**Figure S1.** Verification of the rebound tonometer (Tonolab) readings in animals with a circumlimbal suture. **A.** As the circumlimbal suture compresses the eyeball it is possible that changes in corneal curvature return erroneous IOP readings with the rebound tonometer. In a separate cohort of 4 rats IOP was simultaneously measured via an anterior chamber cannula (30 gauge needle) connected to a pressure transducer, as well as using the Tonolab. The wide range of IOP levels was achieved by tightening the circumlimbal suture to various degrees. There was a strong linear relationship between the two measurements, with a slope (0.94, 95% CI: 0.90 – 0.98) that was significantly greater than 0 and very close to 1. The y intercept, 0.01 (95% CI: -1.8 – 1.8) was not significantly different from 0. **B.** Bland-Altman analysis testing the agreement between the Tonolab and direct IOP measurement with anterior chamber cannulation. The horizontal reference line indicates the bias (-2.5 mmHg), whereas the shaded area denotes the 95% Limits of Agreement (3.0 to -8.1 mmHg). The finding suggests that the Tonolab tonometer provides accurate IOP readings despite changes in corneal curvature induced by the circumlimbal suture.