

PalmScan A-Scan Performs Superbly

In an effort to assess the accuracy of PalmScan AP2000 immersion A-Scan, MMD worked with Dr. Ray Oyakawa, a leading Ophthalmologist in the southern California area.

Dr. Oyakawa regularly performs both Immersion biometry and Laser Interferometry measurements on his patients who undergo cataract extraction surgery with premium IOL implantation. In addition to verifying the Axial Length measurements, Dr. Oyakawa utilizes PalmScan's Anterior Chamber Depth and Lens Thickness measurements to improve the outcome of his premium IOL cases.

The [attached table](#) holds comparison biometry data captured by the PalmScan handheld A-Scan (operated in the Immersion mode) and the IOL Master. The study was carried out on 33 eyes between winter '06 and spring '07.

The inclusion criteria for these subject eyes were patients with cataracts whom have elected to undergo cataract extraction surgery with premium IOL implant.

Exclusion criteria were patients with previous ocular surgery.

The range of axial length measurements were between 22.0 mm and 28.2 mm.

The average difference between the two modalities was calculated to be an astounding 0.002 mm (20 microns) with a standard deviation of 0.092 mm. The correlation coefficient (R) was calculated to be 0.998.

These results show no statistical difference between axial length measurements obtained by PalmScan vs. IOL-Master. Furthermore, the PalmScan provides the additional ability to acquire a much more accurate Anterior Chamber Depth and Lens Thickness measurements than the IOL-Master.

Comparison Results

Avg. Diff. (mm)	0.002
STD (mm)	0.092
Correlation Coeff. (R)	0.998
N	33

