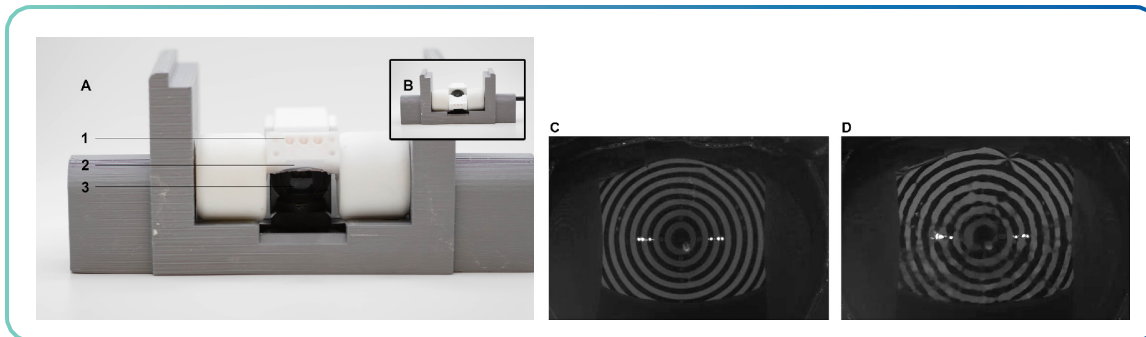


EVALUATING VISCOSITY AND TEAR BREAKUP TIME OF CONTEMPORARY COMMERCIAL OCULAR LUBRICANTS ON AN IN VITRO EYE MODEL

Study conducted by:

Chau-Minh Phan; Mitchell Ross; Karim Fahmy; Blair McEwen; Ilan Hofmann; Vivian W. Y. Chan; Connor Clark-Baba; Lyndon Jones

MODEL USED: THE OCUBLINK SYSTEM



A: The open eye configuration

- 1: PBS is delivered to the system via three inlets at the top of the eyelid
- 2: The eyelid
- 3: Spreads the tear fluid to create an artificial tear film with each blink motion

B: The closed eye configuration

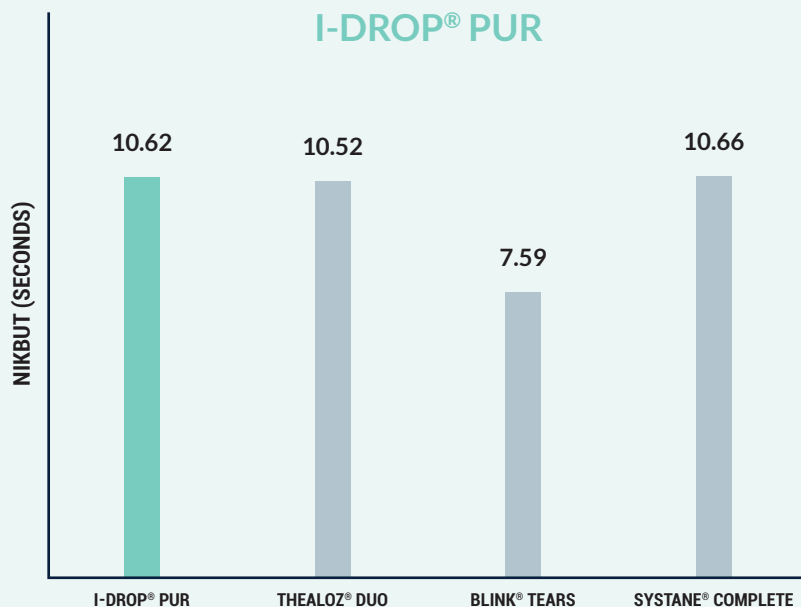
C: A representative image of the tear film on the OcuBlink as imaged using a keratograph (OCULUS Keratograph 5M; OCULUS Optikgeräte, Wetzlar, Germany)

D: A representative image of a broken tear film on the OcuBlink

The OcuBlink System is an *in vitro* model that simulates a physiological blink actuation and an artificial tear film layer. This innovative model replicates the human eye to a great extent and provides Tear Break Up Time (TBUT) as output, allowing an easy, fast, reproducible, and reliable comparison between drops.

