



# Unrivaled Quality... By Design

1-3mL NovaPure® Plunger



The market for prefillable systems is growing. In fact, two-thirds of the world's blockbuster drugs are now delivered via a prefilled syringe system or auto-injector, and auto-injectors are one of the fastest growing delivery segments. To ensure effective delivery and patient safety, manufacturers need high-quality components that are designed and manufactured to reduce particulates, ensure consistency of delivery and that fit the changing needs of higher-volume delivery systems.

# Developed for Quality Risk Management

West manufactures the 1-3mL NovaPure Plunger using Quality by Design principles to help ensure superior quality.

- Low part-to-part variability
- Controlled dimensional capability (CpK)
- Specification in parts per million (ppm)

#### **Designed for Biologics**

West knows biologics. Our products are vital components for all of the top biologic drug products worldwide.

- Ideal fit for 2.25mL autoinjectors
- FluroTec® barrier film for enhanced drug compatibility
- Low particulate levels (visible and sub-visible)

#### **Engineered for Auto-Injectors**

West knows how to deliver. West is the largest manufacturer of auto-injectors and pens, and our injection systems have been used by top drug manufacturers around the world.

- Injection devices with highervolume delivery are on the rise
- Superior performance in syringe systems
- May help achieve a more consistent injection rate

Talk to your West representative to select the right product to fit your drug, delivery system and patient requirements.





# **A Growing Challenge**

As demand for self-administered drug products continues to rise, delivery systems capable of mitigating risk, enabling complete dosing and ensuring patient safety are needed. Legacy plunger technology, developed for manual injections and with less stringent quality requirements, may not be the best choice for modern drug products.



## **Preferred Delivery Methods Require Optimized Solutions**

Patient preference for ease of use and convenience has helped to increase the use of autoinjectors for drug delivery. Delivery systems optimized for consistency of injection rate can lead to better patient outcomes, as variability in performance can hinder time to market and compromise patient safety.



#### **Changing Dosing Regimens**

Many therapies are exploring the benefits of less frequent injection dosing; however, viscous biologics can be difficult to inject and often require higher injection volumes. The unique challenges associated with higher-volume and higher-viscosity drugs have necessitated the development of large-volume auto-injectors.



## **NovaPure Syringe Plungers: A Consistent Solution**

West designed the 1-3mL NovaPure syringe plungers to ensure consistent functional performance when used as part of a 2.25mL delivery system. With an optimized breakloose and glide force profile and very tight dimensional tolerance capability, NovaPure plungers are ideal for auto-injector drug applications across various injection volumes and higher viscosity ranges.

For more information visit www.westpharma.com

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