

## Neofuser Onco, an elastomeric infusion pump for oncology

**S&S Med**, founded in 2012 is a South Korean medical device manufacturing company providing patients with the best treatment experience.

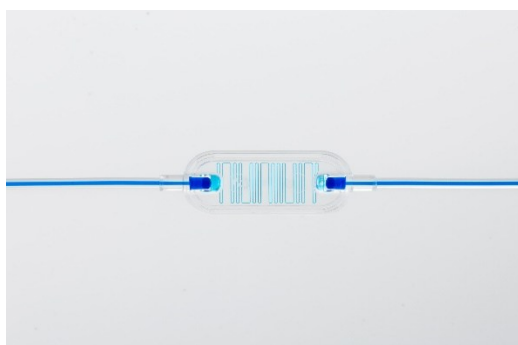
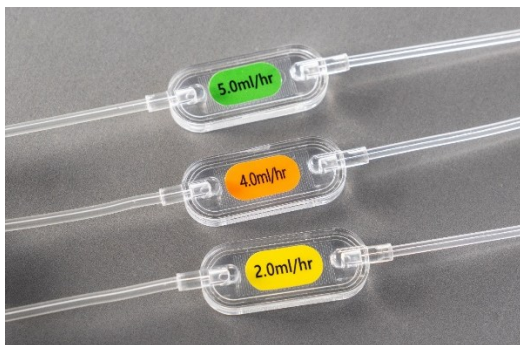
Only S&S MED possesses this patented micro channel technology worldwide.

### ■ Introducing Innovative Neofuser Onco, an elastomeric infusion pump for oncology applications.

- Neofuser Onco is designed for the infusion of 5-Fluorouracil, Trabectedin, and other oncology drugs, ensuring precise delivery.
- It incorporates a microfluidic chip technology with a flow limiter specifically developed for 5-fluorouracil infusion, enhancing control.



- The wide-channel flow regulator, tailored for 5-Fluorouracil infusions, maintains high flow accuracy crucial for effective treatment.
- Its wide channels enable smooth, uninterrupted flow, eliminating delays caused by fine crystal precipitations of 5-Fluorouracil.