RESULTS ANALYSIS

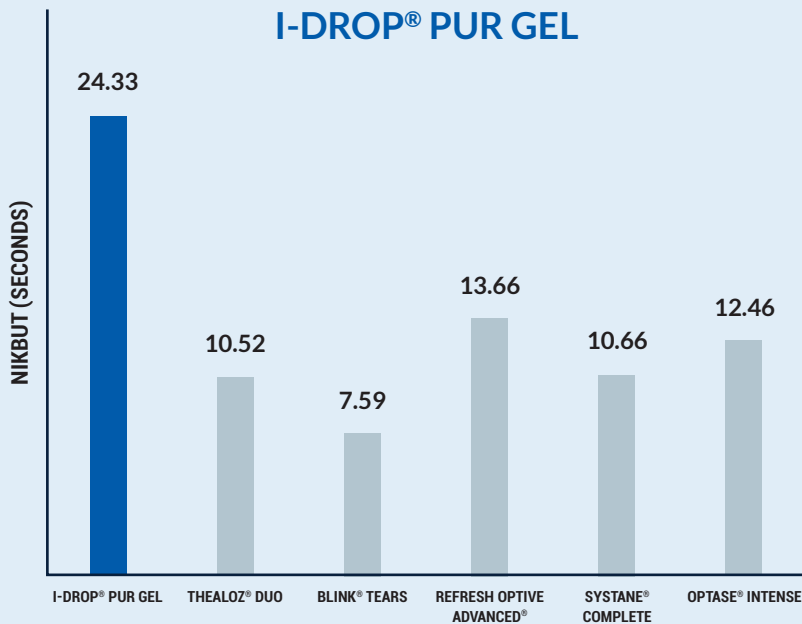
I-DROP® PUR



I-DROP® PUR:

- ✓ Provides a comparable TBUT extension as **THEALOZ® DUO**.
- ✓ Provides a 40% increase in TBUT compared to **BLINK® TEARS**.
- ✓ Provides a comparable TBUT extension as **SYSTANE® COMPLETE**.

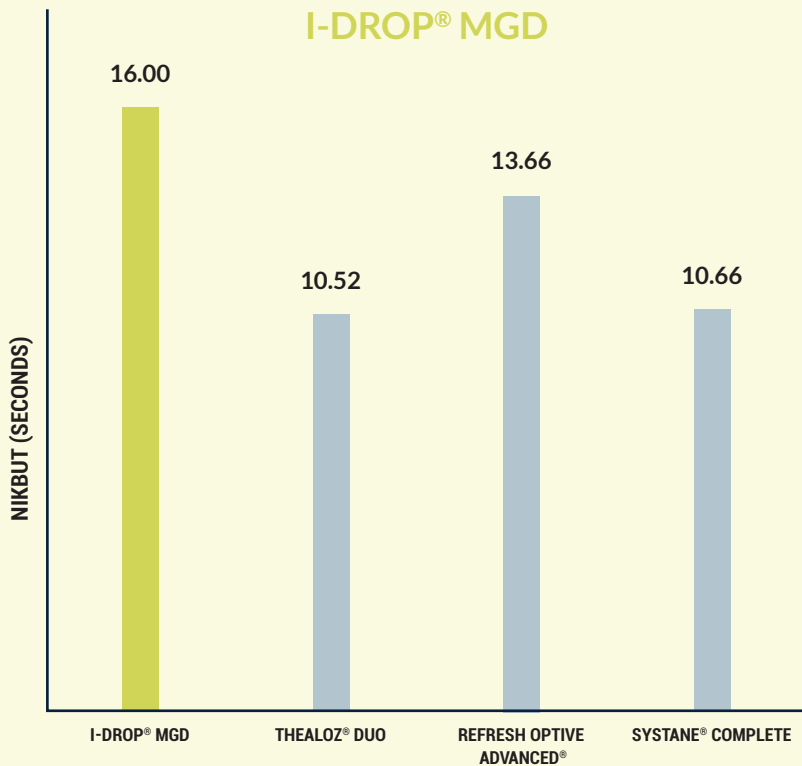
I-DROP® PUR GEL



I-DROP® PUR GEL:

- ✓ Offers an unmatched extension of TBUT.
- ✓ Mimics the natural tear film offering comfort during blinking.
- ✓ Offers the longest TBUT among all competitors in the study by 78% to 220%.

I-DROP® MGD



I-DROP® MGD:

- ✓ Outperforms Evaporative Dry Eye drops in extending TBUT.
- ✓ Provides an extension of TBUT over other phospholipids or oil-containing drops by 17% to 52%.
- ✓ This *in vitro* study demonstrated the superiority of I-DROP® MGD in extending TBUT by 52% compared to THEALOZ® DUO, confirming the 35% previously reported *in vivo*.

CONCLUSIONS

- ✓ The I-DROP® line exhibits high initial viscosity offering an extended TBUT while behaving like the natural tear film.
- ✓ The I-DROP® line mimics natural tear film, offering comfort during blinking.
- ✓ I-DROP® uses a unique formula that contains high molecular weight hyaluronic acid to improve tear stability and mimic natural tear viscosity.