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# Improve Standard IOP Measurements

## Tonometer enhances IOP reading accuracy via corneal compensation

**B**ecause intraocular pressure (IOP) measurements can influence glaucoma diagnosis and treatment options, obtaining an accurate IOP reading is essential. One way I ensure IOP measurements are correct is by using Reichert's 7CR Auto Tonometer + Corneal Response Technology. This auto tonometer

provides reliable IOP measurements, as they are minimally influenced by corneal properties, surgical procedures, such as LASIK, or

As a result of IOPcc, some ocular hypertensive patients who I have been watching closely have been relieved to find that their pressure isn't as high as I previously thought. On the other hand, some patients currently using glaucoma medications seem to have IOP measurements higher than I suspected.

The IOPcc reading confirms my other clinical observations, such as a higher IOPcc measurement in the

**The 7CR Auto Tonometer + Corneal Response Technology provides IOP measurements that are minimally influenced by corneal properties.**



### 7CR Auto Tonometer + Corneal Response Technology

**HEIGHT:** 19.75 inches  
**WIDTH:** 10.5 inches  
**DEPTH:** 14 inches  
**WEIGHT:** 23 lbs  
**COST:** \$7,600

otherwise atypical corneal conditions, such as keratoconus and corneal edema.

Here, I explain the specific attributes of the device.

#### Corneal compensated IOP

The 7CR Auto Tonometer + Corneal Response Technology provides a corneal compensated IOP (IOPcc) reading, which accommodates for biochemical variations. In other words, the device helps to eliminate the uncertainty of corneal variations by simultaneously displaying an IOPcc reading as well as a Goldman-correlated IOP measurement (IOPg).

The measurements, which are displayed side-by-side on the tonometer's color LCD screen, allow me to better understand my patients' IOP measurements, which lead to accurate diagnoses and treatment decisions.

eye with worse progression, and it plays a role in my decision to either continue monitoring the patient closely or to initiate treatment.

The same concept holds true for my glaucoma patients who are already using treatment. In some cases, the IOP measurement seemed to be at a tolerable level, but after using the 7CR Auto Tonometer + Corneal Response Technology and considering IOPcc, I adjusted these patients' medication(s) to elicit a better effect and improved IOP measurement.

#### Operator and patient friendly

The 7CR Auto Tonometer + Corneal Response Technology features a simple touch-screen, requiring minimal user training, which makes the instrument easy to integrate into daily practice.

Also, the device features a fully automated alignment and measure-

ment feature that streamlines the test for both the administrator and the patient. Specifically, the Auto

results, the 7CR Auto Tonometer + Corneal Response Technology has a triple measurement mode, taking

## The triple measurement mode obtains three consecutive IOP measurements automatically to reduce the ambiguity of results.

Tonometer + Corneal Response Technology guides you or your staff member through the alignment process and obtains the measurements as the patient leans into the forehead rest.

Also, I've discovered that the air puff, which is customized for each measurement to be as soft as possible, reduces patient discomfort.

In order to reduce ambiguity of

three consecutive IOP measurements automatically. Each measurement is "scored" based on an objective internal criteria. If a score falls below a set standard, making it unreliable, the machine indicates this on its screen.

The 7CR Auto Tonometer + Corneal Response Technology has helped me to appreciate how much corneal biomechanical properties

can affect tonometry measurements. The IOPcc measurement directly contributes to the quality of my diagnosis and treatment decisions for my glaucoma and ocular hypertensive patients. Specifically, it aids me in my decision to begin treatment sooner, to adjust medication for an improved IOP reading and to feel more confident in my diagnoses. The overall result is the most appropriate management for my patients. Further, because the 7CR Auto Tonometer + Corneal Response Technology's non-contact measurement technique obtains IOP readings in a non-invasive manner, my patients say they feel it's an easy test to take. The device is a win-win for both doctors and patients. **OM**

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