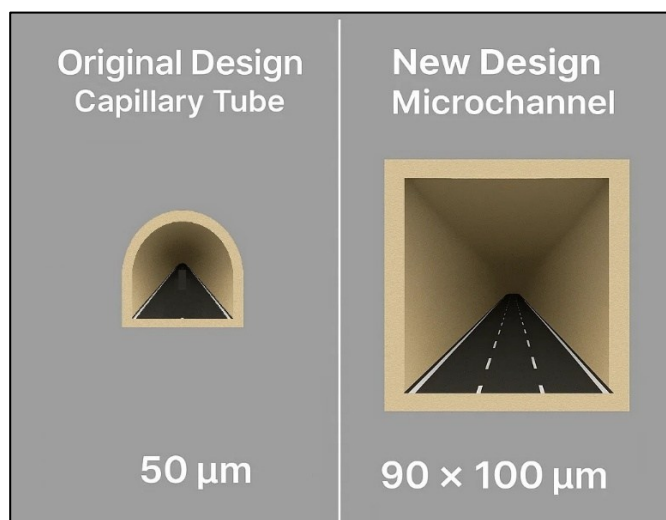
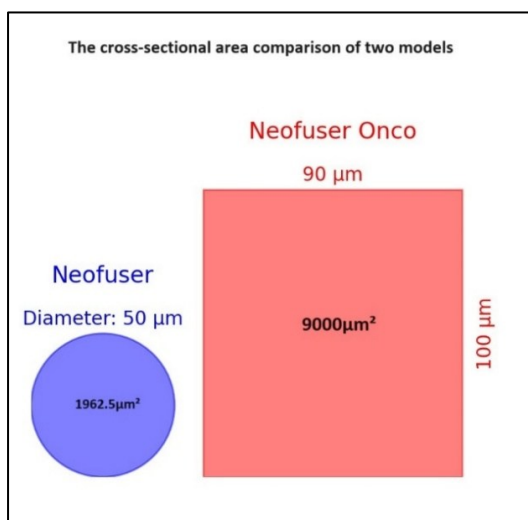
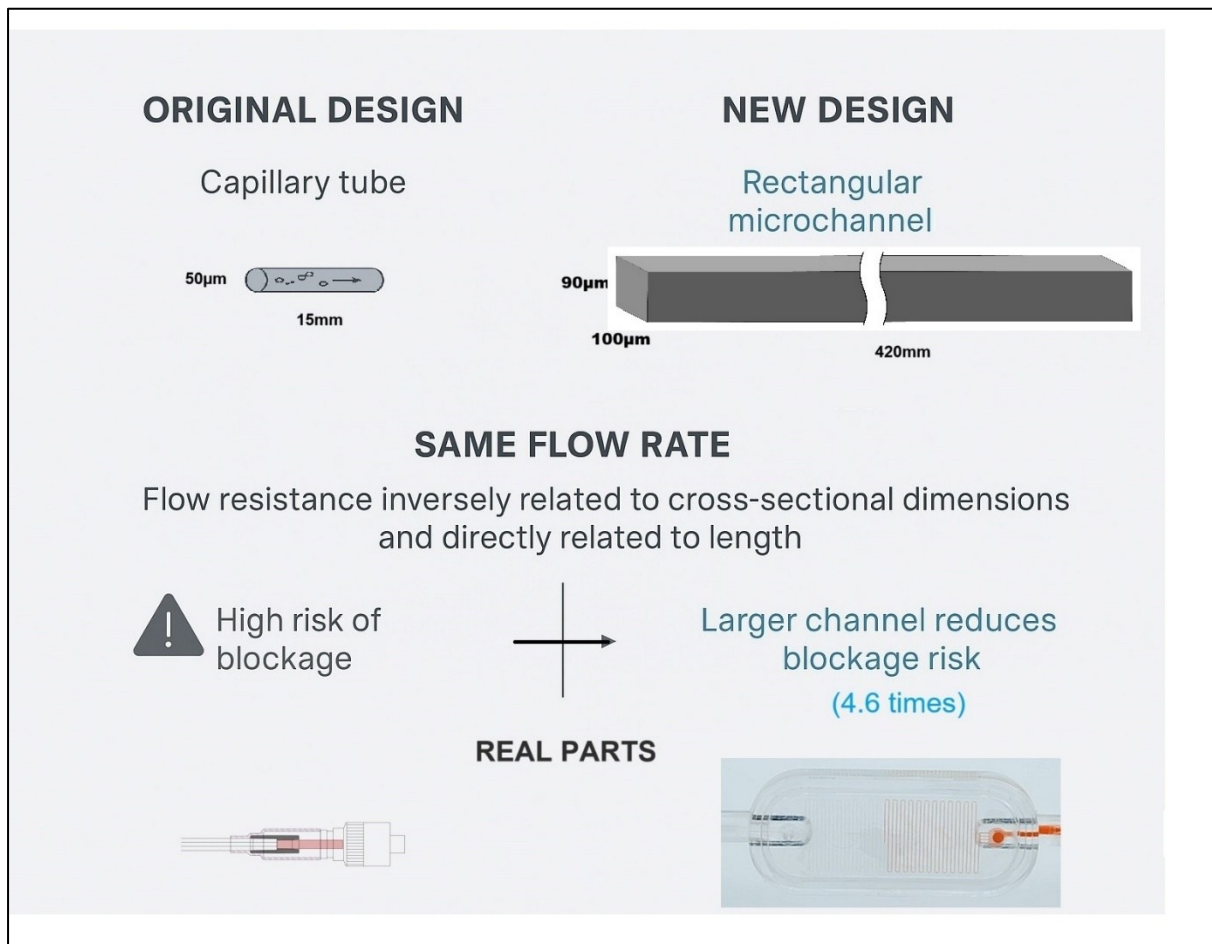


- UV protection is integrated to safeguard the medication's potency and stability throughout the infusion process.

■ NeoFuser uses a larger microchannel cross-section about **(9,000  $\mu\text{m}^2$  vs. 1,962  $\mu\text{m}^2$ )** compared to a conventional capillary.

To precisely control the flow rate, the channel length is extended about **(420 mm vs. 15 mm)** while maintaining a wide flow path.

This design greatly reduces blockage caused by drug crystallization, ensuring stable and reliable infusion.



■ As we increased the diameter of the capillary by 4.6 times, we had to make its length 28 times longer.

We developed a micro-channel based on this principle, and it took us seven years to complete the development.

$$Q = \frac{\Delta P \times D^4}{L \times \eta} \times K$$

D (Diameter) : The internal diameter of the flow restrictor

L (Length) : The length of the flow restrictor

#### ■ Neofuser's Key features

- Precision in infusion timing
- Durable hard reservoir
- Scale indicator printed on case
- Guided balloon for controlled inflation
- UV protection to maintain medication
- Particle filter included
- Bag available as an accessory

#### ■ Neofuser Onco specification

- ▣ Volume(ml) : 60ml(S), 100ml(M), 180ml(R), 275ml(L), 450ml(X)
- ▣ Fixed flow rate(ml/hr) : 0.5, 1, 1.5, 2, 2.5, 3, 4, 5, 6, 7, 10ml/hr