

FORCE REQUIRED FOR EYE DROP BOTTLE ACTUATION

In a recent webinar sponsored by Thea Pharmaceuticals, entitled *Dry eye drops – aren't they all the same?*, Dr. Christine Purslow, Professor of Optometry, presented the following facts.

At least 50% of patients report difficulty in self-administration of topical ocular medicine.

The two most frequently reported causes of difficulty include:

1. **Squeezing** the bottle
2. **Aiming** the bottle

PRODUCT	ACTUATION FORCE REQUIRED IN NEWTONS (N)
Optives® – Allergan	15.4N
Systane® – Alcon	8.1N
Hyabak® – Théa	10.5N
Hilo Forte® – Ursapharm	36.4N

DR. PURSLOW ALSO STATED

- ✓ A normal pinch grip can vary depending on **age & gender**
- ✓ A normal pinch grip force is between **17N to 160N**
- ✓ A normal 3-point-pinch grip force for older females (≥55 years of age) is **15.7N**



This means **Hilo® Forte** requires more than twice the normal force for older females. It is important to mention that the majority of DED patients are women, 55 years of age and older, making it difficult, if not impossible, for many patients to actuate the bottle.

Based on a study performed by I-MED Pharma on **I-DROP® PUR GEL**, our most viscous material available at the time, a force of 11.9N is required for actuation of this bottle.¹ Therefore, the **I-DROP® PUR GEL** bottle falls comfortably below the normal value of a 3-point-pinch force of older women.

In addition, the blue tip of **I-DROP® PUR GEL** makes aiming easier for most patients.

¹Data on file at I-MED Pharma