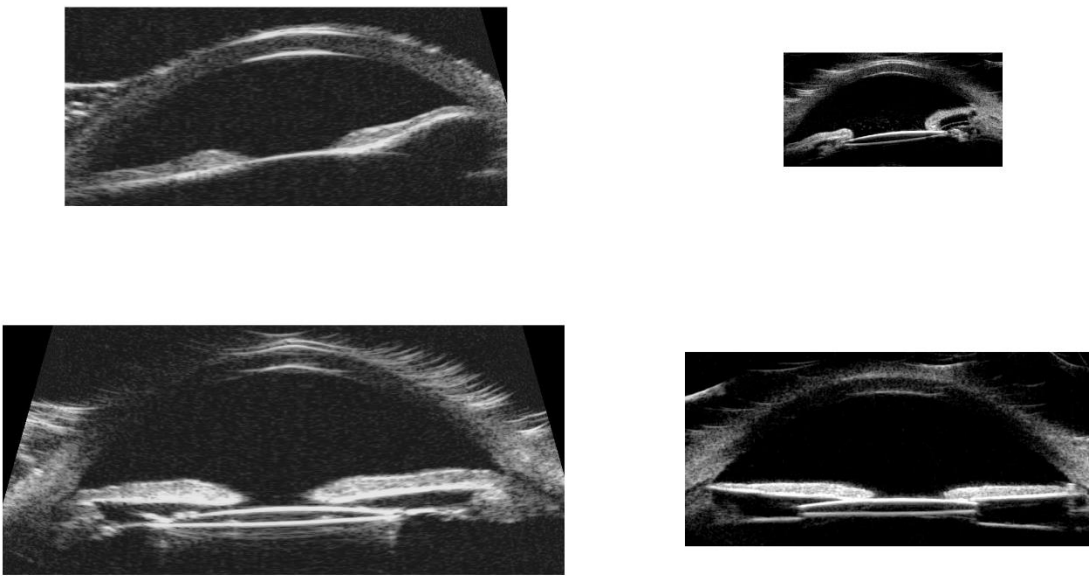


Supplemental Materials

Supplementary Table 1: Accutome vs Quantel image composition by lens status and resolution

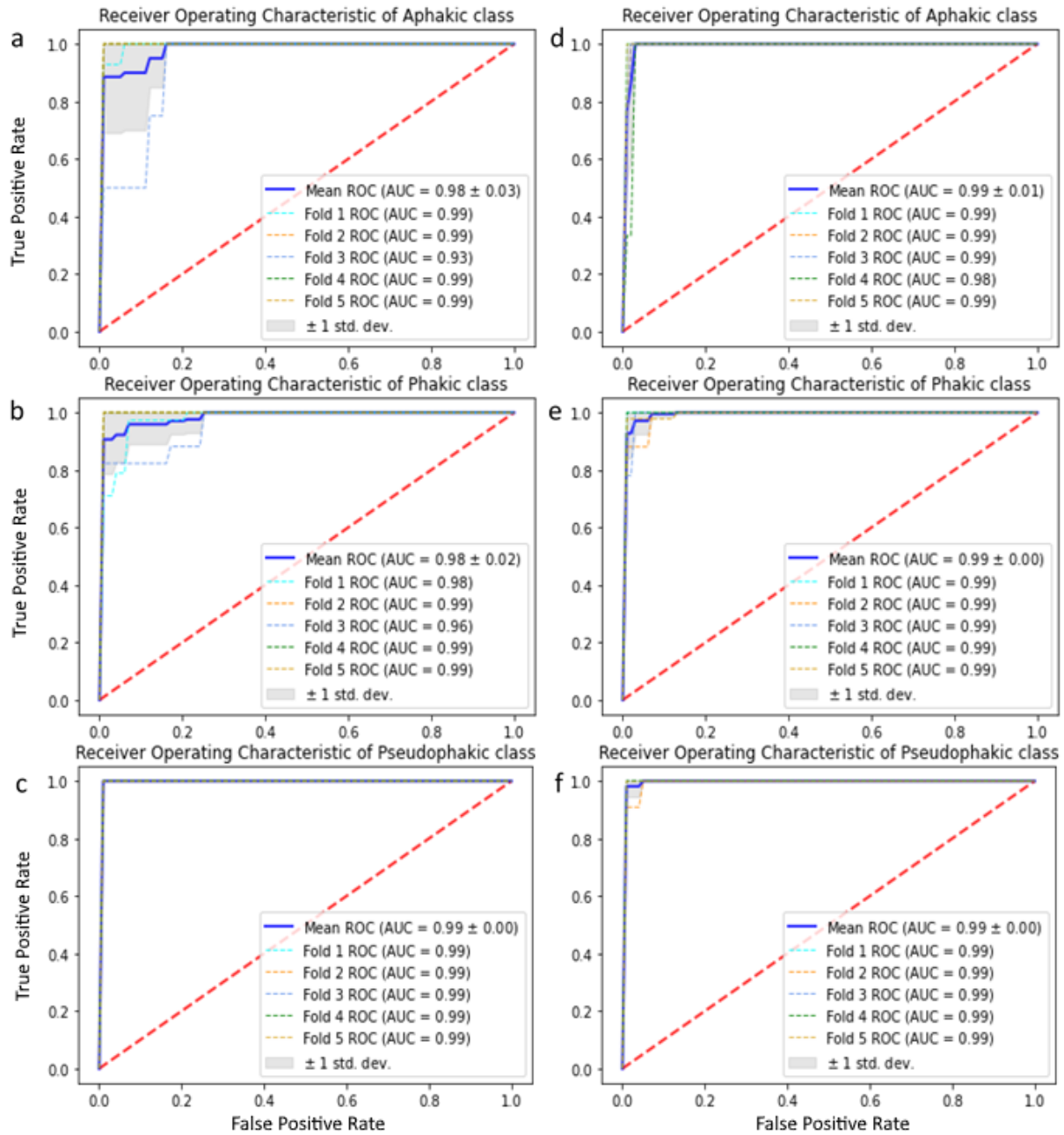
| | Accutome | Quantel |
|-------------------------|------------|------------|
| Aphakic | 6 | 21 |
| Phakic | 26 | 151 |
| Pseudophakic | 14 | 67 |
| Min Resolution (pixels) | (101,422) | (241,464) |
| Max Resolution (pixels) | (630,1039) | (503,1077) |



