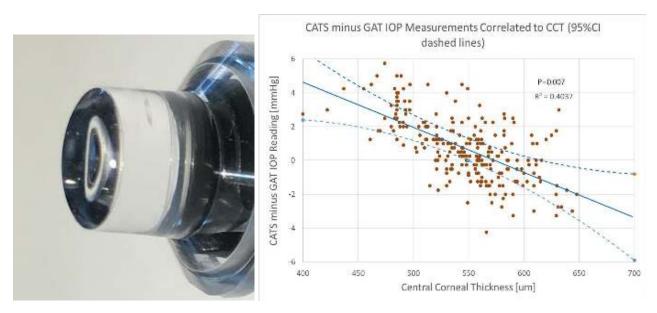
CATS® Tonometer Prism Whitepaper



The CATS® (Correcting Applanation Tonometry Surface) Tonometer Disposable and Reusable Prisms are FDA cleared for intraocular pressure (IOP) measurement in existing Goldmann-type applanation tonometers (GAT) (Figure 1). The seven peer-reviewed studies listed below indicate CATS® Tonometer Prism's decreased corneal biomechanical sensitivity is attributable to the sinusoidal curved modification of applanating surface. The CATS® Tonometer Prism significantly decreases patient corneal biomechanical sensitivity and tear-film properties. The CATS® Tonometer Prism's precision has been demonstrated in direct clinical GAT prism comparison and by surgically placed intracameral transducer pressure comparison. Figure 2 illustrates the CATS® Tonometer Prism minus GAT IOP measurement which correlates very closely to the Dresdner CCT correction.



All Goldmann type tonometers may utilize CATS® Tonometer Prism without recalibration. A clinician measures IOP using the same protocol and techniques as those currently employed in GAT measurement. The CATS® Tonometer Prism achieves the reduction in corneal biomechanical sensitivity by partially matching the curvature of the tonometer surface to curvature of the cornea minimizing the intracorneal stress during applanation. This design minimizes the contribution of total force on the prism face due to corneal deformation, measuring predominantly the IOP force. The annular curvature away from the cornea is designed to simultaneously minimize the tear-film error. We believe the CATS® Tonometer Prism will be the new standard of care for all eye care clinicians who want confidence in the IOP metrics used to assess and protect their patients' sight.

- 1. https://tvst.arvojournals.org/article.aspx?articleid=2552691&resultClick=1
- 2. https://www.ajo.com/article/S0002-9394(18)30513-0/fulltext
- 3. https://bjo.bmj.com/content/early/2019/02/21/bjophthalmol-2018-313470
- 4. https://bmcophthalmol.biomedcentral.com/articles/10.1186/s12886-017-0668-z
- 5. https://bmcophthalmol.biomedcentral.com/articles/10.1186/s12886-017-0608-y
- 6. https://www.dovepress.com/goldmann-tonometer-error-correcting-prism-clinical-evaluation-peer-reviewed-article-OPTH
- 7. https://www.dovepress.com/goldmann-tonometry-tear-film-error-and-partial-correction-with-a-shape-peer-reviewed-article-OPTH
- 8. https://www.dovepress.com/improved-efficacy-of-topical-latanoprost-0005-demonstrated-by-corneal--peer-reviewed-fulltext-article-OPTH
- 9. <u>https://www.tandfonline.com/doi/full/10.1080/02713683.2021.1916039</u>