



SequiDose: Prefilled Syringe to Deliver Multiple Boluses of Medications & Flushes

OTT 1825

Applications: SequiDose is intended for hospital and clinical use, particularly in emergency departments, critical care units, surgical suites, and long-term care. It simplifies IV drug delivery, improves safety, and streamlines workflows where rapid and aseptic administration is critical.

Target Problems: IV drug administration is essential in healthcare but poses safety risks, including central line-associated bloodstream infections and medication errors. Frequent line access also increases infection risk and introduces the chance of dosing errors, drug incompatibilities, and environmental waste. Current prefilled syringes reduce some complexity but still require multiple manipulations, compromising aseptic technique.

Solution: Pre-filled syringe system for sequential drug and flush delivery: SequiDose™

Key Benefits:

- Enables sequential delivery of multiple, pre-measured medications or flushes
- Minimizes IV-line manipulations and reduces infection risk
- Streamlines workflow—reduces syringe swaps
- Supports consistent, aseptic delivery in high-pressure clinical settings
- Decreases medication errors by ensuring accurate dosing
- Compatible with existing IV administration protocols

About this Technology: SequiDose is a syringe system that contains multiple sealed pods (SequiPods), each prefilled with a single medication dose or flush. As the plunger is depressed, an internal mechanism pierces each pod in sequence, delivering its contents through the syringe and into the IV line. This design allows multiple drugs to be administered in a defined order with a single IV manipulation. The system reduces infection risk, improves safety, and simplifies medication delivery procedures. It is especially effective in settings where time, sterility, and reliability are critical.

Stage of Development: Initial design and prototyping have resulted in a rough working syringe and pods. Additional work is needed to test the feasibility of this system.

Partnering Opportunity: SequiDose LLC has an exclusive option agreement with the UWM Research Foundation to evaluate this technology for licensing. Together, the parties are working to find additional partners to develop the technology into a final product.

Intellectual Property: This technology is protected under one or more patent applications filed with the United States Patent and Trademark Office. The UWM Research Foundation manages the intellectual property portfolio and works closely with our partners to support their commercialization needs.

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