaining high performance and reliability.

Versatile manual systems enable access in cost-sensitive markets without compromising on user experience.

Connected devices introduce a new dimension of care, enabling dose tracking, adherence monitoring, and digital integration.

These innovations go beyond functionality—they are designed to

fit seamlessly into patients' daily lives.

Supporting adherence through smart design

Adherence remains one of the biggest challenges in chronic disease management. Advanced pen injectors address this through:

Clear visual and tactile feedback

Simplified dosing mechanisms

Integrated dose tracking and history

Ergonomic, user-centric design

By reducing complexity and uncertainty, these features help patients stay on track—delivering measurable value to both patients and healthcare systems.

Enabling the future of GLP-1 RA therapies and beyond

The rapid growth of GLP-1 RA therapies is reshaping the treatment landscape for diabetes, obesity and CVD. These therapies often require higher volumes, less frequent dosing, and enhanced usability, creating new demands for delivery systems.

Next-generation pen injectors are meeting these challenges by offering:

Smooth, spring-assisted injection for improved comfort

Fixed-dose options to eliminate dosing errors

Multidose configurations for greater convenience

Designs tailored to specific patient populations

As therapies evolve, so too must the devices that deliver them—ensuring optimal performance, adherence, and patient satisfaction.

Nemera offers a comprehensive range of pen injector platforms: flexibility and precision

PenSET and PenDIA platforms support multidose, spring-assisted delivery of GLP-1 RA therapies. By consolidating up to one month of treatment into a single device, they reduce treatment burden, enhance portability, and minimize dosing errors.

PenDURA AD is a reusable platform with a lifespan of up to three years. It offers cost efficiency, clear dose-completion indicators.

PenSET provides patients with full fixed dose possibility

PenDIA provides a positive user experience with smooth spring-assisted delivery

PenVARIO provides a versatile, manual platform compatible with multiple therapeutic areas. Its adaptable design allows alignment with specific population needs, including affordability in emerging markets. A connected add-on device enables digital dose tracking and supports adherence.

In the example of semaglutide which requires a weekly injection with a titration phase followed by a maintenance phase, patients should change drug intake every month, therefore change the pen injector they are using every month. As patients cannot be considered a homogeneous group because of variations in age, gender, socioeconomic status, and geography, Nemera offers its Semapen in three versions to facilitate treatment access, and foster treatment adherence.

The first version is SemaPenVARIO based on the PenVARIO platform which is multidose and manual. The second one is SemaPenDIA based on the PenDIA platform which is multidose and spring-assisted. The third one is SemaPenDURA based on the PenDURA platform which is multidose, spring-assisted and reusable. Each of them provides ISO complying primary functions such as dose accuracy, but pharma company can select the platform which best suits their patient population targets.

Beyond this device offer, Nemera can support pharma companies in their combination product journey and their high scale manufacturing requirements.

INTEGRATED SERVICES AND MANUFACTURING CAPABILITIES TO SUPPORT THE DRUG-DEVICE COMBINATION

For specific customer applications, Insight by Nemera, our independent development and consulting team within our services business unit, can support any pen-platform-based combination product to registration through to commercialization. We provide this support through our suite of consulting services designed to address every aspect of combination product development. With a proven track record of helping customers achieve regulatory approvals in over 50 countries with a wide variety of device types and suppliers, we define customized strategies to meet the unique needs of each program.

Our services include:

Functional/Analytical Lab Testing & Design Verification – Our state-of-the-art facilities and customized methodologies ensure that products meet safety, quality, and compliance standards. We support performance and functionality testing, analytical testing (stability, biocompatibility/ biological risk assessments, etc.), and design verification for final combination products. Our processes align with ISO and FDA requirements.

Human Factors Management & Design Validation – We ensure devices and combination products are safe and effective for target users while enhancing patient experiences and adherence. The areas we can support include human factors strategy development, risk analyses, usability testing (formative and summative), and preparation of regulatory documentation for global regulatory authorities.

Instructional Materials & Secondary Packaging Development – We create tailored instructions for use, value-added packaging, and integrating digital assets that improve the user experience, increase adherence, boost engagement, and support specific combination product applications.

Quality/Regulatory Strategy & Registration Support – Our team navigates the complexities of global regulatory processes and standards from strategy and pre-market activities to registration and post market support. We develop strategies, engage with regulatory bodies, and preparing submission-ready materials to ensure compliance with global requirements including the management of Essential Drug Delivery Outputs (EDDO's).

These services can be augmented by pre-clinical, clinical, and small series device supply. accelerating development timelines while deferring capital expenses. This insures a cost-effective and streamlined process. A holistic approach to these activities is crucial for success.

By combining our comprehensive service offerings with our global manufacturing facilities and a commitment to sustainability, Nemera delivers unmatched value to our customers. Our holistic approach ensures every aspect of combination product development is seamlessly integrated.

BENEFITS OF PARTNERING WITH AN INTEGRATED PRODUCT AND SERVICE PROVIDER

Partnering with Nemera and Insight by Nemera means working with a best-in-class, integrated partner capable of delivering comprehensive solutions from proven pen platforms, development, manufacturing, and consulting to support your combination product from concept to market. Insight by Nemera's experience with our pen platforms streamlines project onboarding and execution, ensuring efficient progress and on track programs. At every stage, our development and consulting excellence is dedicated to driving improved outcomes for patients and delivering confidence to our customers.

By working with us the need to coordinate multiple specialized partners is eliminated. We simplify the process, reducing complexity and risk, while accelerating regulatory approval and market access. Our agile and integrated approach allows customers to focus on their core business while we manage the details of combination product

development, ensuring the result is safe, effective, and differentiated. This end-to-end support enables pharmaceutical partners to **bring innovative therapies to market faster and with confidence.**

A commitment to sustainability and scale

As global demand grows, so does the need for responsible manufacturing. Modern production facilities combine **state-of-the-art technology with sustainability principles,** including waste reduction, energy efficiency, and scalable automation.

Willing to provide fully automated industrial capability to its partners, Nemera has invested in two of its European plants, respectively Poland and Germany, to expand pen injector manufacturing capabilities. Able to produce prototypes, small series for clinical batches as well as high scale volumes, these plants are equipped with state-of-the-art machines from molding to assembly activities, including quality control testing.

State-of-the-art facility dedicated to pen injector manufacturing in Szczecin Poland

Conclusion: putting patients at the centre

The rise of diabetes, obesity and CVD conditions call for bold, patient-centric innovation. By combining advanced therapies with intuitive, flexible drug delivery platforms, Nemera grabs a unique opportunity to transform the patient experience.

Pen injectors are no longer just delivery tools—they are **enablers of better care.** Through smart design, platform flexibility, and integrated services, they empower patients, support adherence, and help shape the future of chronic disease management.