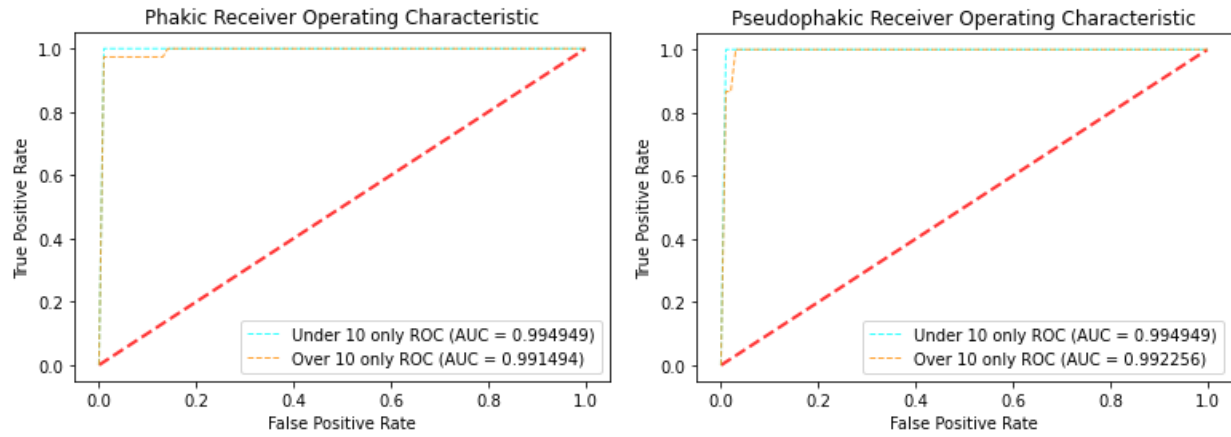
Supplementary Figure 1: Lowest (top) and highest (bottom) resolution cropped images for Accutome (left) and Quantel (right)

Supplementary Table 2: Lens status breakdown and performance metrics for each cross-validation fold for both under-10 and all-ages model

| | Fold 1 | Fold 2 | Fold 3 | Fold 4 | Fold 5 |
|---------------------|--------|---------|--------|--------|--------|
| Under 10 | | | | | |
| Subjects | 10 | 10 | 8 | 7 | 7 |
| Aphakic Images | 14 | 4 | 4 | 3 | 2 |
| Phakic Images | 38 | 12 | 17 | 18 | 25 |
| Pseudophakic Images | 15 | 8 | 8 | 6 | 7 |
| Total Images | 67 | 24 | 29 | 27 | 34 |
| Precision | 93.28% | 100.00% | 83.18% | 96.49% | 97.06% |
| Recall | 92.54% | 100.00% | 79.31% | 96.30% | 94.12% |
| F1 Score | 92.47% | 100.00% | 80.15% | 95.58% | 94.98% |
| False Positive Rate | 5.20% | 0.00% | 16.31% | 7.41% | 0.37% |
| AUC | 0.983 | 0.995 | 0.964 | 0.995 | 0.995 |
| All Ages | | | | | |
| Subjects | 13 | 13 | 12 | 12 | 12 |
| Aphakic | 14 | 4 | 4 | 3 | 2 |
| Phakic | 21 | 42 | 41 | 27 | 46 |
| Pseudophakic | 11 | 11 | 34 | 11 | 14 |
| Total Images | 46 | 57 | 79 | 41 | 62 |
| Precision | 97.92% | 94.06% | 97.59% | 95.12% | 97.31% |
| Recall | 97.83% | 92.98% | 97.47% | 95.12% | 96.77% |
| F1 Score | 97.81% | 93.25% | 97.08% | 95.12% | 96.91% |
| False Positive Rate | 1.83% | 5.60% | 2.73% | 4.90% | 4.69% |
| AUC | 0.995 | 0.989 | 0.993 | 0.994 | 0.993 |



Supplementary Figure 2: ROC curves for each class and fold for both under-10 (left) and all-ages (right) model



Supplementary Figure 3: ROC curves for phakic and pseudophakic class for under 10 and over 10 only ROC models tested on only under 10 year old patient images.